



FORM 19 # 1632784

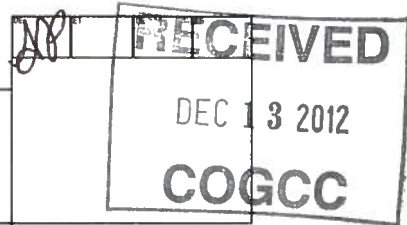
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Page 1  
FORM  
4  
Rev 12/05

State of Colorado

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



## SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b).

1. OGCC Operator Number: 10079		4. Contact Name Cole Kilstrom		Complete the Attachment Checklist	
2. Name of Operator: Antero Resources Piceance Corporation		Phone: 303-357-76709		OPOGCC	
3. Address: 1625 17th St STE 300 ATTN: Cole Kilstrom		Fax: 303-357-7315			
City: Denver State: CO Zip: 80202					
5. API Number 05-045-14284		OGCC Facility ID Number 291065		Survey Plat	
6. Well/Facility Name: Valley Farms F Pad		7. Well/Facility Number F2		Directional Survey	
8. Location (Qtr/Sec, Twp, Rng, Meridian): NWSW 14 6S 92W 6				Surface Equipmt Diagram	
9. County: Garfield		10. Field Name: Mamm Creek		Technical Info Page <input checked="" type="checkbox"/>	
11. Federal, Indian or State Lease Number:				Other	

## General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)																	
Change of Surface Footage from Exterior Section Lines:	<table border="1"> <tr> <td></td> <td>FNL/FSL</td> <td></td> <td>FEL/FWL</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>		FNL/FSL		FEL/FWL												
	FNL/FSL		FEL/FWL														
Change of Surface Footage to Exterior Section Lines:																	
Change of Bottomhole Footage from Exterior Section Lines:																	
Change of Bottomhole Footage to Exterior Section Lines:	attach directional survey																
Bottomhole location Qtr/Sec, Twp, Rng, Mer																	
Latitude	Distance to nearest property line																
Longitude	Distance to nearest bldg, public rd, utility or RR																
Ground Elevation	Distance to nearest lease line																
	Is location in a High Density Area (rule 603b)? Yes/No																
	Distance to nearest well same formation																
	Surface owner consultation date:																
GPS DATA:																	
Date of Measurement	PDOP Reading																
	Instrument Operator's Name																
<input type="checkbox"/> CHANGE SPACING UNIT																	
Formation	Formation Code																
Spacing order number	Unit Acreage																
	Unit configuration																
<input type="checkbox"/> Remove from surface bond																	
Signed surface use agreement attached																	
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling):																	
Effective Date:																	
Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual																	
<input type="checkbox"/> CHANGE WELL NAME																	
From:																	
To:																	
Effective Date:																	
<input type="checkbox"/> ABANDONED LOCATION:																	
Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No																	
Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No																	
Date Ready for inspection:																	
<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS																	
Date well shut in or temporarily abandoned:																	
Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No																	
MIT required if shut in longer than two years. Date of last MIT																	
<input type="checkbox"/> SPUD DATE:																	
<input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)																	
<input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK																	
*submit cbl and cement job summaries																	
Method used	Cementing tool setting/perf depth																
Cement volume	Cement top																
Cement bottom	Date																
<input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.																	
Final reclamation will commence on approximately																	
Final reclamation is completed and site is ready for inspection.																	

## Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent		<input type="checkbox"/> Report of Work Done	
Approximate Start Date:		Date Work Completed:	
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)			
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal	
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste	
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input checked="" type="checkbox"/> Status Update/Change of Remediation Plans	
<input type="checkbox"/> Casing/Cementing Program Change	<input type="checkbox"/> Other:	for Spills and Releases	

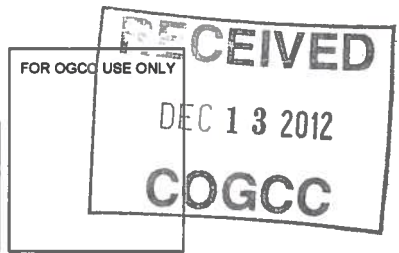
I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: Cole Kilstrom  
Print Name: Cole KilstromDate: 12/12/12 Email: ckilstrom@anterosources.com  
Title: ENV specialistCOGCC Approved: [Signature]  
CONDITIONS OF APPROVAL, IF ANY:Title: Env. Sup. Date: 1/4/13

See Attached Comments.

Location ID  
# 335538

TECHNICAL INFORMATION PAGE



1. OGCC Operator Number:	10079	API Number:	05-045-14284
2. Name of Operator:	Antero Resources Piceance		OGCC Facility ID # 291065
3. Well/Facility Name:	Valley Farms F Pad	Well/Facility Number:	F2
4. Location (QtrQtr, Sec, Twp, Rng, Meridian):	NWSW 14 6S 92W 6		

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS**

Summary of Corrective Actions and Request for Spill Report Closure:

On February 5, 2010 a hose came loose at the Antero Valley Farms F2 well due to a camlock fitting malfunction. The malfunction caused the release of flow from the frac tanks onto the pad surface. The spill was contained on the berm. Antero re-clamped the hose and dispatched vacuum trucks to the site, which recovered the spilled water. Antero has also replaced all similar fittings with appropriate fittings to avoid future incidents.

COGCC Spill Report Form 19 # 1632784 stated that Antero would conduct soil remediation and testing once weather conditions permitted.

Antero conducted sampling of the impacted area on November 29, 2012, and the results released December 6, 2012, attached hereto, demonstrate that the impacted soils are in compliance with COGCC Table 910-1 standards.

Because Antero has demonstrated site compliance with COGCC standards, Antero respectfully requests final COGCC closure of Spill Report # 1632784 in accordance with COGCC Rule 909(e).

*Comments:*

Based on review of information presented on data presented it appears that no further action is necessary at this time, and COGCC approves the closure request. However, should future conditions at the site indicate contaminant concentrations in soils exceeding COGCC standards or if ground water is found to be significantly impacted, then further investigation and/or remediation activities may be required at the site.

*ASR*  
*1/4/13*



06-Dec-2012

Mark Mumby  
HRL Compliance Solutions  
2385 F 1/2 Road  
Grand Junction, CO 81505

Re: **Antero Valley Farms F Pad 11/29/12**

Work Order: **1212022**

Dear Mark,

ALS Environmental received 6 samples on 01-Dec-2012 10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 33.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN331938

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

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**Client:** HRL Compliance Solutions  
**Project:** Antero Valley Farms F Pad 11/29/12  
**Work Order:** 1212022

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**Work Order Sample Summary**

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<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1212022-01	Valley Farms F Pad Pt 1	Soil		11/29/2012 10:00	12/1/2012 10:00	<input type="checkbox"/>
1212022-02	Valley Farms F Pad Pt 2	Soil		11/29/2012 11:10	12/1/2012 10:00	<input type="checkbox"/>
1212022-03	Valley Farms F Pad Pt 3	Soil		11/29/2012 10:20	12/1/2012 10:00	<input type="checkbox"/>
1212022-04	BKGD 1	Soil		11/29/2012 10:30	12/1/2012 10:00	<input type="checkbox"/>
1212022-05	BKGD 2	Soil		11/29/2012 10:35	12/1/2012 10:00	<input type="checkbox"/>
1212022-06	BKGD 3	Soil		11/29/2012 10:40	12/1/2012 10:00	<input type="checkbox"/>

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**Client:** HRL Compliance Solutions  
**Project:** Antero Valley Farms F Pad 11/29/12  
**Work Order:** 1212022

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**Case Narrative**

Batch 45171 sample Valley Farms F Pad Pt 1 MS/MSD recoveries for Barium and Zinc were below control limits, however, the result in the parent sample was greater than 4x the spiked amount. No qualification is required for Barium or Zinc. The MSD recoveries for Copper and Lead were outside the control limit. Both the MS recoveries and RPDs met quality control criteria. No data requires qualification.

Batch R113359 Duplicate data for pH is not related to this project's samples. No data requires qualification.

**Client:** HRL Compliance Solutions  
**Project:** Antero Valley Farms F Pad 11/29/12  
**WorkOrder:** 1212022

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<b><u>Acronym</u></b>	<b><u>Description</u></b>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
SD	Serial Dilution
TDL	Target Detection Limit

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
µmhos/cm @25°	
none	
s.u.	Standard Units

# ALS Group USA, Corp

Date: 06-Dec-12

Client: HRL Compliance Solutions

Project: Antero Valley Farms F Pad 11/29/12

Work Order: 1212022

Sample ID: Valley Farms F Pad Pt 1

Lab ID: 1212022-01

Collection Date: 11/29/2012 10:00 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep Date: 12/4/2012	Analyst: CW
DRO (C10-C28)	32		4.7	mg/Kg-dry	1	12/4/2012 08:10 PM
Surr: 4-Terphenyl-d14	68.0		39-115	%REC	1	12/4/2012 08:10 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: CW
GRO (C6-C10)	ND		2.8	mg/Kg-dry	50	12/3/2012 10:57 PM
Surr: Toluene-d8	107		50-150	%REC	50	12/3/2012 10:57 PM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep Date: 12/5/2012	Analyst: LR
Mercury	0.026		0.019	mg/Kg-dry	1	12/5/2012 03:39 PM
<b>METALS BY ICP-MS</b>						
			<b>SW6020A</b>		Prep Date: 12/5/2012	Analyst: CES
Arsenic	0.89		0.79	mg/Kg-dry	2	12/5/2012 06:37 PM
Barium	510		7.9	mg/Kg-dry	20	12/5/2012 06:01 PM
Cadmium	ND		0.32	mg/Kg-dry	2	12/5/2012 06:37 PM
Chromium	5.7		0.79	mg/Kg-dry	2	12/5/2012 06:37 PM
Copper	15		0.79	mg/Kg-dry	2	12/5/2012 06:37 PM
Lead	11		0.79	mg/Kg-dry	2	12/5/2012 06:37 PM
Nickel	6.6		0.79	mg/Kg-dry	2	12/5/2012 06:37 PM
Selenium	0.98		0.79	mg/Kg-dry	2	12/5/2012 06:37 PM
Silver	ND		0.79	mg/Kg-dry	2	12/5/2012 06:37 PM
Zinc	40		1.6	mg/Kg-dry	2	12/5/2012 06:37 PM
<b>SOLUBLE CATIONS FOR SAR</b>						
			<b>SW6020A</b>		Prep Date: 12/5/2012	Analyst: CES
Calcium	120		5.7	mg/L-dry	10	12/5/2012 03:00 PM
Magnesium	13		2.3	mg/L-dry	10	12/5/2012 03:00 PM
Sodium	130		2.3	mg/L-dry	10	12/5/2012 03:00 PM
<b>SODIUM ADSORPTION RATIO</b>						
			<b>USDA H60 METHO</b>		Prep Date: 12/5/2012	Analyst: CES
Sodium Adsorption Ratio	2.8		0.010	none	1	12/5/2012
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep Date: 12/4/2012	Analyst: RM
Acenaphthene	ND		17	µg/Kg-dry	1	12/4/2012 08:19 PM
Anthracene	ND		17	µg/Kg-dry	1	12/4/2012 08:19 PM
Benzo(a)anthracene	ND		19	µg/Kg-dry	1	12/4/2012 08:19 PM
Benzo(a)pyrene	ND		19	µg/Kg-dry	1	12/4/2012 08:19 PM
Benzo(b)fluoranthene	ND		20	µg/Kg-dry	1	12/4/2012 08:19 PM
Benzo(g,h,i)perylene	ND		32	µg/Kg-dry	1	12/4/2012 08:19 PM
Benzo(k)fluoranthene	ND		20	µg/Kg-dry	1	12/4/2012 08:19 PM
Chrysene	ND		17	µg/Kg-dry	1	12/4/2012 08:19 PM
Dibenzo(a,h)anthracene	ND		20	µg/Kg-dry	1	12/4/2012 08:19 PM
Fluoranthene	ND		17	µg/Kg-dry	1	12/4/2012 08:19 PM
Fluorene	ND		17	µg/Kg-dry	1	12/4/2012 08:19 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 06-Dec-12

Client: HRL Compliance Solutions  
 Project: Antero Valley Farms F Pad 11/29/12  
 Sample ID: Valley Farms F Pad Pt 1  
 Collection Date: 11/29/2012 10:00 AM

Work Order: 1212022  
 Lab ID: 1212022-01  
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		23	µg/Kg-dry	1	12/4/2012 08:19 PM
Naphthalene	ND		17	µg/Kg-dry	1	12/4/2012 08:19 PM
Pyrene	ND		17	µg/Kg-dry	1	12/4/2012 08:19 PM
Surr: 2-Fluorobiphenyl	73.3		12-100	%REC	1	12/4/2012 08:19 PM
Surr: 4-Terphenyl-d14	96.0		25-137	%REC	1	12/4/2012 08:19 PM
Surr: Nitrobenzene-d5	73.4		37-107	%REC	1	12/4/2012 08:19 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>		Prep Date: 12/3/2012	Analyst: BG
Benzene	ND		34	µg/Kg-dry	1	12/3/2012 06:11 PM
Ethylbenzene	ND		34	µg/Kg-dry	1	12/3/2012 06:11 PM
m,p-Xylene	ND		68	µg/Kg-dry	1	12/3/2012 06:11 PM
o-Xylene	ND		34	µg/Kg-dry	1	12/3/2012 06:11 PM
Toluene	ND		34	µg/Kg-dry	1	12/3/2012 06:11 PM
Xylenes, Total	ND		100	µg/Kg-dry	1	12/3/2012 06:11 PM
Surr: 1,2-Dichloroethane-d4	113		70-130	%REC	1	12/3/2012 06:11 PM
Surr: 4-Bromofluorobenzene	102		70-130	%REC	1	12/3/2012 06:11 PM
Surr: Dibromofluoromethane	104		70-130	%REC	1	12/3/2012 06:11 PM
Surr: Toluene-d8	100		70-130	%REC	1	12/3/2012 06:11 PM
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHO</b>		Prep Date: 12/5/2012	Analyst: JB
Electrical Conductivity @ Saturation	1.3		0.025	mmhos/cm @25	5	12/5/2012 03:00 PM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: EE
Chromium, Trivalent	5.3		0.57	mg/Kg-dry	1	12/6/2012 02:30 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: 12/4/2012	Analyst: JB
Chromium, Hexavalent	ND		0.56	mg/Kg-dry	1	12/5/2012 12:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: LR
Moisture	12		0.050	% of sample	1	12/4/2012 07:15 AM
<b>PH</b>			<b>SW9045D</b>			Analyst: JB
pH	8.58			s.u.	1	12/3/2012 10:50 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.



# ALS Group USA, Corp

Date: 06-Dec-12

Client: HRL Compliance Solutions

Project: Antero Valley Farms F Pad 11/29/12

Work Order: 1212022

Sample ID: Valley Farms F Pad Pt 2

Lab ID: 1212022-02

Collection Date: 11/29/2012 11:10 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep Date: 12/4/2012	Analyst: CW
DRO (C10-C28)	73		4.4	mg/Kg-dry	1	12/4/2012 08:37 PM
Surr: 4-Terphenyl-d14	92.7		39-115	%REC	1	12/4/2012 08:37 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: CW
GRO (C6-C10)	ND		2.7	mg/Kg-dry	50	12/3/2012 10:32 PM
Surr: Toluene-d8	102		50-150	%REC	50	12/3/2012 10:32 PM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep Date: 12/5/2012	Analyst: LR
Mercury	0.019		0.017	mg/Kg-dry	1	12/5/2012 03:41 PM
<b>METALS BY ICP-MS</b>						
			<b>SW6020A</b>		Prep Date: 12/5/2012	Analyst: CES
Arsenic	2.6		0.81	mg/Kg-dry	2	12/5/2012 06:55 PM
Barium	520		8.1	mg/Kg-dry	20	12/5/2012 07:01 PM
Cadmium	ND		0.33	mg/Kg-dry	2	12/5/2012 06:55 PM
Chromium	10		0.81	mg/Kg-dry	2	12/5/2012 06:55 PM
Copper	9.8		0.81	mg/Kg-dry	2	12/5/2012 06:55 PM
Lead	10		0.81	mg/Kg-dry	2	12/5/2012 06:55 PM
Nickel	11		0.81	mg/Kg-dry	2	12/5/2012 06:55 PM
Selenium	ND		0.81	mg/Kg-dry	2	12/5/2012 06:55 PM
Silver	ND		0.81	mg/Kg-dry	2	12/5/2012 06:55 PM
Zinc	33		1.6	mg/Kg-dry	2	12/5/2012 06:55 PM
<b>SOLUBLE CATIONS FOR SAR</b>						
			<b>SW6020A</b>		Prep Date: 12/5/2012	Analyst: CES
Calcium	750		5.3	mg/L-dry	10	12/5/2012 03:06 PM
Magnesium	130		2.1	mg/L-dry	10	12/5/2012 03:06 PM
Sodium	800		2.1	mg/L-dry	10	12/5/2012 03:06 PM
<b>SODIUM ADSORPTION RATIO</b>						
			<b>USDA H60 METHO</b>		Prep Date: 12/5/2012	Analyst: CES
Sodium Adsorption Ratio	6.9		0.010	none	1	12/5/2012
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep Date: 12/4/2012	Analyst: RM
Acenaphthene	ND		16	µg/Kg-dry	1	12/4/2012 08:44 PM
Anthracene	ND		16	µg/Kg-dry	1	12/4/2012 08:44 PM
Benzo(a)anthracene	ND		18	µg/Kg-dry	1	12/4/2012 08:44 PM
Benzo(a)pyrene	ND		18	µg/Kg-dry	1	12/4/2012 08:44 PM
Benzo(b)fluoranthene	ND		19	µg/Kg-dry	1	12/4/2012 08:44 PM
Benzo(g,h,i)perylene	ND		30	µg/Kg-dry	1	12/4/2012 08:44 PM
Benzo(k)fluoranthene	ND		19	µg/Kg-dry	1	12/4/2012 08:44 PM
Chrysene	ND		16	µg/Kg-dry	1	12/4/2012 08:44 PM
Dibenzo(a,h)anthracene	ND		19	µg/Kg-dry	1	12/4/2012 08:44 PM
Fluoranthene	ND		16	µg/Kg-dry	1	12/4/2012 08:44 PM
Fluorene	ND		16	µg/Kg-dry	1	12/4/2012 08:44 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 06-Dec-12

Client: HRL Compliance Solutions

Project: Antero Valley Farms F Pad 11/29/12

Work Order: 1212022

Sample ID: Valley Farms F Pad Pt 2

Lab ID: 1212022-02

Collection Date: 11/29/2012 11:10 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		21	µg/Kg-dry	1	12/4/2012 08:44 PM
Naphthalene	ND		16	µg/Kg-dry	1	12/4/2012 08:44 PM
Pyrene	ND		16	µg/Kg-dry	1	12/4/2012 08:44 PM
Surr: 2-Fluorobiphenyl	77.2		12-100	%REC	1	12/4/2012 08:44 PM
Surr: 4-Terphenyl-d14	101		25-137	%REC	1	12/4/2012 08:44 PM
Surr: Nitrobenzene-d5	75.5		37-107	%REC	1	12/4/2012 08:44 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>		Prep Date: 12/3/2012	Analyst: BG
Benzene	ND		32	µg/Kg-dry	1	12/3/2012 06:35 PM
Ethylbenzene	ND		32	µg/Kg-dry	1	12/3/2012 06:35 PM
m,p-Xylene	ND		64	µg/Kg-dry	1	12/3/2012 06:35 PM
o-Xylene	ND		32	µg/Kg-dry	1	12/3/2012 06:35 PM
Toluene	ND		32	µg/Kg-dry	1	12/3/2012 06:35 PM
Xylenes, Total	ND		96	µg/Kg-dry	1	12/3/2012 06:35 PM
Surr: 1,2-Dichloroethane-d4	109		70-130	%REC	1	12/3/2012 06:35 PM
Surr: 4-Bromofluorobenzene	101		70-130	%REC	1	12/3/2012 06:35 PM
Surr: Dibromofluoromethane	102		70-130	%REC	1	12/3/2012 06:35 PM
Surr: Toluene-d8	99.7		70-130	%REC	1	12/3/2012 06:35 PM
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHO</b>		Prep Date: 12/5/2012	Analyst: JB
Electrical Conductivity @ Saturation	9.3		0.025	mmhos/cm @25	5	12/5/2012 03:00 PM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: EE
Chromium, Trivalent	10		0.53	mg/Kg-dry	1	12/6/2012 02:30 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: 12/4/2012	Analyst: JB
Chromium, Hexavalent	ND		0.53	mg/Kg-dry	1	12/5/2012 12:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: LR
Moisture	6.0		0.050	% of sample	1	12/4/2012 07:30 AM
<b>PH</b>			<b>SW9045D</b>			Analyst: JB
pH	8.67			s.u.	1	12/3/2012 10:50 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 06-Dec-12

Client: HRL Compliance Solutions

Project: Antero Valley Farms F Pad 11/29/12

Work Order: 1212022

Sample ID: Valley Farms F Pad Pt 3

Lab ID: 1212022-03

Collection Date: 11/29/2012 10:20 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep Date: 12/4/2012	Analyst: CW
DRO (C10-C28)	38		4.3	mg/Kg-dry	1	12/4/2012 09:04 PM
Surr: 4-Terphenyl-d14	70.5		39-115	%REC	1	12/4/2012 09:04 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: CW
GRO (C6-C10)	ND		2.6	mg/Kg-dry	50	12/3/2012 11:22 PM
Surr: Toluene-d8	104		50-150	%REC	50	12/3/2012 11:22 PM
<b>MERCURY BY CVAA</b>						
			<b>SW7471</b>		Prep Date: 12/5/2012	Analyst: LR
Mercury	0.021		0.018	mg/Kg-dry	1	12/5/2012 03:43 PM
<b>METALS BY ICP-MS</b>						
			<b>SW6020A</b>		Prep Date: 12/5/2012	Analyst: CES
Arsenic	2.2		0.79	mg/Kg-dry	2	12/5/2012 07:07 PM
Barium	480		7.9	mg/Kg-dry	20	12/5/2012 07:12 PM
Cadmium	ND		0.32	mg/Kg-dry	2	12/5/2012 07:07 PM
Chromium	8.8		0.79	mg/Kg-dry	2	12/5/2012 07:07 PM
Copper	9.1		0.79	mg/Kg-dry	2	12/5/2012 07:07 PM
Lead	11		0.79	mg/Kg-dry	2	12/5/2012 07:07 PM
Nickel	8.7		0.79	mg/Kg-dry	2	12/5/2012 07:07 PM
Selenium	0.82		0.79	mg/Kg-dry	2	12/5/2012 07:07 PM
Silver	ND		0.79	mg/Kg-dry	2	12/5/2012 07:07 PM
Zinc	33		1.6	mg/Kg-dry	2	12/5/2012 07:07 PM
<b>SOLUBLE CATIONS FOR SAR</b>						
			<b>SW6020A</b>		Prep Date: 12/5/2012	Analyst: CES
Calcium	250		5.2	mg/L-dry	10	12/5/2012 03:12 PM
Magnesium	92		2.1	mg/L-dry	10	12/5/2012 03:12 PM
Sodium	610		2.1	mg/L-dry	10	12/5/2012 03:12 PM
<b>SODIUM ADSORPTION RATIO</b>						
			<b>USDA H60 METHO</b>		Prep Date: 12/5/2012	Analyst: CES
Sodium Adsorption Ratio	8.2		0.010	none	1	12/5/2012
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8270</b>		Prep Date: 12/4/2012	Analyst: RM
Acenaphthene	ND		15	µg/Kg-dry	1	12/4/2012 09:09 PM
Anthracene	ND		15	µg/Kg-dry	1	12/4/2012 09:09 PM
Benzo(a)anthracene	ND		17	µg/Kg-dry	1	12/4/2012 09:09 PM
Benzo(a)pyrene	ND		17	µg/Kg-dry	1	12/4/2012 09:09 PM
Benzo(b)fluoranthene	ND		18	µg/Kg-dry	1	12/4/2012 09:09 PM
Benzo(g,h,i)perylene	ND		29	µg/Kg-dry	1	12/4/2012 09:09 PM
Benzo(k)fluoranthene	ND		18	µg/Kg-dry	1	12/4/2012 09:09 PM
Chrysene	ND		15	µg/Kg-dry	1	12/4/2012 09:09 PM
Dibenzo(a,h)anthracene	ND		18	µg/Kg-dry	1	12/4/2012 09:09 PM
Fluoranthene	ND		15	µg/Kg-dry	1	12/4/2012 09:09 PM
Fluorene	ND		15	µg/Kg-dry	1	12/4/2012 09:09 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 06-Dec-12

Client: HRL Compliance Solutions

Project: Antero Valley Farms F Pad 11/29/12

Work Order: 1212022

Sample ID: Valley Farms F Pad Pt 3

Lab ID: 1212022-03

Collection Date: 11/29/2012 10:20 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		20	µg/Kg-dry	1	12/4/2012 09:09 PM
Naphthalene	ND		15	µg/Kg-dry	1	12/4/2012 09:09 PM
Pyrene	ND		15	µg/Kg-dry	1	12/4/2012 09:09 PM
Surr: 2-Fluorobiphenyl	72.7		12-100	%REC	1	12/4/2012 09:09 PM
Surr: 4-Terphenyl-d14	94.6		25-137	%REC	1	12/4/2012 09:09 PM
Surr: Nitrobenzene-d5	71.0		37-107	%REC	1	12/4/2012 09:09 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>		Prep Date: 12/3/2012	Analyst: BG
Benzene	ND		31	µg/Kg-dry	1	12/3/2012 07:00 PM
Ethylbenzene	ND		31	µg/Kg-dry	1	12/3/2012 07:00 PM
m,p-Xylene	ND		63	µg/Kg-dry	1	12/3/2012 07:00 PM
o-Xylene	ND		31	µg/Kg-dry	1	12/3/2012 07:00 PM
Toluene	ND		31	µg/Kg-dry	1	12/3/2012 07:00 PM
Xylenes, Total	ND		94	µg/Kg-dry	1	12/3/2012 07:00 PM
Surr: 1,2-Dichloroethane-d4	111		70-130	%REC	1	12/3/2012 07:00 PM
Surr: 4-Bromofluorobenzene	102		70-130	%REC	1	12/3/2012 07:00 PM
Surr: Dibromofluoromethane	101		70-130	%REC	1	12/3/2012 07:00 PM
Surr: Toluene-d8	100		70-130	%REC	1	12/3/2012 07:00 PM
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHO</b>		Prep Date: 12/5/2012	Analyst: JB
Electrical Conductivity @ Saturation	5.4		0.025	mmhos/cm @25	5	12/5/2012 03:00 PM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: EE
Chromium, Trivalent	8.3		0.52	mg/Kg-dry	1	12/6/2012 02:30 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: 12/4/2012	Analyst: JB
Chromium, Hexavalent	ND		0.52	mg/Kg-dry	1	12/5/2012 12:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: LR
Moisture	4.7		0.050	% of sample	1	12/4/2012 07:30 AM
<b>PH</b>			<b>SW9045D</b>			Analyst: JB
pH	8.68			s.u.	1	12/3/2012 10:50 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp****Date:** 06-Dec-12**Client:** HRL Compliance Solutions**Project:** Antero Valley Farms F Pad 11/29/12**Work Order:** 1212022**Sample ID:** BKGD 1**Lab ID:** 1212022-04**Collection Date:** 11/29/2012 10:30 AM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>12/5/2012</b>	Analyst: <b>CES</b>
Arsenic	7.4		0.75	mg/Kg-dry	2	12/5/2012 07:18 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>LR</b>
Moisture	5.5		0.050	% of sample	1	12/4/2012 07:30 AM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp****Date:** 06-Dec-12**Client:** HRL Compliance Solutions**Project:** Antero Valley Farms F Pad 11/29/12**Work Order:** 1212022**Sample ID:** BKGD 2**Lab ID:** 1212022-05**Collection Date:** 11/29/2012 10:35 AM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>12/5/2012</b>	Analyst: <b>CES</b>
Arsenic	6.4		0.68	mg/Kg-dry	2	12/5/2012 07:24 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>LR</b>
Moisture	3.7		0.050	% of sample	1	12/4/2012 07:30 AM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 06-Dec-12

Client: HRL Compliance Solutions  
Project: Antero Valley Farms F Pad 11/29/12  
Sample ID: BKGD 3  
Collection Date: 11/29/2012 10:40 AM

Work Order: 1212022  
Lab ID: 1212022-06  
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: 12/5/2012	Analyst: CES
Arsenic	4.7		0.72	mg/Kg-dry	2	12/5/2012 08:13 PM
<b>SOLUBLE CATIONS FOR SAR</b>			<b>SW6020A</b>		Prep Date: 12/5/2012	Analyst: CES
Calcium	140		5.6	mg/L-dry	10	12/5/2012 03:18 PM
Magnesium	26		2.2	mg/L-dry	10	12/5/2012 03:18 PM
Sodium	150		2.2	mg/L-dry	10	12/5/2012 03:18 PM
<b>SODIUM ADSORPTION RATIO</b>			<b>USDA H60 METHO</b>		Prep Date: 12/5/2012	Analyst: CES
Sodium Adsorption Ratio	2.9		0.010	none	1	12/5/2012
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHO</b>		Prep Date: 12/5/2012	Analyst: JB
Electrical Conductivity @ Saturation	0.70		0.025	mmhos/cm @25	5	12/5/2012 03:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: LR
Moisture	11		0.050	% of sample	1	12/4/2012 07:30 AM
<b>PH</b>			<b>SW9045D</b>			Analyst: JB
pH	8.58			s.u.	1	12/3/2012 10:50 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 06-Dec-12

Client: HRL Compliance Solutions

Work Order: 1212022

Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45127

Instrument ID GC8

Method: SW8015M

<b>MBLK</b>		Sample ID: DBLKS1-45127-45127				Units: mg/Kg		Analysis Date: 12/4/2012 12:53 PM		
Client ID:		Run ID: GC8_121204A				SeqNo: 2159142		Prep Date: 12/4/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	1.207	0	1.667	0	72.4	39-115	0			

<b>LCS</b>		Sample ID: DLCSS1-45127-45127				Units: mg/Kg		Analysis Date: 12/4/2012 01:20 PM		
Client ID:		Run ID: GC8_121204A				SeqNo: 2159143		Prep Date: 12/4/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	115.9	4.2	166.7	0	69.5	49-124	0			
Surr: 4-Terphenyl-d14	1.391	0	1.667	0	83.4	39-115	0			

<b>MS</b>		Sample ID: 1212019-01B MS				Units: mg/Kg		Analysis Date: 12/4/2012 01:47 PM		
Client ID:		Run ID: GC8_121204A				SeqNo: 2159144		Prep Date: 12/4/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	234.6	7.9	316.6	49.51	58.4	49-130	0			
Surr: 4-Terphenyl-d14	2.888	0	3.166	0	91.2	39-115	0			

<b>MSD</b>		Sample ID: 1212019-01B MSD				Units: mg/Kg		Analysis Date: 12/4/2012 02:14 PM		
Client ID:		Run ID: GC8_121204A				SeqNo: 2159145		Prep Date: 12/4/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	246.8	8.3	330.4	49.51	59.7	49-130	234.6	5.09	30	
Surr: 4-Terphenyl-d14	2.828	0	3.304	0	85.6	39-115	2.888	2.07	30	

The following samples were analyzed in this batch: 1212022-01B 1212022-02B 1212022-03B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: R113376 Instrument ID GC10 Method: SW8015

<b>MBLK</b>		Sample ID: GBLK2-121203-R113376				Units: µg/L		Analysis Date: 12/3/2012 07:13 PM		
Client ID:		Run ID: GC10_121203B				SeqNo: 2156757		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	105.8	0	100	0	106	70-130	0			

<b>LCS</b>		Sample ID: GLCS2-121203-R113376				Units: µg/L		Analysis Date: 12/3/2012 06:48 PM		
Client ID:		Run ID: GC10_121203B				SeqNo: 2156756		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	8166	200	10000	0	81.7	70-130	0			
Surr: Toluene-d8	112.3	0	100	0	112	70-130	0			

<b>MS</b>		Sample ID: 1211899-05A MS				Units: µg/Kg		Analysis Date: 12/4/2012 01:04 AM		
Client ID:		Run ID: GC10_121203B				SeqNo: 2156769		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	433900	2,500	500000	0	86.8	70-130	0			
Surr: Toluene-d8	5615	0	5000	0	112	50-150	0			

<b>MSD</b>		Sample ID: 1211899-05A MSD				Units: µg/Kg		Analysis Date: 12/4/2012 01:28 AM		
Client ID:		Run ID: GC10_121203B				SeqNo: 2156770		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	421600	2,500	500000	0	84.3	70-130	433900	2.89	30	
Surr: Toluene-d8	5662	0	5000	0	113	50-150	5615	0.834	30	

The following samples were analyzed in this batch: 1212022-01A 1212022-02A 1212022-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45180 Instrument ID HG1 Method: SW7471

MBLK				Sample ID: MBLK-45180-45180				Units: mg/Kg		Analysis Date: 12/5/2012 02:42 PM									
Client ID:				Run ID: HG1_121205A				SeqNo: 2159440		Prep Date: 12/5/2012		DF: 1							
Analyte		Result		PQL		SPK Val		SPK Ref Value		Control Limit		RPD Ref Value		%RPD		RPD Limit		Qual	
Mercury		0.001917		0.020														J	

LCS				Sample ID: LCS-45180-45180				Units: mg/Kg			Analysis Date: 12/5/2012 02:44 PM			
Client ID:				Run ID: HG1-121205A				SeqNo: 2159441			Prep Date: 12/5/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Mercury	0.1637	0.020	0.1665	0	98.3	80-120	0							

MS				Sample ID: 1211689-09AMS				Units: mg/Kg				Analysis Date: 12/5/2012 03:12 PM									
Client ID:				Run ID: HG1_121205A				SeqNo: 2159454				Prep Date: 12/5/2012				DF: 1					
Analyte		Result		PQL		SPK Val		SPK Ref Value		%REC		Control Limit		RPD Ref Value		%RPD		RPD Limit		Qual	
Mercury		0.1775		0.018		0.1482		0.03234		98		75-125		0							

MSD				Sample ID: 1211689-09AMSD				Units: mg/Kg		Analysis Date: 12/5/2012 03:14 PM	
Client ID:			Run ID: HG1_121205A			SeqNo: 2159455		Prep Date: 12/5/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.1711	0.017	0.1442	0.03234	96.3	75-125	0.1775	3.66	35		

The following samples were analyzed in this batch:

1212022-01B	1212022-02B	1212022-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45116 Instrument ID ICPMS1 Method: SW6020A (Dissolve)

DUP	Sample ID: 1211855-01C DUP				Units: mg/L		Analysis Date: 12/5/2012 02:48 PM			
Client ID:	Run ID: ICPMS1_121205A				SeqNo: 2159651		Prep Date: 12/5/2012		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	146.4	5.0	0	0	0	0-0	138.3	5.69		
Magnesium	80.95	2.0	0	0	0	0-0	77.09	4.88		
Sodium	333.3	2.0	0	0	0	0-0	319.9	4.1		

DUP	Sample ID: 1211855-01C DUP				Units: none		Analysis Date: 12/5/2012			
Client ID:	Run ID: SAR_121205A				SeqNo: 2159762		Prep Date: 12/5/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	5.486	0.010	0	0	0		5.407	1.45	50	

The following samples were analyzed in this batch:

1212022-01C	1212022-02C	1212022-03C
1212022-06B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45171 Instrument ID ICPMS1 Method: SW6020A

MBLK		Sample ID: MBLK-45171-45171				Units: mg/Kg		Analysis Date: 12/5/2012 03:31 PM		
Client ID:		Run ID: ICPMS1_121205A				SeqNo: 2159689		Prep Date: 12/5/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.10								
Chromium	ND	0.25								
Copper	0.02212	0.25								J
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS		Sample ID: LCS-45171-45171				Units: mg/Kg		Analysis Date: 12/5/2012 05:14 PM		
Client ID:		Run ID: ICPMS1_121205A				SeqNo: 2160043		Prep Date: 12/5/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.384	0.25	5	0	87.7	80-120	0			
Barium	4.858	0.25	5	0	97.2	80-120	0			
Cadmium	4.864	0.10	5	0	97.3	80-120	0			
Chromium	4.796	0.25	5	0	95.9	80-120	0			
Copper	4.736	0.25	5	0	94.7	80-120	0			
Lead	4.994	0.25	5	0	99.9	80-120	0			
Nickel	4.742	0.25	5	0	94.8	80-120	0			
Selenium	4.294	0.25	5	0	85.9	80-120	0			
Silver	4.858	0.25	5	0	97.2	80-120	0			
Zinc	4.48	0.50	5	0	89.6	80-120	0			

MS		Sample ID: 1212022-01BMS				Units: mg/Kg		Analysis Date: 12/5/2012 06:07 PM		
Client ID: Valley Farms F Pad Pt 1		Run ID: ICPMS1_121205A				SeqNo: 2160052		Prep Date: 12/5/2012		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	441.9	7.0	7.032	445.5	-51.6	75-125	0			SO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45171 Instrument ID ICPMS1 Method: SW6020A

<b>MS</b>		Sample ID: 1212022-01BMS				Units: mg/Kg		Analysis Date: 12/5/2012 06:43 PM		
Client ID: Valley Farms F Pad Pt 1		Run ID: ICPMS1_121205A				SeqNo: 2160058		Prep Date: 12/5/2012		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	6.568	0.70	7.032	0.7798	82.3	75-125	0			
Cadmium	6.917	0.28	7.032	0.103	96.9	75-125	0			
Chromium	11.59	0.70	7.032	5.026	93.3	75-125	0			
Copper	18.78	0.70	7.032	13.45	75.7	75-125	0			
Lead	16.74	0.70	7.032	9.597	102	75-125	0			
Nickel	11.46	0.70	7.032	5.845	79.8	75-125	0			
Selenium	6.466	0.70	7.032	0.8645	79.6	75-125	0			
Silver	6.136	0.70	7.032	0.03118	86.8	75-125	0			
Zinc	41.84	1.4	7.032	35.5	90.2	75-125	0			O

<b>MSD</b>		Sample ID: 1212022-01BMSD				Units: mg/Kg		Analysis Date: 12/5/2012 06:31 PM		
Client ID: Valley Farms F Pad Pt 1		Run ID: ICPMS1_121205A				SeqNo: 2160056		Prep Date: 12/5/2012		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	449.6	7.1	7.133	445.5	57.5	75-125	441.9	1.73	25	SO

<b>MSD</b>		Sample ID: 1212022-01BMSD				Units: mg/Kg		Analysis Date: 12/5/2012 06:49 PM		
Client ID: Valley Farms F Pad Pt 1		Run ID: ICPMS1_121205A				SeqNo: 2160059		Prep Date: 12/5/2012		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.33	0.71	7.133	0.7798	91.8	75-125	6.568	11	25	
Cadmium	7.136	0.29	7.133	0.103	98.6	75-125	6.917	3.11	25	
Chromium	12.53	0.71	7.133	5.026	105	75-125	11.59	7.79	25	
Copper	18.37	0.71	7.133	13.45	69	75-125	18.78	2.17	25	S
Lead	19.84	0.71	7.133	9.597	144	75-125	16.74	17	25	S
Nickel	12.14	0.71	7.133	5.845	88.2	75-125	11.46	5.74	25	
Selenium	6.678	0.71	7.133	0.8645	81.5	75-125	6.466	3.23	25	
Silver	6.197	0.71	7.133	0.03118	86.4	75-125	6.136	0.98	25	
Zinc	111.7	1.4	7.133	35.5	1070	75-125	41.84	91	25	SRO

The following samples were analyzed in this batch:

1212022-01B	1212022-02B	1212022-03B
1212022-04A	1212022-05A	1212022-06A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45126 Instrument ID SVMS6 Method: SW8270

MBLK Sample ID: SBLKS1-45126-45126				Units: µg/Kg		Analysis Date: 12/4/2012 07:29 PM				
Client ID:			Run ID: SVMS6_121204A		SeqNo: 2158527		Prep Date: 12/4/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	30								
Anthracene	ND	30								
Benzo(a)anthracene	ND	30								
Benzo(a)pyrene	ND	30								
Benzo(b)fluoranthene	ND	30								
Benzo(g,h,i)perylene	ND	30								
Benzo(k)fluoranthene	ND	30								
Chrysene	ND	30								
Dibenzo(a,h)anthracene	ND	30								
Fluoranthene	ND	30								
Fluorene	ND	30								
Indeno(1,2,3-cd)pyrene	ND	30								
Naphthalene	ND	30								
Pyrene	ND	30								
Surr: 2-Fluorobiphenyl	1362	0	1667	0	81.7	12-100	0			
Surr: 4-Terphenyl-d14	1782	0	1667	0	107	25-137	0			
Surr: Nitrobenzene-d5	1371	0	1667	0	82.3	37-107	0			

LCS Sample ID: SLCSS1-45126-45126				Units: µg/Kg		Analysis Date: 12/4/2012 05:48 PM				
Client ID:		Run ID: SVMS6_121204A		SeqNo: 2158515		Prep Date: 12/4/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	558.7	30	666.7	0	83.8	45-110		0		
Anthracene	569.3	30	666.7	0	85.4	55-105		0		
Benzo(a)anthracene	551.7	30	666.7	0	82.7	50-110		0		
Benzo(a)pyrene	593	30	666.7	0	88.9	50-110		0		
Benzo(b)fluoranthene	585	30	666.7	0	87.7	45-115		0		
Benzo(g,h,i)perylene	603	30	666.7	0	90.4	40-125		0		
Benzo(k)fluoranthene	555.7	30	666.7	0	83.3	45-115		0		
Chrysene	588.7	30	666.7	0	88.3	55-110		0		
Dibenzo(a,h)anthracene	621.7	30	666.7	0	93.2	40-125		0		
Fluoranthene	589	30	666.7	0	88.3	55-115		0		
Fluorene	560	30	666.7	0	84	50-110		0		
Indeno(1,2,3-cd)pyrene	610.7	30	666.7	0	91.6	40-120		0		
Naphthalene	554.3	30	666.7	0	83.1	40-105		0		
Pyrene	578.3	30	666.7	0	86.7	45-125		0		
Surr: 2-Fluorobiphenyl	1306	0	1667	0	78.4	12-100		0		
Surr: 4-Terphenyl-d14	1614	0	1667	0	96.9	25-137		0		
Surr: Nitrobenzene-d5	1313	0	1667	0	78.8	37-107		0		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45126 Instrument ID SVMS6 Method: SW8270

MS Sample ID: 1211904-02A MS				Units: µg/Kg		Analysis Date: 12/4/2012 06:13 PM				
Client ID:		Run ID: SVMS6_121204A		SeqNo: 2158518		Prep Date: 12/4/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1007	57	1277	0	78.8	45-110	0			
Anthracene	1104	57	1277	0	86.5	55-105	0			
Benzo(a)anthracene	1058	57	1277	0	82.8	50-110	0			
Benzo(a)pyrene	1129	57	1277	0	88.4	50-110	0			
Benzo(b)fluoranthene	1123	57	1277	0	87.9	45-115	0			
Benzo(g,h,i)perylene	1242	57	1277	0	97.3	40-125	0			
Benzo(k)fluoranthene	1070	57	1277	0	83.8	45-115	0			
Chrysene	1134	57	1277	0	88.8	55-110	0			
Dibenzo(a,h)anthracene	1226	57	1277	0	96	40-125	0			
Fluoranthene	1133	57	1277	0	88.7	55-115	0			
Fluorene	1052	57	1277	0	82.4	50-110	0			
Indeno(1,2,3-cd)pyrene	1213	57	1277	0	95	40-120	0			
Naphthalene	958.1	57	1277	0	75	40-105	0			
Pyrene	1121	57	1277	0	87.8	45-125	0			
Surr: 2-Fluorobiphenyl	2268	0	3191	0	71.1	12-100	0			
Surr: 4-Terphenyl-d14	3071	0	3191	0	96.2	25-137	0			
Surr: Nitrobenzene-d5	2247	0	3191	0	70.4	37-107	0			

MSD Sample ID: 1211904-02A MSD				Units: µg/Kg		Analysis Date: 12/4/2012 06:38 PM				
Client ID:		Run ID: SVMS6_121204A		SeqNo: 2158521		Prep Date: 12/4/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	838.3	58	1287	0	65.1	45-110	1007	18.2	30	
Anthracene	894.9	58	1287	0	69.5	55-105	1104	20.9	30	
Benzo(a)anthracene	856.3	58	1287	0	66.5	50-110	1058	21	30	
Benzo(a)pyrene	912.2	58	1287	0	70.9	50-110	1129	21.2	30	
Benzo(b)fluoranthene	922.2	58	1287	0	71.7	45-115	1123	19.6	30	
Benzo(g,h,i)perylene	981.4	58	1287	0	76.3	40-125	1242	23.4	30	
Benzo(k)fluoranthene	850.2	58	1287	0	66.1	45-115	1070	22.9	30	
Chrysene	892.9	58	1287	0	69.4	55-110	1134	23.7	30	
Dibenzo(a,h)anthracene	982.1	58	1287	0	76.3	40-125	1226	22.1	30	
Fluoranthene	916.1	58	1287	0	71.2	55-115	1133	21.2	30	
Fluorene	849.8	58	1287	0	66	50-110	1052	21.2	30	
Indeno(1,2,3-cd)pyrene	975.3	58	1287	0	75.8	40-120	1213	21.8	30	
Naphthalene	796.1	58	1287	0	61.9	40-105	958.1	18.5	30	
Pyrene	895.2	58	1287	0	69.6	45-125	1121	22.4	30	
Surr: 2-Fluorobiphenyl	1914	0	3217	0	59.5	12-100	2268	16.9	40	
Surr: 4-Terphenyl-d14	2439	0	3217	0	75.8	25-137	3071	22.9	40	
Surr: Nitrobenzene-d5	1866	0	3217	0	58	37-107	2247	18.5	40	

The following samples were analyzed in this batch: 1212022-01B 1212022-02B 1212022-03B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45115 Instrument ID VMS5 Method: SW8260

MBLK Sample ID: MBLK-45115-45115				Units: µg/Kg		Analysis Date: 12/3/2012 03:10 PM				
Client ID:			Run ID: VMS5_121203A		SeqNo: 2157058		Prep Date: 12/3/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	1104	0	1000	0	110	70-130	0			
Surr: 4-Bromofluorobenzene	1034	0	1000	0	103	70-130	0			
Surr: Dibromofluoromethane	1010	0	1000	0	101	70-130	0			
Surr: Toluene-d8	1014	0	1000	0	101	70-130	0			

MBLK Sample ID: MBLK-45115-45115			Units: µg/Kg			Analysis Date: 12/3/2012 02:02 PM				
Client ID:		Run ID: VMS8_121203A		SeqNo: 2157155		Prep Date: 12/3/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	1018	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	1004	0	1000	0	100	70-130	0			
Surr: Dibromofluoromethane	1006	0	1000	0	101	70-130	0			
Surr: Toluene-d8	968.5	0	1000	0	96.8	70-130	0			

MBLK Sample ID: MBLK-45115-45115				Units: µg/Kg			Analysis Date: 12/4/2012 02:45 AM			
Client ID:		Run ID: VMS8_121203B		SeqNo: 2157797			Prep Date: 12/3/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	1000	0	1000	0	100	70-130	0			
Surr: 4-Bromofluorobenzene	1033	0	1000	0	103	70-130	0			
Surr: Dibromofluoromethane	971	0	1000	0	97.1	70-130	0			
Surr: Toluene-d8	931.5	0	1000	0	93.2	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45115 Instrument ID VMS5 Method: SW8260

MBLK Sample ID: MBLK-45115-45115				Units: µg/Kg			Analysis Date: 12/4/2012 11:21 AM			
Client ID:		Run ID: VMS9_121204A			SeqNo: 2158197		Prep Date: 12/3/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	1008	0	1000	0	101	70-130	0			
Surr: 4-Bromofluorobenzene	943	0	1000	0	94.3	70-130	0			
Surr: Dibromofluoromethane	939	0	1000	0	93.9	70-130	0			
Surr: Toluene-d8	946.5	0	1000	0	94.6	70-130	0			

LCS Sample ID: LCS-45115-45115				Units: µg/Kg			Analysis Date: 12/3/2012 01:58 PM			
Client ID:		Run ID: VMS5_121203A			SeqNo: 2157056		Prep Date: 12/3/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	923.5	30	1000	0	92.4	75-125	0			
Ethylbenzene	970.5	30	1000	0	97	75-125	0			
m,p-Xylene	1932	60	2000	0	96.6	80-125	0			
o-Xylene	957.5	30	1000	0	95.8	75-125	0			
Toluene	927.5	30	1000	0	92.8	70-125	0			
Xylenes, Total	2889	90	3000	0	96.3	75-125	0			
Surr: 1,2-Dichloroethane-d4	1073	0	1000	0	107	70-130	0			
Surr: 4-Bromofluorobenzene	1016	0	1000	0	102	70-130	0			
Surr: Dibromofluoromethane	1022	0	1000	0	102	70-130	0			
Surr: Toluene-d8	1025	0	1000	0	102	70-130	0			

LCS Sample ID: LCS-45115-45115				Units: µg/Kg		Analysis Date: 12/3/2012 12:50 PM				
Client ID:		Run ID: VMS8_121203A		SeqNo: 2157154		Prep Date: 12/3/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1030	30	1000	0	103	75-125	0			
Ethylbenzene	1026	30	1000	0	103	75-125	0			
m,p-Xylene	2064	60	2000	0	103	80-125	0			
o-Xylene	1032	30	1000	0	103	75-125	0			
Toluene	1004	30	1000	0	100	70-125	0			
Xylenes, Total	3096	90	3000	0	103	75-125	0			
Surr: 1,2-Dichloroethane-d4	981.5	0	1000	0	98.2	70-130	0			
Surr: 4-Bromofluorobenzene	1029	0	1000	0	103	70-130	0			
Surr: Dibromofluoromethane	1018	0	1000	0	102	70-130	0			
Surr: Toluene-d8	1006	0	1000	0	101	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45115 Instrument ID VMS5 Method: SW8260

LCS		Sample ID: LCS-45115-45115				Units: µg/Kg		Analysis Date: 12/4/2012 01:34 AM		
Client ID:		Run ID: VMS8_121203B				SeqNo: 2157796		Prep Date: 12/3/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1076	30	1000	0	108	75-125	0			
Ethylbenzene	1046	30	1000	0	105	75-125	0			
m,p-Xylene	2102	60	2000	0	105	80-125	0			
o-Xylene	1049	30	1000	0	105	75-125	0			
Toluene	1054	30	1000	0	105	70-125	0			
Xylenes, Total	3151	90	3000	0	105	75-125	0			
Surr: 1,2-Dichloroethane-d4	972.5	0	1000	0	97.2	70-130	0			
Surr: 4-Bromofluorobenzene	1018	0	1000	0	102	70-130	0			
Surr: Dibromofluoromethane	988.5	0	1000	0	98.8	70-130	0			
Surr: Toluene-d8	983	0	1000	0	98.3	70-130	0			

LCS		Sample ID: LCS-45115-45115				Units: µg/Kg		Analysis Date: 12/4/2012 10:05 AM		
Client ID:		Run ID: VMS9_121204A				SeqNo: 2158196		Prep Date: 12/3/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1034	30	1000	0	103	75-125	0			
Ethylbenzene	1001	30	1000	0	100	75-125	0			
m,p-Xylene	2036	60	2000	0	102	80-125	0			
o-Xylene	1010	30	1000	0	101	75-125	0			
Toluene	996	30	1000	0	99.6	70-125	0			
Xylenes, Total	3045	90	3000	0	102	75-125	0			
Surr: 1,2-Dichloroethane-d4	965	0	1000	0	96.5	70-130	0			
Surr: 4-Bromofluorobenzene	1026	0	1000	0	103	70-130	0			
Surr: Dibromofluoromethane	1003	0	1000	0	100	70-130	0			
Surr: Toluene-d8	971.5	0	1000	0	97.2	70-130	0			

MS		Sample ID: 1212019-01A MS				Units: µg/Kg		Analysis Date: 12/3/2012 10:23 PM		
Client ID:		Run ID: VMS8_121203A				SeqNo: 2157171		Prep Date: 12/3/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1002	30	1000	24	97.8	75-125	0			
Ethylbenzene	1014	30	1000	13	100	75-125	0			
m,p-Xylene	2014	60	2000	68	97.3	80-125	0			
o-Xylene	1028	30	1000	0	103	75-125	0			
Toluene	1024	30	1000	72	95.2	70-125	0			
Xylenes, Total	3042	90	3000	68	99.1	75-125	0			
Surr: 1,2-Dichloroethane-d4	953.5	0	1000	0	95.4	70-130	0			
Surr: 4-Bromofluorobenzene	1043	0	1000	0	104	70-130	0			
Surr: Dibromofluoromethane	971	0	1000	0	97.1	70-130	0			
Surr: Toluene-d8	952.5	0	1000	0	95.2	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45115 Instrument ID VMS5 Method: SW8260

MSD		Sample ID: 1212019-01A MSD				Units: µg/Kg		Analysis Date: 12/3/2012 10:47 PM		
Client ID:		Run ID: VMS8_121203A				SeqNo: 2157173		Prep Date: 12/3/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1006	30	1000	24	98.2	75-125	1002	0.398	30	
Ethylbenzene	978	30	1000	13	96.5	75-125	1014	3.57	30	
m,p-Xylene	2016	60	2000	68	97.4	80-125	2014	0.124	30	
o-Xylene	1006	30	1000	0	101	75-125	1028	2.26	30	
Toluene	993	30	1000	72	92.1	70-125	1024	3.07	30	
Xylenes, Total	3022	90	3000	68	98.4	75-125	3042	0.676	30	
Surr: 1,2-Dichloroethane-d4	974.5	0	1000	0	97.4	70-130	953.5	2.18	30	
Surr: 4-Bromofluorobenzene	1016	0	1000	0	102	70-130	1043	2.57	30	
Surr: Dibromofluoromethane	1008	0	1000	0	101	70-130	971	3.79	30	
Surr: Toluene-d8	947.5	0	1000	0	94.8	70-130	952.5	0.526	30	

The following samples were analyzed in this batch: 1212022-01A 1212022-02A 1212022-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
Work Order: 1212022  
Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45116 Instrument ID WETCHEM Method: USDA H60 Method

DUP		Sample ID: 1211855-01C DUP				Units: mmhos/cm @25°F		Analysis Date: 12/5/2012 03:00 PM		
Client ID:		Run ID: WETCHEM_1212051				SeqNo: 2159402		Prep Date: 12/5/2012		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	3.46	0.025	0	0	0		3.095	11.1	50	

The following samples were analyzed in this batch:

1212022-01C	1212022-02C	1212022-03C
1212022-06B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: 45148 Instrument ID WETCHEM Method: SW7196A

<b>MBLK</b>	Sample ID: <b>MBLK-45148-45148</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>12/5/2012 12:00 PM</b>			
Client ID:	Run ID: <b>WETCHEM_121205E</b>				SeqNo: <b>2158891</b>		Prep Date: <b>12/4/2012</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

<b>LCS</b>	Sample ID: <b>LCS-45148-45148</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>12/5/2012 12:00 PM</b>			
Client ID:	Run ID: <b>WETCHEM_121205E</b>				SeqNo: <b>2158892</b>		Prep Date: <b>12/4/2012</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.712 0.50 2 0 85.6 75-110 0

<b>MS</b>	Sample ID: <b>1212022-02B MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>12/5/2012 12:00 PM</b>			
Client ID: <b>Valley Farms F Pad Pt 2</b>	Run ID: <b>WETCHEM_121205E</b>				SeqNo: <b>2158897</b>		Prep Date: <b>12/4/2012</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.883 0.51 2.024 0.26 80.2 60-130 0

<b>MSD</b>	Sample ID: <b>1212022-02B MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>12/5/2012 12:00 PM</b>			
Client ID: <b>Valley Farms F Pad Pt 2</b>	Run ID: <b>WETCHEM_121205E</b>				SeqNo: <b>2158898</b>		Prep Date: <b>12/4/2012</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.883 0.51 2.024 0.26 80.2 60-130 1.883 0 30

The following samples were analyzed in this batch: 1212022-01B 1212022-02B 1212022-03B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: R113359 Instrument ID WETCHEM Method: SW9040

LCS	Sample ID: WLC SW1-121203-R113359				Units: s.u.		Analysis Date: 12/3/2012 10:50 AM			
Client ID:	Run ID: WETCHEM_121203N			SeqNo: 2156390		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 4.37 0 4.4 0 99.3 90-110 0

LCS	Sample ID: WLC SW1-121203-R113359					Units: s.u.		Analysis Date: 12/3/2012 10:50 AM		
Client ID:	Run ID: WETCHEM_121203N			SeqNo: 2156393		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 4.37 0 4.4 0 99.3 90-110 0

LCS	Sample ID: WLCSS1-121203-R113359					Units: s.u.		Analysis Date: 12/3/2012 10:50 AM		
Client ID:		Run ID: WETCHEM_121203N			SeqNo: 2156397		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 4.37 0 4.4 0 99.3 90-110 0

DUP	Sample ID: 1212026-02A DUP				Units: s.u.		Analysis Date: 12/3/2012 10:50 AM			
Client ID:	Run ID: WETCHEM_121203N				SeqNo: 2156392		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 7.86 0 0 0 0 0-0 7.86 0 20 H

DUP		Sample ID: 1212029-01B DUP				Units: s.u.		Analysis Date: 12/3/2012 10:50 AM		
Client ID:		Run ID: WETCHEM_121203N				SeqNo: 2156395		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 7.45 0 0 0 0 0-0 7.45 0 20

DUP	Sample ID: 1211924-01C DUP				Units: s.u.		Analysis Date: 12/3/2012 10:50 AM			
Client ID:	Run ID: WETCHEM_121203N				SeqNo: 2156399		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 8.6 0 0 0 0 0-0 8.59 0.116 20

The following samples were analyzed in this batch:

1212022-01B	1212022-02B	1212022-03B
1212022-06A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: R113437 Instrument ID MOIST Method: A2540 G

MBLK		Sample ID: WBLKS1-R113437				Units: % of sample		Analysis Date: 12/4/2012 07:15 AM		
Client ID:		Run ID: MOIST_121204B				SeqNo: 2158258		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS		Sample ID: LCS-R113437				Units: % of sample		Analysis Date: 12/4/2012 07:15 AM		
Client ID:		Run ID: MOIST_121204B				SeqNo: 2158254		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: 1212023-79B DUP				Units: % of sample		Analysis Date: 12/4/2012 07:15 AM		
Client ID:		Run ID: MOIST_121204B				SeqNo: 2158233		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 11 0.050 0 0 0 0-0 11.52 4.62 20

DUP		Sample ID: 1212023-98B DUP				Units: % of sample		Analysis Date: 12/4/2012 07:15 AM		
Client ID:		Run ID: MOIST_121204B				SeqNo: 2158252		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 9.52 0.050 0 0 0 0-0 10.09 5.81 20

The following samples were analyzed in this batch: 1212022-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 1212022  
 Project: Antero Valley Farms F Pad 11/29/12

## QC BATCH REPORT

Batch ID: R113442 Instrument ID MOIST Method: A2540 G

MBLK		Sample ID: WBLKS1-R113442				Units: % of sample		Analysis Date: 12/4/2012 07:30 AM		
Client ID:		Run ID: MOIST_121204C				SeqNo: 2158541		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS		Sample ID: LCS-R113442				Units: % of sample		Analysis Date: 12/4/2012 07:30 AM		
Client ID:		Run ID: MOIST_121204C				SeqNo: 2158537		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP		Sample ID: 1212021-13A DUP				Units: % of sample		Analysis Date: 12/4/2012 07:30 AM		
Client ID:		Run ID: MOIST_121204C				SeqNo: 2158529		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	2.86	0.050	0	0	0	0-0	2.77	3.2	20	

DUP		Sample ID: 1212022-03B DUP				Units: % of sample		Analysis Date: 12/4/2012 07:30 AM		
Client ID: Valley Farms F Pad Pt 3		Run ID: MOIST_121204C				SeqNo: 2158532		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	4.63	0.050	0	0	0	0-0	4.7	1.5	20	

The following samples were analyzed in this batch:

1212022-02B	1212022-03B	1212022-04A
1212022-05A	1212022-06A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.





## Chain-of-Custody

Form 20248

[illegible]

*Time Zone (Circle):	EST	CST	MST	PST	Matrix: O = oil	S = soil	NS = non-salt solid	W = water	L = liquid	E = extract	F = filter
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**For metals or anions, please detail analytes below.**

Comments		QC Plan (Age of lot below)	Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035					
		X	LEVEL II (Standard QC)	LEVEL III (Std QC + forms)	LEVEL IV (Std QC + forms + raw data)			
40°C								

SIGNATURE	PRINTED NAME	DATE	TIME
	R. J. W. L. D.	11/30/12	5:00
	A. J. D. E. V. E. R. S. E.	12/11/12	1:00

Preservative Key: 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-NaHSO<sub>4</sub> 7-Other 8-4 degrees C 9-5035

# ALS Group USA, Corp

## Sample Receipt Checklist

Client Name: HRL  
Work Order: 1212022

Date/Time Received: 01-Dec-12 10:00  
Received by: PD

Checklist completed by Diane Shaw 03-Dec-12 Reviewed by: Ann Preston 04-Dec-12  
eSignature Date eSignature Date

Matrices: Soil  
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Temperature(s)/Thermometer(s): 4.0 c

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 12/3/2012 9:28:49 AM

Water - VOA vials have zero headspace? Yes ☐ No ☐ No VOA vials submitted ☒

Water - pH acceptable upon receipt? Yes ☐ No ☐ N/A ☒

pH adjusted? Yes ☐ No ☐ N/A ☒

pH adjusted by:

Login Notes:

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Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

**FedEx** Express **US Airbill**

8681 6429 2811

1 From  
Sender's FedEx Account Number  
Date 11/10/01  
Sender's Name Bob D. Dill Phone 714 236 5021  
Company Walt Disney  
Address 201 N. Main St.  
City Orange State CA ZIP 92667  
2 Your Internal Billing Reference  
3 To  
Recipient's Name Walt Disney Phone 714 236 5021  
Company Walt Disney  
Recipient's Address 201 N. Main St.  
City Orange State CA ZIP 92667  
Address  
To request a package be held at a specific FedEx location, print FedEx address here.



8681 6429 2811

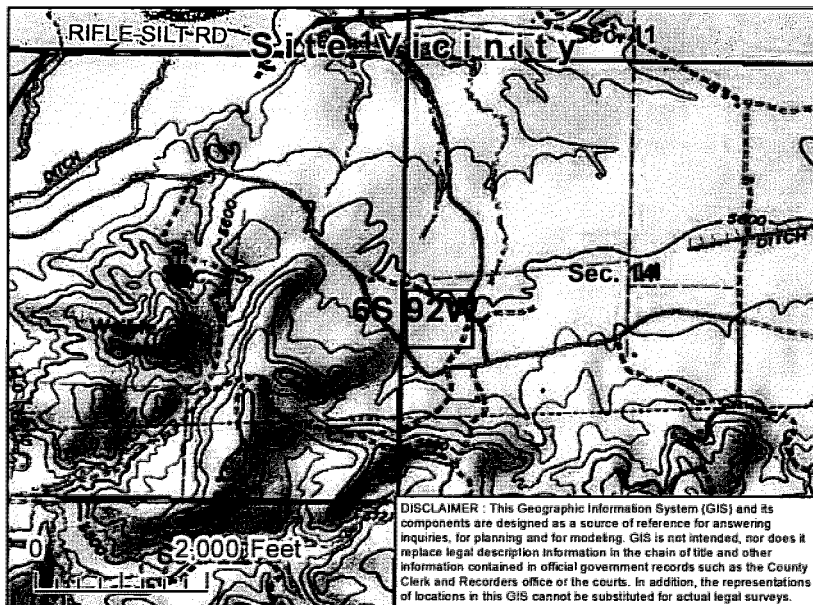
0200

FedEx Retrieval Copy

4a Express Package Service  
1 ☐ FedEx Priority Overnight  
2 ☐ FedEx Standard Overnight  
3 ☐ FedEx 2Day  
4 ☐ FedEx 2Day Freight  
5 ☐ FedEx 3Day Freight  
6 ☐ FedEx 4Day Freight  
7 ☐ FedEx 5Day Freight  
8 ☐ FedEx International Priority  
9 ☐ FedEx International Economy  
10 ☐ FedEx International Freight  
11 ☐ FedEx Home Delivery  
12 ☐ FedEx Mail Boxes  
13 ☐ FedEx Freight  
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5 Packaging  
6 Special Handling  
7 Payment  
8 Residential Delivery Signature Options  
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520



**Sample Location Map**  
**Location: Valley Farms F**  
*Antero Resources Piceance Corp.*

**Legend**

- |                       |                              |
|-----------------------|------------------------------|
| ● Confirmation Sample | <b>Hydrographic Features</b> |
| <b>PLSS</b>           | — Perennial Stream           |
| ▭ Township            | - - - Intermittent Stream    |
| ▭ Section             | ▤ Ditch/Canal                |
| ▬ Highways            |                              |
| ▬ Public Roads        |                              |

