



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 09, 2015

Emilee Skyles
Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: CoP Sunnyside Pipeline D5L-1

OrderNo.: 1506925

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/19/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1506925**

Date Reported: **7/9/2015**

CLIENT: Animas Environmental

Client Sample ID: Background

Project: CoP Sunnyside Pipeline D5L-1

Collection Date: 6/18/2015 11:25:00 AM

Lab ID: 1506925-001

Matrix: SOIL

Received Date: 6/19/2015 8:10:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Arsenic	1.9	0.29	2.5	J	mg/Kg	1	7/7/2015 4:36:39 PM	19885
SAR SOLUBLE CATIONS							Analyst: MED	
Sodium Adsorption Ratio	0.069	0	0			1	7/7/2015 10:35:00 AM	20103
SM4500-H+B: PH							Analyst: JRR	
pH	8.09	0.100	1.68		pH Units	1	6/25/2015 10:58:00 AM	R27082
RESISTIVITY AND EC SOIL							Analyst: JRR	
Conductivity	375	1.00	1.00		µmhos/c	1	6/30/2015 10:06:00 AM	20011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506925

09-Jul-15

Client: Animas Environmental

Project: CoP Sunnyside Pipeline D5L-1

Sample ID	MB-19885		SampType: MBLK		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS		Batch ID: 19885		RunNo: 27100					
Prep Date:	6/23/2015		Analysis Date: 6/25/2015		SeqNo: 810170		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								

Sample ID	LCS-19885		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 19885		RunNo: 27100					
Prep Date:	6/23/2015		Analysis Date: 6/25/2015		SeqNo: 810171		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	25	2.5	25.00	0	102	80	120			

Sample ID	1506925-001BMS		SampType: MS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	Background		Batch ID: 19885		RunNo: 27342					
Prep Date:	6/23/2015		Analysis Date: 7/7/2015		SeqNo: 819848		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	2.5	24.79	1.869	78.4	75	125			

Sample ID	1506925-001BMSD		SampType: MSD		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	Background		Batch ID: 19885		RunNo: 27342					
Prep Date:	6/23/2015		Analysis Date: 7/7/2015		SeqNo: 819849		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	2.5	24.86	1.869	75.2	75	125	3.53	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506925

09-Jul-15

Client: Animas Environmental

Project: CoP Sunnyside Pipeline D5L-1

Sample ID	1506925-001ADUP	SampType:	DUP	TestCode:	Resistivity and eC Soil					
Client ID:	Background	Batch ID:	20011	RunNo:	27183					
Prep Date:	6/29/2015	Analysis Date:	6/30/2015	SeqNo:	813715	Units:	µmhos/cm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	379	1.00						1.06	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1506925

RcptNo: 1

Received by/date: AT 6/19/15

Logged By: Celina Sessa 6/19/2015 8:10:00 AM

Completed By: Celina Sessa 6/19/2015 10:15:49 AM

Reviewed By: [Signature] 06/20/15
Celina Sessa
Celina Sessa

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved bottles checked for pH: _____
 (<2 or >12 unless noted)
 Adjusted? _____
 Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____ Date: _____
 By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
 Regarding: _____
 Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W. Puer

Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#: eskyes@animasenvironmental

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

COP Sunnyside Pipeline DSL-1

Project #:

Project Manager:

E. Skyles

Sampler: E. Skyles

On Ice: ☒ Yes ☐ No

Sample Temperature: 23

Container Type and #

3-8oz cool

Preservative Type

HEAL No.

1506925

-001

Sample Request ID

Background

Date Time Matrix

6/18/15 11:25 Soil

Date Time

18/15 15:30

Date Time

18/15 15:30

Relinquished by:

E. Skyles

Relinquished by:

E. Skyles

Received by

Alan R. 06/19/15

Received by

Alan R. 06/19/15

Date

06/19/15

Date

06/19/15

Remarks:

Bill to Conoco Phillips * CO 910 TABLE R

NO # 2079402

SUPER Randy Martinez

Area:

AREA: FIXED EQUIPMENT

Order #:

ORDER BY: Crystal Miller

Analysis Request

8270 (Semi-VOA)

8260B (VOA)

8081 Pesticides / 8082 PCB's

Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

X

X

PH, EC, SAR

Remarks: Bill to Conoco Phillips * CO 910 TABLE R

NO # 2079402

SUPER Randy Martinez

ORDER BY: Crystal Miller