



Summit Midstream Partners, LLC
999 18th Street, Suite 3400 South
Denver, CO 80202
Phone: 720.452.6225
www.summitmidstream.com

December 4, 2015

Carlos Lujan
Colorado Oil and Gas Conservation Commission
796 Megan Ave, Suite 201
Rifle, CO 81650

**RE: Reportable Spill Final Report
High Mesa 8" Pipeline
Red Rock Gathering Company, LLC (Operator ID 13980)**

Dear Mr. Lujan,

At approximately 5:00 pm on September 8, 2015, Red Rock Gathering Company, LLC (Red Rock Gathering) was informed that a line strike had occurred on the High Mesa 8" pipeline by Willow Creek Company, a third party contractor conducting excavation work. The pipeline is owned and operated by Red Rock Gathering, a subsidiary of Summit Midstream, LLC (Summit Midstream). At 9:40 am on September 9, 2015 a representative from Summit Midstream contacted the Colorado Department of Public Health and Environment (CDPHE) and notified them of the incident. At that time, the CDPHE directed Summit Midstream to contact the Colorado Oil and Gas Conservation Commission (COGCC).

Location Coordinates:
Latitude: 39.430462
Longitude: -108.011194

The line strike resulted in the release of approximately 10 bbls of produced water, which was contained in the excavated area on the receiving station site. A mist of produced water and surface soil was sprayed from the rupture area, and misted a dry drainage ditch 50 yards north of the incident location. Upon discovery of the incident, Operations personnel shut-in and immediately depressurized the segment of pipeline. An environmental remediation contractor, Aspen Environmental, arrived on site on the morning of September 9, 2015. Aspen Environmental cleaned the misted vegetation and sampled multiple locations around the impacted area.

On September 9, 2015 and September 10, 2015 Aspen Environmental sampled three locations within the remediated area (locations 1, 2, and 5) and two locations outside of the impacted area (Locations 3 and 4) for background levels. Please refer to Figure 1 for the sample locations. All of the samples with the exception of location 1 were below cleanup thresholds. On September 10, 2015 additional excavation was conducted at location 1 to remove any remaining contaminated soil. This location was sampled and tested for total petroleum hydrocarbons (TPH) via a petroFLAG by Olsson Associates on September 10, 2015. The results indicated that location 1 had been sufficiently remediated. The petroFLAG was also used as a field duplicate to analyze the soil from the sampling locations that Aspen Environmental had sampled, and those field screening results are consistent with the laboratory analytical results. The locations from the petroFLAG sampling effort are attached in Figure 2. The sampling results from the laboratory and petroFLAG are attached for your review in Appendix A and B, respectively. Please refer to the table below for the sampling location designations from Aspen Environmental and Olsson Associates.

Aspen Environmental Sample Location ID	Olsson Associates Sample Location ID
#1	SS2
#2	SS1
#3	Not Sampled
#4	Not Sampled
#5	SS3
Not Sampled	SS4

Summit Midstream combined and mixed a small amount of impacted soil (approximately 3%) with clean fill material (approximately 97%), and backfilled the hole after the pipeline was repaired on September 15, 2015. Jonathan Shares, with Summit Midstream, contacted you on October 27, 2015, to discuss the fill material to determine an appropriate and safe course of action to provide confirmation that the area had been sufficiently remediated. Based on the guidance we received from you, it was determined that potholing and sampling next to the line strike area would be the best course of action to determine if the impacted area had been sufficiently remediated.

On November 13, 2015, Aspen Environmental arrived on site and performed the potholing and sampling. Four soil samples were collected at the site of the line strike (Location 1) at varying depths. The samples were collected at the depths of 2', 5', 9' and 13'. The analytical results were received on November 27, 2015, and are attached for your review as Appendix C. The results indicate that the impacted area has been sufficiently remediated.

Summit Midstream believes the area has been sufficiently remediated, and is requesting that the COGCC close the incident in their database. If you should have any questions, or need any additional information, please contact Jonathan Shares with Summit Midstream Partners, LLC at (720) 358-3855 or jshares@summitmidstream.com.

Sincerely,



Andrew Parisi
 Director of Environmental
 Summit Midstream Partners, LLC
 Phone: (303) 626-8269
aparisi@summitmidstream.com

Figure 1
Aspen Environmental Sampling Locations
9/9/2015 and 9/10/2015

Figure 1. Aspen Environmental Sample Locations 9/9/2015 & 9/10/2015

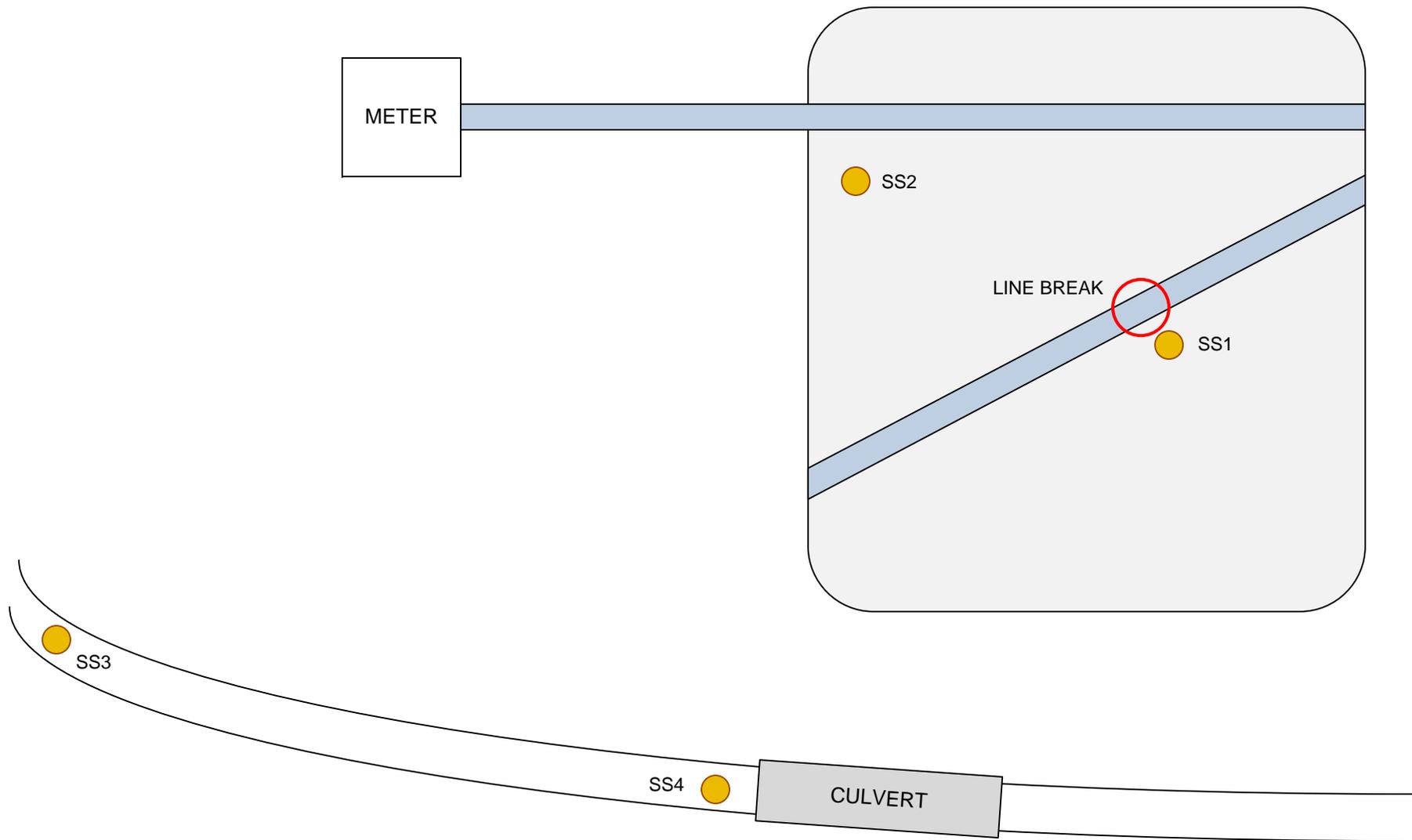


Figure 2

Olsson Associates Sampling Locations

9/10/2015

Figure 2. Olsson Associates Sample Locations 9/10/2015 EXCAVATION



NOT TO SCALE

PROJECT NO: 015-2617
DRAWN BY: JLD
DATE: 10/2/2015

Field Analysis Schematic
Summit Midstream
GARFIELD COUNTY, CO



760 Horizon Drive, Suite 102
Grand Junction, CO 81506
TEL 970.263.7800
FAX 970.263.7456

Figure

1

Appendix A

Aspen Environmental Sampling Results

9/15/2015

Test Report

eANALYTICS LABORATORY

September 22, 2015

Client: Aspen Environmental Field Services
Project: Summit Midstream / Monument Ridge
Lab ID: 3894
Date Samples Received: 9/15/2015
Number of Samples: 5
Sample Condition: Samples arrived intact and in appropriate sample containers
Sample Temperature: Within acceptable range of 2-6° C, or as specified in EPA Method

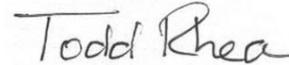
The quality control procedures associated with the requested analyses were satisfactorily passed before the samples were run.

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

Sincerely,



Christopher Dieken
Quality Assurance Manager



Todd Rhea
Laboratory Manager

eAnalytics Laboratory

4130 Clydesdale Parkway Loveland CO 80538

Chain of Custody

eANALYTICS

LABORATORY



CLIENT INFORMATION <small>(*New Clients please fill out completely)</small>			ANALYSIS INFORMATION <small>(Select analysis by checking box on corresponding sample line)</small>																			
Company: Aspen Environmental F.S.			Number of Containers	Matrix(S) Soil (W) Water (V) Vapor (O) Other	BTEX GRO (EPA 8260)	DRO (EPA 8015)	PAH's (EPA 8270-SIM)	SAR (US Dept of Ag Method 20B)	EC (US Dept of Ag Method 3)	pH (EPA 9045D)	Metals - Table 910 List (EPA 6010)	Other Analysis										
Project: Summit Midstream / Monument Ridge																						
Project Manager: Criss Duncan ccduncan@aspenefs.com																						
Sampler: Daniel Orr																						
Phone/Email: (541) 891-4595 tportnoff@aspenefs.com																						
Address: 1685 17 Rd Loma, CO. 81524																						
Lab ID	Sample Name	Sampling Date/Time																				
1	#1 - Center of Excavation - 13' Depth	9/9/2015 1235 hrs	1	S	<input checked="" type="checkbox"/>																	
2	#2 - NW Corner Excavation - 10' Depth	9/9/2015 1235 hrs	1	S	<input checked="" type="checkbox"/>																	
3	#3 - SW Corner of Pad - 12" Depth	9/9/2015 1240 hrs	1	S	<input checked="" type="checkbox"/>																	
4	#4 - NE Corner of Pad - Culvert Inlet	9/10/2015 1300 hrs	1	S	<input checked="" type="checkbox"/>																	
5	#5 - NE Corner of Pad - Culvert Outlet	9/10/2015 1344 hrs	1	S	<input checked="" type="checkbox"/>																	
Comments:																						

Turnaround Time (Business Days) <small>TAT begins when sample is received by eANALYTICS</small> <input checked="" type="radio"/> Normal (5-10 Days) <input type="radio"/> 3 Day (1.25x) <small>Rush analysis requires an extra charge.</small> <input type="radio"/> 2 Day (1.5x) <small>If possible please inform eANALYTICS in advance for rush analysis.</small> <input type="radio"/> 1 Day (2x) <input type="radio"/> Same Day (3x)		Record of Custody Relinquished by: Daniel Orr Company: Aspen Environmental Received by: <i>FedEx</i> Company: <i>FedEx</i>		Date: 9/14/15 Time: 10:00 AM/PM Date: 9/14/15 Time: 10:00 AM/PM
For eANALYTICS Use Samples Received Intact: Yes / No Received Within Temperature Range (2-6°C): Yes / No Sample Preservative: Ice / None		Relinquished by: <i>[Signature]</i> Company: <i>[Signature]</i> Received by: <i>[Signature]</i> Company: eANALYTICS		Date: 9/21/2015 Time: 1500 AM/PM Date: 9/15/15 Time: 11:00 AM/PM



Client: Aspen Environmental Field Services Lab ID: 3894

Project: Summit Midstream / Monument Ridge

Analysis: Volatile Organics Method: EPA8260
TPH EPA8260/8015

Sample Name	Benzene mg/kg	Toluene mg/kg	Ethyl- benzene mg/kg	Total Xylenes mg/kg	TPH	TPH	Date Sampled	Date Analyzed	Lab ID
					GRO C6-C10 mg/kg	DRO C10-C28 mg/kg			
#1 - Center of Excavation - 13' Depth	0.116	5.73	2.58	40.3	931	305	09/09/15	09/17/15	3894 1
#2 - NW Corner Excavation - 10' Depth	< 0.010	< 0.010	< 0.010	0.038	< 50	< 50	09/09/15	09/17/15	3894 2
#3 - SW Corner of Pad - 12" Depth	< 0.010	< 0.010	< 0.010	< 0.010	< 50	< 50	09/09/15	09/17/15	3894 3
#4 - NE Corner of Pad - Culvert Inlet	< 0.010	< 0.010	< 0.010	< 0.010	< 50	< 50	09/10/15	09/17/15	3894 4
#5 - NE Corner of Pad - Culvert Outlet	< 0.010	< 0.010	< 0.010	< 0.010	< 50	< 50	09/10/15	09/17/15	3894 5



Client:	Aspen Environmental Field Services	Sample Name:	#1 - Center of Excavation - 13' Depth
		Lab ID:	3894 1
Project:	Summit Midstream / Monument Ridge	Date Sampled:	9/9/2015
		Date Analyzed:	9/21/2015
Analysis:	PAH	Method:	EPA8270 SIM

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
2,4,6-Tribromophenol (70%-130%)	84	Nitrobenzene-d5 (70%-130%)	126
2-Fluorobiphenyl (70%-130%)	94	2-Fluorophenol (70%-130%)	84

Compound	CAS #	Result (mg/kg)	Compound	CAS #	Result (mg/kg)
Acenaphthene	83-32-9	< 1.0	Chrysene	218-01-9	< 0.15
Acenaphthylene	208-96-8	< 1.0	Dibenzo(a,h)-anthracene	53-70-3	< 0.015
Anthracene	120-12-7	< 1.0	Fluoranthene	206-44-0	< 1.0
Benzo(a)-anthracene	56-55-3	< 0.15	Fluorene	86-73-7	< 1.0
Benzo(a)-pyrene	50-32-8	< 0.015	Indeno(1,2,3-C,D)-pyrene	193-39-5	< 0.15
Benzo(b)fluoranthene	205-99-2	< 0.15	Naphthalene	91-20-3	3.21
Benzo(g,h,i)-perylene	191-24-2	< 1.0	Phenanthrene	85-01-8	< 1.0
Benzo(k)-fluoranthene	207-08-9	< 1.5	Pyrene	129-00-0	< 1.0

eANALYTICS

LABORATORY

Client:	Aspen Environmental Field Services	Sample Name:	#2 - NW Corner Excavation - 10' Depth
Project:	Summit Midstream / Monument Ridge	Lab ID:	3894 2
Analysis:	PAH	Date Sampled:	9/9/2015
		Date Analyzed:	9/21/2015
		Method:	EPA8270 SIM

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
2,4,6-Tribromophenol (70%-130%)	80	Nitrobenzene-d5 (70%-130%)	90
2-Fluorobiphenyl (70%-130%)	91	2-Fluorophenol (70%-130%)	77

Compound	CAS #	Result (mg/kg)	Compound	CAS #	Result (mg/kg)
Acenaphthene	83-32-9	< 1.0	Chrysene	218-01-9	< 0.15
Acenaphthylene	208-96-8	< 1.0	Dibenzo(a,h)-anthracene	53-70-3	< 0.015
Anthracene	120-12-7	< 1.0	Fluoranthene	206-44-0	< 1.0
Benzo(a)-anthracene	56-55-3	< 0.15	Fluorene	86-73-7	< 1.0
Benzo(a)-pyrene	50-32-8	< 0.015	Indeno(1,2,3-C,D)-pyrene	193-39-5	< 0.15
Benzo(b)fluoranthene	205-99-2	< 0.15	Naphthalene	91-20-3	< 1.0
Benzo(g,h,i)-perylene	191-24-2	< 1.0	Phenanthrene	85-01-8	< 1.0
Benzo(k)-fluoranthene	207-08-9	< 1.5	Pyrene	129-00-0	< 1.0

eAnalytics Laboratory

4130 Clydesdale Parkway Loveland CO 80538



Client:	Aspen Environmental Field Services	Sample Name:	#3 - SW Corner of Pad - 12" Depth
		Lab ID:	3894 3
Project:	Summit Midstream / Monument Ridge	Date Sampled:	9/9/2015
		Date Analyzed:	9/21/2015
Analysis:	PAH	Method:	EPA8270 SIM

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
2,4,6-Tribromophenol (70%-130%)	79	Nitrobenzene-d5 (70%-130%)	96
2-Fluorobiphenyl (70%-130%)	90	2-Fluorophenol (70%-130%)	99

Compound	CAS #	Result (mg/kg)	Compound	CAS #	Result (mg/kg)
Acenaphthene	83-32-9	< 1.0	Chrysene	218-01-9	< 0.15
Acenaphthylene	208-96-8	< 1.0	Dibenzo(a,h)-anthracene	53-70-3	< 0.015
Anthracene	120-12-7	< 1.0	Fluoranthene	206-44-0	< 1.0
Benzo(a)-anthracene	56-55-3	< 0.15	Fluorene	86-73-7	< 1.0
Benzo(a)-pyrene	50-32-8	< 0.015	Indeno(1,2,3-C,D)-pyrene	193-39-5	< 0.15
Benzo(b)fluoranthene	205-99-2	< 0.15	Naphthalene	91-20-3	< 1.0
Benzo(g,h,i)-perylene	191-24-2	< 1.0	Phenanthrene	85-01-8	< 1.0
Benzo(k)-fluoranthene	207-08-9	< 1.5	Pyrene	129-00-0	< 1.0

eAnalytics Laboratory

4130 Clydesdale Parkway Loveland CO 80538



Client:	Aspen Environmental Field Services	Sample Name:	#4 - NE Corner of Pad - Culvert Inlet
		Lab ID:	3894 4
Project:	Summit Midstream / Monument Ridge	Date Sampled:	9/10/2015
		Date Analyzed:	9/21/2015
Analysis:	PAH	Method:	EPA8270 SIM

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
2,4,6-Tribromophenol (70%-130%)	74	Nitrobenzene-d5 (70%-130%)	98
2-Fluorobiphenyl (70%-130%)	88	2-Fluorophenol (70%-130%)	101

Compound	CAS #	Result (mg/kg)	Compound	CAS #	Result (mg/kg)
Acenaphthene	83-32-9	< 1.0	Chrysene	218-01-9	< 0.15
Acenaphthylene	208-96-8	< 1.0	Dibenzo(a,h)-anthracene	53-70-3	< 0.015
Anthracene	120-12-7	< 1.0	Fluoranthene	206-44-0	< 1.0
Benzo(a)-anthracene	56-55-3	< 0.15	Fluorene	86-73-7	< 1.0
Benzo(a)-pyrene	50-32-8	< 0.015	Indeno(1,2,3-C,D)-pyrene	193-39-5	< 0.15
Benzo(b)fluoranthene	205-99-2	< 0.15	Naphthalene	91-20-3	< 1.0
Benzo(g,h,i)-perylene	191-24-2	< 1.0	Phenanthrene	85-01-8	< 1.0
Benzo(k)-fluoranthene	207-08-9	< 1.5	Pyrene	129-00-0	< 1.0



4130 Clydesdale Parkway Loveland CO 80538



Client:	Aspen Environmental Field Services	Sample Name:	#5 - NE Corner of Pad - Culvert Outlet
		Lab ID:	3894 5
Project:	Summit Midstream / Monument Ridge	Date Sampled:	9/10/2015
		Date Analyzed:	9/21/2015
Analysis:	PAH	Method:	EPA8270 SIM

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
2,4,6-Tribromophenol (70%-130%)	84	Nitrobenzene-d5 (70%-130%)	97
2-Fluorobiphenyl (70%-130%)	75	2-Fluorophenol (70%-130%)	98

Compound	CAS #	Result (mg/kg)	Compound	CAS #	Result (mg/kg)
Acenaphthene	83-32-9	< 1.0	Chrysene	218-01-9	< 0.15
Acenaphthylene	208-96-8	< 1.0	Dibenzo(a,h)-anthracene	53-70-3	< 0.015
Anthracene	120-12-7	< 1.0	Fluoranthene	206-44-0	< 1.0
Benzo(a)-anthracene	56-55-3	< 0.15	Fluorene	86-73-7	< 1.0
Benzo(a)-pyrene	50-32-8	< 0.015	Indeno(1,2,3-C,D)-pyrene	193-39-5	< 0.15
Benzo(b)fluoranthene	205-99-2	< 0.15	Naphthalene	91-20-3	< 1.0
Benzo(g,h,i)-perylene	191-24-2	< 1.0	Phenanthrene	85-01-8	< 1.0
Benzo(k)-fluoranthene	207-08-9	< 1.5	Pyrene	129-00-0	< 1.0



Client: Aspen Environmental Field Services Lab ID: 3894
 Project: Summit Midstream / Monument Ridge 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
#1 - Center of Excavation - 13' Depth	95	90	98	101	09/09/15	09/17/15	3894 1
#2 - NW Corner Excavation - 10' Depth	98	99	92	104	09/09/15	09/17/15	3894 2
#3 - SW Corner of Pad - 12" Depth	99	93	97	97	09/09/15	09/17/15	3894 3
#4 - NE Corner of Pad - Culvert Inlet	99	96	95	102	09/10/15	09/17/15	3894 4
#5 - NE Corner of Pad - Culvert Outlet	91	99	91	97	09/10/15	09/17/15	3894 5



Client: Aspen Environmental Field Services Lab ID: 3894

Project: Summit Midstream / Monument Ridge

Analysis: Volatile Organics Method: EPA8260
TPH EPA8260/8015

Sample Name	Benzene % Rec	Toluene % Rec	Ethyl- benzene % Rec	Total Xylenes % Rec	TPH GRO C6-C10 % Rec	TPH DRO C10-C28 % Rec	Date Analyzed	Lab ID
Laboratory Control Sample (70-130%)	91	103	92	104	101	98	09/17/15	LCS 3894 1
Method Blank	< 0.010 mg/kg	< 0.010 mg/kg	< 0.010 mg/kg	< 0.010 mg/kg	< 50 mg/kg	< 50 mg/kg	09/17/15	MB 3894 1

Appendix B

Olsson Associates petroFLAG Sampling Results

9/10/2015

Table 1
Summit Midstream Battlement Mesa Water Release
Field Analysis Summary

SAMPLE SUMMARY		
Location Description	Battlement Mesa Pipeline	
FIELD ANALYSIS SUMMARY		
Analysis Type	PID (ppm)	petroFLAG (mg/kg)
Sample Date	9/10/2015	9/10/2015
Depth	0-4"	0-4"
SS1	6.2	164
SS2	59.8	181
SS3	8.5	415
SS4	39.0	223

mg/kg - milligrams per kilogram
 ppm - parts per million

Appendix C

Aspen Environmental Sampling Results

11/17/2015

Test Report



November 25, 2015

Client: Aspen Environmental Field Services
Project: Summit Midstream / Monument Ridge-Watson Pad
Lab ID: 4201
Date Samples Received: 11/17/2015
Number of Samples: 4
Sample Condition: Samples arrived intact and in appropriate sample containers
Sample Temperature: Within acceptable range of 2-6° C, or as specified in EPA Method

The quality control procedures associated with the requested analyses were satisfactorily passed before the samples were run.

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

Sincerely,

A handwritten signature in black ink that reads "Chris Dieken".

Christopher Dieken
Quality Assurance Manager

A handwritten signature in black ink that reads "Todd Rhea".

Todd Rhea
Laboratory Manager

eAnalytics Laboratory
4130 Clydesdale Parkway Loveland CO 80538



Client:	Aspen Environmental Field Services	Sample Name:	#1 - Collected at 2'
		Lab ID:	4201 1
Project:	Summit Midstream / Monument Ridge-Watson Pad	Date Sampled:	11/13/2015
		Date Analyzed:	11/17/2015
Analysis:	PAH	Method:	EPA8270 SIM

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
2,4,6-Tribromophenol (70%-130%)	112	Nitrobenzene-d5 (70%-130%)	81
2-Fluorobiphenyl (70%-130%)	84	2-Fluorophenol (70%-130%)	80

Compound	CAS #	Result (mg/kg)	Compound	CAS #	Result (mg/kg)
Acenaphthene	83-32-9	< 1.0	Chrysene	218-01-9	< 0.15
Acenaphthylene	208-96-8	< 1.0	Dibenzo(a,h)-anthracene	53-70-3	< 0.015
Anthracene	120-12-7	< 1.0	Fluoranthene	206-44-0	< 1.0
Benzo(a)-anthracene	56-55-3	< 0.15	Fluorene	86-73-7	< 1.0
Benzo(a)-pyrene	50-32-8	< 0.015	Indeno(1,2,3-C,D)-pyrene	193-39-5	< 0.15
Benzo(b)fluoranthene	205-99-2	< 0.15	Naphthalene	91-20-3	< 1.0
Benzo(g,h,i)-perylene	191-24-2	< 1.0	Phenanthrene	85-01-8	< 1.0
Benzo(k)-fluoranthene	207-08-9	< 1.5	Pyrene	129-00-0	< 1.0



Client:	Aspen Environmental Field Services	Sample Name:	#2 - Collected at 5'
		Lab ID:	4201 2
Project:	Summit Midstream / Monument Ridge-Watson Pad	Date Sampled:	11/13/2015
		Date Analyzed:	11/17/2015
Analysis:	PAH	Method:	EPA8270 SIM

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
2,4,6-Tribromophenol (70%-130%)	108	Nitrobenzene-d5 (70%-130%)	89
2-Fluorobiphenyl (70%-130%)	80	2-Fluorophenol (70%-130%)	84

Compound	CAS #	Result (mg/kg)	Compound	CAS #	Result (mg/kg)
Acenaphthene	83-32-9	< 1.0	Chrysene	218-01-9	< 0.15
Acenaphthylene	208-96-8	< 1.0	Dibenzo(a,h)-anthracene	53-70-3	< 0.015
Anthracene	120-12-7	< 1.0	Fluoranthene	206-44-0	< 1.0
Benzo(a)-anthracene	56-55-3	< 0.15	Fluorene	86-73-7	< 1.0
Benzo(a)-pyrene	50-32-8	< 0.015	Indeno(1,2,3-C,D)-pyrene	193-39-5	< 0.15
Benzo(b)fluoranthene	205-99-2	< 0.15	Naphthalene	91-20-3	< 1.0
Benzo(g,h,i)-perylene	191-24-2	< 1.0	Phenanthrene	85-01-8	< 1.0
Benzo(k)-fluoranthene	207-08-9	< 1.5	Pyrene	129-00-0	< 1.0



Client:	Aspen Environmental Field Services	Sample Name:	#3 - Collected at 9'
		Lab ID:	4201 3
Project:	Summit Midstream / Monument Ridge-Watson Pad	Date Sampled:	11/13/2015
		Date Analyzed:	11/17/2015
Analysis:	PAH	Method:	EPA8270 SIM

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
2,4,6-Tribromophenol (70%-130%)	107	Nitrobenzene-d5 (70%-130%)	78
2-Fluorobiphenyl (70%-130%)	85	2-Fluorophenol (70%-130%)	83

Compound	CAS #	Result (mg/kg)	Compound	CAS #	Result (mg/kg)
Acenaphthene	83-32-9	< 1.0	Chrysene	218-01-9	< 0.15
Acenaphthylene	208-96-8	< 1.0	Dibenzo(a,h)-anthracene	53-70-3	< 0.015
Anthracene	120-12-7	< 1.0	Fluoranthene	206-44-0	< 1.0
Benzo(a)-anthracene	56-55-3	< 0.15	Fluorene	86-73-7	< 1.0
Benzo(a)-pyrene	50-32-8	< 0.015	Indeno(1,2,3-C,D)-pyrene	193-39-5	< 0.15
Benzo(b)fluoranthene	205-99-2	< 0.15	Naphthalene	91-20-3	< 1.0
Benzo(g,h,i)-perylene	191-24-2	< 1.0	Phenanthrene	85-01-8	< 1.0
Benzo(k)-fluoranthene	207-08-9	< 1.5	Pyrene	129-00-0	< 1.0



4130 Clydesdale Parkway Loveland CO 80538



Client:	Aspen Environmental Field Services	Sample Name:	#4 Collected at 13'
		Lab ID:	4201 4
Project:	Summit Midstream / Monument Ridge-Watson Pad	Date Sampled:	11/13/2015
		Date Analyzed:	11/17/2015
Analysis:	PAH	Method:	EPA8270 SIM

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
2,4,6-Tribromophenol (70%-130%)	114	Nitrobenzene-d5 (70%-130%)	83
2-Fluorobiphenyl (70%-130%)	86	2-Fluorophenol (70%-130%)	84

Compound	CAS #	Result (mg/kg)	Compound	CAS #	Result (mg/kg)
Acenaphthene	83-32-9	< 1.0	Chrysene	218-01-9	< 0.15
Acenaphthylene	208-96-8	< 1.0	Dibenzo(a,h)-anthracene	53-70-3	< 0.015
Anthracene	120-12-7	< 1.0	Fluoranthene	206-44-0	< 1.0
Benzo(a)-anthracene	56-55-3	< 0.15	Fluorene	86-73-7	< 1.0
Benzo(a)-pyrene	50-32-8	< 0.015	Indeno(1,2,3-C,D)-pyrene	193-39-5	< 0.15
Benzo(b)fluoranthene	205-99-2	< 0.15	Naphthalene	91-20-3	< 1.0
Benzo(g,h,i)-perylene	191-24-2	< 1.0	Phenanthrene	85-01-8	< 1.0
Benzo(k)-fluoranthene	207-08-9	< 1.5	Pyrene	129-00-0	< 1.0



Client: Aspen Environmental Field Services Lab ID: 4201
 Project: Summit Midstream / Monument Ridge-Watson Pad 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
#1 - Collected at 2'	105	89	97	98	11/13/15	11/17/15	4201 1
#2 - Collected at 5'	94	101	105	104	11/13/15	11/17/15	4201 2
#3 - Collected at 9'	93	97	98	104	11/13/15	11/17/15	4201 3
#4 - Collected at 13'	96	94	99	94	11/13/15	11/17/15	4201 4

