

**3R-1013**

**Release Report/ General  
Correspondence**

**Williams SJ**

**Date: Jul-Sept 2014**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: Williams Four Corners LLC	Contact: Jana Franchini
Address: 188 CR 4900, Bloomfield, NM 87413	Telephone No.: (505) 634-4951
Facility Name: Horse Canyon CDP	Facility Type: Central delivery point (CDP)

Surface Owner: BLM	Mineral Owner	API No.
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	27	30N	9W					San Juan

Latitude 36.787621° N Longitude -107.761609° W

**NATURE OF RELEASE**

Type of Release: Natural gas	Volume of Release: 58.9 MCF natural gas	Volume Recovered: 0 MCF natural gas
Source of Release: Emergency shutdown (ESD)	Date and Hour of Occurrence: 08/02/2014 at 02:00 PM MST	Date and Hour of Discovery: 08/02/2014 at 02:10 PM MST
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour: N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse: N/A	

If a Watercourse was Impacted, Describe Fully.\*  
N/A

**OIL CONS. DIV DIST. 3**  
**AUG 11 2014**

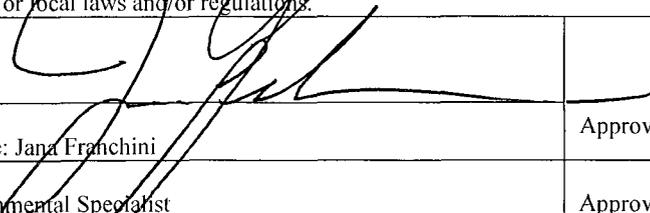
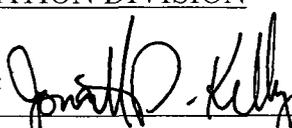
Describe Cause of Problem and Remedial Action Taken.\*

The Horse Canyon CPD ESD system was initiated on low supply pressure the afternoon of August 2, 2014; a resulting 58.9 MCF of natural gas was vented to atmosphere. Williams' personnel found the pressure adjustment on the ESD supply regulator too low, possibly the result of loosening of the jam nut from vibration. The regulator set-point was re-adjusted, the jam nut was re-set, and the ESD system was re-armed.

Describe Area Affected and Cleanup Action Taken.\*

No clean-up required for natural gas releases.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jana Franchini	Approved by Environmental Specialist: 	
Title: Environmental Specialist	Approval Date: 9/8/2014	Expiration Date:
E-mail Address: jana.franchini@williams.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 08/07/2014	Phone: (505) 634-4951	

\* Attach Additional Sheets If Necessary

nJK1425155424

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**Release Notification and Corrective Action**

**OPERATOR**  Initial Report  Final Report

Name of Company: Williams Four Corners LLC	Contact: Jana Franchini
Address: 188 CR 4900, Bloomfield, NM 87413	Telephone No.: (505) 634-4951
Facility Name: Trunk A	Facility Type: Natural gas pipeline
Surface Owner: BLM	Mineral Owner
API No.	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	27	29N	11W					San Juan

Latitude 36.691326° N Longitude -107.978910° W

**NATURE OF RELEASE**

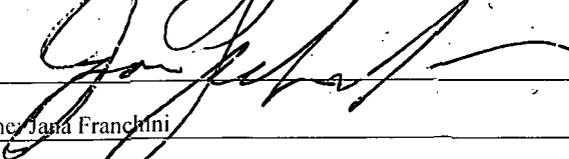
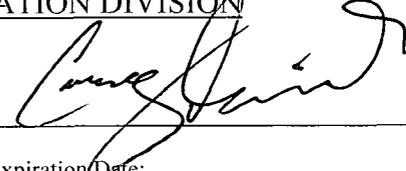
Type of Release: Natural gas & methanol	Volume of Release: 31.4 MCF natural gas & 50 gallons (approx.) methanol	Volume Recovered: 0 MCF natural gas & 0 gallons methanol
Source of Release: Pipeline methanol injection station	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 06/26/2014 at 04:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mark Kelly (BLM), Cory Smith (NMOCD), NRC	
By Whom? Jana Franchini & ES&H (Release Reporting Contractor)	Date and Hour: 06/26/2014 at 04:20 PM MST	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse: 50 gallons methanol mixed with potable water	

If a Watercourse was Impacted, Describe Fully.\*  
  
A break in the potable water line running to Kutz Plant eroded enough soil beneath a methanol injection station on the Trunk A Pipeline that the methanol container fell over. Approximately 50 gallons of methanol leaked out of the container before it was righted and removed. The methanol mixed with the water rushing from the water line break and was carried down an un-named, dry wash (natural erosional feature) before pooling-up and evaporating. There were no impacts to surface or ground water. Groundwater is estimated to be greater than 100 feet below the ground surface.

Describe Cause of Problem and Remedial Action Taken.\*  
  
Erosion from the break in the potable water line eventually toppled a methanol injection station on Trunk A Pipeline, which resulted in a release of 31.4 MCF natural gas to atmosphere and approximately 50 gallons of methanol to soil. The water line was isolated and repaired and the methanol tank was righted and removed.

Describe Area Affected and Cleanup Action Taken.\*  
  
The area of the release was sampled on July 3, 2014 and analyzed for residual methanol by Method 8260. The results were non-detectable for all nine samples collected (refer to the attached lab report and map for more information). As such, no additional cleanup or remedial actions are anticipated.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jana Franchini	Approved by Environmental Specialist: 	
Title: Environmental Specialist	Approval Date: 9/8/14	Expiration Date:
E-mail Address: jana.franchini@williams.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 07/24/2014	Phone: (505) 634-4951	

#NCS 1425130111



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

July 23, 2014

Debbie Watson  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 486-4071  
FAX (505) 324-2022

RE: Williams Field Service Chaco Trunk A

OrderNo.: 1407309

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 7/8/2014 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](http://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

# Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com  
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

**Client:** HALL ENVIRONMENTAL ANALYSIS LAB  
**Address:** 4901 HAWKINS NE SUITE D  
ALBUQUERQUE, NM 87109  
**Attn:** ANDY FREEMAN

**Batch #:** 140709056  
**Project Name:** 1407309

## Analytical Results Report

<b>Sample Number</b>	140709056-001	<b>Sampling Date</b>	7/3/2014	<b>Date/Time Received</b>	7/9/2014	12:30 PM
<b>Client Sample ID</b>	1407309-001A / S-1	<b>Sampling Time</b>	12:46 PM	<b>Extraction Date</b>	7/17/2014	
<b>Matrix</b>	Soil	<b>Sample Location</b>				
<b>Comments</b>						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Methanol	ND	mg/kg	50	7/21/2014	KFG	GC/FID	
%moisture	0.9	Percent		7/21/2014	KFG	%moisture	

<b>Sample Number</b>	140709056-002	<b>Sampling Date</b>	7/3/2014	<b>Date/Time Received</b>	7/9/2014	12:30 PM
<b>Client Sample ID</b>	1407309-002A / S-2	<b>Sampling Time</b>	12:52 PM	<b>Extraction Date</b>	7/17/2014	
<b>Matrix</b>	Soil	<b>Sample Location</b>				
<b>Comments</b>						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Methanol	ND	mg/kg	50	7/21/2014	KFG	GC/FID	
%moisture	2.5	Percent		7/21/2014	KFG	%moisture	

<b>Sample Number</b>	140709056-003	<b>Sampling Date</b>	7/3/2014	<b>Date/Time Received</b>	7/9/2014	12:30 PM
<b>Client Sample ID</b>	1407309-003A / S-3	<b>Sampling Time</b>	1:00 PM	<b>Extraction Date</b>	7/17/2014	
<b>Matrix</b>	Soil	<b>Sample Location</b>				
<b>Comments</b>						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Methanol	ND	mg/kg	50	7/21/2014	KFG	GC/FID	
%moisture	1.9	Percent		7/21/2014	KFG	%moisture	

<b>Sample Number</b>	140709056-004	<b>Sampling Date</b>	7/3/2014	<b>Date/Time Received</b>	7/9/2014	12:30 PM
<b>Client Sample ID</b>	1407309-004A / S-4	<b>Sampling Time</b>	1:06 PM	<b>Extraction Date</b>	7/17/2014	
<b>Matrix</b>	Soil	<b>Sample Location</b>				
<b>Comments</b>						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Methanol	ND	mg/kg	50	7/21/2014	KFG	GC/FID	
%moisture	0.9	Percent		7/21/2014	KFG	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87B93; ID:ID00013; MT: CERT0028; NM: ID00013; OR:ID200001-002; WA:C595  
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT: CertID095; FL(NELAP): E871099

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**Client:** HALL ENVIRONMENTAL ANALYSIS LAB  
**Address:** 4901 HAWKINS NE SUITE D  
 ALBUQUERQUE, NM 87109  
**Attn:** ANDY FREEMAN

**Batch #:** 140709056  
**Project Name:** 1407309

## Analytical Results Report

<b>Sample Number</b>	140709056-005	<b>Sampling Date</b>	7/3/2014	<b>Date/Time Received</b>	7/9/2014	12:30 PM
<b>Client Sample ID</b>	1407309-005A / S-5	<b>Sampling Time</b>	1:12 PM	<b>Extraction Date</b>	7/17/2014	
<b>Matrix</b>	Soil	<b>Sample Location</b>				
<b>Comments</b>						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Methanol	ND	mg/kg	50	7/21/2014	KFG	GC/FID	
%moisture	0.6	Percent		7/21/2014	KFG	%moisture	

<b>Sample Number</b>	140709056-006	<b>Sampling Date</b>	7/3/2014	<b>Date/Time Received</b>	7/9/2014	12:30 PM
<b>Client Sample ID</b>	1407309-006A / S-6	<b>Sampling Time</b>	1:19 PM	<b>Extraction Date</b>	7/17/2014	
<b>Matrix</b>	Soil	<b>Sample Location</b>				
<b>Comments</b>						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Methanol	ND	mg/kg	50	7/21/2014	KFG	GC/FID	
%moisture	11.2	Percent		7/21/2014	KFG	%moisture	

<b>Sample Number</b>	140709056-007	<b>Sampling Date</b>	7/3/2014	<b>Date/Time Received</b>	7/9/2014	12:30 PM
<b>Client Sample ID</b>	1407309-007A / S-7	<b>Sampling Time</b>	1:26 PM	<b>Extraction Date</b>	7/17/2014	
<b>Matrix</b>	Soil	<b>Sample Location</b>				
<b>Comments</b>						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Methanol	ND	mg/kg	50	7/21/2014	KFG	GC/FID	
%moisture	2	Percent		7/21/2014	KFG	%moisture	

<b>Sample Number</b>	140709056-008	<b>Sampling Date</b>	7/3/2014	<b>Date/Time Received</b>	7/9/2014	12:30 PM
<b>Client Sample ID</b>	1407309-008A / S-8	<b>Sampling Time</b>	1:35 PM	<b>Extraction Date</b>	7/17/2014	
<b>Matrix</b>	Soil	<b>Sample Location</b>				
<b>Comments</b>						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Methanol	ND	mg/kg	50	7/21/2014	KFG	GC/FID	
%moisture	6.4	Percent		7/21/2014	KFG	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595  
 Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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**Client:** HALL ENVIRONMENTAL ANALYSIS LAB  
**Address:** 4901 HAWKINS NE SUITE D  
ALBUQUERQUE, NM 87109  
**Attn:** ANDY FREEMAN

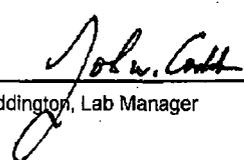
**Batch #:** 140709056  
**Project Name:** 1407309

## Analytical Results Report

<b>Sample Number</b>	140709056-009	<b>Sampling Date</b>	7/3/2014	<b>Date/Time Received</b>	7/9/2014 12:30 PM
<b>Client Sample ID</b>	1407309-009A / S-9	<b>Sampling Time</b>	1:41 PM	<b>Extraction Date</b>	7/17/2014
<b>Matrix</b>	Soil	<b>Sample Location</b>			
<b>Comments</b>					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Methanol	ND	mg/kg	50	7/21/2014	KFG	GC/FID	
%moisture	11.3	Percent		7/21/2014	KFG	%moisture	

Authorized Signature

  
John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level  
ND Not Detected  
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.  
The results reported relate only to the samples indicated.  
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT: CERT0028; NM: ID00013; OR: ID200001-002; WA: C595  
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA: C595; MT: Cert0095; FL(NELAP): E871099

Tuesday, July 22, 2014

Page 3 of 3

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**Client:** HALL ENVIRONMENTAL ANALYSIS LAB  
**Address:** 4901 HAWKINS NE SUITE D  
ALBUQUERQUE, NM 87109  
**Attn:** ANDY FREEMAN

**Batch #:** 140709056  
**Project Name:** 1407309

## Analytical Results Report Quality Control Data

### Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Methanol	240	mg/L	250	96.0	70-130	7/17/2014	7/21/2014

### Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
140709056-002	Methanol	ND	238	mg/kg	250	95.2	50-150	7/17/2014	7/21/2014

### Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Methanol	186	mg/kg	250	74.4	24.5	0-25	7/17/2014	7/21/2014

### Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Methanol	ND	mg/kg	25	7/17/2014	7/21/2014

AR Acceptable Range  
ND Not Detected  
PQL Practical Quantitation Limit  
RPD Relative Percentage Difference

### Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595  
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C595; MT:Cert0095; FL(NELAP): E871099



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

# Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1407309

RcptNo: 1

Received by/date: 07/08/14

Logged By: **Anne Thorne** 7/8/2014 7:55:00 AM *Anne Thorne*

Completed By: **Anne Thorne** 7/8/2014 *Anne Thorne*

Reviewed By: *mg* 07/08/14

**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° 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

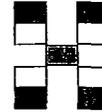
Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Yes			

# Chain-of-Custody Record



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client: Animas Environmental Service LLC  
 Mailing Address: 624 E Comanche Farmington, NM 87401  
 Phone #: (505) 564-2281  
 email or Fax#: \_\_\_\_\_  
 QA/QC Package:  
 Standard  Level 4 (Full Validation)  
 Accreditation  
 NELAP  Other \_\_\_\_\_  
 EDD (Type) \_\_\_\_\_

Turn-Around Time:  
 Standard  Rush  
 Project Name: Williams Field Service Chorro Trunk A  
 Project #: \_\_\_\_\_  
 Project Manager: D. Watson or K. Christiansen  
 Sampler: Laura Lane / Ross Kennemer  
 On Ice:  Yes  No  
 Sample Temperature: 2.9

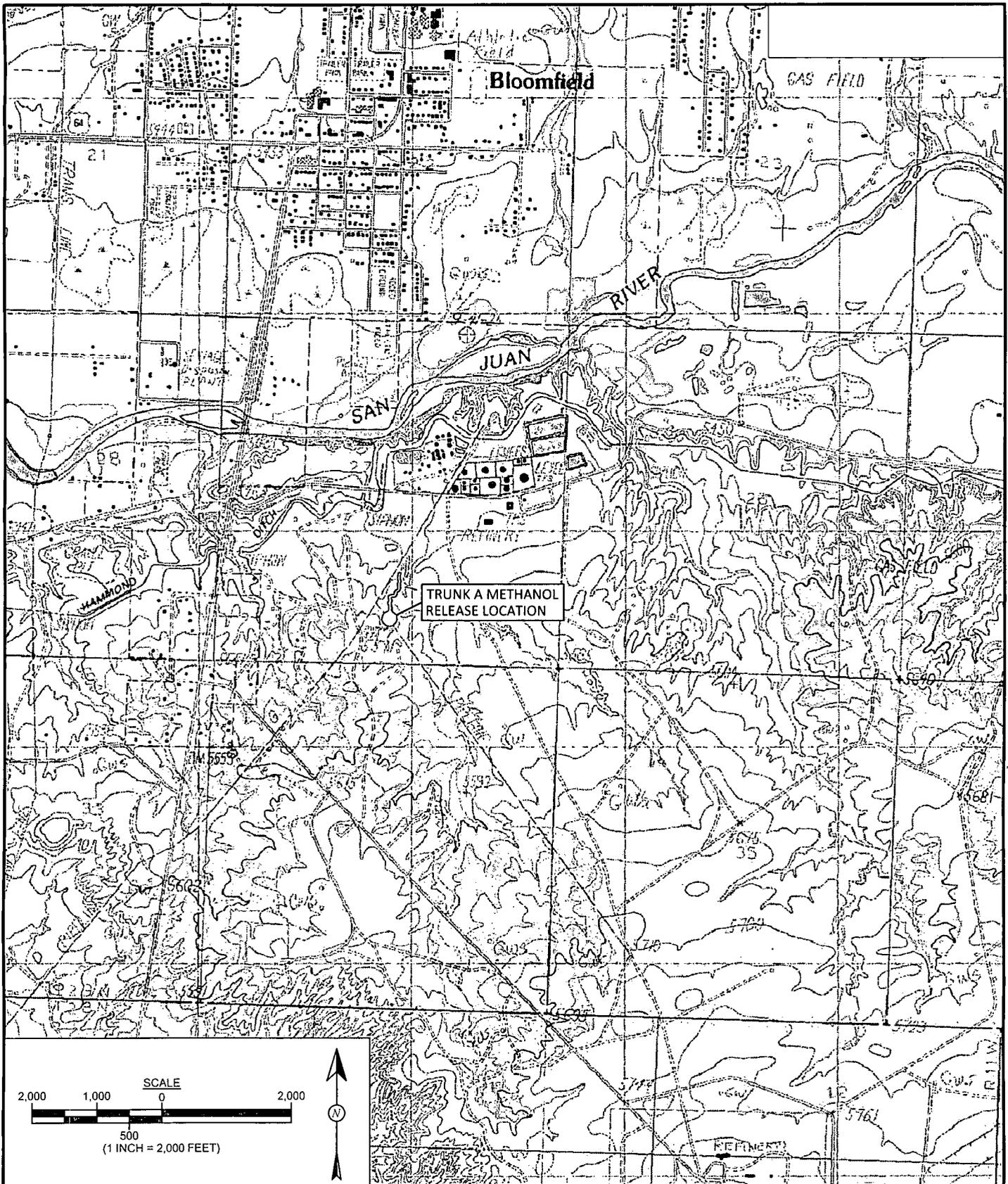
### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8260 Methanol LL	Air Bubbles (Y or N)
7-3-14	12:46	soil	S-1	Terracov 2-4oz -4oz	2-Sodium bisulfate cold	1407309												X	
	12:52	"	S-2	"	"													X	
	13:00	"	S-3	"	"													X	
	13:06	"	S-4	"	"													X	
	13:12	"	S-5	"	"													X	
	13:19	"	S-6	"	"													X	
	13:26	"	S-7	"	"													X	
	13:35	"	S-8	"	"													X	
	13:41	"	S-9	"	"													X	

Date: 7/7/14 Time: 1645 Relinquished by: Laura Lane Received by: Christina Wachs Date: 7/7/14 Time: 1649  
 Date: 7/7/14 Time: 1740 Relinquished by: Christina Wachs Received by: Chris Date: 07/08/14 Time: 0755

Remarks: Invoice WFS

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.

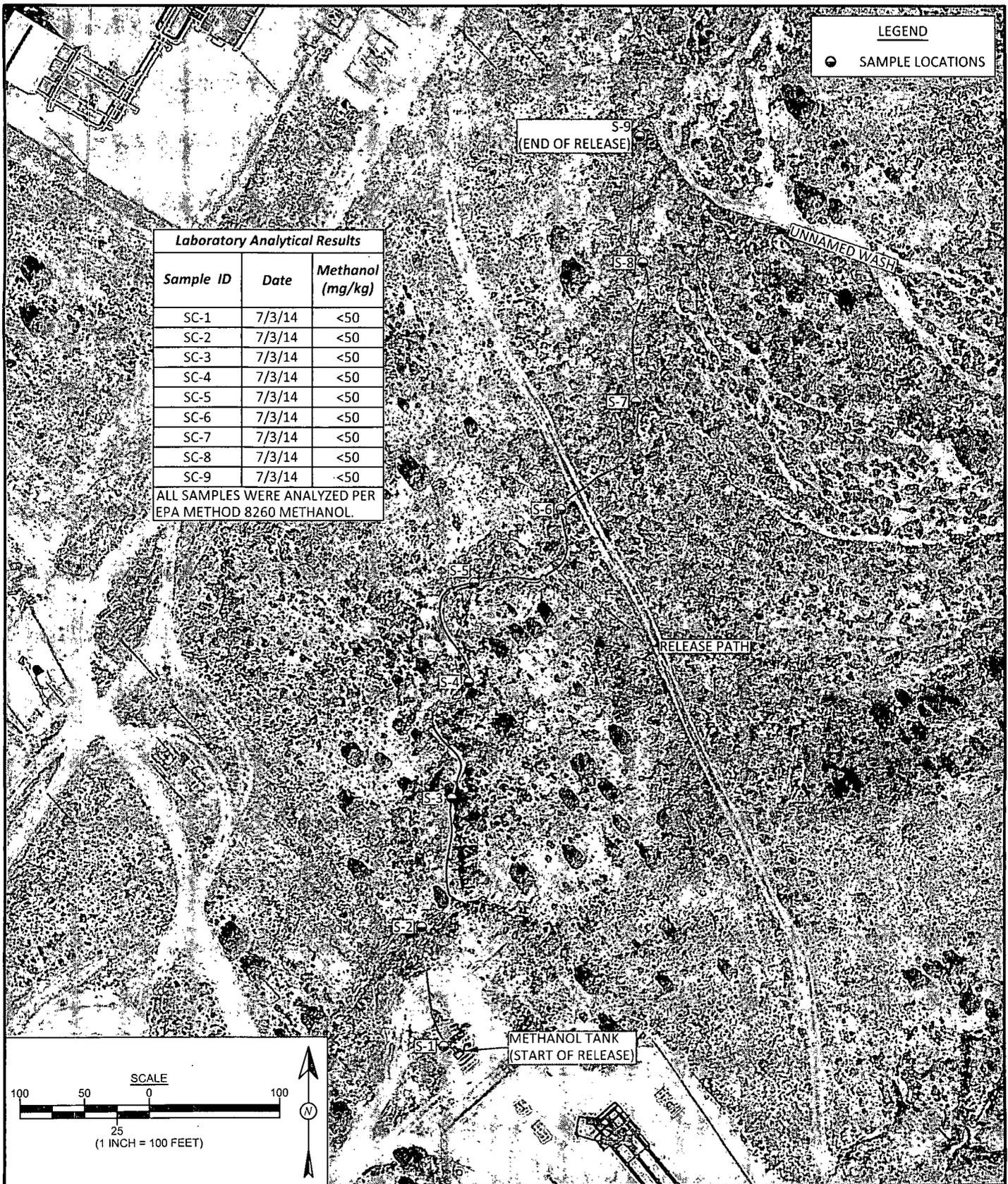


Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> July 23, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> July 23, 2014
<b>CHECKED BY:</b> R. Kennemer	<b>DATE CHECKED:</b> July 23, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> July 23, 2014

**FIGURE 1**

**TOPOGRAPHIC SITE LOCATION MAP**  
 WILLIAMS FOUR CORNERS LLC  
 TRUNK A METHANOL TANK RELEASE  
 SW¼, SE¼, SECTION 27, T29N, R11W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.69132, W107.97888



<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> July 23, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> July 23, 2014
<b>CHECKED BY:</b> R. Kennemer	<b>DATE CHECKED:</b> July 23, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> July 23, 2014

**FIGURE 2**  
**AERIAL SITE MAP,  
SAMPLE LOCATION AND RESULTS**  
WILLIAMS FOUR CORNERS LLC  
TRUNK A METHANOL TANK RELEASE  
SW¼ SE¼, SECTION 27, T29N, R11W  
SAN JUAN COUNTY, NEW MEXICO  
N36.69132, W107.97888

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: Williams Four Corners LLC	Contact: Jana Franchini
Address: 188 CR 4900, Bloomfield, NM 87413	Telephone No.: (505) 634-4951
Facility Name: Horse Canyon CDP	Facility Type: Central delivery point (CDP)
Surface Owner: BLM	Mineral Owner
API No.	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	27	30N	9W					San Juan

Latitude 36.787621° N Longitude -107.761609° W

**NATURE OF RELEASE**

Type of Release: Natural gas	Volume of Release: 79.88 MCF natural gas	Volume Recovered: 0 MCF natural gas
Source of Release: Emergency shutdown (ESD)	Date and Hour of Occurrence: 07/21/2014 at 08:30 PM MST	Date and Hour of Discovery: 07/21/2014 at 08:30 PM MST
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour: N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse: N/A	

If a Watercourse was Impacted, Describe Fully.\*  
N/A

Describe Cause of Problem and Remedial Action Taken.\*

A leak on the rack vent of the Horse Canyon CPD ESD system caused the facility to partially ESD on the evening of July 21, 2014. A resulting 79.88 MCF of natural gas was vented to atmosphere. Williams' personnel re-charged the ESD system, in order to minimize the release. Maintenance to fix the leaks on the ESD was completed on July 28, 2014.

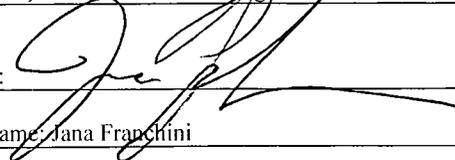
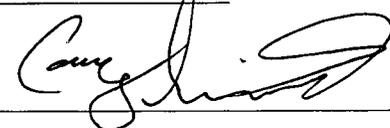
**OIL CONS. DIV DIST. 3**

Describe Area Affected and Cleanup Action Taken.\*

No clean-up required for natural gas releases.

**JUL 30 2014**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Jana Franchini	Approved by Environmental Specialist: 	
Title: Environmental Specialist	Approval Date: 9/8/14	Expiration Date:
E-mail Address: jana.franchini@williams.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 07/28/2014	Phone: (505) 634-4951	

\* Attach Additional Sheets If Necessary

#NCS 1425130899

~  
~

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 N. Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**  Initial Report  Final Report

Name of Company: Williams Four Corners LLC	Contact: Jana Franchini
Address: 188 CR 4900, Bloomfield, NM 87413	Telephone No.: (505) 634-4951
Facility Name: Trunk K	Facility Type: Natural gas pipeline
Surface Owner: BLM	Mineral Owner:
API No.	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H & E	28 & 29	28N	10W					San Juan

Latitude 36.63420° N Longitude -107.90770° W

REC'D AUG 19 '14  
OIL CONS. DIV.  
DIST. 3

**NATURE OF RELEASE**

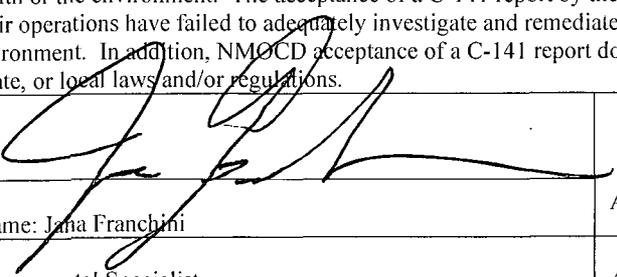
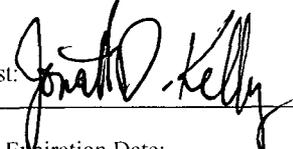
Type of Release: Produced water & natural gas	Volume of Release: 30 BBL (approx.) produced water & 210.9 MCF natural gas	Volume Recovered: 0 BBL produced water & 0 MCF natural gas
Source of Release: Pipeline release	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 06/10/2014 at 05:45 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Brandon Powell (NMOCD) and Mark Kelly (BLM). Additionally, NRC, LEPC, & USACE following watercourse confirmation.	
By Whom? Monica Sandoval, ES&H contractor, & Animas Environmental	Date and Hour: 06/10/2014 at 09:55 PM & 09:50 PM, to NMOCD & BLM, respectively	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse: 30 BBL produced water	

If a Watercourse was Impacted, Describe Fully.\*  
Approximately 30 barrels of produced water was released from a pipeline release. The produced water flowed for approximately 1,300 feet down the intermittent drainage—an un-named, dry wash (natural erosional feature) that enters Kutz Wash, which is located approximately 3.5 miles southwest of the release. There were no impacts to surface or ground water. Groundwater is estimated to be greater than 100 feet below the ground surface.

Describe Cause of Problem and Remedial Action Taken.\*  
The pipeline leaks (and consequential releases of natural gas and produced water) were discovered during a routine leak survey performed on June 10, 2014. The pipeline was isolated, blown-down, clamped, and later pigged, in order to stop the release, remove liquid, and make repairs, respectively.

Describe Area Affected and Cleanup Action Taken.\*  
Impacted soil from the wash and the pipeline, amounting to 980 cubic yards and 3,280 cubic yards, respectively, was removed and transported off-site for disposal. Confirmation soil samples were collected on June 25<sup>th</sup> and again on July 17<sup>th</sup>, following additional excavation in the south release. Refer to the attached figures for more detailed information. Based on the results of the confirmation samples (and subsequent approval to back-fill), Williams proceeded to back-fill and compact, as necessary, all excavated areas. The remediation work was completed on August 14, 2014.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

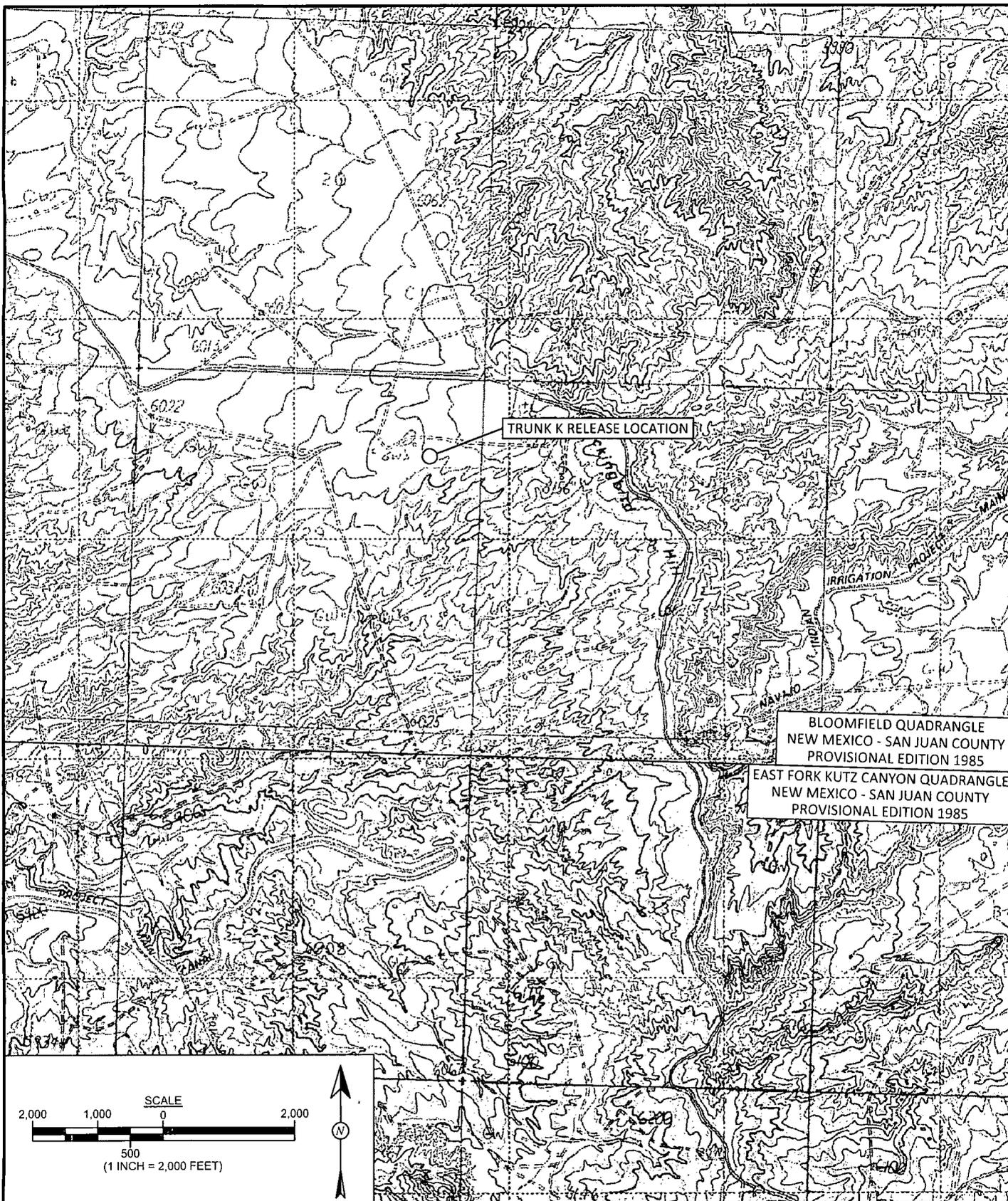
Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jana Franchini	Approved by Environmental Specialist: 	
Title: Environmental Specialist	Approval Date: 9/8/2014	Expiration Date:
E-mail Address: jana.franchini@williams.com	Conditions of Approval:	Attached <input type="checkbox"/>

nJK1425/5326

Date: 08/15/2014

Phone: (505) 634-4951

\* Attach Additional Sheets If Necessary

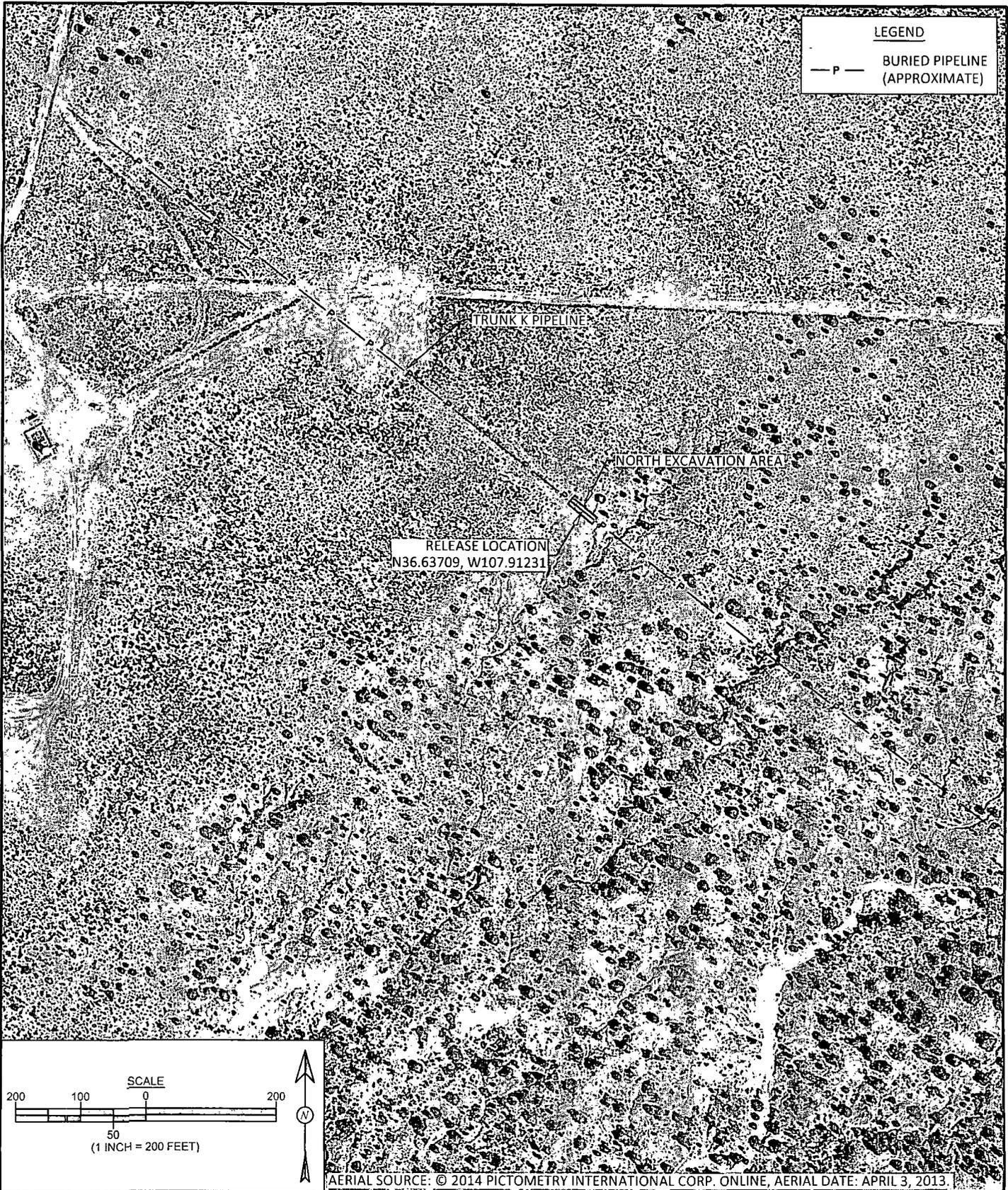


Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 26, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 29, 2014
<b>CHECKED BY:</b> K. Christiansen	<b>DATE CHECKED:</b> June 29, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 29, 2014

## FIGURE 1

**TOPOGRAPHIC SITE LOCATION MAP**  
WILLIAMS FOUR CORNERS LLC  
TRUNK K PIPELINE RELEASE  
NE¼, NE¼, SECTION 29, T28N, R10W  
SAN JUAN COUNTY, NEW MEXICO  
N36.63709, W107.91231

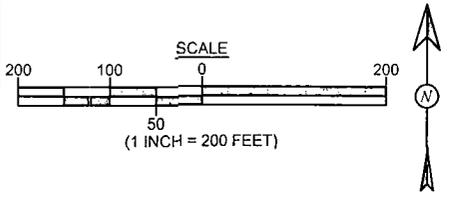


**LEGEND**  
 — P — BURIED PIPELINE (APPROXIMATE)

TRUNK K PIPELINE

NORTH EXCAVATION AREA

RELEASE LOCATION  
 N36.63709, W107.91231



AERIAL SOURCE: © 2014 PICTOMETRY INTERNATIONAL CORP. ONLINE, AERIAL DATE: APRIL 3, 2013



<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 26, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 29, 2014
<b>CHECKED BY:</b> K. Christiansen	<b>DATE CHECKED:</b> June 29, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 29, 2014

**FIGURE 2**  
  
**AERIAL SITE MAP**  
 WILLIAMS FOUR CORNERS LLC  
 TRUNK K PIPELINE RELEASE  
 NE¼, NE¼, SECTION 29, T28N, R10W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.63709, W107.91231

**FIGURE 3**

**NORTH EXCAVATION SAMPLE LOCATIONS AND RESULTS, JUNE 2014**  
 WILLIAMS FOUR CORNERS LLC  
 TRUNK K PIPELINE RELEASE  
 NE¼ NE¼, SECTION 29, T28N, R10W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.63709, W107.91231



Animas Environmental Services, LLC

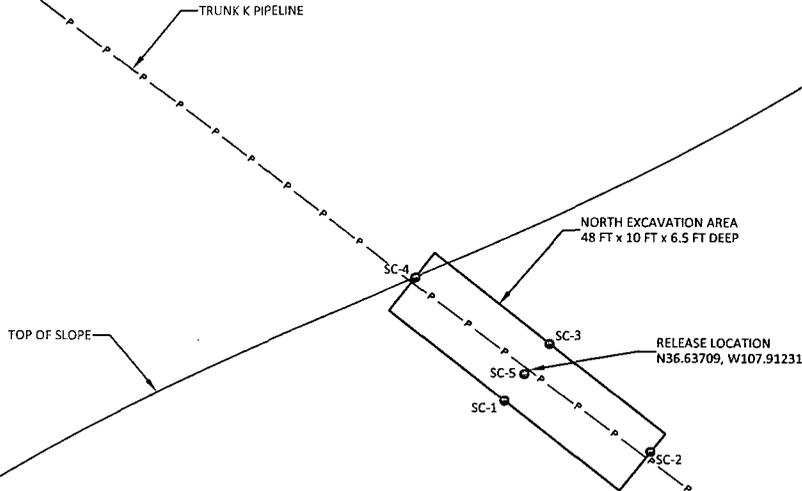
<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 26, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 29, 2014
<b>CHECKED BY:</b> K. Christiansen	<b>DATE CHECKED:</b> June 29, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 29, 2014

**LEGEND**

- SAMPLE LOCATIONS
- P — BURIED PIPELINE (APPROXIMATE)

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>100</b>	<b>100</b>
SC-1	6/25/14	1 to 6.5	18.9	242
SC-2	6/25/14	1 to 6.5	474	94.7
SC-3	6/25/14	1 to 6.5	3.1	53.0
SC-4	6/25/14	1 to 6.5	128	69.5
SC-5	6/25/14	6.5	14.0	79.3

ALL SAMPLES ARE COMPOSITE SAMPLES.

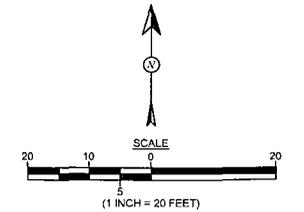


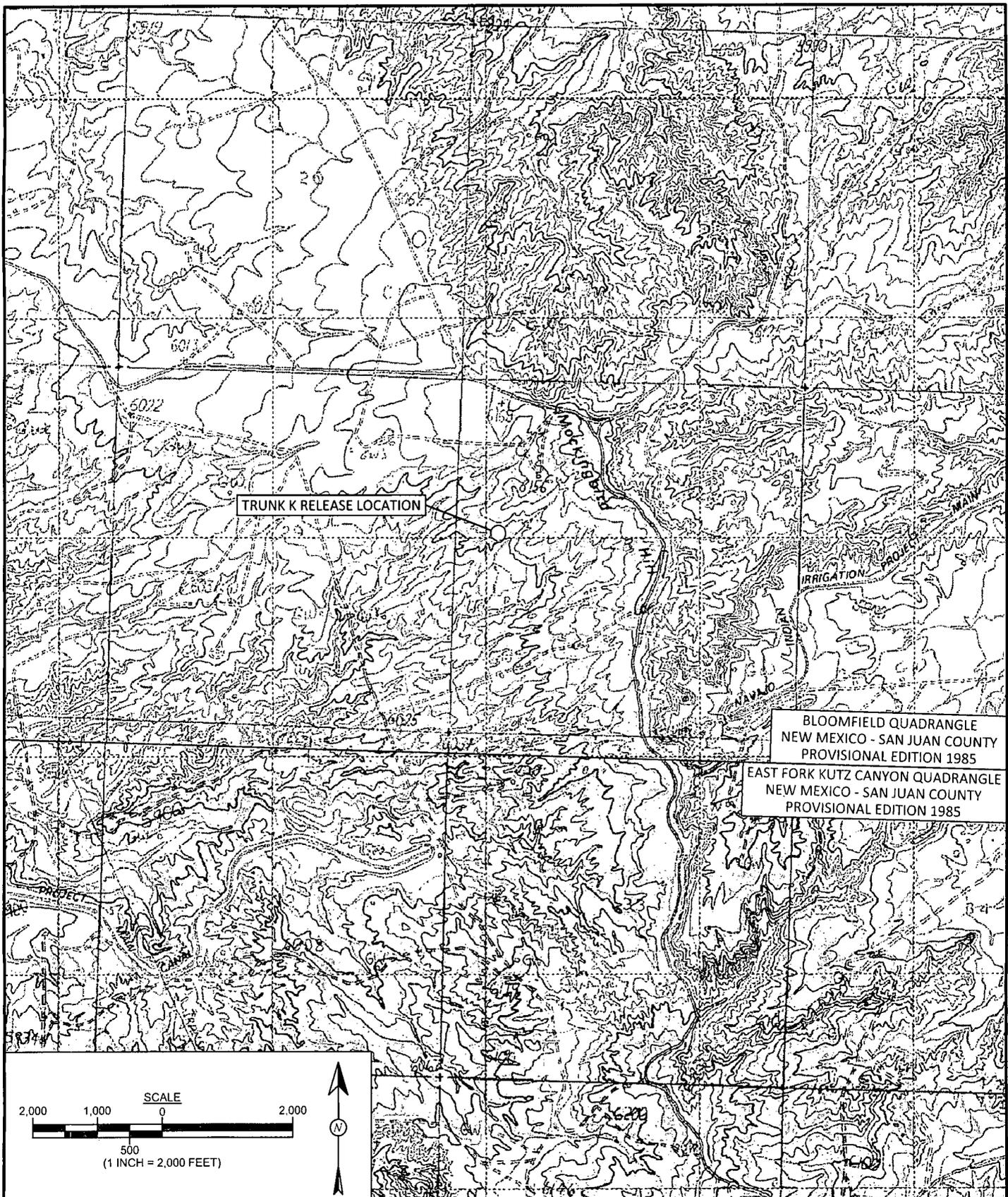
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>10</b>	<b>50</b>	<b>100</b>	<b>NE</b>	
SC-1	6/25/14	1 to 6.5	<0.048	0.155	<4.8	56	180
SC-2	6/25/14	1 to 6.5	<0.041	0.57	17	29	220
SC-3	6/25/14	1 to 6.5	<0.054	0.17	<5.4	<9.9	71
SC-4	6/25/14	1 to 6.5	<0.040	3.05	16	<9.8	51
SC-5	6/25/14	6.5	<0.042	<0.209	<4.2	<9.8	140

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D.  
 NE - NOT ESTABLISHED

Sample ID	Date	Depth (ft)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Mercury (mg/kg)
<b>CONSTRUCTION WORKER NMSSL*</b>			<b>53.0</b>	<b>4,350</b>	<b>277</b>	<b>465,000</b>	<b>800</b>	<b>1,550</b>	<b>1,550</b>	<b>13.6</b>
SC-1	6/25/14	1 to 6.5	<4.9	130	<0.20	5.1	2.8	<4.9	<0.49	<0.033
SC-2	6/25/14	1 to 6.5	<4.9	310	<0.20	6.9	2.5	<4.9	<0.49	<0.032
SC-3	6/25/14	1 to 6.5	<4.9	220	<0.20	7.1	2.5	<4.9	<0.49	<0.032
SC-4	6/25/14	1 to 6.5	<5.0	170	<0.20	4.1	2.5	<5.0	<0.50	<0.032
SC-5	6/25/14	6.5	<5.0	150	<0.20	6.2	2.4	<5.0	<0.50	<0.033

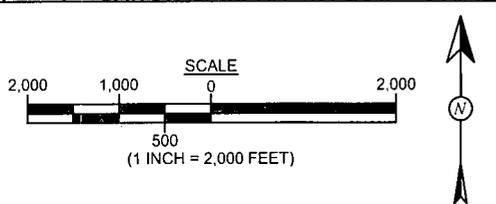
ALL SAMPLES WERE ANALYZED PER EPA METHOD 6010B, 7471, AND 300.0.  
 \* - NEW MEXICO SOIL SCREENING LEVELS (NMSSL) TABLE A-1 (JUNE 2012)





BLOOMFIELD QUADRANGLE  
 NEW MEXICO - SAN JUAN COUNTY  
 PROVISIONAL EDITION 1985

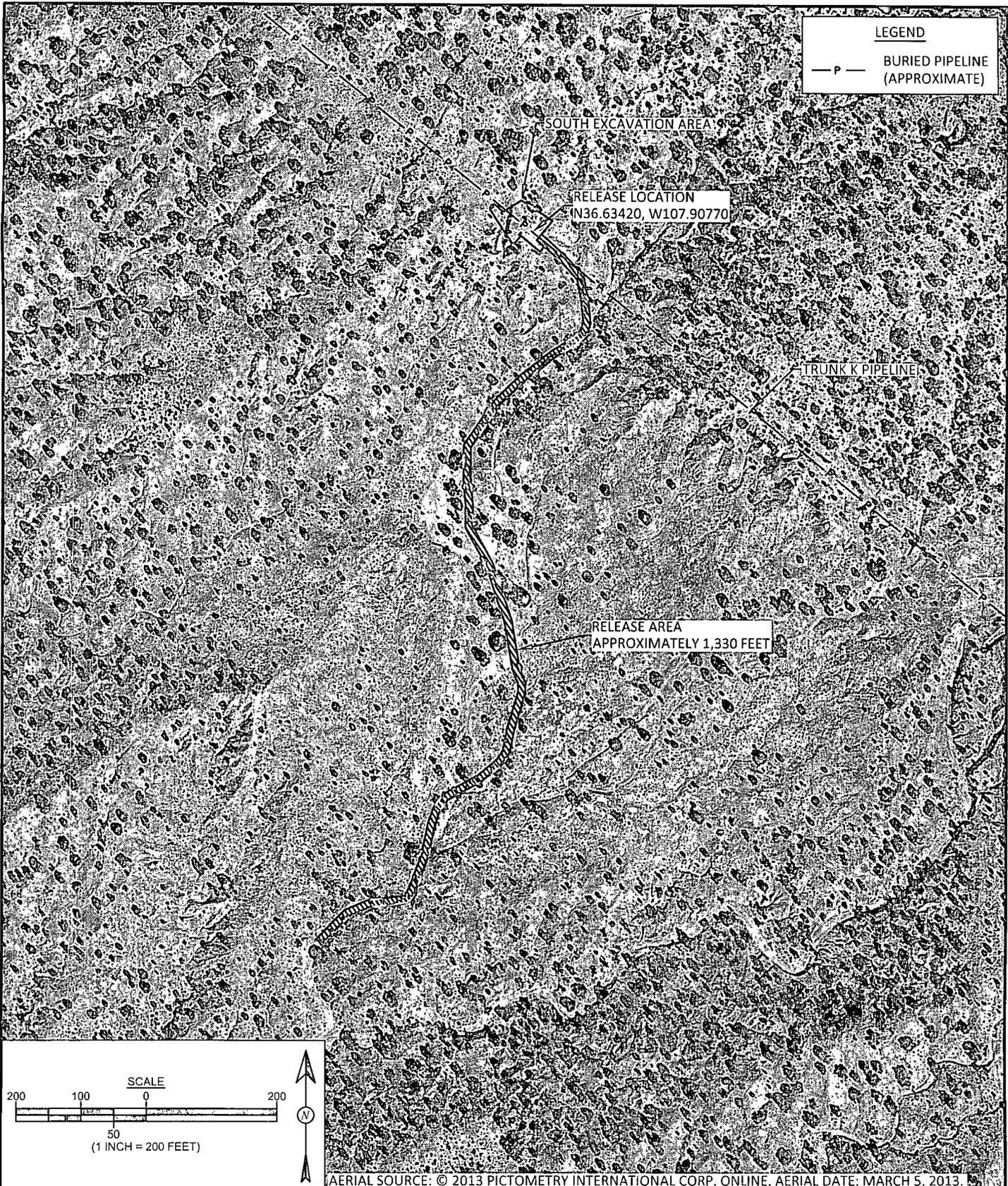
EAST FORK KUTZ CANYON QUADRANGLE  
 NEW MEXICO - SAN JUAN COUNTY  
 PROVISIONAL EDITION 1985



<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 26, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 29, 2014
<b>CHECKED BY:</b> K. Christiansen	<b>DATE CHECKED:</b> June 29, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 29, 2014

**FIGURE 1**

**TOPOGRAPHIC SITE LOCATION MAP**  
 WILLIAMS FOUR CORNERS LLC  
 TRUNK K PIPELINE RELEASE  
 SW $\frac{1}{4}$  NW $\frac{1}{4}$ , SECTION 28, T28N, R10W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.63420, W107.90770



Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 26, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 29, 2014
<b>CHECKED BY:</b> K. Christiansen	<b>DATE CHECKED:</b> June 29, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 29, 2014

**FIGURE 2**

**AERIAL SITE MAP**  
 WILLIAMS FOUR CORNERS LLC  
 TRUNK K PIPELINE RELEASE  
 SW¼, NW¼, SECTION 28, T28N, R10W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.63420, W107.90770

**FIGURE 3**

**SOUTH EXCAVATION SAMPLING LOCATIONS AND RESULTS**  
**JUNE AND JULY 2014**  
 WILLIAMS FOUR CORNERS LLC  
 TRUNK K PIPELINE RELEASE  
 SW¼ NW¼, SECTION 28, T28N, R10W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.63420, W107.90770

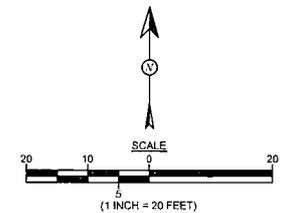


Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> July 18, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> July 29, 2014
<b>CHECKED BY:</b> K. Christiansen	<b>DATE CHECKED:</b> July 29, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> July 29, 2014

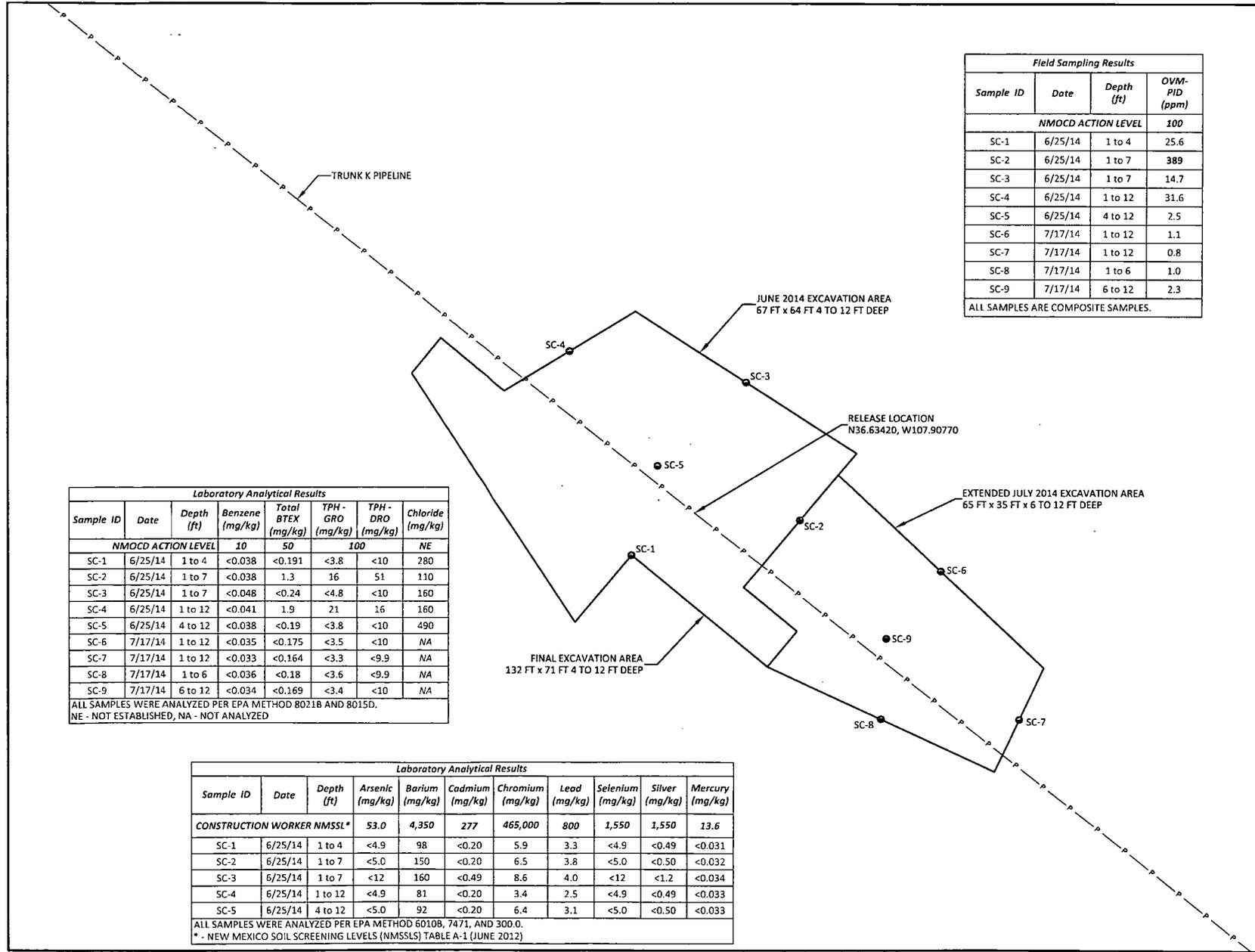
**LEGEND**

- SAMPLE LOCATIONS
- P — BURIED PIPELINE (APPROXIMATE)



Field Sampling Results			
Sample ID	Date	Depth (ft)	OVM-PID (ppm)
<b>NMOCED ACTION LEVEL</b>			<b>100</b>
SC-1	6/25/14	1 to 4	25.6
SC-2	6/25/14	1 to 7	389
SC-3	6/25/14	1 to 7	14.7
SC-4	6/25/14	1 to 12	31.6
SC-5	6/25/14	4 to 12	2.5
SC-6	7/17/14	1 to 12	1.1
SC-7	7/17/14	1 to 12	0.8
SC-8	7/17/14	1 to 6	1.0
SC-9	7/17/14	6 to 12	2.3

ALL SAMPLES ARE COMPOSITE SAMPLES.



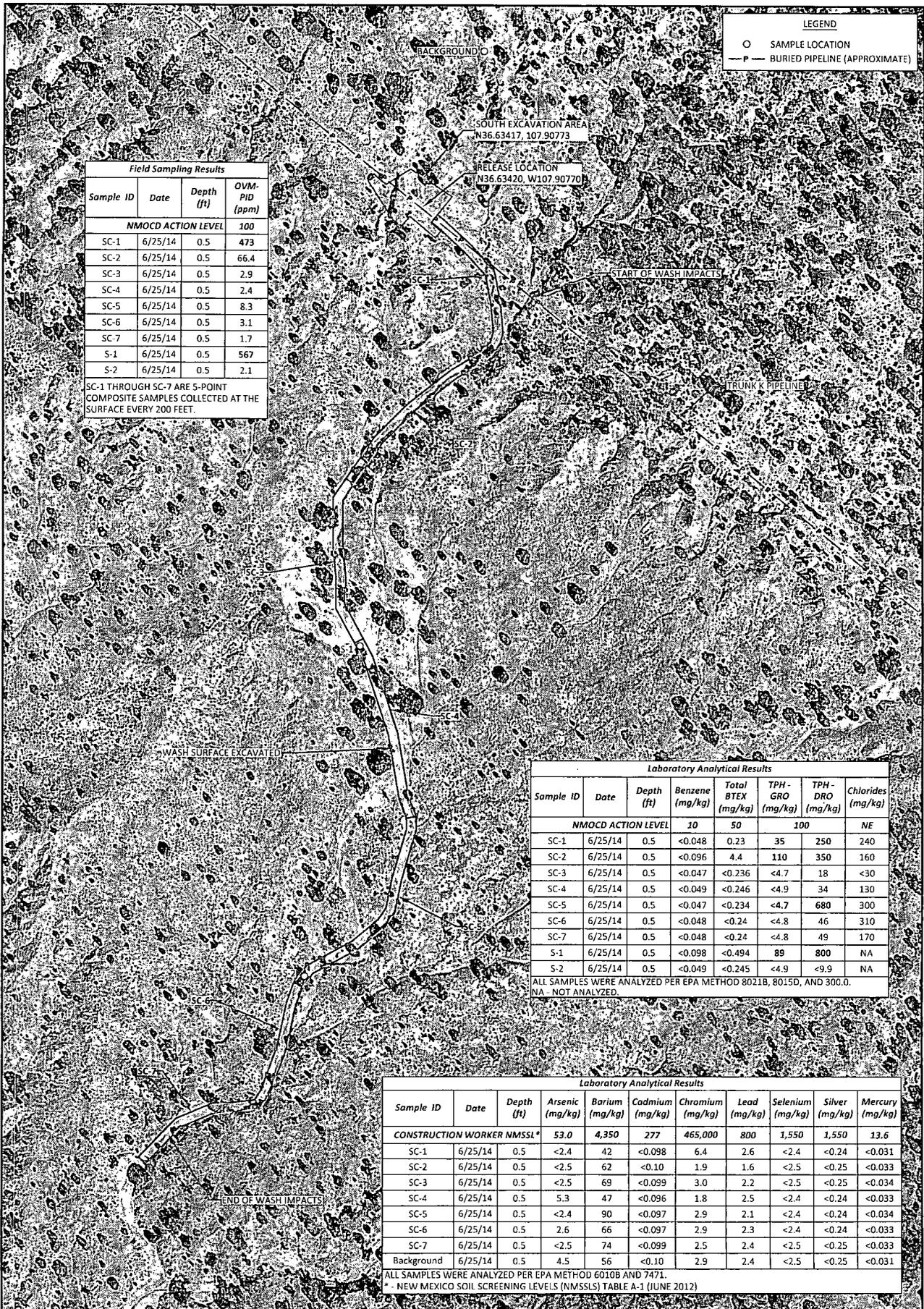
Laboratory Analytical Results							
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chloride (mg/kg)
<b>NMOCED ACTION LEVEL</b>			<b>10</b>	<b>50</b>	<b>100</b>		<b>NE</b>
SC-1	6/25/14	1 to 4	<0.038	<0.191	<3.8	<10	280
SC-2	6/25/14	1 to 7	<0.038	1.3	16	51	110
SC-3	6/25/14	1 to 7	<0.048	<0.24	<4.8	<10	160
SC-4	6/25/14	1 to 12	<0.041	1.9	21	16	160
SC-5	6/25/14	4 to 12	<0.038	<0.19	<3.8	<10	490
SC-6	7/17/14	1 to 12	<0.035	<0.175	<3.5	<10	NA
SC-7	7/17/14	1 to 12	<0.033	<0.164	<3.3	<9.9	NA
SC-8	7/17/14	1 to 6	<0.036	<0.18	<3.6	<9.9	NA
SC-9	7/17/14	6 to 12	<0.034	<0.169	<3.4	<10	NA

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D.  
 NE - NOT ESTABLISHED, NA - NOT ANALYZED

Laboratory Analytical Results										
Sample ID	Date	Depth (ft)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Mercury (mg/kg)
<b>CONSTRUCTION WORKER NMSSL*</b>			<b>53.0</b>	<b>4,350</b>	<b>277</b>	<b>465,000</b>	<b>800</b>	<b>1,550</b>	<b>1,550</b>	<b>13.6</b>
SC-1	6/25/14	1 to 4	<4.9	98	<0.20	5.9	3.3	<4.9	<0.49	<0.031
SC-2	6/25/14	1 to 7	<5.0	150	<0.20	6.5	3.8	<5.0	<0.50	<0.032
SC-3	6/25/14	1 to 7	<12	160	<0.49	8.6	4.0	<12	<1.2	<0.034
SC-4	6/25/14	1 to 12	<4.9	81	<0.20	3.4	2.5	<4.9	<0.49	<0.033
SC-5	6/25/14	4 to 12	<5.0	92	<0.20	6.4	3.1	<5.0	<0.50	<0.033

ALL SAMPLES WERE ANALYZED PER EPA METHOD 6010B, 7471, AND 300.0.  
 \* - NEW MEXICO SOIL SCREENING LEVELS (NMSSL) TABLE A-1 (JUNE 2012)

06



**Field Sampling Results**

Sample ID	Date	Depth (ft)	OVMPID (ppm)
<b>NMOC D ACTION LEVEL</b>			<b>100</b>
SC-1	6/25/14	0.5	473
SC-2	6/25/14	0.5	66.4
SC-3	6/25/14	0.5	2.9
SC-4	6/25/14	0.5	2.4
SC-5	6/25/14	0.5	8.3
SC-6	6/25/14	0.5	3.1
SC-7	6/25/14	0.5	1.7
S-1	6/25/14	0.5	567
S-2	6/25/14	0.5	2.1

SC-1 THROUGH SC-7 ARE 5-POINT COMPOSITE SAMPLES COLLECTED AT THE SURFACE EVERY 200 FEET.

**Laboratory Analytical Results**

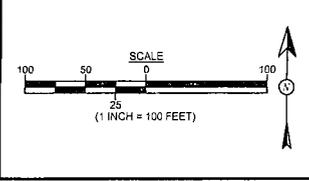
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
<b>NMOC D ACTION LEVEL</b>			<b>10</b>	<b>50</b>	<b>100</b>	<b>NE</b>	
SC-1	6/25/14	0.5	<0.048	0.23	35	250	240
SC-2	6/25/14	0.5	<0.096	4.4	110	350	160
SC-3	6/25/14	0.5	<0.047	<0.236	<4.7	18	<30
SC-4	6/25/14	0.5	<0.049	<0.246	<4.9	34	130
SC-5	6/25/14	0.5	<0.047	<0.234	<4.7	680	300
SC-6	6/25/14	0.5	<0.048	<0.24	<4.8	46	310
SC-7	6/25/14	0.5	<0.048	<0.24	<4.8	49	170
S-1	6/25/14	0.5	<0.098	<0.494	89	800	NA
S-2	6/25/14	0.5	<0.049	<0.245	<4.9	<9.9	NA

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B, 8015D, AND 300.0.  
NA - NOT ANALYZED

**Laboratory Analytical Results**

Sample ID	Date	Depth (ft)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Mercury (mg/kg)
<b>CONSTRUCTION WORKER NMSSL*</b>			<b>53.0</b>	<b>4,350</b>	<b>277</b>	<b>465,000</b>	<b>800</b>	<b>1,550</b>	<b>1,550</b>	<b>13.6</b>
SC-1	6/25/14	0.5	<2.4	42	<0.098	6.4	2.6	<2.4	<0.24	<0.031
SC-2	6/25/14	0.5	<2.5	62	<0.10	1.9	1.6	<2.5	<0.25	<0.033
SC-3	6/25/14	0.5	<2.5	69	<0.099	3.0	2.2	<2.5	<0.25	<0.034
SC-4	6/25/14	0.5	5.3	47	<0.096	1.8	2.5	<2.4	<0.24	<0.033
SC-5	6/25/14	0.5	<2.4	90	<0.097	2.9	2.1	<2.4	<0.24	<0.034
SC-6	6/25/14	0.5	2.6	66	<0.097	2.9	2.3	<2.4	<0.24	<0.033
SC-7	6/25/14	0.5	<2.5	74	<0.099	2.5	2.4	<2.5	<0.25	<0.033
Background	6/25/14	0.5	4.5	56	<0.10	2.9	2.4	<2.5	<0.25	<0.031

ALL SAMPLES WERE ANALYZED PER EPA METHOD 6010B AND 7471.  
\* - NEW MEXICO SOIL SCREENING LEVELS (NMSSL) TABLE A-1 (JUNE 2012)

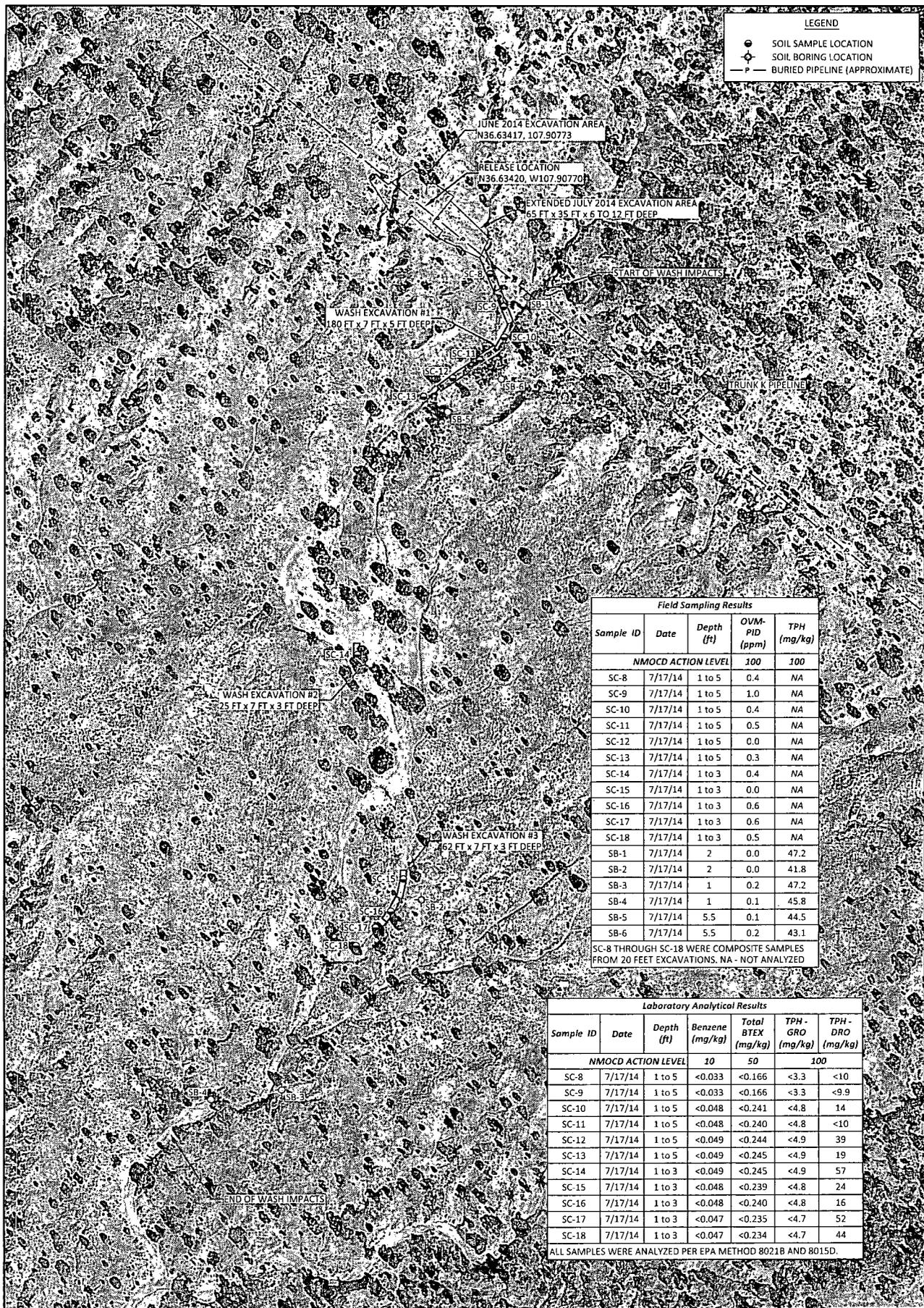


<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 26, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 29, 2014
<b>CHECKED BY:</b> K. Christiansen	<b>DATE CHECKED:</b> June 29, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 29, 2014

**FIGURE 4**

**WASH RELEASE ASSESSMENT SAMPLING LOCATIONS AND RESULTS, JUNE 2014**

WILLIAMS FOUR CORNERS LLC  
TRUNK K PIPELINE RELEASE  
SW¼ NW¼, SECTION 28, T28N, R10W  
SAN JUAN COUNTY, NEW MEXICO  
N36.63420, W107.90770



**LEGEND**  
 ● SOIL SAMPLE LOCATION  
 ○ SOIL BORING LOCATION  
 — BURIED PIPELINE (APPROXIMATE)

**Field Sampling Results**

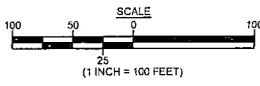
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
<b>NMOCD ACTION LEVEL</b>			<b>100</b>	<b>100</b>
SC-8	7/17/14	1 to 5	0.4	NA
SC-9	7/17/14	1 to 5	1.0	NA
SC-10	7/17/14	1 to 5	0.4	NA
SC-11	7/17/14	1 to 5	0.5	NA
SC-12	7/17/14	1 to 5	0.0	NA
SC-13	7/17/14	1 to 5	0.3	NA
SC-14	7/17/14	1 to 3	0.4	NA
SC-15	7/17/14	1 to 3	0.0	NA
SC-16	7/17/14	1 to 3	0.6	NA
SC-17	7/17/14	1 to 3	0.6	NA
SC-18	7/17/14	1 to 3	0.5	NA
SB-1	7/17/14	2	0.0	47.2
SB-2	7/17/14	2	0.0	41.8
SB-3	7/17/14	1	0.2	47.2
SB-4	7/17/14	1	0.1	45.8
SB-5	7/17/14	5.5	0.1	44.5
SB-6	7/17/14	5.5	0.2	43.1

SC-8 THROUGH SC-18 WERE COMPOSITE SAMPLES FROM 20 FEET EXCAVATIONS. NA - NOT ANALYZED

**Laboratory Analytical Results**

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)		TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
				10	50		
<b>NMOCD ACTION LEVEL</b>							
SC-8	7/17/14	1 to 5	<0.033	<0.166	<3.3	<10	
SC-9	7/17/14	1 to 5	<0.033	<0.166	<3.3	<9.9	
SC-10	7/17/14	1 to 5	<0.048	<0.241	<4.8	14	
SC-11	7/17/14	1 to 5	<0.048	<0.240	<4.8	<10	
SC-12	7/17/14	1 to 5	<0.049	<0.244	<4.9	39	
SC-13	7/17/14	1 to 5	<0.049	<0.245	<4.9	19	
SC-14	7/17/14	1 to 3	<0.049	<0.245	<4.9	57	
SC-15	7/17/14	1 to 3	<0.048	<0.239	<4.8	24	
SC-16	7/17/14	1 to 3	<0.048	<0.240	<4.8	16	
SC-17	7/17/14	1 to 3	<0.047	<0.235	<4.7	52	
SC-18	7/17/14	1 to 3	<0.047	<0.234	<4.7	44	

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D.



**DRAWN BY:** C. Lameman  
**DATE DRAWN:** July 18, 2014  
**REVISIONS BY:** C. Lameman  
**DATE REVISED:** July 29, 2014  
**CHECKED BY:** K. Christiansen  
**DATE CHECKED:** July 29, 2014  
**APPROVED BY:** E. McNally  
**DATE APPROVED:** July 29, 2014

**FIGURE 5**  
**WASH EXCAVATION CLEARANCE SAMPLING LOCATIONS AND RESULTS, JULY 2014**  
 WILLIAMS FOUR CORNERS LLC  
 TRUNK K PIPELINE RELEASE  
 SW¼ NW¼, SECTION 28, T28N, R10W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.63420, W107.90770



Trunk K Pipeline Excavation Clearance & Wash Results (in mg/Kg)

8015D			8021B					Chlorides	6010B						7471
Diesel-Range	Gas-Range	Total	Benzene	Toluene	Ethylbenzene	Xylenes, Total	As		Ba	Cd	Cr	Pb	Se	Ag	Hg
<b>South Excavation (7/17)</b>															
SC-6	ND	ND	--	ND	ND	ND	ND								
SC-7	ND	ND	--	ND	ND	ND	ND								
SC-8	ND	ND	--	ND	ND	ND	ND								
SC-9	ND	ND	--	ND	ND	ND	ND								
<b>Wash (7/17)</b>															
Wash SC-7	ND	ND	--	ND	ND	ND	ND								
Wash SC-8	ND	ND	--	ND	ND	ND	ND								
Wash SC-9	14	ND	--	ND	ND	ND	ND								
Wash SC-10	ND	ND	--	ND	ND	ND	ND								
Wash SC-11	39	ND	--	ND	ND	ND	ND								
Wash SC-12	19	ND	--	ND	ND	ND	ND								
Wash SC-13	57	ND	--	ND	ND	ND	ND								
Wash SC-14	24	ND	--	ND	ND	ND	ND								
Wash SC-15	16	ND	--	ND	ND	ND	ND								
Wash SC-16	52	ND	--	ND	ND	ND	ND								
Wash SC-17	44	ND	--	ND	ND	ND	ND								



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

June 30, 2014

Kelsey Christiansen  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX (505) 324-2022

RE: Williams Trunk K

OrderNo.: 1406B90

Dear Kelsey Christiansen:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/26/2014 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](http://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.**

CLIENT: Animas Environmental Services

Client Sample ID: SC-1-S

Project: Williams Trunk K

Collection Date: 6/25/2014 11:25:00 AM

Lab ID: 1406B90-001

Matrix: MEOH (SOIL)

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/26/2014 11:08:38 AM	13911
Surr: DNOP	79.6	57.9-140		%REC	1	6/26/2014 11:08:38 AM	13911
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	6/26/2014 11:08:11 AM	R19524
Surr: BFB	92.0	80-120		%REC	1	6/26/2014 11:08:11 AM	R19524
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.038		mg/Kg	1	6/26/2014 11:08:11 AM	R19524
Toluene	ND	0.038		mg/Kg	1	6/26/2014 11:08:11 AM	R19524
Ethylbenzene	ND	0.038		mg/Kg	1	6/26/2014 11:08:11 AM	R19524
Xylenes, Total	ND	0.077		mg/Kg	1	6/26/2014 11:08:11 AM	R19524
Surr: 4-Bromofluorobenzene	99.4	80-120		%REC	1	6/26/2014 11:08:11 AM	R19524
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	280	30		mg/Kg	20	6/26/2014 11:03:59 AM	13914
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.031		mg/Kg	1	6/27/2014 10:52:55 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	4.9		mg/Kg	2	6/27/2014 8:42:33 AM	13928
Barium	98	0.20		mg/Kg	2	6/27/2014 8:42:33 AM	13928
Cadmium	ND	0.20		mg/Kg	2	6/27/2014 8:42:33 AM	13928
Chromium	5.9	0.59		mg/Kg	2	6/27/2014 8:42:33 AM	13928
Lead	3.3	0.49		mg/Kg	2	6/27/2014 8:42:33 AM	13928
Selenium	ND	4.9		mg/Kg	2	6/27/2014 8:42:33 AM	13928
Silver	ND	0.49		mg/Kg	2	6/27/2014 8:42:33 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: SC-2-S

Project: Williams Trunk K

Collection Date: 6/25/2014 11:30:00 AM

Lab ID: 1406B90-002

Matrix: MEOH (SOIL)

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	51	9.9		mg/Kg	1	6/26/2014 11:30:27 AM	13911
Surr: DNOP	84.7	57.9-140		%REC	1	6/26/2014 11:30:27 AM	13911
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	16	7.7		mg/Kg	2	6/26/2014 11:38:16 AM	R19524
Surr: BFB	142	80-120	S	%REC	2	6/26/2014 11:38:16 AM	R19524
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.038		mg/Kg	2	6/26/2014 11:38:16 AM	R19524
Toluene	0.17	0.077		mg/Kg	2	6/26/2014 11:38:16 AM	R19524
Ethylbenzene	0.12	0.077		mg/Kg	2	6/26/2014 11:38:16 AM	R19524
Xylenes, Total	1.0	0.15		mg/Kg	2	6/26/2014 11:38:16 AM	R19524
Surr: 4-Bromofluorobenzene	110	80-120		%REC	2	6/26/2014 11:38:16 AM	R19524
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	110	30		mg/Kg	20	6/26/2014 11:16:23 AM	13914
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.032		mg/Kg	1	6/27/2014 10:54:41 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	5.0		mg/Kg	2	6/27/2014 8:46:17 AM	13928
Barium	150	0.20		mg/Kg	2	6/27/2014 8:46:17 AM	13928
Cadmium	ND	0.20		mg/Kg	2	6/27/2014 8:46:17 AM	13928
Chromium	6.5	0.60		mg/Kg	2	6/27/2014 8:46:17 AM	13928
Lead	3.8	0.50		mg/Kg	2	6/27/2014 8:46:17 AM	13928
Selenium	ND	5.0		mg/Kg	2	6/27/2014 8:46:17 AM	13928
Silver	ND	0.50		mg/Kg	2	6/27/2014 8:46:17 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-3-S

Project: Williams Trunk K

Collection Date: 6/25/2014 11:35:00 AM

Lab ID: 1406B90-003

Matrix: MEOH (SOIL)

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/26/2014 11:52:22 AM	13911
Surr: DNOP	72.9	57.9-140		%REC	1	6/26/2014 11:52:22 AM	13911
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/26/2014 12:08:35 PM	R19524
Surr: BFB	95.6	80-120		%REC	1	6/26/2014 12:08:35 PM	R19524
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	6/26/2014 12:08:35 PM	R19524
Toluene	ND	0.048		mg/Kg	1	6/26/2014 12:08:35 PM	R19524
Ethylbenzene	ND	0.048		mg/Kg	1	6/26/2014 12:08:35 PM	R19524
Xylenes, Total	ND	0.096		mg/Kg	1	6/26/2014 12:08:35 PM	R19524
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	6/26/2014 12:08:35 PM	R19524
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	160	30		mg/Kg	20	6/26/2014 11:53:36 AM	13914
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.034		mg/Kg	1	6/27/2014 10:56:27 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	12		mg/Kg	5	6/27/2014 8:36:22 AM	13928
Barium	160	0.49		mg/Kg	5	6/27/2014 8:36:22 AM	13928
Cadmium	ND	0.49		mg/Kg	5	6/27/2014 8:36:22 AM	13928
Chromium	8.6	1.5		mg/Kg	5	6/27/2014 8:36:22 AM	13928
Lead	4.0	1.2		mg/Kg	5	6/27/2014 8:36:22 AM	13928
Selenium	ND	12		mg/Kg	5	6/27/2014 8:36:22 AM	13928
Silver	ND	1.2		mg/Kg	5	6/27/2014 8:36:22 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: SC-4-S

Project: Williams Trunk K

Collection Date: 6/25/2014 11:40:00 AM

Lab ID: 1406B90-004

Matrix: MEOH (SOIL)

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	16	10		mg/Kg	1	6/26/2014 12:14:13 PM	13911
Surr: DNOP	69.8	57.9-140		%REC	1	6/26/2014 12:14:13 PM	13911
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	21	4.1		mg/Kg	1	6/26/2014 12:38:53 PM	R19524
Surr: BFB	106	80-120		%REC	1	6/26/2014 12:38:53 PM	R19524
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.041		mg/Kg	1	6/26/2014 12:38:53 PM	R19524
Toluene	0.25	0.041		mg/Kg	1	6/26/2014 12:38:53 PM	R19524
Ethylbenzene	0.17	0.041		mg/Kg	1	6/26/2014 12:38:53 PM	R19524
Xylenes, Total	1.5	0.082		mg/Kg	1	6/26/2014 12:38:53 PM	R19524
Surr: 4-Bromofluorobenzene	114	80-120		%REC	1	6/26/2014 12:38:53 PM	R19524
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	160	30		mg/Kg	20	6/26/2014 12:06:00 PM	13914
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.033		mg/Kg	1	6/27/2014 10:58:13 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	4.9		mg/Kg	2	6/27/2014 7:44:49 AM	13928
Barium	81	0.20		mg/Kg	2	6/27/2014 7:44:49 AM	13928
Cadmium	ND	0.20		mg/Kg	2	6/27/2014 7:44:49 AM	13928
Chromium	3.4	0.59		mg/Kg	2	6/27/2014 7:44:49 AM	13928
Lead	2.5	0.49		mg/Kg	2	6/27/2014 7:44:49 AM	13928
Selenium	ND	4.9		mg/Kg	2	6/27/2014 7:44:49 AM	13928
Silver	ND	0.49		mg/Kg	2	6/27/2014 7:44:49 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services      Client Sample ID: SC-5-S  
 Project: Williams Trunk K      Collection Date: 6/25/2014 11:50:00 AM  
 Lab ID: 1406B90-005      Matrix: MEOH (SOIL)      Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/26/2014 12:36:16 PM	13911
Surr: DNOP	74.4	57.9-140		%REC	1	6/26/2014 12:36:16 PM	13911
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	6/26/2014 1:09:05 PM	R19524
Surr: BFB	92.7	80-120		%REC	1	6/26/2014 1:09:05 PM	R19524
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.038		mg/Kg	1	6/26/2014 1:09:05 PM	R19524
Toluene	ND	0.038		mg/Kg	1	6/26/2014 1:09:05 PM	R19524
Ethylbenzene	ND	0.038		mg/Kg	1	6/26/2014 1:09:05 PM	R19524
Xylenes, Total	ND	0.076		mg/Kg	1	6/26/2014 1:09:05 PM	R19524
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	6/26/2014 1:09:05 PM	R19524
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	490	30		mg/Kg	20	6/26/2014 12:18:25 PM	13914
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.033		mg/Kg	1	6/27/2014 11:00:00 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	5.0		mg/Kg	2	6/27/2014 7:46:05 AM	13928
Barium	92	0.20		mg/Kg	2	6/27/2014 7:46:05 AM	13928
Cadmium	ND	0.20		mg/Kg	2	6/27/2014 7:46:05 AM	13928
Chromium	6.4	0.60		mg/Kg	2	6/27/2014 7:46:05 AM	13928
Lead	3.1	0.50		mg/Kg	2	6/27/2014 7:46:05 AM	13928
Selenium	ND	5.0		mg/Kg	2	6/27/2014 7:46:05 AM	13928
Silver	ND	0.50		mg/Kg	2	6/27/2014 7:46:05 AM	13928

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

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 5 of 12
	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 greater than 2.	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

50

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1406B90  
30-Jun-14

**Client:** Animas Environmental Services  
**Project:** Williams Trunk K

Sample ID	<b>MB-13914</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13914</b>	RunNo:	<b>19547</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>566119</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	<b>LCS-13914</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13914</b>	RunNo:	<b>19547</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>566120</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

**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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1406B90

30-Jun-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	<b>MB-13911</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13911</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>564983</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	7.1		10.00		70.6	57.9	140			

Sample ID	<b>LCS-13911</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13911</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>564984</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.3	68.6	130			
Surr: DNOP	3.4		5.000		67.1	57.9	140			

Sample ID	<b>MB-13913</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13913</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>565609</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.6		10.00		66.4	57.9	140			

Sample ID	<b>LCS-13913</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13913</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>565610</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.1		5.000		61.7	57.9	140			

### 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 greater than 2.                          |
| 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#: 1406B90

30-Jun-14

**Client:** Animas Environmental Services  
**Project:** Williams Trunk K

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R19524	RunNo:	19524					
Prep Date:		Analysis Date:	6/26/2014	SeqNo:	565533	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		93.6	80	120			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R19524	RunNo:	19524					
Prep Date:		Analysis Date:	6/26/2014	SeqNo:	565534	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	71.7	134			
Surr: BFB	940		1000		94.2	80	120			

### 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 greater than 2.                          |
| 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#: 1406B90

30-Jun-14

**Client:** Animas Environmental Services  
**Project:** Williams Trunk K

Sample ID: <b>5ML RB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>R19524</b>	RunNo: <b>19524</b>								
Prep Date:	Analysis Date: <b>6/26/2014</b>	SeqNo: <b>565547</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: <b>100NG BTEX LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>R19524</b>	RunNo: <b>19524</b>								
Prep Date:	Analysis Date: <b>6/26/2014</b>	SeqNo: <b>565548</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	110	80	120			
Toluene	1.1	0.050	1.000	0	109	80	120			
Ethylbenzene	1.1	0.050	1.000	0	108	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

### 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 greater than 2.                          |
| 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#: 1406B90

30-Jun-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	MB-13918	SampType:	MBLK	TestCode:	EPA Method 7471: Mercury					
Client ID:	PBS	Batch ID:	13918	RunNo:	19543					
Prep Date:	6/26/2014	Analysis Date:	6/27/2014	SeqNo:	565912	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-13918	SampType:	LCS	TestCode:	EPA Method 7471: Mercury					
Client ID:	LCSS	Batch ID:	13918	RunNo:	19543					
Prep Date:	6/26/2014	Analysis Date:	6/27/2014	SeqNo:	565913	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

## 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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406B90

30-Jun-14

**Client:** Animas Environmental Services

**Project:** Williams Trunk K

Sample ID: <b>MB-13928</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 6010B: Soil Metals</b>			
Client ID: <b>PBS</b>	Batch ID: <b>13928</b>	RunNo: <b>19536</b>			
Prep Date: <b>6/26/2014</b>	Analysis Date: <b>6/27/2014</b>	SeqNo: <b>565682</b>	Units: <b>mg/Kg</b>		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID: <b>LCS-13928</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 6010B: Soil Metals</b>			
Client ID: <b>LCSS</b>	Batch ID: <b>13928</b>	RunNo: <b>19536</b>			
Prep Date: <b>6/26/2014</b>	Analysis Date: <b>6/27/2014</b>	SeqNo: <b>565683</b>	Units: <b>mg/Kg</b>		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	98.0	80	120			
Barium	24	0.10	25.00	0	98.0	80	120			
Cadmium	25	0.10	25.00	0	99.1	80	120			
Chromium	25	0.30	25.00	0	99.7	80	120			
Lead	24	0.25	25.00	0	95.2	80	120			
Selenium	23	2.5	25.00	0	93.5	80	120			
Silver	5.1	0.25	5.000	0	103	80	120			

Sample ID: <b>1406B90-001BMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 6010B: Soil Metals</b>			
Client ID: <b>SC-1-S</b>	Batch ID: <b>13928</b>	RunNo: <b>19536</b>			
Prep Date: <b>6/26/2014</b>	Analysis Date: <b>6/27/2014</b>	SeqNo: <b>565728</b>	Units: <b>mg/Kg</b>		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	5.1	25.41	0	88.8	75	125			
Barium	130	0.20	25.41	97.95	124	75	125			
Cadmium	22	0.20	25.41	0	86.1	75	125			
Chromium	29	0.61	25.41	5.878	92.4	75	125			
Lead	22	0.51	25.41	3.345	71.6	75	125			S
Selenium	16	5.1	25.41	0	64.0	75	125			S
Silver	4.5	0.51	5.082	0	87.8	75	125			

Sample ID: <b>1406B90-001BMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 6010B: Soil Metals</b>			
Client ID: <b>SC-1-S</b>	Batch ID: <b>13928</b>	RunNo: <b>19536</b>			
Prep Date: <b>6/26/2014</b>	Analysis Date: <b>6/27/2014</b>	SeqNo: <b>565729</b>	Units: <b>mg/Kg</b>		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	22	5.0	25.19	0	86.9	75	125	3.00	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 greater than 2.
- RL Reporting Detection Limit

**QC SUMMARY REPORT**  
**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1406B90  
 30-Jun-14

**Client:** Animas Environmental Services  
**Project:** Williams Trunk K

Sample ID: 1406B90-001BMSD	SampType: MSD	TestCode: EPA Method 6010B: Soil Metals
Client ID: SC-1-S	Batch ID: 13928	RunNo: 19536
Prep Date: 6/26/2014	Analysis Date: 6/27/2014	SeqNo: 565729
		Units: mg/Kg

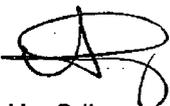
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	120	0.20	25.19	97.95	76.0	75	125	9.93	20	
Cadmium	22	0.20	25.19	0	86.0	75	125	0.901	20	
Chromium	29	0.60	25.19	5.878	92.7	75	125	0.418	20	
Lead	22	0.50	25.19	3.345	73.2	75	125	1.21	20	S
Selenium	16	5.0	25.19	0	63.0	75	125	2.40	20	S
Silver	4.4	0.50	5.039	0	87.1	75	125	1.70	20	

**Qualifiers:**

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- 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 greater than 2.
- RL Reporting Detection Limit

# Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **1406B90** RcptNo: **1**

Received by/date:  **06/26/14**

Logged By: **Ashley Gallegos**

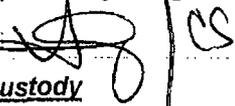
**6/26/2014 8:10:00 AM**



Completed By: **Ashley Gallegos**

**6/26/2014 8:13:07 AM**



Reviewed By:  **CS**

**06/26/14**

**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° 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? Yes  No  # of preserved bottles checked for pH: ( <2 or >12 unless noted )
- 13. Are matrices correctly identified on Chain of Custody? Yes  No  Adjusted?
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? Yes  No  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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

Client: Animas Environmental Services

Mailing Address: 624 E Comanche St  
Farmington, NM 87401

Phone #: 505-564-2281

Email or Fax#:

QA/QC Package:  
 Standard       Level 4 (Full Validation)

Accreditation:  
 NELAP       Other \_\_\_\_\_  
 EDD (Type) \_\_\_\_\_

Standard       Rush *same day!*

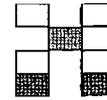
Project Name: *TPH/BTEX/CI*

Williams Trunk K  
Project #:

Project Manager:  
K. Christiansen

Sampler: *S. Lynn*  
 On Ice       Yes       No

Sample Temperature: *1.7*



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com  
 4901 Hawkins NE - Albuquerque, NM 87109  
 Tel. 505-345-3975      Fax 505-345-4107

## Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	Arsenic - EPA 200.8	Specific Conductance - EPA 120.1	TSS - SM 2540D, TDS - SM 2540	Sulfide A4500-SD	Salinity	Radioactivity - Alpha/Beta - EPA 900.0	Dissolved Gases - RSK175	Chlorides - EPA300.0	Major Cations - EPA 200.7	Alkalinity - SM 2320B	BTEX - 8021B	TPH - EPA 8015B	Ammonia SM 4500 NH3	RCRA 8 Metals - USEPA 6010
6/25/14	1125	Soil	SC-1-S	4oz jar	4° C	-001								X			X	X		X
6/25/14	1130	Soil	SC-2-S	4oz jar	4° C	-002								X			X	X		X
6/25/14	1135	Soil	SC-3-S	4oz jar	4° C	-003								X			X	X		X
6/25/14	1140	Soil	SC-4-S	4oz jar	4° C	-004								X			X	X		X
6/25/14	1150	Soil	SC-5-S	4oz jar	4° C	-005								X			X	X		X

Date: *6/25/14*      Time: *1621*      Relinquished by: *Stephen Lynn*

Date: *6/25/14*      Time: *1740*      Relinquished by: *Christ Walk*

Received by: *MT Watz*      Date: *6/25/14*      Time: *1621*

Received by: *Christy Wallace*      Date: *06/26/14*      Time: *0810*

Remarks: Direct bill to Williams Field Services. Please email preliminary results ASAP to kchristiansen@animasenvironmental.com & ariling@animasenvironmental.com.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



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

June 30, 2014

Kelsey Christiansen  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX (505) 324-2022

RE: Williams Trunk K

OrderNo.: 1406B94

Dear Kelsey Christiansen:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/26/2014 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](http://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.

CLIENT: Animas Environmental Services

Client Sample ID: SC-1-N

Project: Williams Trunk K

Collection Date: 6/25/2014 9:25:00 AM

Lab ID: 1406B94-001

Matrix: MEOH (SOIL)

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	56	9.9		mg/Kg	1	6/26/2014 12:32:15 PM	13911
Surr: DNOP	66.4	57.9-140		%REC	1	6/26/2014 12:32:15 PM	13911
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/26/2014 10:56:38 AM	R19523
Surr: BFB	106	80-120		%REC	1	6/26/2014 10:56:38 AM	R19523
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	6/26/2014 10:56:38 AM	R19523
Toluene	0.057	0.048		mg/Kg	1	6/26/2014 10:56:38 AM	R19523
Ethylbenzene	ND	0.048		mg/Kg	1	6/26/2014 10:56:38 AM	R19523
Xylenes, Total	0.098	0.095		mg/Kg	1	6/26/2014 10:56:38 AM	R19523
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	6/26/2014 10:56:38 AM	R19523
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	180	30		mg/Kg	20	6/26/2014 1:08:03 PM	13914
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.033		mg/Kg	1	6/27/2014 11:01:47 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	4.9		mg/Kg	2	6/27/2014 7:47:22 AM	13928
Barium	130	0.20		mg/Kg	2	6/27/2014 7:47:22 AM	13928
Cadmium	ND	0.20		mg/Kg	2	6/27/2014 7:47:22 AM	13928
Chromium	5.1	0.59		mg/Kg	2	6/27/2014 7:47:22 AM	13928
Lead	2.8	0.49		mg/Kg	2	6/27/2014 7:47:22 AM	13928
Selenium	ND	4.9		mg/Kg	2	6/27/2014 7:47:22 AM	13928
Silver	ND	0.49		mg/Kg	2	6/27/2014 7:47:22 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Animas Environmental Services

**Client Sample ID:** SC-2-N

**Project:** Williams Trunk K

**Collection Date:** 6/25/2014 9:30:00 AM

**Lab ID:** 1406B94-002

**Matrix:** MEOH (SOIL)

**Received Date:** 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	29	10		mg/Kg	1	6/26/2014 1:02:45 PM	13911
Surr: DNOP	67.9	57.9-140		%REC	1	6/26/2014 1:02:45 PM	13911
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	17	8.1		mg/Kg	2	6/26/2014 11:25:13 AM	R19523
Surr: BFB	153	80-120	S	%REC	2	6/26/2014 11:25:13 AM	R19523
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.041		mg/Kg	2	6/26/2014 11:25:13 AM	R19523
Toluene	ND	0.081		mg/Kg	2	6/26/2014 11:25:13 AM	R19523
Ethylbenzene	ND	0.081		mg/Kg	2	6/26/2014 11:25:13 AM	R19523
Xylenes, Total	0.57	0.16		mg/Kg	2	6/26/2014 11:25:13 AM	R19523
Surr: 4-Bromofluorobenzene	113	80-120		%REC	2	6/26/2014 11:25:13 AM	R19523
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	220	30		mg/Kg	20	6/26/2014 1:20:28 PM	13914
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.032		mg/Kg	1	6/27/2014 11:03:35 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	4.9		mg/Kg	2	6/27/2014 8:21:39 AM	13928
Barium	310	0.20		mg/Kg	2	6/27/2014 8:21:39 AM	13928
Cadmium	ND	0.20		mg/Kg	2	6/27/2014 8:21:39 AM	13928
Chromium	6.9	0.59		mg/Kg	2	6/27/2014 8:21:39 AM	13928
Lead	2.5	0.49		mg/Kg	2	6/27/2014 8:21:39 AM	13928
Selenium	ND	4.9		mg/Kg	2	6/27/2014 8:21:39 AM	13928
Silver	ND	0.49		mg/Kg	2	6/27/2014 8:21:39 AM	13928

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

<b>Qualifiers:</b>	* 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 greater than 2.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: SC-3-N

Project: Williams Trunk K

Collection Date: 6/25/2014 9:35:00 AM

Lab ID: 1406B94-003

Matrix: MEOH (SOIL)

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/26/2014 2:03:57 PM	13911
Surr: DNOP	58.0	57.9-140		%REC	1	6/26/2014 2:03:57 PM	13911
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg	1	6/26/2014 11:53:59 AM	R19523
Surr: BFB	120	80-120		%REC	1	6/26/2014 11:53:59 AM	R19523
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.054		mg/Kg	1	6/26/2014 11:53:59 AM	R19523
Toluene	ND	0.054		mg/Kg	1	6/26/2014 11:53:59 AM	R19523
Ethylbenzene	ND	0.054		mg/Kg	1	6/26/2014 11:53:59 AM	R19523
Xylenes, Total	0.17	0.11		mg/Kg	1	6/26/2014 11:53:59 AM	R19523
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	6/26/2014 11:53:59 AM	R19523
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	71	30		mg/Kg	20	6/26/2014 1:32:52 PM	13914
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.032		mg/Kg	1	6/27/2014 11:05:23 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	4.9		mg/Kg	2	6/27/2014 8:22:57 AM	13928
Barium	220	0.20		mg/Kg	2	6/27/2014 8:22:57 AM	13928
Cadmium	ND	0.20		mg/Kg	2	6/27/2014 8:22:57 AM	13928
Chromium	7.1	0.59		mg/Kg	2	6/27/2014 8:22:57 AM	13928
Lead	2.5	0.49		mg/Kg	2	6/27/2014 8:22:57 AM	13928
Selenium	ND	4.9		mg/Kg	2	6/27/2014 8:22:57 AM	13928
Silver	ND	0.49		mg/Kg	2	6/27/2014 8:22:57 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: SC-4-N

Project: Williams Trunk K

Collection Date: 6/25/2014 9:40:00 AM

Lab ID: 1406B94-004

Matrix: MEOH (SOIL)

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/26/2014 12:58:19 PM	13911
Surr: DNOP	69.7	57.9-140		%REC	1	6/26/2014 12:58:19 PM	13911
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	16	4.0		mg/Kg	1	6/26/2014 12:22:40 PM	R19523
Surr: BFB	152	80-120	S	%REC	1	6/26/2014 12:22:40 PM	R19523
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.040		mg/Kg	1	6/26/2014 12:22:40 PM	R19523
Toluene	0.82	0.040		mg/Kg	1	6/26/2014 12:22:40 PM	R19523
Ethylbenzene	0.23	0.040		mg/Kg	1	6/26/2014 12:22:40 PM	R19523
Xylenes, Total	2.0	0.081		mg/Kg	1	6/26/2014 12:22:40 PM	R19523
Surr: 4-Bromofluorobenzene	118	80-120		%REC	1	6/26/2014 12:22:40 PM	R19523
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	51	30		mg/Kg	20	6/26/2014 1:45:16 PM	13914
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.032		mg/Kg	1	6/27/2014 11:10:55 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	5.0		mg/Kg	2	6/27/2014 8:26:26 AM	13928
Barium	170	0.20		mg/Kg	2	6/27/2014 8:26:26 AM	13928
Cadmium	ND	0.20		mg/Kg	2	6/27/2014 8:26:26 AM	13928
Chromium	4.1	0.60		mg/Kg	2	6/27/2014 8:26:26 AM	13928
Lead	2.5	0.50		mg/Kg	2	6/27/2014 8:26:26 AM	13928
Selenium	ND	5.0		mg/Kg	2	6/27/2014 8:26:26 AM	13928
Silver	ND	0.50		mg/Kg	2	6/27/2014 8:26:26 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1406B94

Date Reported: 6/30/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-5-N

Project: Williams Trunk K

Collection Date: 6/25/2014 9:45:00 AM

Lab ID: 1406B94-005

Matrix: MEOH (SOIL)

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/26/2014 1:20:16 PM	13911
Surr: DNOP	82.0	57.9-140		%REC	1	6/26/2014 1:20:16 PM	13911
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	6/26/2014 12:51:21 PM	R19523
Surr: BFB	108	80-120		%REC	1	6/26/2014 12:51:21 PM	R19523
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.042		mg/Kg	1	6/26/2014 12:51:21 PM	R19523
Toluene	ND	0.042		mg/Kg	1	6/26/2014 12:51:21 PM	R19523
Ethylbenzene	ND	0.042		mg/Kg	1	6/26/2014 12:51:21 PM	R19523
Xylenes, Total	ND	0.083		mg/Kg	1	6/26/2014 12:51:21 PM	R19523
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	6/26/2014 12:51:21 PM	R19523
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	140	30		mg/Kg	20	6/26/2014 2:22:30 PM	13914
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.033		mg/Kg	1	6/27/2014 11:12:45 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	5.0		mg/Kg	2	6/27/2014 8:27:40 AM	13928
Barium	150	0.20		mg/Kg	2	6/27/2014 8:27:40 AM	13928
Cadmium	ND	0.20		mg/Kg	2	6/27/2014 8:27:40 AM	13928
Chromium	6.2	0.60		mg/Kg	2	6/27/2014 8:27:40 AM	13928
Lead	2.4	0.50		mg/Kg	2	6/27/2014 8:27:40 AM	13928
Selenium	ND	5.0		mg/Kg	2	6/27/2014 8:27:40 AM	13928
Silver	ND	0.50		mg/Kg	2	6/27/2014 8:27:40 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	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#: 1406B94

30-Jun-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	MB-13914	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	13914	RunNo:	19547					
Prep Date:	6/26/2014	Analysis Date:	6/26/2014	SeqNo:	566119	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-13914	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	13914	RunNo:	19547					
Prep Date:	6/26/2014	Analysis Date:	6/26/2014	SeqNo:	566120	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

## 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 greater than 2.                          |
| 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#: 1406B94

30-Jun-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	<b>MB-13911</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13911</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>564983</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	7.1		10.00		70.6	57.9	140			

Sample ID	<b>LCS-13911</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13911</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>564984</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.3	68.6	130			
Surr: DNOP	3.4		5.000		67.1	57.9	140			

Sample ID	<b>MB-13913</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13913</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>565609</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.6		10.00		66.4	57.9	140			

Sample ID	<b>LCS-13913</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13913</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>565610</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.1		5.000		61.7	57.9	140			

## 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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406B94

30-Jun-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	<b>MB-13887 MK</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>R19523</b>	RunNo:	<b>19523</b>					
Prep Date:		Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>565478</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		95.6	80	120			

Sample ID	<b>LCS-13887 MK</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>R19523</b>	RunNo:	<b>19523</b>					
Prep Date:		Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>565479</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	71.7	134			
Surr: BFB	1100		1000		105	80	120			

## 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 greater than 2.                          |
| 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#: 1406B94

30-Jun-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	<b>MB-13887 MK</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>R19523</b>	RunNo:	<b>19523</b>					
Prep Date:		Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>565515</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID	<b>LCS-13887 MK</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>R19523</b>	RunNo:	<b>19523</b>					
Prep Date:		Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>565516</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	104	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

## 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 greater than 2.                          |
| 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#: 1406B94

30-Jun-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	MB-13918	SampType:	MBLK	TestCode:	EPA Method 7471: Mercury					
Client ID:	PBS	Batch ID:	13918	RunNo:	19543					
Prep Date:	6/26/2014	Analysis Date:	6/27/2014	SeqNo:	565912	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-13918	SampType:	LCS	TestCode:	EPA Method 7471: Mercury					
Client ID:	LCSS	Batch ID:	13918	RunNo:	19543					
Prep Date:	6/26/2014	Analysis Date:	6/27/2014	SeqNo:	565913	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

## 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 greater than 2.
- RL Reporting Detection Limit

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# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406B94

30-Jun-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	MB-13928	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	13928	RunNo:	19536					
Prep Date:	6/26/2014	Analysis Date:	6/27/2014	SeqNo:	565682	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID	LCS-13928	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	13928	RunNo:	19536					
Prep Date:	6/26/2014	Analysis Date:	6/27/2014	SeqNo:	565683	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	98.0	80	120			
Barium	24	0.10	25.00	0	98.0	80	120			
Cadmium	25	0.10	25.00	0	99.1	80	120			
Chromium	25	0.30	25.00	0	99.7	80	120			
Lead	24	0.25	25.00	0	95.2	80	120			
Selenium	23	2.5	25.00	0	93.5	80	120			
Silver	5.1	0.25	5.000	0	103	80	120			

## 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 greater than 2.
- RL Reporting Detection Limit

# Sample Log-In Check List

Client Name: **Animas Environmental**

Work Order Number: **1406B94**

RcptNo: 1

Received by/date:

*[Signature]*

**06/26/14**

Logged By: **Ashley Gallegos**

**6/26/2014 8:10:00 AM**

*[Signature]*

Completed By: **Ashley Gallegos**

**6/26/2014 8:28:34 AM**

*[Signature]*

Reviewed By:

*[Signature]* /cs

**06/26/14**

**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° 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  # of preserved bottles checked for pH: (<2 or >12 unless noted)
- 13. Are matrices correctly identified on Chain of Custody? Yes  No  Adjusted?
- 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  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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

Client: Animas Environmental Services

Mailing Address: 624 E Comanche St  
Farmington, NM 87401

Phone #: 505-564-2281

Email or Fax#:

QA/QC Package:  
 Standard       Level 4 (Full Validation)

Accreditation:  
 NELAP       Other \_\_\_\_\_  
 EDD (Type) \_\_\_\_\_

Standard       Rush *same day!*

Project Name: *TPH/BTEX CI-*

Williams Trunk K

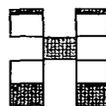
Project #:

Project Manager:  
K. Christiansen

Sampler: *S. Lynn*

On Ice:  Yes       No

Sample Temperature: *17*



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109  
 Tel. 505-345-3975      Fax 505-345-4107

## Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	Arsenic - EPA 200.8	Specific Conductance - EPA 120.1	TSS - SM 2540D, TDS - SM 2540C	Sulfide A4500-SD	Salinity	Radioactivity - Alpha/Beta - EPA 900.0	Dissolved Gases - RSK175	Chlorides - EPA300.0	Major Cations - EPA 200.7	Alkalinity - SM 2320B	BTEX - 8021B	TPH - EPA 8015B	Ammonia SM 4500 NH3	RCRA 8 Metals - USEPA 6010
6/25/14	0925	Soil	SC-1-N	4oz jar	4° C	<i>1406B04001</i>								X			X	X		X
6/25/14	0930	Soil	SC-2-N	4oz jar	4° C	<i>-002</i>								X			X	X		X
6/25/14	0935	Soil	SC-3-N	4oz jar	4° C	<i>-003</i>								X			X	X		X
6/25/14	0940	Soil	SC-4-N	4oz jar	4° C	<i>-004</i>								X			X	X		X
6/25/14	0945	Soil	SC-5-N	4oz jar	4° C	<i>-005</i>								X			X	X		X

Date: <i>6/25/14</i>	Time: <i>1621</i>	Relinquished by: <i>Stephanie Lynn</i>	Received by: <i>Christ Walt</i>	Date: <i>6/25/14</i>	Time: <i>1621</i>
Date: <i>6/25/14</i>	Time: <i>1740</i>	Relinquished by: <i>Christ Walt</i>	Received by: <i>Joshua Ballou</i>	Date: <i>06/25/14</i>	Time: <i>D810</i>

Remarks: Direct bill to Williams Field Services. Please email preliminary results ASAP to [kchristiansen@animasenvironmental.com](mailto:kchristiansen@animasenvironmental.com) & [ariling@animasenvironmental.com](mailto:ariling@animasenvironmental.com).

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



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

July 01, 2014

Kelsey Christiansen  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX (505) 324-2022

RE: Williams Trunk K

OrderNo.: 1406B97

Dear Kelsey Christiansen:

Hall Environmental Analysis Laboratory received 10 sample(s) on 6/26/2014 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](http://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 light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-1

Project: Williams Trunk K

Collection Date: 6/25/2014 12:10:00 PM

Lab ID: 1406B97-001

Matrix: SOIL

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	250	10		mg/Kg	1	6/26/2014 10:08:08 PM	13913
Surr: DNOP	87.5	57.9-140		%REC	1	6/26/2014 10:08:08 PM	13913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	35	4.8		mg/Kg	1	6/27/2014 1:39:43 PM	13921
Surr: BFB	281	80-120	S	%REC	1	6/27/2014 1:39:43 PM	13921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	6/27/2014 1:39:43 PM	13921
Toluene	ND	0.048		mg/Kg	1	6/27/2014 1:39:43 PM	13921
Ethylbenzene	ND	0.048		mg/Kg	1	6/27/2014 1:39:43 PM	13921
Xylenes, Total	0.23	0.097		mg/Kg	1	6/27/2014 1:39:43 PM	13921
Surr: 4-Bromofluorobenzene	112	80-120		%REC	1	6/27/2014 1:39:43 PM	13921
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	240	30		mg/Kg	20	6/27/2014 12:09:10 PM	13936
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.031		mg/Kg	1	6/27/2014 11:14:35 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	2.4		mg/Kg	1	6/27/2014 9:33:19 AM	13928
Barium	42	0.098		mg/Kg	1	6/27/2014 9:33:19 AM	13928
Cadmium	ND	0.098		mg/Kg	1	6/27/2014 9:33:19 AM	13928
Chromium	6.4	0.29		mg/Kg	1	6/27/2014 9:33:19 AM	13928
Lead	2.6	0.24		mg/Kg	1	6/27/2014 9:33:19 AM	13928
Selenium	ND	2.4		mg/Kg	1	6/27/2014 9:33:19 AM	13928
Silver	ND	0.24		mg/Kg	1	6/27/2014 9:33:19 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-2

Project: Williams Trunk K

Collection Date: 6/25/2014 12:20:00 PM

Lab ID: 1406B97-002

Matrix: SOIL

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	350	9.8		mg/Kg	1	6/26/2014 10:38:13 PM	13913
Surr: DNOP	92.4	57.9-140		%REC	1	6/26/2014 10:38:13 PM	13913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	110	9.6		mg/Kg	2	6/27/2014 3:05:41 PM	13921
Surr: BFB	250	80-120	S	%REC	2	6/27/2014 3:05:41 PM	13921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.096		mg/Kg	2	6/27/2014 3:05:41 PM	13921
Toluene	0.81	0.096		mg/Kg	2	6/27/2014 3:05:41 PM	13921
Ethylbenzene	0.22	0.096		mg/Kg	2	6/27/2014 3:05:41 PM	13921
Xylenes, Total	3.4	0.19		mg/Kg	2	6/27/2014 3:05:41 PM	13921
Surr: 4-Bromofluorobenzene	123	80-120	S	%REC	2	6/27/2014 3:05:41 PM	13921
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	160	30		mg/Kg	20	6/27/2014 12:21:35 PM	13936
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.033		mg/Kg	1	6/27/2014 11:16:25 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	2.5		mg/Kg	1	6/27/2014 9:34:34 AM	13928
Barium	62	0.10		mg/Kg	1	6/27/2014 9:34:34 AM	13928
Cadmium	ND	0.10		mg/Kg	1	6/27/2014 9:34:34 AM	13928
Chromium	1.9	0.30		mg/Kg	1	6/27/2014 9:34:34 AM	13928
Lead	1.6	0.25		mg/Kg	1	6/27/2014 9:34:34 AM	13928
Selenium	ND	2.5		mg/Kg	1	6/27/2014 9:34:34 AM	13928
Silver	ND	0.25		mg/Kg	1	6/27/2014 9:34:34 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1406B97

Date Reported: 7/1/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-3

Project: Williams Trunk K

Collection Date: 6/25/2014 12:25:00 PM

Lab ID: 1406B97-003

Matrix: SOIL

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	18	9.8		mg/Kg	1	6/26/2014 11:08:32 PM	13913
Surr: DNOP	81.4	57.9-140		%REC	1	6/26/2014 11:08:32 PM	13913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/27/2014 4:31:39 PM	13921
Surr: BFB	112	80-120		%REC	1	6/27/2014 4:31:39 PM	13921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	6/27/2014 4:31:39 PM	13921
Toluene	ND	0.047		mg/Kg	1	6/27/2014 4:31:39 PM	13921
Ethylbenzene	ND	0.047		mg/Kg	1	6/27/2014 4:31:39 PM	13921
Xylenes, Total	ND	0.095		mg/Kg	1	6/27/2014 4:31:39 PM	13921
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	6/27/2014 4:31:39 PM	13921
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	ND	30		mg/Kg	20	6/27/2014 12:34:00 PM	13936
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.034		mg/Kg	1	6/27/2014 11:18:17 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	2.5		mg/Kg	1	6/27/2014 9:39:39 AM	13928
Barium	69	0.099		mg/Kg	1	6/27/2014 9:39:39 AM	13928
Cadmium	ND	0.099		mg/Kg	1	6/27/2014 9:39:39 AM	13928
Chromium	3.0	0.30		mg/Kg	1	6/27/2014 9:39:39 AM	13928
Lead	2.2	0.25		mg/Kg	1	6/27/2014 9:39:39 AM	13928
Selenium	ND	2.5		mg/Kg	1	6/27/2014 9:39:39 AM	13928
Silver	ND	0.25		mg/Kg	1	6/27/2014 9:39:39 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services  
 Project: Williams Trunk K  
 Lab ID: 1406B97-004

Client Sample ID: Wash SC-4  
 Collection Date: 6/25/2014 12:30:00 PM  
 Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	34	10		mg/Kg	1	6/26/2014 11:38:33 PM	13913
Surr: DNOP	81.9	57.9-140		%REC	1	6/26/2014 11:38:33 PM	13913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/27/2014 5:00:23 PM	13921
Surr: BFB	101	80-120		%REC	1	6/27/2014 5:00:23 PM	13921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	6/27/2014 5:00:23 PM	13921
Toluene	ND	0.049		mg/Kg	1	6/27/2014 5:00:23 PM	13921
Ethylbenzene	ND	0.049		mg/Kg	1	6/27/2014 5:00:23 PM	13921
Xylenes, Total	ND	0.099		mg/Kg	1	6/27/2014 5:00:23 PM	13921
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	6/27/2014 5:00:23 PM	13921
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	130	30		mg/Kg	20	6/27/2014 1:11:13 PM	13936
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.033		mg/Kg	1	6/27/2014 11:20:09 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	5.3	2.4		mg/Kg	1	6/27/2014 9:40:58 AM	13928
Barium	47	0.096		mg/Kg	1	6/27/2014 9:40:58 AM	13928
Cadmium	ND	0.096		mg/Kg	1	6/27/2014 9:40:58 AM	13928
Chromium	1.8	0.29		mg/Kg	1	6/27/2014 9:40:58 AM	13928
Lead	2.5	0.24		mg/Kg	1	6/27/2014 9:40:58 AM	13928
Selenium	ND	2.4		mg/Kg	1	6/27/2014 9:40:58 AM	13928
Silver	ND	0.24		mg/Kg	1	6/27/2014 9:40:58 AM	13928

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

<b>Qualifiers:</b>	* 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 greater than 2.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-5

Project: Williams Trunk K

Collection Date: 6/25/2014 12:40:00 PM

Lab ID: 1406B97-005

Matrix: SOIL

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	680	10		mg/Kg	1	6/27/2014 12:08:48 AM	13913
Surr: DNOP	103	57.9-140		%REC	1	6/27/2014 12:08:48 AM	13913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/27/2014 5:29:03 PM	13921
Surr: BFB	100	80-120		%REC	1	6/27/2014 5:29:03 PM	13921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	6/27/2014 5:29:03 PM	13921
Toluene	ND	0.047		mg/Kg	1	6/27/2014 5:29:03 PM	13921
Ethylbenzene	ND	0.047		mg/Kg	1	6/27/2014 5:29:03 PM	13921
Xylenes, Total	ND	0.093		mg/Kg	1	6/27/2014 5:29:03 PM	13921
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	6/27/2014 5:29:03 PM	13921
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	300	30		mg/Kg	20	6/27/2014 1:23:38 PM	13936
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.034		mg/Kg	1	6/27/2014 11:21:53 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	2.4		mg/Kg	1	6/27/2014 9:42:13 AM	13928
Barium	90	0.097		mg/Kg	1	6/27/2014 9:42:13 AM	13928
Cadmium	ND	0.097		mg/Kg	1	6/27/2014 9:42:13 AM	13928
Chromium	2.9	0.29		mg/Kg	1	6/27/2014 9:42:13 AM	13928
Lead	2.1	0.24		mg/Kg	1	6/27/2014 9:42:13 AM	13928
Selenium	ND	2.4		mg/Kg	1	6/27/2014 9:42:13 AM	13928
Silver	ND	0.24		mg/Kg	1	6/27/2014 9:42:13 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Animas Environmental Services

**Client Sample ID:** Wash SC-6

**Project:** Williams Trunk K

**Collection Date:** 6/25/2014 12:50:00 PM

**Lab ID:** 1406B97-006

**Matrix:** SOIL

**Received Date:** 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	46	10		mg/Kg	1	6/27/2014 12:39:19 AM	13913
Surr: DNOP	88.9	57.9-140		%REC	1	6/27/2014 12:39:19 AM	13913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/27/2014 9:18:09 PM	13921
Surr: BFB	96.9	80-120		%REC	1	6/27/2014 9:18:09 PM	13921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	6/27/2014 9:18:09 PM	13921
Toluene	ND	0.048		mg/Kg	1	6/27/2014 9:18:09 PM	13921
Ethylbenzene	ND	0.048		mg/Kg	1	6/27/2014 9:18:09 PM	13921
Xylenes, Total	ND	0.096		mg/Kg	1	6/27/2014 9:18:09 PM	13921
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	6/27/2014 9:18:09 PM	13921
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	310	30		mg/Kg	20	6/27/2014 1:36:03 PM	13936
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.033		mg/Kg	1	6/27/2014 11:23:37 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	2.6	2.4		mg/Kg	1	6/27/2014 9:43:28 AM	13928
Barium	66	0.097		mg/Kg	1	6/27/2014 9:43:28 AM	13928
Cadmium	ND	0.097		mg/Kg	1	6/27/2014 9:43:28 AM	13928
Chromium	2.9	0.29		mg/Kg	1	6/27/2014 9:43:28 AM	13928
Lead	2.3	0.24		mg/Kg	1	6/27/2014 9:43:28 AM	13928
Selenium	ND	2.4		mg/Kg	1	6/27/2014 9:43:28 AM	13928
Silver	ND	0.24		mg/Kg	1	6/27/2014 9:43:28 AM	13928

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

<b>Qualifiers:</b>	* 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 greater than 2.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-7

Project: Williams Trunk K

Collection Date: 6/25/2014 1:00:00 PM

Lab ID: 1406B97-007

Matrix: SOIL

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	49	10		mg/Kg	1	6/27/2014 1:09:47 AM	13913
Surr: DNOP	89.1	57.9-140		%REC	1	6/27/2014 1:09:47 AM	13913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/27/2014 9:46:47 PM	13921
Surr: BFB	95.2	80-120		%REC	1	6/27/2014 9:46:47 PM	13921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	6/27/2014 9:46:47 PM	13921
Toluene	ND	0.048		mg/Kg	1	6/27/2014 9:46:47 PM	13921
Ethylbenzene	ND	0.048		mg/Kg	1	6/27/2014 9:46:47 PM	13921
Xylenes, Total	ND	0.096		mg/Kg	1	6/27/2014 9:46:47 PM	13921
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	6/27/2014 9:46:47 PM	13921
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	170	30		mg/Kg	20	6/27/2014 1:48:28 PM	13936
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.033		mg/Kg	1	6/27/2014 11:25:22 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	ND	2.5		mg/Kg	1	6/27/2014 9:44:43 AM	13928
Barium	74	0.099		mg/Kg	1	6/27/2014 9:44:43 AM	13928
Cadmium	ND	0.099		mg/Kg	1	6/27/2014 9:44:43 AM	13928
Chromium	2.5	0.30		mg/Kg	1	6/27/2014 9:44:43 AM	13928
Lead	2.4	0.25		mg/Kg	1	6/27/2014 9:44:43 AM	13928
Selenium	ND	2.5		mg/Kg	1	6/27/2014 9:44:43 AM	13928
Silver	ND	0.25		mg/Kg	1	6/27/2014 9:44:43 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Background

Project: Williams Trunk K

Collection Date: 6/25/2014 8:15:00 AM

Lab ID: 1406B97-008

Matrix: SOIL

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/27/2014 1:40:13 AM	13913
Surr: DNOP	74.2	57.9-140		%REC	1	6/27/2014 1:40:13 AM	13913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/27/2014 10:15:27 PM	13921
Surr: BFB	96.3	80-120		%REC	1	6/27/2014 10:15:27 PM	13921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.050		mg/Kg	1	6/27/2014 10:15:27 PM	13921
Toluene	ND	0.050		mg/Kg	1	6/27/2014 10:15:27 PM	13921
Ethylbenzene	ND	0.050		mg/Kg	1	6/27/2014 10:15:27 PM	13921
Xylenes, Total	ND	0.099		mg/Kg	1	6/27/2014 10:15:27 PM	13921
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	6/27/2014 10:15:27 PM	13921
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	ND	30		mg/Kg	20	6/27/2014 2:50:32 PM	13936
<b>EPA METHOD 7471: MERCURY</b>							Analyst: <b>DBD</b>
Mercury	ND	0.031		mg/Kg	1	6/27/2014 11:27:09 AM	13918
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: <b>ELS</b>
Arsenic	4.5	2.5		mg/Kg	1	6/27/2014 9:45:57 AM	13928
Barium	56	0.10		mg/Kg	1	6/27/2014 9:45:57 AM	13928
Cadmium	ND	0.10		mg/Kg	1	6/27/2014 9:45:57 AM	13928
Chromium	2.9	0.30		mg/Kg	1	6/27/2014 9:45:57 AM	13928
Lead	2.4	0.25		mg/Kg	1	6/27/2014 9:45:57 AM	13928
Selenium	ND	2.5		mg/Kg	1	6/27/2014 9:45:57 AM	13928
Silver	ND	0.25		mg/Kg	1	6/27/2014 9:45:57 AM	13928

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash S-1

Project: Williams Trunk K

Collection Date: 6/25/2014 1:05:00 PM

Lab ID: 1406B97-009

Matrix: SOIL

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	800	9.8		mg/Kg	1	6/27/2014 2:10:40 AM	13913
Surr: DNOP	94.6	57.9-140		%REC	1	6/27/2014 2:10:40 AM	13913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	89	9.8		mg/Kg	2	6/27/2014 10:44:04 PM	13921
Surr: BFB	471	80-120	S	%REC	2	6/27/2014 10:44:04 PM	13921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.098		mg/Kg	2	6/27/2014 10:44:04 PM	13921
Toluene	ND	0.098		mg/Kg	2	6/27/2014 10:44:04 PM	13921
Ethylbenzene	ND	0.098		mg/Kg	2	6/27/2014 10:44:04 PM	13921
Xylenes, Total	ND	0.20		mg/Kg	2	6/27/2014 10:44:04 PM	13921
Surr: 4-Bromofluorobenzene	124	80-120	S	%REC	2	6/27/2014 10:44:04 PM	13921

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash S-2

Project: Williams Trunk K

Collection Date: 6/25/2014 1:10:00 PM

Lab ID: 1406B97-010

Matrix: SOIL

Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/27/2014 2:40:45 AM	13913
Surr: DNOP	86.0	57.9-140		%REC	1	6/27/2014 2:40:45 AM	13913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/27/2014 11:12:39 PM	13921
Surr: BFB	113	80-120		%REC	1	6/27/2014 11:12:39 PM	13921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	6/27/2014 11:12:39 PM	13921
Toluene	ND	0.049		mg/Kg	1	6/27/2014 11:12:39 PM	13921
Ethylbenzene	ND	0.049		mg/Kg	1	6/27/2014 11:12:39 PM	13921
Xylenes, Total	ND	0.098		mg/Kg	1	6/27/2014 11:12:39 PM	13921
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	6/27/2014 11:12:39 PM	13921

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

<b>Qualifiers:</b>	*	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 greater than 2.
	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#: 1406B97

01-Jul-14

**Client:** Animas Environmental Services  
**Project:** Williams Trunk K

Sample ID	<b>MB-13936</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13936</b>	RunNo:	<b>19582</b>					
Prep Date:	<b>6/27/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>567620</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	<b>LCS-13936</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13936</b>	RunNo:	<b>19582</b>					
Prep Date:	<b>6/27/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>567621</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.6	90	110			

**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 greater than 2.                          |
| 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#: 1406B97

01-Jul-14

**Client:** Animas Environmental Services  
**Project:** Williams Trunk K

Sample ID	<b>MB-13911</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13911</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>564983</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.1		10.00		70.6	57.9	140			

Sample ID	<b>LCS-13911</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13911</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>564984</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.4		5.000		67.1	57.9	140			

Sample ID	<b>MB-13913</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13913</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>565609</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	6.6		10.00		66.4	57.9	140			

Sample ID	<b>LCS-13913</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13913</b>	RunNo:	<b>19522</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/26/2014</b>	SeqNo:	<b>565610</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.5	68.6	130			
Surr: DNOP	3.1		5.000		61.7	57.9	140			

Sample ID	<b>MB-13931</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13931</b>	RunNo:	<b>19537</b>					
Prep Date:	<b>6/27/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>565685</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.4		10.00		74.1	57.9	140			

Sample ID	<b>LCS-13931</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13931</b>	RunNo:	<b>19537</b>					
Prep Date:	<b>6/27/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>565790</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		83.6	57.9	140			

**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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406B97

01-Jul-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	<b>MB-13921</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13921</b>	RunNo:	<b>19545</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>566587</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.5	80	120			

Sample ID	<b>LCS-13921</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13921</b>	RunNo:	<b>19545</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>566588</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	117	71.7	134			
Surr: BFB	1000		1000		101	80	120			

Sample ID	<b>1406B97-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>Wash SC-1</b>	Batch ID:	<b>13921</b>	RunNo:	<b>19545</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>566594</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	86	4.8	24.22	35.49	208	71.8	132			S
Surr: BFB	3200		969.0		327	80	120			S

Sample ID	<b>1406B97-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>Wash SC-1</b>	Batch ID:	<b>13921</b>	RunNo:	<b>19545</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>566595</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	73	4.8	24.25	35.49	154	71.8	132	16.5	20	S
Surr: BFB	3300		969.9		336	80	120	0	0	S

## 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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406B97

01-Jul-14

**Client:** Animas Environmental Services

**Project:** Williams Trunk K

Sample ID	<b>MB-13921</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13921</b>	RunNo:	<b>19545</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>566622</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	<b>LCS-13921</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13921</b>	RunNo:	<b>19545</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>566623</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	105	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.7	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	<b>1406B97-002AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>Wash SC-2</b>	Batch ID:	<b>13921</b>	RunNo:	<b>19545</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>566635</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.097	0.9662	0.04723	113	77.4	142			
Toluene	1.5	0.097	0.9662	0.8122	76.2	77	132			S
Ethylbenzene	1.2	0.097	0.9662	0.2230	106	77.6	134			
Xylenes, Total	5.1	0.19	2.899	3.371	59.6	77.4	132			S
Surr: 4-Bromofluorobenzene	2.3		1.932		120	80	120			

Sample ID	<b>1406B97-002AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>Wash SC-2</b>	Batch ID:	<b>13921</b>	RunNo:	<b>19545</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>566636</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.097	0.9699	0.04723	110	77.4	142	1.91	20	
Toluene	1.4	0.097	0.9699	0.8122	62.4	77	132	8.80	20	S
Ethylbenzene	1.3	0.097	0.9699	0.2230	110	77.6	134	3.20	20	
Xylenes, Total	5.2	0.19	2.910	3.371	62.8	77.4	132	1.96	20	S
Surr: 4-Bromofluorobenzene	2.3		1.940		121	80	120	0	0	S

**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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406B97

01-Jul-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	MB-13918	SampType:	MBLK	TestCode:	EPA Method 7471: Mercury					
Client ID:	PBS	Batch ID:	13918	RunNo:	19543					
Prep Date:	6/26/2014	Analysis Date:	6/27/2014	SeqNo:	565912	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-13918	SampType:	LCS	TestCode:	EPA Method 7471: Mercury					
Client ID:	LCSS	Batch ID:	13918	RunNo:	19543					
Prep Date:	6/26/2014	Analysis Date:	6/27/2014	SeqNo:	565913	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

## 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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406B97

01-Jul-14

**Client:** Animas Environmental Services

**Project:** Williams Trunk K

Sample ID	<b>MB-13928</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 6010B: Soil Metals</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13928</b>	RunNo:	<b>19536</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>565682</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID	<b>LCS-13928</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 6010B: Soil Metals</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13928</b>	RunNo:	<b>19536</b>					
Prep Date:	<b>6/26/2014</b>	Analysis Date:	<b>6/27/2014</b>	SeqNo:	<b>565683</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	98.0	80	120			
Barium	24	0.10	25.00	0	98.0	80	120			
Cadmium	25	0.10	25.00	0	99.1	80	120			
Chromium	25	0.30	25.00	0	99.7	80	120			
Lead	24	0.25	25.00	0	95.2	80	120			
Selenium	23	2.5	25.00	0	93.5	80	120			
Silver	5.1	0.25	5.000	0	103	80	120			

**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 greater than 2.
- RL Reporting Detection Limit

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Client Name: Animas Environmental

Work Order Number: 1406B97

RcptNo: 1

Received by/date: *[Signature]* *06/26/14*

Logged By: Lindsay Mangin 6/26/2014 8:10:00 AM *[Signature]*

Completed By: Lindsay Mangin 6/26/2014 8:59:21 AM *[Signature]*

Reviewed By: *mg* *06/26/14*

**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° 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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

Chain of Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E Comanche St  
Farmington, NM 87401

Phone #: 505-564-2281

Email or Fax#:

QA/QC Package:  
 Standard       Level 4 (Full Validation)

Accreditation:  
 NELAP       Other \_\_\_\_\_  
 EDD (Type) \_\_\_\_\_

Standard       Rush

Project Name:  
Williams Trunk K

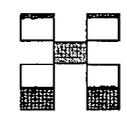
Project #:

Project Manager:  
K. Christiansen

Sampler: *S. Lynn*

Office       Yes       No

Sample Temperature: *10*



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com  
 4901 Hawkins NE - Albuquerque, NM 87109  
 Tel. 505-345-3975 Fax 505-345-4107

**Analysis Request**

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	Arsenic - EPA 200.8	Specific Conductance - EPA 120.1	TSS - SM 2540D, TDS - SM 2540	Sulfide A4500-SD	Salinity	Radioactivity - Alpha/Beta - EPA 900.0	Dissolved Gases - RSK175	Chlorides - EPA300.0	Major Cations - EPA 200.7	Alkalinity - SM 2320B	BTEX - 8021B	TPH - EPA 8015B	Ammonia SM 4500 NH3	RCRA 8 Metals - USEPA 6010
6/25/14	1210	Soil	Wash SC-1	1-4oz jar	4° C	-001								X			X	X		X
6/25/14	1220	Soil	Wash SC-2	1-4oz jar	4° C	-002								X			X	X		X
6/25/14	1225	Soil	Wash SC-3	1-4oz jar	4° C	-003								X			X	X		X
6/25/14	1230	Soil	Wash SC-4	1-4oz jar	4° C	-004								X			X	X		X
6/25/14	1240	Soil	Wash SC-5	1-4oz jar	4° C	-005								X			X	X		X
6/25/14	1250	Soil	Wash SC-6	1-4oz jar	4° C	-006								X			X	X		X
6/25/14	1300	Soil	Wash SC-7	1-4oz jar	4° C	-007								X			X	X		X
6/25/14	0815	Soil	Background	1-4oz jar	4° C	-008								X			X	X		X
6/25/14	1305	Soil	Wash S-1	1-4oz jar	4° C	-009											X	X		
6/25/14	1310	Soil	Wash S-2	1-4oz jar	4° C	-010											X	X		

Date: *6/25/14* Time: *1621* Relinquished by: *Stephanie Lynn*

Date: *6/25/14* Time: *1740* Relinquished by: *Chris Walt*

Received by: *[Signature]* Date: *6/25/14* Time: *1621*

Received by: *[Signature]* Date: *06/26/14* Time: *0810*

Remarks: Direct bill to Williams Field Services. Please email preliminary results ASAP to kchristiansen@animasenvironmental.com & ariling@animasenvironmental.com.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



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

July 21, 2014

Kelsey Christiansen  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX (505) 324-2022

RE: Williams Trunk K

OrderNo.: 1407844

Dear Kelsey Christiansen:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/18/2014 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](http://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

Analytical Report

Lab Order 1407844

Date Reported: 7/21/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-7

Project: Williams Trunk K

Collection Date: 7/17/2014 9:10:00 AM

Lab ID: 1407844-001

Matrix: MEOH (SOIL)

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/18/2014 11:12:29 AM	14297
Surr: DNOP	88.8	57.9-140		%REC	1	7/18/2014 11:12:29 AM	14297
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	7/18/2014 11:27:50 AM	R19984
Surr: BFB	109	80-120		%REC	1	7/18/2014 11:27:50 AM	R19984
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.033		mg/Kg	1	7/18/2014 11:27:50 AM	R19984
Toluene	ND	0.033		mg/Kg	1	7/18/2014 11:27:50 AM	R19984
Ethylbenzene	ND	0.033		mg/Kg	1	7/18/2014 11:27:50 AM	R19984
Xylenes, Total	ND	0.067		mg/Kg	1	7/18/2014 11:27:50 AM	R19984
Surr: 4-Bromofluorobenzene	113	80-120		%REC	1	7/18/2014 11:27:50 AM	R19984

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

<b>Qualifiers:</b>	* 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 greater than 2.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-8

Project: Williams Trunk K

Collection Date: 7/17/2014 9:20:00 AM

Lab ID: 1407844-002

Matrix: MEOH (SOIL)

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/18/2014 11:34:07 AM	14297
Surr: DNOP	84.3	57.9-140		%REC	1	7/18/2014 11:34:07 AM	14297
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	7/18/2014 11:56:30 AM	R19984
Surr: BFB	90.6	80-120		%REC	1	7/18/2014 11:56:30 AM	R19984
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.033		mg/Kg	1	7/18/2014 11:56:30 AM	R19984
Toluene	ND	0.033		mg/Kg	1	7/18/2014 11:56:30 AM	R19984
Ethylbenzene	ND	0.033		mg/Kg	1	7/18/2014 11:56:30 AM	R19984
Xylenes, Total	ND	0.067		mg/Kg	1	7/18/2014 11:56:30 AM	R19984
Surr: 4-Bromofluorobenzene	99.2	80-120		%REC	1	7/18/2014 11:56:30 AM	R19984

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: South Excavation SC-6

Project: Williams Trunk K

Collection Date: 7/17/2014 8:45:00 AM

Lab ID: 1407844-003

Matrix: MEOH (SOIL)

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/18/2014 11:55:44 AM	14297
Surr: DNOP	78.6	57.9-140		%REC	1	7/18/2014 11:55:44 AM	14297
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	7/18/2014 12:25:12 PM	R19984
Surr: BFB	89.2	80-120		%REC	1	7/18/2014 12:25:12 PM	R19984
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.035		mg/Kg	1	7/18/2014 12:25:12 PM	R19984
Toluene	ND	0.035		mg/Kg	1	7/18/2014 12:25:12 PM	R19984
Ethylbenzene	ND	0.035		mg/Kg	1	7/18/2014 12:25:12 PM	R19984
Xylenes, Total	ND	0.070		mg/Kg	1	7/18/2014 12:25:12 PM	R19984
Surr: 4-Bromofluorobenzene	98.0	80-120		%REC	1	7/18/2014 12:25:12 PM	R19984

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: South Excavation SC-7

Project: Williams Trunk K

Collection Date: 7/17/2014 8:50:00 AM

Lab ID: 1407844-004

Matrix: MEOH (SOIL)

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/18/2014 12:17:19 PM	14297
Surr: DNOP	83.4	57.9-140		%REC	1	7/18/2014 12:17:19 PM	14297
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	7/18/2014 12:53:49 PM	R19984
Surr: BFB	92.8	80-120		%REC	1	7/18/2014 12:53:49 PM	R19984
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.033		mg/Kg	1	7/18/2014 12:53:49 PM	R19984
Toluene	ND	0.033		mg/Kg	1	7/18/2014 12:53:49 PM	R19984
Ethylbenzene	ND	0.033		mg/Kg	1	7/18/2014 12:53:49 PM	R19984
Xylenes, Total	ND	0.065		mg/Kg	1	7/18/2014 12:53:49 PM	R19984
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	7/18/2014 12:53:49 PM	R19984

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: South Excavation SC-8

Project: Williams Trunk K

Collection Date: 7/17/2014 8:55:00 AM

Lab ID: 1407844-005

Matrix: MEOH (SOIL)

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/18/2014 12:38:50 PM	14297
Surr: DNOP	83.6	57.9-140		%REC	1	7/18/2014 12:38:50 PM	14297
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	7/18/2014 1:22:26 PM	R19984
Surr: BFB	90.6	80-120		%REC	1	7/18/2014 1:22:26 PM	R19984
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.036		mg/Kg	1	7/18/2014 1:22:26 PM	R19984
Toluene	ND	0.036		mg/Kg	1	7/18/2014 1:22:26 PM	R19984
Ethylbenzene	ND	0.036		mg/Kg	1	7/18/2014 1:22:26 PM	R19984
Xylenes, Total	ND	0.072		mg/Kg	1	7/18/2014 1:22:26 PM	R19984
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	7/18/2014 1:22:26 PM	R19984

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

<b>Qualifiers:</b>	* 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 greater than 2.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: South Excavation SC-9

Project: Williams Trunk K

Collection Date: 7/17/2014 9:00:00 AM

Lab ID: 1407844-006

Matrix: MEOH (SOIL)

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/18/2014 1:00:34 PM	14297
Surr: DNOP	85.2	57.9-140		%REC	1	7/18/2014 1:00:34 PM	14297
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	7/18/2014 1:51:10 PM	R19984
Surr: BFB	90.8	80-120		%REC	1	7/18/2014 1:51:10 PM	R19984
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.034		mg/Kg	1	7/18/2014 1:51:10 PM	R19984
Toluene	ND	0.034		mg/Kg	1	7/18/2014 1:51:10 PM	R19984
Ethylbenzene	ND	0.034		mg/Kg	1	7/18/2014 1:51:10 PM	R19984
Xylenes, Total	ND	0.067		mg/Kg	1	7/18/2014 1:51:10 PM	R19984
Surr: 4-Bromofluorobenzene	98.1	80-120		%REC	1	7/18/2014 1:51:10 PM	R19984

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

<b>Qualifiers:</b>	*	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 greater than 2.
	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#: 1407844

21-Jul-14

**Client:** Animas Environmental Services  
**Project:** Williams Trunk K

Sample ID <b>MB-14297</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>14297</b>	RunNo: <b>19942</b>								
Prep Date: <b>7/18/2014</b>	Analysis Date: <b>7/18/2014</b>	SeqNo: <b>580565</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.9		10.00		89.2	57.9	140			

Sample ID <b>LCS-14297</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>14297</b>	RunNo: <b>19942</b>								
Prep Date: <b>7/18/2014</b>	Analysis Date: <b>7/18/2014</b>	SeqNo: <b>580566</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	65	10	50.00	0	130	68.6	130			S
Surr: DNOP	4.7		5.000		94.3	57.9	140			

Sample ID <b>MB-14220</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>14220</b>	RunNo: <b>19942</b>								
Prep Date: <b>7/15/2014</b>	Analysis Date: <b>7/18/2014</b>	SeqNo: <b>580642</b>			Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		90.2	57.9	140			

Sample ID <b>LCS-14220</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>14220</b>	RunNo: <b>19942</b>								
Prep Date: <b>7/15/2014</b>	Analysis Date: <b>7/18/2014</b>	SeqNo: <b>580643</b>			Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0		5.000		80.7	57.9	140			

Sample ID <b>MB-14301</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>14301</b>	RunNo: <b>19974</b>								
Prep Date: <b>7/18/2014</b>	Analysis Date: <b>7/18/2014</b>	SeqNo: <b>581081</b>			Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.4		10.00		73.9	57.9	140			

Sample ID <b>LCS-14301</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>14301</b>	RunNo: <b>19974</b>								
Prep Date: <b>7/18/2014</b>	Analysis Date: <b>7/18/2014</b>	SeqNo: <b>581082</b>			Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0		5.000		79.6	57.9	140			

## 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 greater than 2.
- RL Reporting Detection Limit

80

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1407844

21-Jul-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	<b>MB-14300</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>14300</b>	RunNo:	<b>19999</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/19/2014</b>	SeqNo:	<b>581178</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.2		10.00		82.4	57.9	140			

Sample ID	<b>MB-14315</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>14315</b>	RunNo:	<b>19999</b>					
Prep Date:	<b>7/19/2014</b>	Analysis Date:	<b>7/19/2014</b>	SeqNo:	<b>581179</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.4		10.00		74.1	57.9	140			

Sample ID	<b>LCS-14300</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>14300</b>	RunNo:	<b>19999</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/19/2014</b>	SeqNo:	<b>581180</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		85.7	57.9	140			

Sample ID	<b>LCS-14315</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>14315</b>	RunNo:	<b>19999</b>					
Prep Date:	<b>7/19/2014</b>	Analysis Date:	<b>7/19/2014</b>	SeqNo:	<b>581181</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		5.000		77.3	57.9	140			

### 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 greater than 2.                          |
| 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#: 1407844

21-Jul-14

**Client:** Animas Environmental Services

**Project:** Williams Trunk K

Sample ID <b>5ML RB</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>R19984</b>		RunNo: <b>19984</b>							
Prep Date:	Analysis Date: <b>7/18/2014</b>		SeqNo: <b>581093</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		93.7	80	120			

Sample ID <b>2.5UG GRO LCSB</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>R19984</b>		RunNo: <b>19984</b>							
Prep Date:	Analysis Date: <b>7/18/2014</b>		SeqNo: <b>581094</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	71.7	134			
Surr: BFB	980		1000		97.7	80	120			

Sample ID <b>1407844-001AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>Wash SC-7</b>	Batch ID: <b>R19984</b>		RunNo: <b>19984</b>							
Prep Date:	Analysis Date: <b>7/18/2014</b>		SeqNo: <b>581096</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.3	16.72	0	93.4	71.8	132			
Surr: BFB	740		668.9		111	80	120			

Sample ID <b>1407844-001AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>Wash SC-7</b>	Batch ID: <b>R19984</b>		RunNo: <b>19984</b>							
Prep Date:	Analysis Date: <b>7/18/2014</b>		SeqNo: <b>581097</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	3.3	16.72	0	112	71.8	132	18.2	20	
Surr: BFB	760		668.9		114	80	120	0	0	

**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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1407844

21-Jul-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	<b>5ML RB</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>R19984</b>	RunNo:	<b>19984</b>					
Prep Date:		Analysis Date:	<b>7/18/2014</b>	SeqNo:	<b>581128</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	<b>100NG BTEX LCS</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>R19984</b>	RunNo:	<b>19984</b>					
Prep Date:		Analysis Date:	<b>7/18/2014</b>	SeqNo:	<b>581129</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	100	80	120			
Toluene	0.96	0.050	1.000	0	96.3	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.1	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

**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 greater than 2.
- RL Reporting Detection Limit



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

# Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1407844

RcptNo: 1

Received by/date: *[Signature]* 07/18/14  
 Logged By: Lindsay Mangin 7/18/2014 7:35:00 AM  
 Completed By: Lindsay Mangin 7/18/2014 7:48:12 AM  
 Reviewed By: *[Signature]* 07/18/14

*[Signature]*  
*[Signature]*

### 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° 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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			

# Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E. Comanche  
Farmington, NM 87401

Phone #: (505) 564-2281

email or Fax#:

QA/QC Package:  
 Standard  Level 4 (Full Validation)

Accreditation  
 NELAP  Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Turn-Around Time:  
 Standard  Rush same day

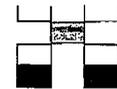
Project Name:  
Williams Trunk K

Project #:

Project Manager:  
K. Christiansen

Sampler: S. Lynn  
On Ice:  Yes  No

Sample Temperature: 7.1



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	BTEX + MTBE + TPB (Gas only)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO DRO MICRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
7-17-14	9:10	soil	Wash SC-7	MEOH 144	MEOH cold	1407844 -001	X	X	X									
7-17-14	9:20	soil	Wash SC-8	non H <sub>2</sub> O <sub>2</sub>		-002	X	X										
7-17-14	8:45	soil	South Excavation SC-6			-003	X	X										
7-17-14	8:50	soil	South Excavation SC-7			-004	X	X										
7-17-14	8:55	soil	South Excavation SC-8			-005	X	X										
7-17-14	9:00	soil	South Excavation SC-9			-006	X	X										

Date: 7/17/14 Time: 1610 Relinquished by: Stephanie Allyn

Received by: Christie Walter Date: 7/17/14 Time: 1610

Remarks: Call if questions.

Date: 7/17/14 Time: 1720 Relinquished by: Christie Walter

Received by: [Signature] Date: 07/18/14 Time: 0735

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



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

July 23, 2014

Kelsey Christiansen  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX (505) 324-2022

RE: Williams Trunk K

OrderNo.: 1407845

Dear Kelsey Christiansen:

Hall Environmental Analysis Laboratory received 9 sample(s) on 7/18/2014 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](http://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.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-9

Project: Williams Trunk K

Collection Date: 7/17/2014 9:30:00 AM

Lab ID: 1407845-001

Matrix: SOIL

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	14	9.9		mg/Kg	1	7/19/2014 5:02:53 PM	14300
Surr: DNOP	87.5	57.9-140		%REC	1	7/19/2014 5:02:53 PM	14300
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/21/2014 2:45:30 PM	14303
Surr: BFB	85.0	80-120		%REC	1	7/21/2014 2:45:30 PM	14303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	7/21/2014 2:45:30 PM	14303
Toluene	ND	0.048		mg/Kg	1	7/21/2014 2:45:30 PM	14303
Ethylbenzene	ND	0.048		mg/Kg	1	7/21/2014 2:45:30 PM	14303
Xylenes, Total	ND	0.097		mg/Kg	1	7/21/2014 2:45:30 PM	14303
Surr: 4-Bromofluorobenzene	94.5	80-120		%REC	1	7/21/2014 2:45:30 PM	14303

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** Wash SC-10**Project:** Williams Trunk K**Collection Date:** 7/17/2014 9:40:00 AM**Lab ID:** 1407845-002**Matrix:** SOIL**Received Date:** 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/19/2014 6:37:39 PM	14300
Surr: DNOP	85.7	57.9-140		%REC	1	7/19/2014 6:37:39 PM	14300
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/21/2014 11:16:46 PM	14303
Surr: BFB	81.4	80-120		%REC	1	7/21/2014 11:16:46 PM	14303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	7/21/2014 11:16:46 PM	14303
Toluene	ND	0.048		mg/Kg	1	7/21/2014 11:16:46 PM	14303
Ethylbenzene	ND	0.048		mg/Kg	1	7/21/2014 11:16:46 PM	14303
Xylenes, Total	ND	0.096		mg/Kg	1	7/21/2014 11:16:46 PM	14303
Surr: 4-Bromofluorobenzene	91.7	80-120		%REC	1	7/21/2014 11:16:46 PM	14303

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-11

Project: Williams Trunk K

Collection Date: 7/17/2014 9:50:00 AM

Lab ID: 1407845-003

Matrix: SOIL

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	39	9.9		mg/Kg	1	7/19/2014 7:09:12 PM	14300
Surr: DNOP	89.2	57.9-140		%REC	1	7/19/2014 7:09:12 PM	14300
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/21/2014 11:46:46 PM	14303
Surr: BFB	85.8	80-120		%REC	1	7/21/2014 11:46:46 PM	14303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	7/21/2014 11:46:46 PM	14303
Toluene	ND	0.049		mg/Kg	1	7/21/2014 11:46:46 PM	14303
Ethylbenzene	ND	0.049		mg/Kg	1	7/21/2014 11:46:46 PM	14303
Xylenes, Total	ND	0.097		mg/Kg	1	7/21/2014 11:46:46 PM	14303
Surr: 4-Bromofluorobenzene	96.0	80-120		%REC	1	7/21/2014 11:46:46 PM	14303

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-12

Project: Williams Trunk K

Collection Date: 7/17/2014 10:00:00 AM

Lab ID: 1407845-004

Matrix: SOIL

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	19	10		mg/Kg	1	7/19/2014 7:40:28 PM	14300
Surr: DNOP	84.1	57.9-140		%REC	1	7/19/2014 7:40:28 PM	14300
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/22/2014 12:18:46 AM	14303
Surr: BFB	81.7	80-120		%REC	1	7/22/2014 12:18:46 AM	14303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	7/22/2014 12:18:46 AM	14303
Toluene	ND	0.049		mg/Kg	1	7/22/2014 12:18:46 AM	14303
Ethylbenzene	ND	0.049		mg/Kg	1	7/22/2014 12:18:46 AM	14303
Xylenes, Total	ND	0.098		mg/Kg	1	7/22/2014 12:18:46 AM	14303
Surr: 4-Bromofluorobenzene	92.1	80-120		%REC	1	7/22/2014 12:18:46 AM	14303

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-13

Project: Williams Trunk K

Collection Date: 7/17/2014 10:10:00 AM

Lab ID: 1407845-005

Matrix: SOIL

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	57	10		mg/Kg	1	7/19/2014 8:11:44 PM	14300
Surr: DNOP	90.9	57.9-140		%REC	1	7/19/2014 8:11:44 PM	14300
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/22/2014 12:48:53 AM	14303
Surr: BFB	83.5	80-120		%REC	1	7/22/2014 12:48:53 AM	14303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	7/22/2014 12:48:53 AM	14303
Toluene	ND	0.049		mg/Kg	1	7/22/2014 12:48:53 AM	14303
Ethylbenzene	ND	0.049		mg/Kg	1	7/22/2014 12:48:53 AM	14303
Xylenes, Total	ND	0.098		mg/Kg	1	7/22/2014 12:48:53 AM	14303
Surr: 4-Bromofluorobenzene	94.7	80-120		%REC	1	7/22/2014 12:48:53 AM	14303

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services      Client Sample ID: Wash SC-14  
 Project: Williams Trunk K      Collection Date: 7/17/2014 10:20:00 AM  
 Lab ID: 1407845-006      Matrix: SOIL      Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	24	10		mg/Kg	1	7/19/2014 8:43:12 PM	14300
Surr: DNOP	92.2	57.9-140		%REC	1	7/19/2014 8:43:12 PM	14300
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/22/2014 1:19:04 AM	14303
Surr: BFB	79.6	80-120	S	%REC	1	7/22/2014 1:19:04 AM	14303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	7/22/2014 1:19:04 AM	14303
Toluene	ND	0.048		mg/Kg	1	7/22/2014 1:19:04 AM	14303
Ethylbenzene	ND	0.048		mg/Kg	1	7/22/2014 1:19:04 AM	14303
Xylenes, Total	ND	0.095		mg/Kg	1	7/22/2014 1:19:04 AM	14303
Surr: 4-Bromofluorobenzene	89.0	80-120		%REC	1	7/22/2014 1:19:04 AM	14303

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

<b>Qualifiers:</b>	* 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 greater than 2.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-15

Project: Williams Trunk K

Collection Date: 7/17/2014 10:30:00 AM

Lab ID: 1407845-007

Matrix: SOIL

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	16	9.8		mg/Kg	1	7/19/2014 9:14:29 PM	14300
Surr: DNOP	89.7	57.9-140		%REC	1	7/19/2014 9:14:29 PM	14300
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/22/2014 1:49:11 AM	14303
Surr: BFB	86.6	80-120		%REC	1	7/22/2014 1:49:11 AM	14303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	7/22/2014 1:49:11 AM	14303
Toluene	ND	0.048		mg/Kg	1	7/22/2014 1:49:11 AM	14303
Ethylbenzene	ND	0.048		mg/Kg	1	7/22/2014 1:49:11 AM	14303
Xylenes, Total	ND	0.096		mg/Kg	1	7/22/2014 1:49:11 AM	14303
Surr: 4-Bromofluorobenzene	99.1	80-120		%REC	1	7/22/2014 1:49:11 AM	14303

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Analytical Report**

Lab Order 1407845

Date Reported: 7/23/2014

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-16

Project: Williams Trunk K

Collection Date: 7/17/2014 10:40:00 AM

Lab ID: 1407845-008

Matrix: SOIL

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	52	9.9		mg/Kg	1	7/19/2014 9:45:28 PM	14300
Surr: DNOP	81.1	57.9-140		%REC	1	7/19/2014 9:45:28 PM	14300
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2014 2:19:13 AM	14303
Surr: BFB	79.3	80-120	S	%REC	1	7/22/2014 2:19:13 AM	14303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	7/22/2014 2:19:13 AM	14303
Toluene	ND	0.047		mg/Kg	1	7/22/2014 2:19:13 AM	14303
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2014 2:19:13 AM	14303
Xylenes, Total	ND	0.094		mg/Kg	1	7/22/2014 2:19:13 AM	14303
Surr: 4-Bromofluorobenzene	89.4	80-120		%REC	1	7/22/2014 2:19:13 AM	14303

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

<b>Qualifiers:</b>	*	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 greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: Wash SC-17

Project: Williams Trunk K

Collection Date: 7/17/2014 10:50:00 AM

Lab ID: 1407845-009

Matrix: SOIL

Received Date: 7/18/2014 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	44	9.9		mg/Kg	1	7/20/2014 7:44:19 PM	14300
Surr: DNOP	84.3	57.9-140		%REC	1	7/20/2014 7:44:19 PM	14300
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2014 2:49:17 AM	14303
Surr: BFB	88.0	80-120		%REC	1	7/22/2014 2:49:17 AM	14303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	7/22/2014 2:49:17 AM	14303
Toluene	ND	0.047		mg/Kg	1	7/22/2014 2:49:17 AM	14303
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2014 2:49:17 AM	14303
Xylenes, Total	ND	0.093		mg/Kg	1	7/22/2014 2:49:17 AM	14303
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	7/22/2014 2:49:17 AM	14303

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

<b>Qualifiers:</b>	*	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 greater than 2.
	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#: 1407845

23-Jul-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	<b>MB-14300</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>14300</b>	RunNo:	<b>19999</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/19/2014</b>	SeqNo:	<b>581178</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.2		10.00		82.4	57.9	140			

Sample ID	<b>LCS-14300</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>14300</b>	RunNo:	<b>19999</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/19/2014</b>	SeqNo:	<b>581180</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	68.6	130			
Surr: DNOP	4.3		5.000		85.7	57.9	140			

Sample ID	<b>1407845-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>Wash SC-9</b>	Batch ID:	<b>14300</b>	RunNo:	<b>20000</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/19/2014</b>	SeqNo:	<b>581410</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	9.9	49.65	13.75	81.9	40.1	152			
Surr: DNOP	3.7		4.965		73.8	57.9	140			

Sample ID	<b>1407845-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>Wash SC-9</b>	Batch ID:	<b>14300</b>	RunNo:	<b>20000</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/19/2014</b>	SeqNo:	<b>581411</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.10	13.75	75.5	40.1	152	5.37	32.1	
Surr: DNOP	3.6		5.010		71.7	57.9	140	0	0	

## 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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1407845

23-Jul-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	<b>MB-14303</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>14303</b>	RunNo:	<b>20023</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/21/2014</b>	SeqNo:	<b>582173</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	840		1000		83.8	80	120			

Sample ID	<b>LCS-14303</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>14303</b>	RunNo:	<b>20023</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/21/2014</b>	SeqNo:	<b>582174</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.6	71.7	134			
Surr: BFB	880		1000		88.4	80	120			

## 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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1407845

23-Jul-14

Client: Animas Environmental Services

Project: Williams Trunk K

Sample ID	<b>MB-14303</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>14303</b>	RunNo:	<b>20023</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/21/2014</b>	SeqNo:	<b>582206</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		97.6	80	120			

Sample ID	<b>LCS-14303</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>14303</b>	RunNo:	<b>20023</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/21/2014</b>	SeqNo:	<b>582207</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.050	1.000	0	92.9	80	120			
Toluene	0.92	0.050	1.000	0	91.8	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.2	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID	<b>1407845-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>Wash SC-9</b>	Batch ID:	<b>14303</b>	RunNo:	<b>20023</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/21/2014</b>	SeqNo:	<b>582216</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.048	0.9653	0	90.4	77.4	142			
Toluene	0.88	0.048	0.9653	0	91.1	77	132			
Ethylbenzene	0.90	0.048	0.9653	0	93.7	77.6	134			
Xylenes, Total	2.9	0.097	2.896	0.03262	98.4	77.4	132			
Surr: 4-Bromofluorobenzene	0.98		0.9653		101	80	120			

Sample ID	<b>1407845-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>Wash SC-9</b>	Batch ID:	<b>14303</b>	RunNo:	<b>20023</b>					
Prep Date:	<b>7/18/2014</b>	Analysis Date:	<b>7/21/2014</b>	SeqNo:	<b>582217</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.048	0.9643	0	93.2	77.4	142	2.93	20	
Toluene	0.89	0.048	0.9643	0	92.6	77	132	1.53	20	
Ethylbenzene	0.92	0.048	0.9643	0	95.9	77.6	134	2.21	20	
Xylenes, Total	2.9	0.096	2.893	0.03262	99.6	77.4	132	1.12	20	
Surr: 4-Bromofluorobenzene	1.0		0.9643		106	80	120	0	0	

### 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 greater than 2.                          |
| R RPD outside accepted recovery limits            | RL Reporting Detection Limit                         |
| S Spike Recovery outside accepted recovery limits |  |



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

# Sample Log-In Check List

Client Name: **Animas Environmental**      Work Order Number: **1407845**      RcptNo: **1**

Received by/date: *[Signature]* **07/18/14**  
 Logged By: **Lindsay Mangin**      7/18/2014 7:35:00 AM      *[Signature]*  
 Completed By: **Lindsay Mangin**      7/18/2014 8:11:54 AM      *[Signature]*  
 Reviewed By: *[Signature]* **07/18/14**

**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° 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       # of preserved bottles checked for pH:      (<2 or >12 unless noted)
- 13. Are matrices correctly identified on Chain of Custody?      Yes       No       Adjusted?
- 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       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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			

# Chain-of-Custody Record

Turn-Around Time:

Client: Animas Environmental Services

Standard  Rush

Mailing Address: 624 E. Comanche

Project Name:

Williams Trunk K

Farmington, NM 87401

Project #:

Phone #: (505) 564-2281

Project Manager:

email or Fax#:

K. Christiansen

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation

NELAP

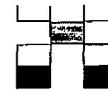
Other \_\_\_\_\_

Sampler: S. Lynn

On Ice:  Yes  No

EDD (Type)

Sample Temperature: 2



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO/DRO/MPE)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
7-17-14	9:30	Soil	Wash SC-9	1-402	cold	-001	X	X										
7-17-14	9:40	Soil	Wash SC-10			-002	X	X										
7-17-14	9:50	Soil	Wash SC-11			-003	X	X										
7-17-14	10:00	Soil	Wash SC-12			-004	X	X										
7-17-14	10:10	Soil	Wash SC-13			-005	X	X										
7-17-14	10:20	Soil	Wash SC-14			-006	X	X										
7-17-14	10:30	Soil	Wash SC-15			-007	X	X										
7-17-14	10:40	Soil	Wash SC-16			-008	X	X										
7-17-14	10:50	Soil	Wash SC-17			-009	X	X										

Date: 7/17/14 Time: 1610 Relinquished by: Stephanie Aeyen

Received by: Christa Waeter Date: 7/17/14 Time: 1610

Remarks: Call if questions.

Date: 7/17/14 Time: 1720 Relinquished by: Christa Waeter

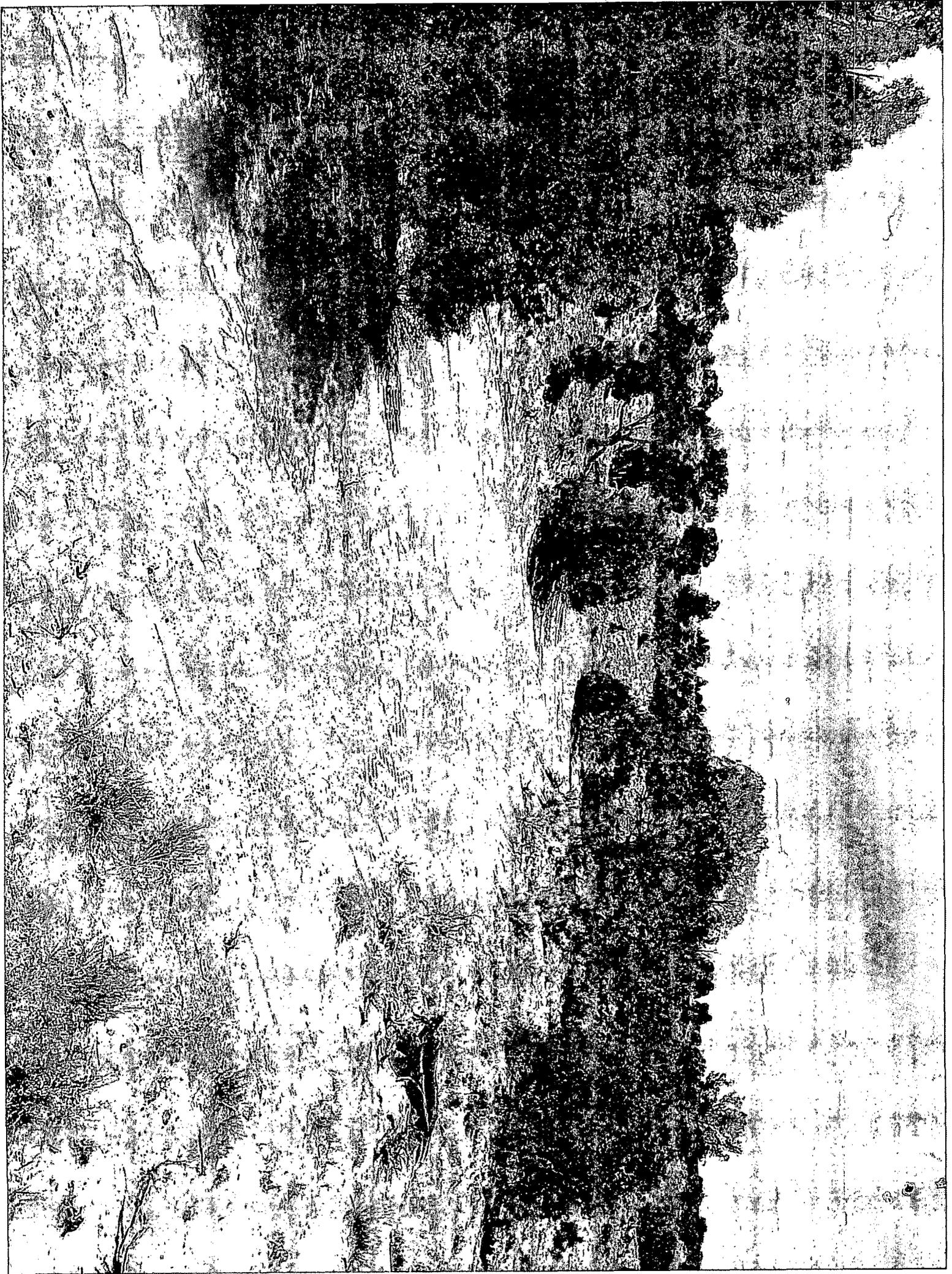
Received by: [Signature] Date: 07/18/14 Time: 0735

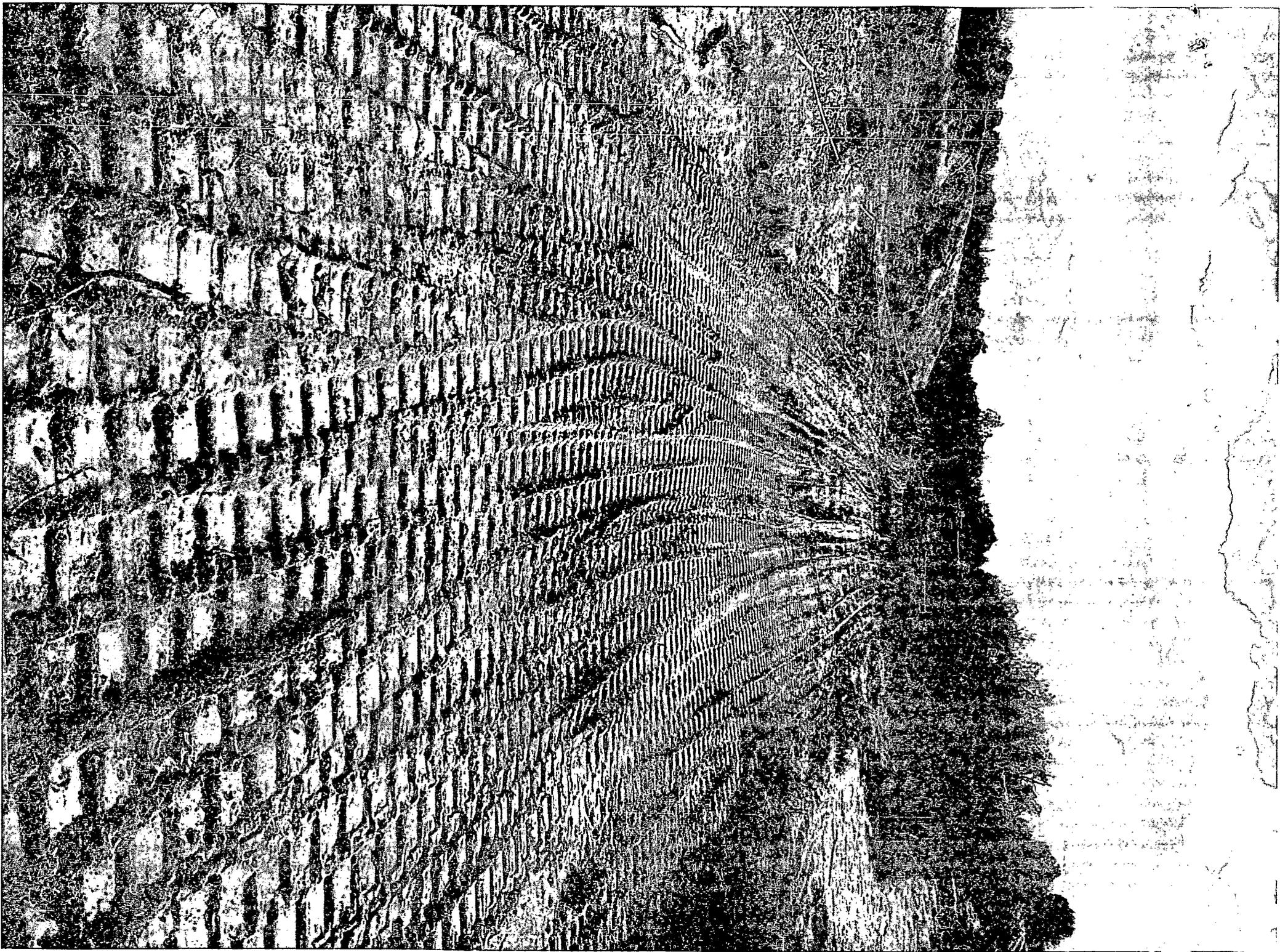
If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

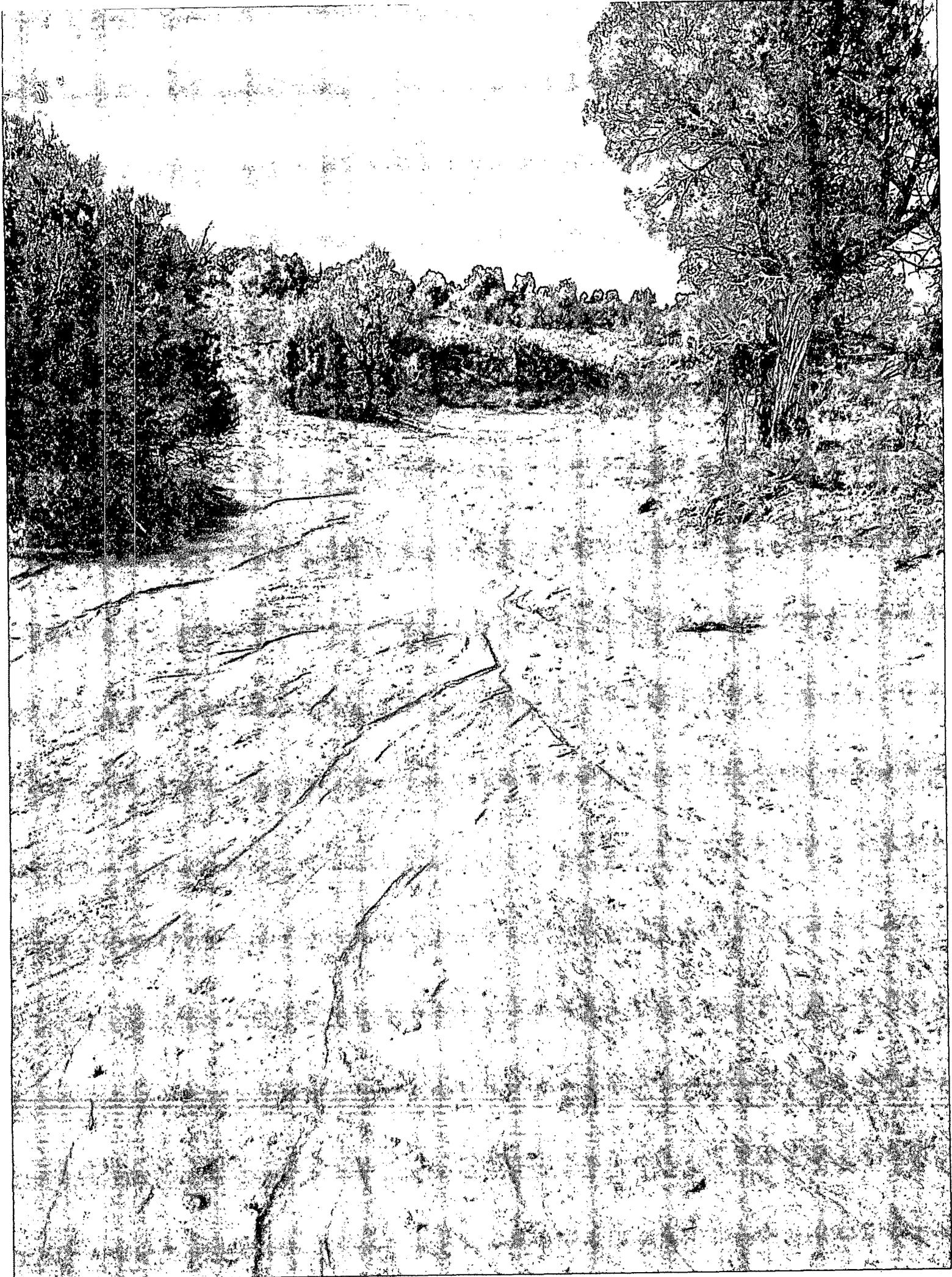


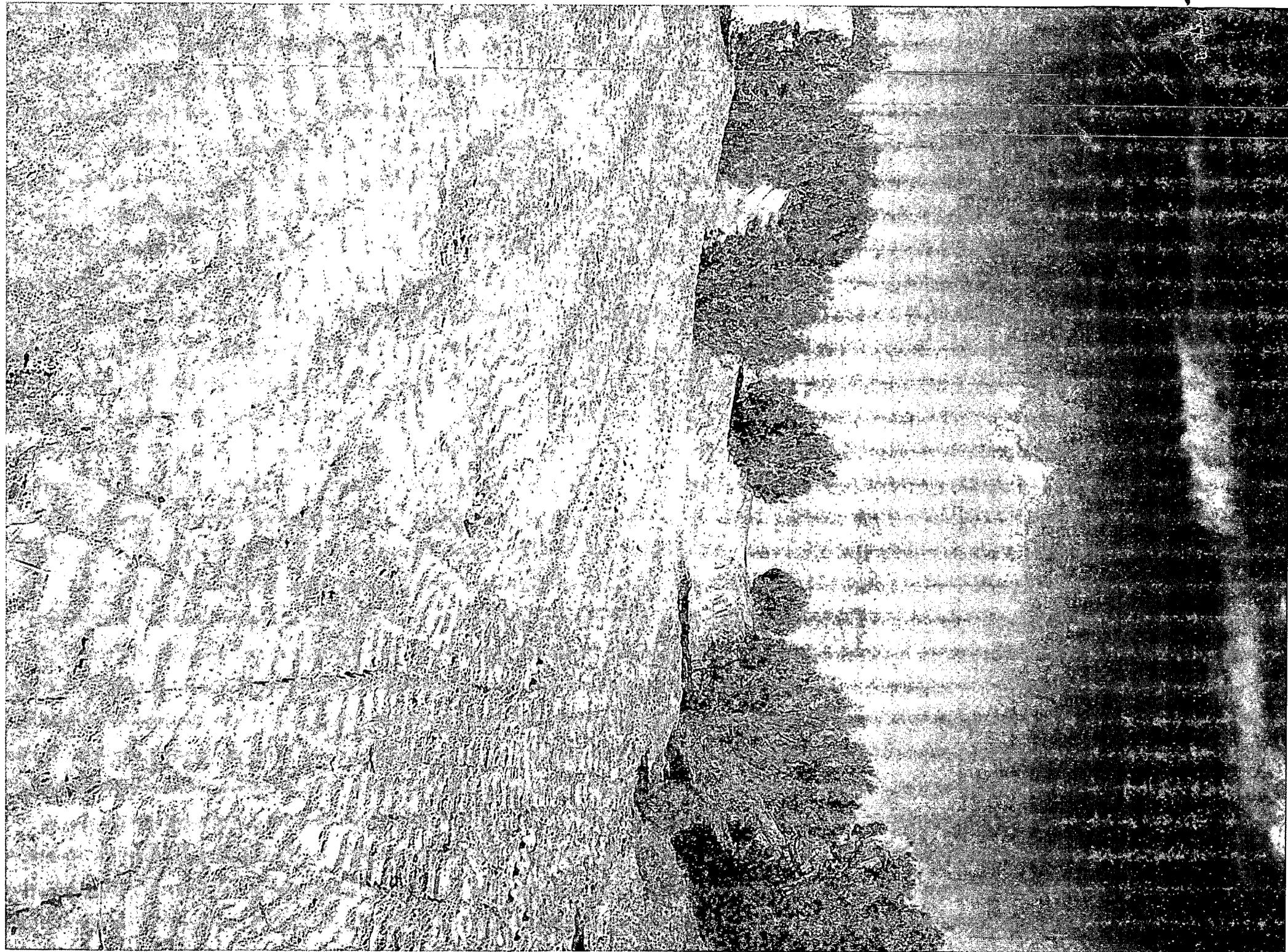












District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: Williams Four Corners LLC	Contact: Jana Franchini
Address: 188 CR 4900, Bloomfield, NM 87413	Telephone No.: (505) 634-4951
Facility Name: Trunk A	Facility Type: Natural gas pipeline

Surface Owner: BLM	Mineral Owner	API No.
--------------------	---------------	---------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	27	29N	11W					San Juan

Latitude 36.691326° N Longitude -107.978910° W

**OIL CONS. DIV DIST. 3**

**NATURE OF RELEASE**

Type of Release: Natural gas & methanol	Volume of Release: 31.4 MCF natural gas & 50 gallons (approx.) methanol	Volume Recovered: 0 MCF natural gas & 0 gallons methanol
Source of Release: Pipeline methanol injection station	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 06/26/2014 at 04:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mark Kelly (BLM), Cory Smith (NMOCD), NRC	
By Whom? Jana Franchini & ES&H (Release Reporting Contractor)	Date and Hour: 06/26/2014 at 04:20 PM MST	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse: 50 gallons methanol mixed with potable water	

JUL 14 2014

If a Watercourse was Impacted, Describe Fully.\*

A break in the potable water line running to Kutz Plant eroded enough soil beneath a methanol injection station on the Trunk A Pipeline that the methanol container fell over. Approximately 50 gallons of methanol leaked out of the container before it was righted and removed. The methanol mixed with the water rushing from the water line break and was carried down an un-named, dry wash (natural erosional feature) before pooling-up and evaporating. There were no impacts to surface or ground water. Groundwater is estimated to be greater than 100 feet below the ground surface.

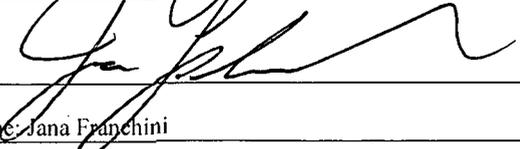
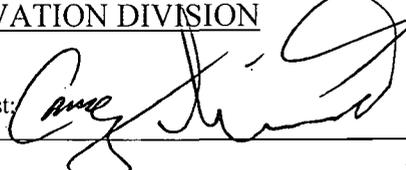
Describe Cause of Problem and Remedial Action Taken.\*

Erosion from the break in the potable water line eventually toppled a methanol injection station on Trunk A Pipeline, which resulted in a release of 31.4 MCF natural gas to atmosphere and approximately 50 gallons of methanol to soil. The water line was isolated and repaired and the methanol tank was righted and removed.

Describe Area Affected and Cleanup Action Taken.\*

The area of the release was sampled on July 3, 2014 and the results are pending analysis by EPA Method 5035. Following receipt of the results, additional clean-up activities will be performed, if warranted, to ensure proper remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jana Franchini	Approved by Environmental Specialist: 	
Title: Environmental Specialist	Approval Date: 11/4/14	Expiration Date:
E-mail Address: jana.franchini@williams.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 07/10/2014	Phone: (505) 634-4951	

#NCS14300939284

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State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: Williams Four Corners LLC	Contact: Jana Franchini
Address: 188 CR 4900, Bloomfield, NM 87413	Telephone No.: (505) 634-4951
Facility Name: Trunk E	Facility Type: Natural gas pipeline

Surface Owner: State of New Mexico	Mineral Owner	API No.
------------------------------------	---------------	---------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	I	30N	11W					San Juan

Latitude 36.838188° N Longitude -107.94811° W

**NATURE OF RELEASE**

Type of Release: Natural gas	Volume of Release: 360 MCF natural gas	Volume Recovered: 0 MCF natural gas
Source of Release: Bullet-hole in pipeline	Date and Hour of Occurrence: 07/06/2014 at 01:00 PM MST (approximate)	Date and Hour of Discovery: 07/07/2014 at 02:30 PM MST
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Cory Smith (NMOCD)	
By Whom? Jana Franchini, Williams	Date and Hour: 07/07/2014 at 05:15 PM MST	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse: N/A	

**OIL CONS. DIV DIST. 3**

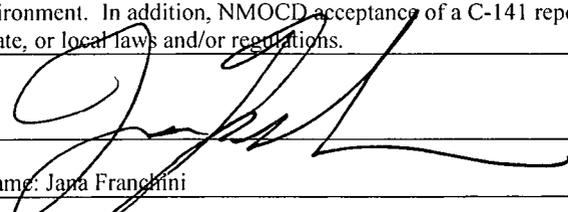
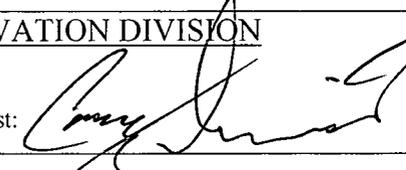
**JUL 14 2014**

If a Watercourse was Impacted, Describe Fully.\*  
N/A

Describe Cause of Problem and Remedial Action Taken.\*  
Williams' personnel discovered a gas leak at the NYE-11E (a 45 degree dog leg) on the Trunk E Pipeline on Monday, July 7th. The leak appeared to be caused by a gunshot. The pipeline was isolated and the associated wells were shut-in by 02:54 PM MST on July 7th. Approximately 360 MCF of gas was released to atmosphere between the time of occurrence and isolation.

Describe Area Affected and Cleanup Action Taken.\*  
No clean-up required for natural gas releases.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jana Franchini	Approved by Environmental Specialist: 	
Title: Environmental Specialist	Approval Date: 11/4/14	Expiration Date:
E-mail Address: jana.franchini@williams.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 07/10/2014 Phone: (505) 634-4951		

\* Attach Additional Sheets If Necessary

#NCS1430839627

District I  
1625 N. French Dr., Hobbs, NM 88240  
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Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: Williams Four Corners LLC	Contact: Jana Franchini	
Address: 188 CR 4900, Bloomfield, NM 87413	Telephone No.: (505) 634-4951	
Facility Name: Reid	Facility Type: Compressor Station	
Surface Owner: BLM	Mineral Owner	API No.

**LOCATION OF RELEASE**

**RCUD SEP 24 '14**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	18	31N	12W					San Juan

Latitude 36.895426° N Longitude -108.142639° W

**OIL CONS. DIV.**

**DIST. 3**

**NATURE OF RELEASE**

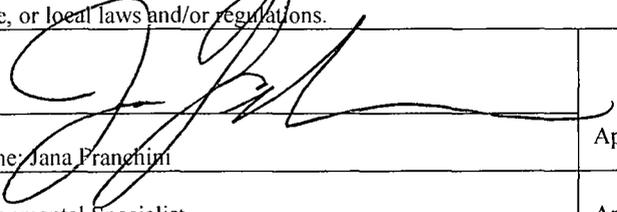
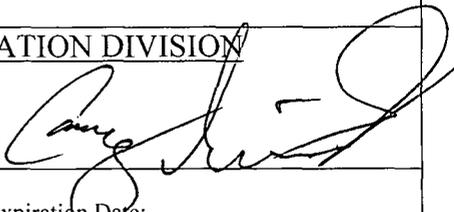
Type of Release: Natural gas	Volume of Release: 280 MCF Natural gas	Volume Recovered: 0 MCF Natural gas
Source of Release: Separator dump valve	Date and Hour of Occurrence: 9/3/2014 at 4:30 PM (approx.)	Date and Hour of Discovery: 9/4/2014 at 8:30 AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour: N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.\*  
N/A

Describe Cause of Problem and Remedial Action Taken.\*  
A faulty actuator on the compression skid resulted in the release of approximately 280 MCF of natural gas to atmosphere at Williams' Reid Compressor Station. The actuator was replaced and the unit was returned to operation by Exterran, the skid owner and operator.

Describe Area Affected and Cleanup Action Taken.\*  
No clean-up required for natural gas release.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jana Franchini	Approved by Environmental Specialist: 	
Title: Environmental Specialist	Approval Date: 11/12/14	Expiration Date:
E-mail Address: jana.franchini@williams.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 09/15/2014	Phone: (505) 634-4951	

\* Attach Additional Sheets If Necessary

*FILES 14031655702*

*150*

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural  
Resources

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office  
in accordance with 19.15.29 NMAC.

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: Enterprise Field Services LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: Jicarilla L#11 DK/GL	Facility Type: Well Site
Surface Owner: Jicarilla Apache Tribe	Mineral Owner: Jicarilla Apache Tribe
API No.	

RP#

**LOCATION OF RELEASE**

Unit Letter B	Section 3	Township 24N	Range 5W	Feet from the 1595	North South Line	Feet from the 1682	East West Line	County Rio Arriba
------------------	--------------	-----------------	-------------	--------------------------	---------------------	--------------------------	----------------	----------------------

Latitude 36.34485 Longitude -107.34550

RCVD SEP 2 '14

**NATURE OF RELEASE**

OIL CONC NTU

Type of Release: Natural Gas and Natural gas liquids	Volume of Release: 20 MCF; Estimated 2-3 BBLs released	Volume Recovered: Unknown
Source of Release: Accidental discharge from a valve on the meter tube.	Date and Hour of Occurrence: 5/12/2014 @ 12:21 p.m.	Date and Hour of Discovery: 5/12/2014 @ 12:45 p.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? JAEPO - Hobson Sandoval; JAO&GA - Bryce Hammond	
By Whom? Thomas Long	Date and Hour 5/12/2014 @ 6:12 p.m. by phone and email	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

DIST. 3

If a Watercourse was Impacted, Describe Fully.

Describe Cause of Problem and Remedial Action Taken: A third party reported a valve leaking on the meter tube. The valve was closed and the well remained in service. Remediation activities were completed on July 2, 2014. The final excavation dimension measured approximately one-hundred-fifteen (115) feet long by thirty-six (36) feet wide by 0.33 feet deep. Approximately 20 cubic yards of hydrocarbon impacted soil was excavated and transported to a NMOCD approved land farm facility.

Describe Area Affected and Cleanup Action Taken.\* A third party reported a valve leaking on the meter tube. The valve was closed and the well remained in service. Remediation activities were completed on July 2, 2014. The final excavation dimension measured approximately one-hundred-fifteen (115) feet long by thirty-six (36) feet wide by 0.33 feet deep. Approximately 20 cubic yards of hydrocarbon impacted soil was excavated and transported a NMOCD approved land farm facility. A third party environmental contractor corrective action report is included with this "final" c-141.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Ivan W. Zirbes	Approved by Environmental Specialist:	
Title: Sr. Director, Environmental	Approval Date: 11/19/14	Expiration Date:
E-mail Address: snolan@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 8-25-2014	Phone: (713) 381-6595	

\* Attach Additional Sheets If Necessary

#WCS 14323929863



## CORRECTIVE ACTION REPORT

Property:

**Jicarilla L #11 Meter Run Valve Release  
NE 1/4, S3 T24N R5W  
Rio Arriba County, New Mexico**

August 11, 2014

Apex Project No. 7030414G009

Prepared for:

**Enterprise Field Services LLC  
614 Reilly Avenue  
Farmington, NM 87401  
Attn: Mr. Thomas Long**

Prepared by:

Handwritten signature of Heather M. Woods in black ink.

---

Heather M. Woods, P.G.  
Senior Project Manager

Handwritten signature of Elizabeth Scaggs in black ink.

---

Elizabeth Scaggs, P.G.  
Senior Program Manager

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### LIST OF APPENDICES

<b>Appendix A:</b>	Figure 1 – Topographic Map Figure 2 – Site Vicinity Map Figure 3 – Site Map with Soil Analytical Results
<b>Appendix B:</b>	Executed C-138 Solid Waste Acceptance Forms
<b>Appendix C:</b>	Photographic Documentation
<b>Appendix D:</b>	Tables
<b>Appendix E:</b>	Laboratory Analytical Reports & Chain of Custody Documentation

## **CORRECTIVE ACTION REPORT**

### **Jicarilla L #11 Meter Run Valve Release**

NE 1/4, S3 T24N R5W

Rio Arriba County, New Mexico

**Apex Project No. 7030414G009**

## **1.0 INTRODUCTION**

### **1.1 Site Description & Background**

The Jicarilla L #11 meter run valve release originated from the Enterprise Field Services LLC (Enterprise) pipeline right-of-way (ROW) in the northeast (NE) ¼ of Section 3 in Township 24 North, Range 5 West in rural Rio Arriba County, New Mexico (36.34485N, 107.3455W), referred to hereinafter as the "Site" or "subject Site". The Site is located adjacent to the Jicarilla L #11 well pad, on land owned by the Jicarilla Apache Nation. The Site is surrounded by native vegetation rangeland periodically interrupted with oil and gas gathering facilities, including the Enterprise natural gas gathering pipeline and meter run.

On May 11, 2014, a meter run valve release was discovered by a third party, and the valve was immediately closed. The partially open valve, suspected to have been opened by a loose antenna cable blown by heavy winds or by rubbing of livestock, resulted in a release of natural gas and a fine mist of pipeline liquids onto a limited area immediately adjacent to the meter run and well pad. On May 21, 2014, Enterprise initiated corrective action activities at the Site, which included removal of impacted vegetation and surface soils.

A topographic map depicting the location of the Site is included as Figure 1, and a Site Vicinity Map is included as Figure 2 in Appendix A.

### **1.2 Project Objective**

The primary objective of the corrective actions was to reduce the concentration of constituents of concern (COCs) in the on-Site soils to below the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) *Remediation Action Levels* using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.

## **2.0 SITE RANKING**

The Site is under the jurisdiction of the Jicarilla Apache Nation Environmental Protection Office (JANEPO). In the absence of published JANEPO regulatory guidance, Apex TITAN Inc. (Apex) referenced the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*. Apex utilized the general site characteristics obtained during the completion of corrective action activities to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table:



Ranking Criteria			Ranking Score
Depth to Groundwater	<50 feet	20	0*
	50 to 99 feet	10	
	>100 feet	0	
Wellhead Protection Area • <1,000 feet from a water source, or; <200 feet from private domestic water source.	Yes	20	0
	No	0	
Distance to Surface Water Body	<200 feet	20	10
	200 to 1,000 feet	10	
	>1,000 feet	0	
<b>Total Ranking Score</b>			<b>10</b>

\*Based on anticipated groundwater depth of >100 feet below grade surface (bgs).

Based on Apex's evaluation of the scoring criteria, the Site would have a Total Ranking Score of "10". This ranking is based on the following:

- The Site is approximately 275 feet southeast and 440 feet northeast of two un-named ephemeral washes which drain to the Larga Cañada southwest of the Site. These washes appear to only convey water during significant rain events, but might be considered surface water bodies by some entities.
- No water wells or water sources were identified on the Office of the State Engineer website database within 1,000 feet of the Site.

### 3.0 RESPONSE ACTIONS

#### 3.1 Soil and Vegetation Removal Activities

On May 21, 2014, Enterprise initiated corrective action activities at the Site, which included removal of impacted surface soils and vegetation. During the corrective action activities, West States Energy Contractors, Inc., provided heavy equipment and labor support, and Aaron Bryant, an Apex environmental professional, provided environmental support.

Minor surface soil staining was visible at the Site in a limited area immediately adjacent to the meter run. Affected surface soils were scraped utilizing a backhoe and hand tools and loaded into a tandem-axle dump truck for transportation to a disposal/treatment facility.

The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty-sands.

The total depth of the final soil removal area ranged from 1 inch bgs to approximately 4 inches bgs in the misted area footprint. The surface expression of the soil removal area measured approximately 115 feet long with a maximum width of approximately 36 feet wide.

A total of approximately 20 cubic yards of hydrocarbon affected soils were transported to the TNT landfarm near Lindrieth, New Mexico for disposal/remediation. The executed C-138 form is provided in Appendix B.

Figure 3 is a site map that indicates the approximate location of the soil removal area in relation to pertinent land features (Appendix A). Photographic documentation of the field activities is included in Appendix C.

### 3.2 Soil Sampling Program

Apex screened head-space samples of Site soils with a photoionization detector (PID) fitted with a 10.6 eV lamp to estimate volatile organic compound (VOC) concentrations in the field.

Apex's soil sampling program included the collection of three (3) initial confirmation samples (C-1 through C-3) from the soil removal area for laboratory analysis. Laboratory analysis of sample C-2, partially located on the gravel surface of the well pad, showed possible historical/residual impact not associated with the meter run valve release, and was resampled as final confirmation sample S-2. Figure 3 depicts the approximate extents of the soil removal area and shows the final confirmation sample locations in relation to the overall footprint of soil removal (Appendix A).

The confirmation soil samples were collected and placed in laboratory prepared glassware, labeled/sealed using the laboratory supplied labels, and placed on ice in a cooler, which was secured with a custody seal. The sample cooler and completed chain-of-custody form were relinquished to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico for analysis.

### 3.3 Laboratory Analytical Methods

The confirmation soil samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA SW-846 Method #8021, and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) using EPA SW-846 Method #8015.

Laboratory results are summarized in Table 1, included in Appendix D. The executed chain-of-custody form and laboratory data sheets are provided in Appendix E.

## 4.0 DATA EVALUATION

The Site is under the jurisdiction of the JANEPO. In the absence of published JANEPO regulatory guidance, Apex referenced New Mexico OCD *Guideline for Remediation of Leaks, Spills, and Releases* as guidance, in addition to the OCD rules, specifically NMAC 19.15.30 *Remediation*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

### 4.1 Confirmation Soil Samples

Although the site ranking for the Site is a "10" with respect to the OCD ranking system, JANEPO prefers to assign each location an initial ranking of "20". Therefore, Apex compared the BTEX and TPH concentrations or reporting limits (RLs) associated with the final confirmation samples collected from the area of soil removal to the OCD *Remediation Action Levels* for sites having a total ranking score of "20".

- The laboratory analyses of the confirmation samples collected from soils remaining in place do not indicate benzene concentrations above laboratory RLs, which are below the OCD *Remediation Action Level*.
- The laboratory analyses of the confirmation samples collected from soils remaining in place do not indicate total BTEX concentrations above laboratory RLs, which are below the OCD *Remediation Action Level*.

- The laboratory analysis of confirmation sample C-2 indicated a TPH DRO concentration of 320 milligrams per Kilogram (mg/Kg), which is above the OCD *Remediation Action Level* for a site with a ranking of "20". Over half of the C-2 composite sample was collected from the well pad area that is used by oil and gas service vehicles, and as such, might be nominally affected by historic impact from vehicular traffic and operational activities. The area was re-sampled on July 2, 2014 as confirmation sample S-2, for which the resulting laboratory analysis did not indicate TPH GRO or DRO concentrations above the OCD *Remediation Action Level*.
- The laboratory analyses of the confirmation samples C-1, C-3, and S-2, collected from soils remaining in place, indicate combined TPH GRO/DRO concentrations below the laboratory reporting limits, which are below the OCD *Remediation Action Level* for a site with a ranking of "20".

Confirmation sample results are provided in Table 1 in Appendix D.

## 5.0 FINDINGS AND RECOMMENDATIONS

The Jicarilla L #11 meter run valve release site release originated from the Enterprise pipeline ROW in the NE ¼ of Section 3 in Township 24 North, Range 5 West in rural Rio Arriba County, New Mexico. The Site is located adjacent to the Jicarilla L #11 well pad, on land owned by the Jicarilla Apache Nation. The Site is surrounded by native vegetation rangeland periodically interrupted with oil and gas gathering facilities, including the Enterprise natural gas gathering pipeline and meter run.

On May 11, 2014, a meter run valve release was discovered by a third party, and the valve was immediately closed. The partially open valve, suspected to have been opened by a loose antenna cable blown by heavy winds or by rubbing of livestock, resulted in a release of natural gas and a fine mist of pipeline liquids onto a limited area immediately adjacent to the meter run and well pad. On May 21, 2014, Enterprise initiated corrective action activities at the Site, which included removal of impacted vegetation and surface soils.

- The primary objective of the corrective actions was to reduce the concentration of COCs in the on-Site soils to below the New Mexico EMNRD OCD *Remediation Action Levels* using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.
- The total depth of the final soil removal area ranged from 1 inch bgs to approximately 4 inches bgs in the misted area footprint. The surface expression of the soil removal area measured approximately 115 feet long with a maximum width of approximately 36 feet wide.
- Based on analytical results, soils remaining in place do not exhibit benzene or total BTEX concentrations above laboratory RLs, which are below the OCD *Remediation Action Levels*.
- The laboratory analysis of confirmation sample C-2 indicated a TPH DRO concentration of 320 milligrams per Kilogram (mg/Kg), which is above the OCD *Remediation Action Level* for a site ranking of "20". Over half of the C-2 composite sample was collected from the well pad area that is used by oil and gas service vehicles, and as such, might be nominally affected by historic impact from vehicular traffic and operational activities. The area was re-sampled on July 2, 2014 as confirmation sample S-2, for which the resulting

laboratory analysis did not indicate TPH concentrations above the OCD *Remediation Action Level*.

- The laboratory analyses of the confirmation samples C-1, C-3, and S-2, collected from soils remaining in place, indicate combined TPH GRO/DRO concentrations below the laboratory reporting limits, which are below the OCD *Remediation Action Level* for a site ranking of "20".
- A total of approximately 20 cubic yards of hydrocarbon affected soils were transported to the TNT landfarm near Lindrith, New Mexico for disposal/remediation.

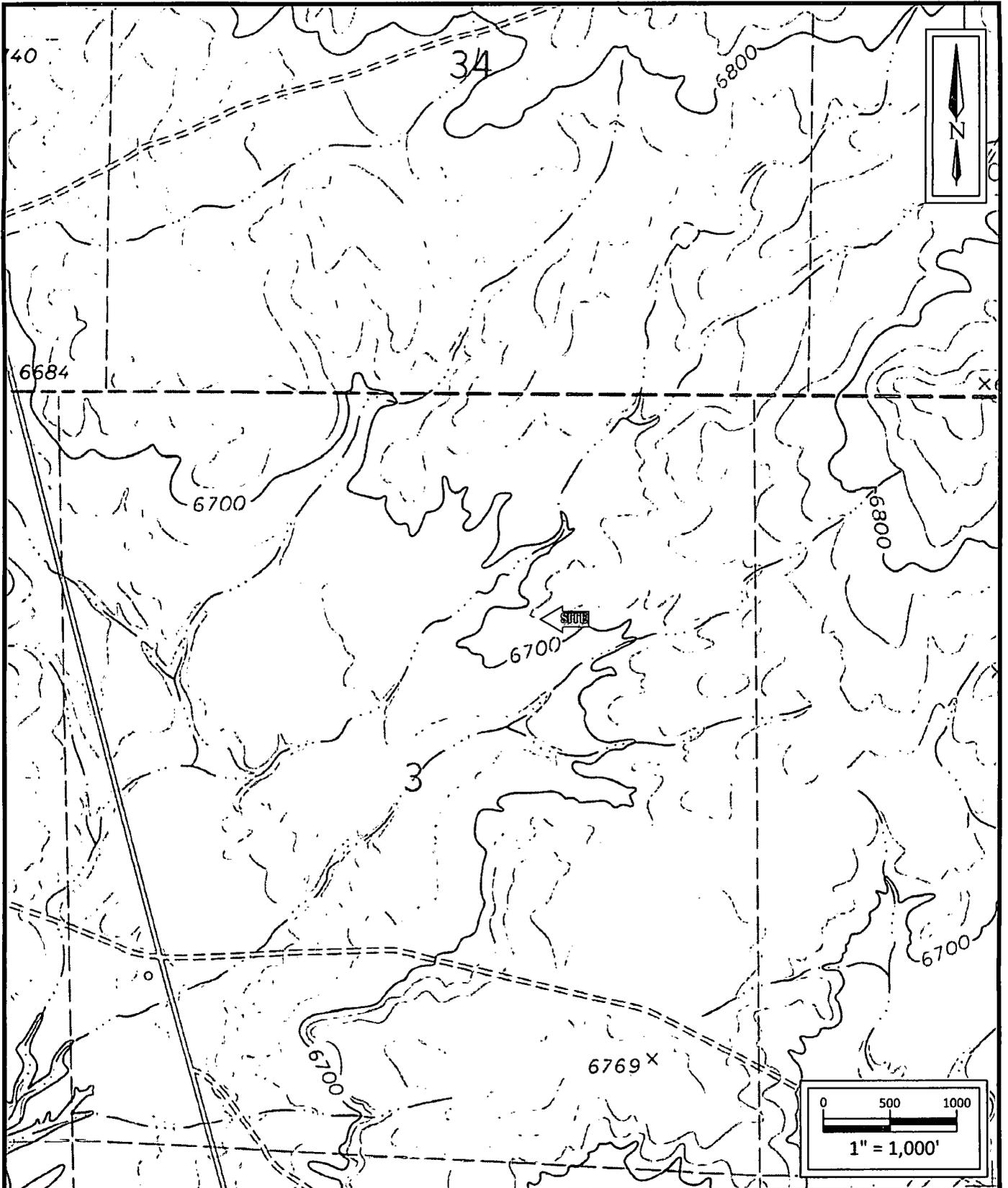
**Based on the laboratory analytical, no additional investigation or corrective action appears warranted at this time.**

## **6.0 STANDARD OF CARE, LIMITATIONS, AND RELIANCE**

Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client.

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Apex cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.



**Jicarilla L #11 Meter Run Valve Release**

NE 1/4 S3 T24N R5W  
 Rural San Juan County, NM  
 36.34485N, 107.3455W

Project No. 7030414G009



**Apex TITAN, Inc.**

606 S. Rio Grande, Suite A  
 Aztec, New Mexico 87410  
 Phone: (505) 334-5200  
[www.apexcos.com](http://www.apexcos.com)  
 A Subsidiary of Apex Companies, LLC

**FIGURE 1**  
**Topographic Map**  
 Otero Store, NM Quadrangle  
 1963



Jicarilla L #11 Meter Run Valve Release

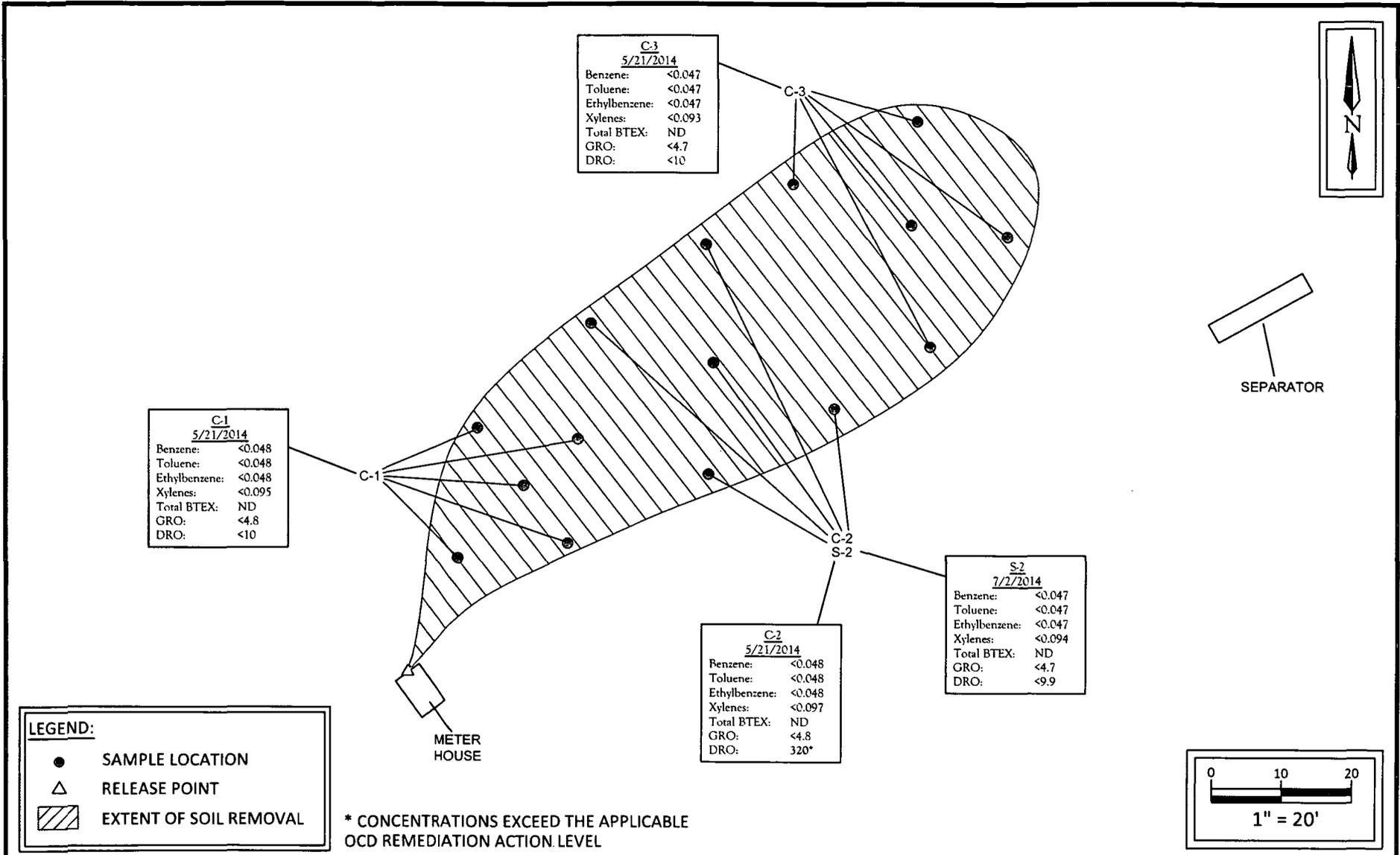
NE 1/4 S3 T24N R5W  
Rural San Juan County, NM  
36.34485N, 107.3455W



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Phone: (505) 334-5200  
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**FIGURE 2**  
**Site Vicinity Map**  
2013 Aerial Photograph

Project No. 7030414G009



Jicarilla L #11 Meter Run Valve Release  
 NE 1/4 S3 T24N R5W  
 Rural San Juan County, NM  
 36.34485N, 107.3455W

Project No. 7030414G009



**Apex TITAN, Inc.**  
 606 S. Rio Grande, Suite A  
 Aztec, New Mexico 87410  
 Phone: (505) 334-5200  
 www.apexc.com  
 A Subsidiary of Apex Companies, LLC

**FIGURE 3**  
**Site Map with**  
**Soil Analytical Results**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-138  
Revised August 1, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

\*Surface Waste Management Facility Operator  
and Generator shall maintain and make this  
documentation available for Division inspection.

**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

1. **Generator Name and Address:**  
Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401

2. **Originating Site:** Jicarilla L #11 Well Site

3. **Location of Material (Street Address, City, State or ULSTR):**  
Unit B, Section 3, T24N, R5W; 36.34485, -107.34550, Rio Arriba County

4. **Source and Description of Waste:** Hydrocarbon impacted soils generated from meter tube release.

5. **Estimated Volume** 20 yd<sup>3</sup> bbls **Known Volume (to be entered by the operator at the end of the haul)** 20 yd<sup>3</sup> bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Thomas Long *Thomas Long* representative or authorized agent for Enterprise Field Services, LLC do hereby  
PRINT & SIGN NAME COMPANY NAME  
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988  
regulatory determination, the above described waste is: (Check the appropriate classification)

RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency*  Monthly  Weekly  Per Load

RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

MSDS Information  RCRA Hazardous Waste Analysis  Process Knowledge  Other (Provide description in Box 4)

**GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS**

I, Thomas Long *Thomas Long*, representative for Enterprise Field Services, LLC authorize TNT Land Farm to  
Generator Signature  
complete the required testing/sign the Generator Waste Testing Certification.

I, ~~Thomas Long~~ Craig, representative for TNT Land Farm do hereby certify that  
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples  
have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results  
of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of  
19.15.36 NMAC.

6. **Transporter: To Be Determined**  
Koestner

**OCD Permitted Surface Waste Management Facility**

Name and Facility Permit #: TNT Evap Pond/Landfarm, NM01-0008  
Address of Facility: 70 CR 405, Lindrieth NM  
Method of Treatment and/or Disposal:

- Evaporation  Injection  Treating Plant  Landfarm  Landfill  Other

**Waste Acceptance Status:**  APPROVED  DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Craig Schmitz TITLE: ProS DATE: 5-21-14

SIGNATURE: [Signature] TELEPHONE NO.: 505-632-0615  
Surface Waste Management Facility Authorized Agent

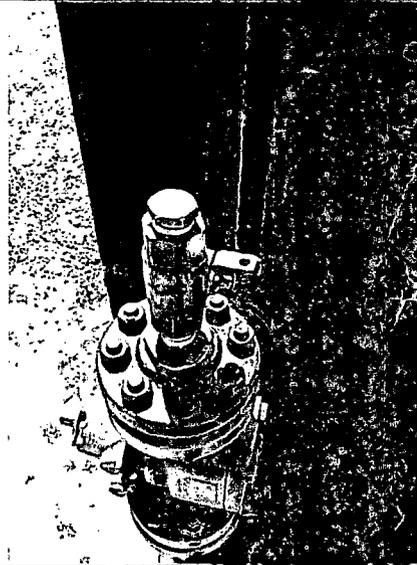
**Photograph 1**

Site prior to corrective action activities, facing west.



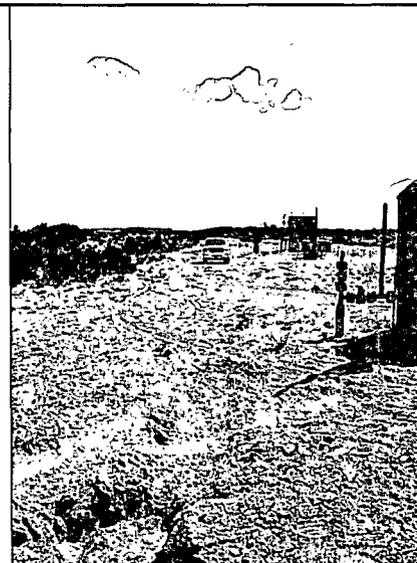
**Photograph 2**

Source of release with new plug.



**Photograph 3**

Looking east (down-wind) at the release area.





**TABLE 1**  
**Jicarilla L #11 Meter Run Valve Release**  
**SOIL ANALYTICAL SUMMARY**

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Entergy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100	
Final Confirmation Samples									
C-1	5/21/2014	Surface	<0.048	<0.048	<0.048	<0.095	ND	<4.8	<10
C-2*	5/21/2014	Surface	<0.048	<0.048	<0.048	<0.097	ND	<4.8	320
S-2*	7/2/2014	Surface	<0.047	<0.047	<0.047	<0.094	ND	<4.7	<9.9
C-3	5/21/2014	Surface	<0.047	<0.047	<0.047	<0.093	ND	<4.7	<10

Note: Concentrations in bold and yellow exceed the applicable OCD Remediation Action Level

NE = Not Established

ND = Not Detected

\* C-2 was resampled as S-2



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

May 29, 2014

Kyle Summers

Southwest Geoscience  
606 S. Rio Grande Unit A  
Aztec, NM 87410  
TEL: (903) 821-5603  
FAX (214) 350-2914

RE: Jicarilla L #11

OrderNo.: 1405A36

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/23/2014 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](http://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.**

**CLIENT:** Southwest Geoscience

**Client Sample ID:** C-1

**Project:** Jicarilla L #11

**Collection Date:** 5/21/2014 12:30:00 PM

**Lab ID:** 1405A36-001

**Matrix:** SOIL

**Received Date:** 5/23/2014 10:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/27/2014 8:07:10 PM	13337
Surr: DNOP	97.9	57.9-140		%REC	1	5/27/2014 8:07:10 PM	13337
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2014 12:10:42 PM	13340
Surr: BFB	105	80-120		%REC	1	5/27/2014 12:10:42 PM	13340
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	5/27/2014 12:10:42 PM	13340
Toluene	ND	0.048		mg/Kg	1	5/27/2014 12:10:42 PM	13340
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2014 12:10:42 PM	13340
Xylenes, Total	ND	0.095		mg/Kg	1	5/27/2014 12:10:42 PM	13340
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	5/27/2014 12:10:42 PM	13340

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

<b>Qualifiers:</b>	* 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 greater than 2.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Southwest Geoscience

**Client Sample ID:** C-2

**Project:** Jicarilla L #11

**Collection Date:** 5/21/2014 12:35:00 PM

**Lab ID:** 1405A36-002

**Matrix:** SOIL

**Received Date:** 5/23/2014 10:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	320	9.9		mg/Kg	1	5/27/2014 8:37:10 PM	13337
Surr: DNOP	102	57.9-140		%REC	1	5/27/2014 8:37:10 PM	13337
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2014 1:36:35 PM	13340
Surr: BFB	91.4	80-120		%REC	1	5/27/2014 1:36:35 PM	13340
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	5/27/2014 1:36:35 PM	13340
Toluene	ND	0.048		mg/Kg	1	5/27/2014 1:36:35 PM	13340
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2014 1:36:35 PM	13340
Xylenes, Total	ND	0.097		mg/Kg	1	5/27/2014 1:36:35 PM	13340
Surr: 4-Bromofluorobenzene	112	80-120		%REC	1	5/27/2014 1:36:35 PM	13340

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

<b>Qualifiers:</b>	* 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 greater than 2.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Southwest Geoscience

**Client Sample ID:** C-3

**Project:** Jicarilla L #11

**Collection Date:** 5/21/2014 12:40:00 PM

**Lab ID:** 1405A36-003

**Matrix:** SOIL

**Received Date:** 5/23/2014 10:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/27/2014 9:07:39 PM	13337
Surr: DNOP	107	57.9-140		%REC	1	5/27/2014 9:07:39 PM	13337
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/27/2014 3:02:25 PM	13340
Surr: BFB	90.3	80-120		%REC	1	5/27/2014 3:02:25 PM	13340
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	5/27/2014 3:02:25 PM	13340
Toluene	ND	0.047		mg/Kg	1	5/27/2014 3:02:25 PM	13340
Ethylbenzene	ND	0.047		mg/Kg	1	5/27/2014 3:02:25 PM	13340
Xylenes, Total	ND	0.093		mg/Kg	1	5/27/2014 3:02:25 PM	13340
Surr: 4-Bromofluorobenzene	112	80-120		%REC	1	5/27/2014 3:02:25 PM	13340

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

<b>Qualifiers:</b>	* 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 greater than 2.
	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#: 1405A36

29-May-14

Client: Southwest Geoscience

Project: Jicarilla L #11

Sample ID	MB-13337	SampType	MBLK	TestCode	EPA Method 8015D: Diesel Range Organics					
Client ID	PBS	Batch ID	13337	RunNo	18843					
Prep Date	5/23/2014	Analysis Date	5/27/2014	SeqNo	544843	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.4		10.00		94.0	57.9	140			

Sample ID	LCS-13337	SampType	LCS	TestCode	EPA Method 8015D: Diesel Range Organics					
Client ID	LCSS	Batch ID	13337	RunNo	18843					
Prep Date	5/23/2014	Analysis Date	5/27/2014	SeqNo	544844	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	64	10	50.00	0	128	60.8	145			
Surr: DNOP	6.5		5.000		129	57.9	140			

## 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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1405A36

29-May-14

Client: Southwest Geoscience

Project: Jicarilla L #11

Sample ID	<b>MB-13340</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13340</b>	RunNo:	<b>18869</b>					
Prep Date:	<b>5/23/2014</b>	Analysis Date:	<b>5/27/2014</b>	SeqNo:	<b>545108</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.4	80	120			

Sample ID	<b>LCS-13340</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13340</b>	RunNo:	<b>18869</b>					
Prep Date:	<b>5/23/2014</b>	Analysis Date:	<b>5/27/2014</b>	SeqNo:	<b>545109</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	71.7	134			
Surr: BFB	990		1000		99.3	80	120			

Sample ID	<b>1405A36-002AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>C-2</b>	Batch ID:	<b>13340</b>	RunNo:	<b>18869</b>					
Prep Date:	<b>5/23/2014</b>	Analysis Date:	<b>5/27/2014</b>	SeqNo:	<b>545113</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.8	24.06	0	105	69.5	145			
Surr: BFB	990		962.5		102	80	120			

Sample ID	<b>1405A36-002AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>C-2</b>	Batch ID:	<b>13340</b>	RunNo:	<b>18869</b>					
Prep Date:	<b>5/23/2014</b>	Analysis Date:	<b>5/27/2014</b>	SeqNo:	<b>545114</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.8	24.11	0	99.4	69.5	145	5.02	20	
Surr: BFB	970		964.3		101	80	120	0	0	

### 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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1405A36

29-May-14

Client: Southwest Geoscience

Project: Jicarilla L #11

Sample ID	<b>MB-13340</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>13340</b>	RunNo:	<b>18869</b>					
Prep Date:	<b>5/23/2014</b>	Analysis Date:	<b>5/27/2014</b>	SeqNo:	<b>545223</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID	<b>LCS-13340</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>13340</b>	RunNo:	<b>18869</b>					
Prep Date:	<b>5/23/2014</b>	Analysis Date:	<b>5/27/2014</b>	SeqNo:	<b>545224</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	110	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		119	80	120			

Sample ID	<b>1405A36-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>C-1</b>	Batch ID:	<b>13340</b>	RunNo:	<b>18869</b>					
Prep Date:	<b>5/23/2014</b>	Analysis Date:	<b>5/27/2014</b>	SeqNo:	<b>545227</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.048	0.9597	0	98.6	67.4	135			
Toluene	0.90	0.048	0.9597	0	94.1	72.6	135			
Ethylbenzene	0.91	0.048	0.9597	0.01541	93.3	69.4	143			
Xylenes, Total	2.7	0.096	2.879	0.01293	92.9	70.8	144			
Surr: 4-Bromofluorobenzene	1.1		0.9597		116	80	120			

Sample ID	<b>1405A36-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>C-1</b>	Batch ID:	<b>13340</b>	RunNo:	<b>18869</b>					
Prep Date:	<b>5/23/2014</b>	Analysis Date:	<b>5/27/2014</b>	SeqNo:	<b>545228</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.048	0.9606	0	95.4	67.4	135	3.26	20	
Toluene	0.89	0.048	0.9606	0	92.4	72.6	135	1.73	20	
Ethylbenzene	0.90	0.048	0.9606	0.01541	92.1	69.4	143	1.24	20	
Xylenes, Total	2.7	0.096	2.882	0.01293	92.2	70.8	144	0.671	20	
Surr: 4-Bromofluorobenzene	1.1		0.9606		119	80	120	0	0	

### 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 greater than 2.
- RL Reporting Detection Limit

**Sample Log-In Check List**

Client Name: Southwest Geoscience

Work Order Number: 1405A36

ReptNo: 1

Received by/date: MS 05/23/14

Logged By: Lindsay Mangin 5/23/2014 10:06:00 AM *Judy Mangin*

Completed By: Lindsay Mangin 5/23/2014 10:47:41 AM *Judy Mangin*

Reviewed By: *[Signature]* 05/23/14

**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° 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? Yes  No   
(Note discrepancies on chain of custody)
- 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? Yes  No   
(If no, notify customer for authorization.)

# 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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.6	Good	Yes			

CHAIN OF CUSTODY RECORD

<h1 style="margin: 0;">Southwest</h1> <p style="margin: 0;">GEOSCIENCE</p> <p style="margin: 0; font-size: small;">Environmental &amp; Hydrogeologic Consultants</p>		Laboratory: <u>HALL</u> Address: <u>ABQ</u>		ANALYSIS REQUESTED  <i>BTEX 8021 TPH 8015 DRUGS</i>										Lab use only Due Date:				
		Office Location: <u>AZTEL, NM</u> Project Manager: <u>KYLE SUMMERS</u>												Contact: <u>FREEMAN</u> Phone: _____ PO/SO #: <u>7030414009</u>		Temp. of coolers when received (C°): <u>3.6</u>		
Sampler's Name: <u>AARON BRYANT</u>		Sampler's Signature: <i>[Signature]</i>		Lab Sample ID (Lab Use Only)														
Proj. No.: <u>7030414009</u>		Project Name: <u>Jicarilla L # 11</u>												No/Type of Containers: <u>4 CE</u>				
Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1L	250 ml	P/O							
S	5-21-14	1230	X		C-1							X	X	1405A36-001 -002 -003				
S	┆	1235	X		C-2							X	X					
S	┆	1240	X		C-3							X	X					
NFS AB																		
Turn around time <input checked="" type="checkbox"/> Normal <input type="checkbox"/> 25% Rush <input type="checkbox"/> 50% Rush <input type="checkbox"/> 100% Rush																		
Relinquished by (Signature): <i>[Signature]</i>			Date: <u>5-22-14</u>		Time: <u>910</u>		Received by (Signature): <i>[Signature]</i>			Date: <u>5/22/14</u>		Time: <u>910</u>		NOTES:  Direct Bill Enterprise Tom Long GG11580				
Relinquished by (Signature): <i>[Signature]</i>			Date: <u>5/22/14</u>		Time: <u>1722</u>		Received by (Signature): <i>[Signature]</i>			Date: <u>05/22/14</u>		Time: <u>0930</u>						
Relinquished by (Signature): _____			Date: _____		Time: _____		Received by (Signature): _____			Date: _____		Time: _____						
Relinquished by (Signature): _____			Date: _____		Time: _____		Received by (Signature): _____			Date: _____		Time: _____						

Matrix Container: WW - Wastewater, W - Water, S - Soil, SD - Solid, L - Liquid, A - Air Bag, C - Charcoal tube, SL - sludge, O - Oil  
 VOA - 40 ml vial, A/G - Amber / Or Glass 1 Liter, 250 ml - Glass wide mouth, P/O - Plastic or other



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

July 18, 2014

Kyle Summers

Apex Titan, Inc.

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX (214) 350-2914

RE: Jicarilla L #11

OrderNo.: 1407183

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/3/2014 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 10, 2014.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. 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. All samples are reported as received unless otherwise indicated.

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

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.**

**CLIENT:** Apex Titan, Inc.

**Client Sample ID:** S-2

**Project:** Jicarilla L #11

**Collection Date:** 7/2/2014 12:30:00 PM

**Lab ID:** 1407183-001

**Matrix:** SOIL

**Received Date:** 7/3/2014 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/8/2014 5:23:04 PM	14085
Surr: DNOP	70.7	57.9-140		%REC	1	7/8/2014 5:23:04 PM	14085
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/8/2014 12:50:50 AM	14058
Surr: BFB	93.8	80-120		%REC	1	7/8/2014 12:50:50 AM	14058
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	7/8/2014 12:50:50 AM	14058
Toluene	ND	0.047		mg/Kg	1	7/8/2014 12:50:50 AM	14058
Ethylbenzene	ND	0.047		mg/Kg	1	7/8/2014 12:50:50 AM	14058
Xylenes, Total	ND	0.094		mg/Kg	1	7/8/2014 12:50:50 AM	14058
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	7/8/2014 12:50:50 AM	14058

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

<b>Qualifiers:</b>	* 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 greater than 2.
	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#: 1407183  
18-Jul-14

**Client:** Apex Titan, Inc.  
**Project:** Jicarilla L #11

Sample ID <b>MB-14085</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>14085</b>		RunNo: <b>19699</b>							
Prep Date: <b>7/7/2014</b>	Analysis Date: <b>7/7/2014</b>		SeqNo: <b>572210</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.8		10.00		87.6	57.9	140			

Sample ID <b>LCS-14085</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>14085</b>		RunNo: <b>19699</b>							
Prep Date: <b>7/7/2014</b>	Analysis Date: <b>7/7/2014</b>		SeqNo: <b>572211</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	105	68.6	130			
Surr: DNOP	4.3		5.000		86.4	57.9	140			

**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 greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1407183

18-Jul-14

Client: Apex Titan, Inc.

Project: Jicarilla L #11

Sample ID	MB-14058	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	14058	RunNo:	19711					
Prep Date:	7/3/2014	Analysis Date:	7/7/2014	SeqNo:	572606	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.2	80	120			

Sample ID	LCS-14058	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	14058	RunNo:	19711					
Prep Date:	7/3/2014	Analysis Date:	7/7/2014	SeqNo:	572607	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	71.7	134			
Surr: BFB	1200		1000		120	80	120			S

### 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
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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1407183

18-Jul-14

Client: Apex Titan, Inc.

Project: Jicarilla L #11

Sample ID	<b>MB-14058</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>14058</b>	RunNo:	<b>19711</b>					
Prep Date:	<b>7/3/2014</b>	Analysis Date:	<b>7/7/2014</b>	SeqNo:	<b>572630</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	<b>LCS-14058</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>14058</b>	RunNo:	<b>19711</b>					
Prep Date:	<b>7/3/2014</b>	Analysis Date:	<b>7/7/2014</b>	SeqNo:	<b>572631</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	105	80	120			
Toluene	0.99	0.050	1.000	0	99.0	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
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**Sample Log-In Check List**

Client Name: APEX Titan

Work Order Number: 1407183

RcptNo: 1

Received by/date: LM 07/03/14

Logged By: **Celina Sessa** 7/3/2014 7:00:00 AM *Celina Sessa*

Completed By: **Celina Sessa** 7/3/2014 11:01:34 AM *Celina Sessa*

Reviewed By: *[Signature]* 07/03/14

**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° 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  *CS 07/03/14*
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? Yes  No   
(Note discrepancies on chain of custody)
- 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? Yes  No   
(if no, notify customer for authorization.)

# 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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Yes			

# Chain-of-Custody Record

Turn-Around Time:

Standard     Rush

Client: **APEX TITAN**

Project Name: **Jicarilla L #11**

Mailing Address: **AZTEC, NM**

Project #: **70304146009**

Phone #: **903-821-5603**

email or Fax#: **Kyle Summers**

Project Manager: **Kyle Summers**

QA/QC Package:

Standard     Level 4 (Full Validation)

Accreditation

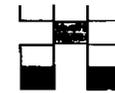
NELAP     Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Sampler: **Aaron Bryant**

On-site:  Yes     No

Sample Temperature: **33**



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975    Fax 505-345-4107

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	BTEX + MTBE + JMAB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)	
2-14	1230	S	S-2	1x4oz		1407183-001	X		X										
<del>AFS AB</del>																			

Date: 2-2-14 Time: 1515 Relinquished by: *[Signature]* Received by: Heather M. Woods Date: 7/2/14 Time: 1515

Date: 12/14 Time: 1530 Relinquished by: Heather M. Woods Received by: *[Signature]* Date: 07/03/14 Time: 0700

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.

PH1