

# Environmental, Audit & Assessment, Inc.

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Web Site: [www.eaa-co.com](http://www.eaa-co.com)

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23 June 2011

Colorado Oil and Gas Conservation Commission  
Chris Canfield  
Environmental Protection Specialist  
707 Wapiti Court, Suite 204  
Rifle, CO 81650

RE: Form 4 – WGV 21-23-697

Mr. Canfield:

Please find the attached Sundry Form 4, submitted on behalf of Williams Production RMT Company, requesting that background arsenic concentrations be taken into consideration for the completion of the reserve pit closure activities at the WGV 21-23-697 (NENW, Sec 23, T6S, R97W; API 05-045-14154) well pad. This request is in accordance with and pertaining to footnote 1 to the Table 910-1 of the COGCC 900-series Rule.

Thank you in advance for your time in reviewing the attached document and consideration of approval for the request. If you have any specific questions, would like additional information, or would otherwise like to discuss the matter further, please contact myself or Karolina Blaney at 970-683-2295, at your convenience.

Sincerely,

Jana Sanders  
Environmental Scientist  
Environmental, Audit & Assessment, Inc

State of Colorado  
Oil and Gas Conservation Commission  
1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



DOCUMENT  
#2215126

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.)

RECEIVED  
6/28/2011

1. OGCC Operator Number: 96850	4. Contact Name: Karolina Blaney
2. Name of Operator: Williams Production R.M.T. Company	Phone: 970-683-2295
3. Address: 1058 County Road 215	Fax: 970-285-9573
City: Parachute State: CO Zip: 81635	
5. API Number 05-045-14154	OGCC Facility ID Number
6. Well/Facility Name: Puckett # WGV 21-23-697	7. Well/Facility Number WGV 21-23-697
8. Location (Qtr/Sec, Twp, Rng, Meridian): NENW, 23, T6S, R97W, 6 PM	
9. County: Garfield #045	10. Field Name: GRAND VALLEY - #31290
11. Federal, Indian or State Lease Number:	

Complete the Attachment Checklist

OP OGCC

LOCATION  
#335117

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qr is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/> FNUFSL <input type="checkbox"/> FELFWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/> attach directional survey
Bottomhole location Qtr/Sec, Twp, Rng, Mer	
Latitude	Distance to nearest property line
Longitude	Distance to nearest lease line
Ground Elevation	Distance to nearest well same formation
	Distance to nearest bldg, public rd, utility or RR
	Is location in a High Density Area (rule 603b)? Yes/No
	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:	NUMBER
Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	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	
Data 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 (5 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	
<input type="checkbox"/> 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 type="checkbox"/> Status Update/Change of Remediation Plans	
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: Background	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: Karolina Blaney Date: 6/24/11 Email: karolina.blaney@williams.com  
Print Name: Karolina Blaney Title: Environmental Specialist

OGCC Approved: Chris Camfield Title: FOR Chris Camfield Date: 07/22/2011

CONDITIONS OF APPROVAL, IF ANY:

EPS NW Region

Reserve pit closure  
must comply with OGCC Rules  
Series 900 and 1000,  
(Pit closure and reclamation)

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: \_\_\_\_\_ API Number: \_\_\_\_\_

2. Name of Operator: \_\_\_\_\_ OGCC Facility ID # \_\_\_\_\_

3. Well/Facility Name: \_\_\_\_\_ Well/Facility Number: \_\_\_\_\_

4. Location (QtrQtr, Sec, Twp, Rng, Meridian): \_\_\_\_\_

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.

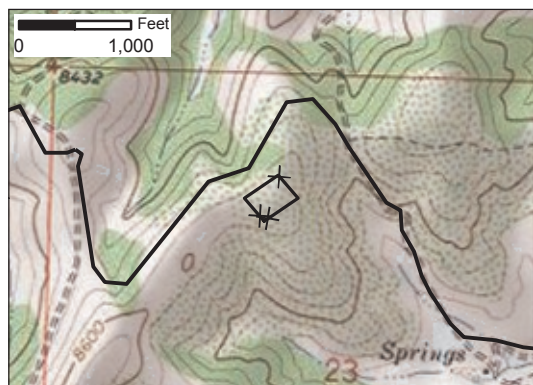
5.

DESCRIBE PROPOSED OR COMPLETED OPERATIONS

Township: 6 S  
Section: 23  
Range: 97 W

Latitude: 39.512489  
Longitude: -108.189658  
NAD 1983 HARN - State Plane Colorado Central FIPS 0502

# WGV 21-23-697



## Sample Collection Location Map Williams Production R.M.T.

- ◆ Background - June 2011
  - ◆ Background - October 2010
  - ◆ Cuttings - October 2010
  - Well Pad (approx)
- \* 2010 samples collected by Olsson

Drawn By:  
EKM  
Date:  
10/2010  
Revised:  
06/2011

**Environmental, Audit & Assessment, Inc.**  
225 North 5<sup>th</sup> Street, Suite 8  
Grand Junction, Colorado 81501  
(970) 245-5987    [www.eaa-co.com](http://www.eaa-co.com)





11/02/10

## Technical Report for

**Olsson Associates**

**WGV 21-23(010-1405\_100\_100001)**

**Accutest Job Number: D18496**

**Sampling Date: 10/26/10**

### Report to:

**Olsson Associates  
826 21 1/2 Road  
Grand Junction, CO 81505  
tdobransky@oaconsulting.com**

**ATTN: Tim Dobransky**

**Total number of pages in report: 46**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'J. Hamilton'.

**John Hamilton  
Laboratory Director**

**Client Service contact: Amanda Kissell 303-425-6021**

Certifications: CO, ID, NE, NM, ND (R-027) (PW) UT (NELAP CO00049)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

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## Sample Summary

Olsson Associates

Job No: D18496

WGV 21-23(010-1405\_100\_100001)

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D18496-1	10/26/10	00:00	10/27/10	SO	Soil	EAST-CUTT
D18496-2	10/26/10	00:00	10/27/10	SO	Soil	WEST-CUTT
D18496-3	10/26/10	00:00	10/27/10	SO	Soil	BG1
D18496-3A	10/26/10	11:25	10/28/10	SO	Soil	BG1
D18496-4	10/26/10	00:00	10/27/10	SO	Soil	BG2
D18496-5	10/26/10	00:00	10/27/10	SO	Soil	BG3
D18496-6	10/26/10	00:00	10/27/10	SO	Soil	BG4
D18496-7	10/26/10	00:00	10/27/10	SO	Soil	BG5

---

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Olsson Associates

**Job No** D18496

**Site:** WGV 21-23(010-1405\_100\_100001)

**Report Dat** 11/2/2010 3:22:21 PM

Between 10/27/2010 and 10/28/2010, 8 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.9 °C & 4.0 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D18496 was assigned to the project. The lab sample IDs, client sample IDs, and dates of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### Volatiles by GC By Method SW846 8015B

<b>Matrix</b> SO	<b>Batch ID:</b> GGA521
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D18496-1MS, D18496-1MSD were used as the QC samples indicated.

### Extractables by GC By Method SW846-8015B

<b>Matrix</b> SO	<b>Batch ID:</b> OP2704
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D18462-5MS, D18462-5MSD were used as the QC samples indicated.
- The matrix spike (MS) recovery of TPH-DRO (C10-C28) is outside control limits. Outside control limits due to high level in sample relative to spike amount.

### Metals By Method SW846 6010B

<b>Matrix</b> AQ	<b>Batch ID:</b> MP3287
------------------	-------------------------

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D18496-3AMS were used as the QC samples for the metals analysis.

### Metals By Method SW846 6020

<b>Matrix</b> SO	<b>Batch ID:</b> MP3257
------------------	-------------------------

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D18496-3MS, D18496-3MSD, D18496-3SDL were used as the QC samples for the metals analysis.

### Wet Chemistry By Method LADNR29B

<b>Matrix</b> SO	<b>Batch ID:</b> MP3287
------------------	-------------------------

- D18496-3A for Sodium Adsorption Ratio: Calculated as:  $(\text{Na meq/L}) / \sqrt{[(\text{Ca meq/L}) + (\text{Mg meq/L})/2]}$



## Wet Chemistry By Method SM19 2540B M

**Matrix** SO

**Batch ID:** GN6956

- The data for SM19 2540B M meets quality control requirements.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

### Sample Results

### Report of Analysis

## Report of Analysis

<b>Client Sample ID:</b>	EAST-CUTT		<b>Date Sampled:</b>	10/26/10
<b>Lab Sample ID:</b>	D18496-1		<b>Date Received:</b>	10/27/10
<b>Matrix:</b>	SO - Soil		<b>Percent Solids:</b>	87.0
<b>Method:</b>	SW846 8015B			
<b>Project:</b>	WGV 21-23(010-1405_100_100001)			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA9567.D	1	10/28/10	BR	n/a	n/a	GGA521
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	13	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	107%		60-140%

ND = Not detected      MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	EAST-CUTT		<b>Date Sampled:</b>	10/26/10
<b>Lab Sample ID:</b>	D18496-1		<b>Date Received:</b>	10/27/10
<b>Matrix:</b>	SO - Soil		<b>Percent Solids:</b>	87.0
<b>Method:</b>	SW846-8015B SW846 3550B			
<b>Project:</b>	WGV 21-23(010-1405_100_100001)			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD4744.D	2	10/27/10	JB	10/27/10	OP2704	GFD206
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	572	31	20	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	109%		63-130%		

ND = Not detected      MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	WEST-CUTT		<b>Date Sampled:</b>	10/26/10
<b>Lab Sample ID:</b>	D18496-2		<b>Date Received:</b>	10/27/10
<b>Matrix:</b>	SO - Soil		<b>Percent Solids:</b>	85.9
<b>Method:</b>	SW846 8015B			
<b>Project:</b>	WGV 21-23(010-1405_100_100001)			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA9570.D	1	10/28/10	BR	n/a	n/a	GGA521
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	13	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	117%		60-140%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	WEST-CUTT		<b>Date Sampled:</b>	10/26/10
<b>Lab Sample ID:</b>	D18496-2		<b>Date Received:</b>	10/27/10
<b>Matrix:</b>	SO - Soil		<b>Percent Solids:</b>	85.9
<b>Method:</b>	SW846-8015B SW846 3550B			
<b>Project:</b>	WGV 21-23(010-1405_100_100001)			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD4745.D	2	10/27/10	JB	10/27/10	OP2704	GFD206
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	759	31	20	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	103%		63-130%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

<b>Client Sample ID:</b>	BG1		
<b>Lab Sample ID:</b>	D18496-3	<b>Date Sampled:</b>	10/26/10
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/27/10
		<b>Percent Solids:</b>	74.4
<b>Project:</b>	WGV 21-23(010-1405_100_100001)		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.8	0.57	mg/kg	5	10/27/10	10/28/10 GJ	SW846 6020 <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA1080  
(2) Prep QC Batch: MP3257

RL = Reporting Limit

Report of Analysis

<b>Client Sample ID:</b>	BG1	<b>Date Sampled:</b>	10/26/10
<b>Lab Sample ID:</b>	D18496-3	<b>Date Received:</b>	10/27/10
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	74.4
<b>Project:</b>	WGV 21-23(010-1405_100_100001)		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	74.4		%	1	10/27/10	CJ	SM19 2540B M
pH	7.22		su	1	10/27/10	JK	SW846 9045C

RL = Reporting Limit



Report of Analysis

<b>Client Sample ID:</b>	BG1		
<b>Lab Sample ID:</b>	D18496-3A	<b>Date Sampled:</b>	10/26/10
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/28/10
		<b>Percent Solids:</b>	74.4
<b>Project:</b>	WGV 21-23(010-1405_100_100001)		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	10.2	2.0	mg/l	1	11/01/10	11/02/10 JM	SW846 6010B <sup>1</sup>	EPA 200.7 <sup>2</sup>
Magnesium	2.03	1.0	mg/l	1	11/01/10	11/02/10 JM	SW846 6010B <sup>1</sup>	EPA 200.7 <sup>2</sup>
Sodium	6.20	2.0	mg/l	1	11/01/10	11/02/10 JM	SW846 6010B <sup>1</sup>	EPA 200.7 <sup>2</sup>

(1) Instrument QC Batch: MA1088  
(2) Prep QC Batch: MP3287

RL = Reporting Limit

Report of Analysis

<b>Client Sample ID:</b>	BG1		
<b>Lab Sample ID:</b>	D18496-3A	<b>Date Sampled:</b>	10/26/10
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/28/10
		<b>Percent Solids:</b>	74.4
<b>Project:</b>	WGV 21-23(010-1405_100_100001)		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio <sup>a</sup>	0.464		ratio	1	11/02/10 00:52	JM	LADNR29B
Specific Conductivity	110	1.0	umhos/cm	1	10/29/10	CJ	DEPT.OF AG, BOOK N9

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

<b>Client Sample ID:</b>	BG2	<b>Date Sampled:</b>	10/26/10
<b>Lab Sample ID:</b>	D18496-4	<b>Date Received:</b>	10/27/10
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	79.1
<b>Project:</b>	WGV 21-23(010-1405_100_100001)		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.4	0.52	mg/kg	5	10/27/10	10/28/10 GJ	SW846 6020 <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA1080  
(2) Prep QC Batch: MP3257

RL = Reporting Limit

Report of Analysis

<b>Client Sample ID:</b>	BG3		
<b>Lab Sample ID:</b>	D18496-5	<b>Date Sampled:</b>	10/26/10
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/27/10
		<b>Percent Solids:</b>	75.5
<b>Project:</b>	WGV 21-23(010-1405_100_100001)		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	4.2	0.51	mg/kg	5	10/27/10	10/28/10 GJ	SW846 6020 <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA1080  
(2) Prep QC Batch: MP3257

RL = Reporting Limit

Report of Analysis

<b>Client Sample ID:</b>	BG4	<b>Date Sampled:</b>	10/26/10
<b>Lab Sample ID:</b>	D18496-6	<b>Date Received:</b>	10/27/10
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	79.1
<b>Project:</b>	WGV 21-23(010-1405_100_100001)		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.9	0.51	mg/kg	5	10/27/10	10/28/10 GJ	SW846 6020 <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA1080  
(2) Prep QC Batch: MP3257

RL = Reporting Limit

Report of Analysis

<b>Client Sample ID:</b>	BG5	<b>Date Sampled:</b>	10/26/10
<b>Lab Sample ID:</b>	D18496-7	<b>Date Received:</b>	10/27/10
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	76.2
<b>Project:</b>	WGV 21-23(010-1405_100_100001)		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	4.1	0.52	mg/kg	5	10/27/10	10/28/10 GJ	SW846 6020 <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA1080  
(2) Prep QC Batch: MP3257

RL = Reporting Limit

## Misc. Forms

### Custody Documents and Other Forms

---

Includes the following where applicable:

- Chain of Custody





[illegible]

## D18496: Chain of Custody

Page 2 of 5



## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D18496

Client: Olsson

Immediate Client Services Action Required: Yes

Date / Time Received: 10/27/2010 8:45:00 AM

Delivery Method: FEDX

Project: WGV 21-23(010-1405\_100\_100001)

No. Coolers: 1

Airbill #'s:

### Cooler Security

Y or N

Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Cooler Temperature

Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Infrared gun                        |                          |
| 3. Cooler media:             | Ice (bag)                           |                          |

### Quality Control Preservation

Y

N

N/A

- |                                 |                                     |                          |                                     |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input type="checkbox"/> |                                     |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input type="checkbox"/> |                                     |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                                     |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### Comments

Sample #3 does not have enough volume to do a SAR and SCON. It will not be logged in for these tests.

### Sample Integrity - Documentation

Y or N

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Sample Integrity - Condition

Y or N

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample rec'd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |                          |

### Sample Integrity - Instructions

Y N N/A

- |   |                                     |                                     |                                     |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume rec'd for analysis:  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Accutest Laboratories  
V: 508.481.6200

495 Technology Center West, Bldg One  
F: 508.481.7753

Marlborough, MA  
www.accutest.com

**D18496: Chain of Custody**

**Page 3 of 5**



## Sample Receipt Summary - Problem Resolution

**Accutest Job Number:** D18496

**CSR:** Amanda Kissell

**Response Date** 10/27/2010

**Response:** Client notified. Add'l volume for SAR/SCON will be received 10/28/10. Please analyze upon receipt.

Accutest Laboratories  
V: 508.481.6200

495 Technology Center West, Bldg One  
F: 508.481.7753

Marlborough, MA  
[www.accutest.com](http://www.accutest.com)

**D18496: Chain of Custody**  
**Page 4 of 5**

**Job Change Order: D18496\_11/2/2010**

<b>Requested Date:</b>	11/2/2010	<b>Received Date:</b>	10/27/2010
<b>Account Name:</b>	Olsson Associates	<b>Due Date:</b>	11/1/2010
<b>Project Description:</b>	WGV 21-23(010-1405_100_100001)	<b>Deliverable:</b>	COMMBN
<b>CSR:</b>	AK	<b>TAT (Days):</b>	14
<b>Sample #:</b>	D18496-3	<b>Change:</b>	Please "no out" ALL data except ASMS and pH. Please keep SAR and SCON reported on -3A.

<b>Above Changes</b>	Tim Dobransky	<b>Date:</b>	11/2/2010
----------------------	---------------	--------------	-----------

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

## GC Volatiles

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## QC Data Summaries

---

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

Page 1 of 1

**Job Number:** D18496  
**Account:** CORCCOGJ Olsson Associates  
**Project:** WGV 21-23(010-1405\_100\_100001)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA521-MB	GA9565.D	1	10/28/10	BR	n/a	n/a	GGA521

The QC reported here applies to the following samples:

Method: SW846 8015B

D18496-1, D18496-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	10	mg/kg	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	105% 60-140%

Blank Spike Summary

Job Number: D18496  
Account: CORCCOGJ Olsson Associates  
Project: WGV 21-23(010-1405\_100\_100001)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA521-BS	GA9566.D	1	10/28/10	BR	n/a	n/a	GGA521

The QC reported here applies to the following samples: Method: SW846 8015B

D18496-1, D18496-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	105	95	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	100%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D18496  
Account: CORCCOGJ Olsson Associates  
Project: WGV 21-23(010-1405\_100\_100001)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D18496-1MS	GA9568.D	1	10/28/10	BR	n/a	n/a	GGA521
D18496-1MSD	GA9569.D	1	10/28/10	BR	n/a	n/a	GGA521
D18496-1	GA9567.D	1	10/28/10	BR	n/a	n/a	GGA521

The QC reported here applies to the following samples:

Method: SW846 8015B

D18496-1, D18496-2

CAS No.	Compound	D18496-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		143	128	90	142	99	10	62-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D18496-1	Limits
120-82-1	1,2,4-Trichlorobenzene	108%	117%	107%	60-140%



## GC Semi-volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

Page 1 of 1

**Job Number:** D18496  
**Account:** CORCCOGJ Olsson Associates  
**Project:** WGV 21-23(010-1405\_100\_100001)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2704-MB	FD4736.D	1	10/27/10	JB	10/27/10	OP2704	GFD206

The QC reported here applies to the following samples:

Method: SW846-8015B

D18496-1, D18496-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	13	8.7	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	95% 63-130%

## Blank Spike Summary

Page 1 of 1

**Job Number:** D18496  
**Account:** CORCCOGJ Olsson Associates  
**Project:** WGV 21-23(010-1405\_100\_100001)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2704-BS	FD4737.D	1	10/27/10	JB	10/27/10	OP2704	GFD206

The QC reported here applies to the following samples:

Method: SW846-8015B

D18496-1, D18496-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	654	98	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	102%	63-130%

6.2.1

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# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** D18496  
**Account:** CORCCOGJ Olsson Associates  
**Project:** WGV 21-23(010-1405\_100\_100001)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2704-MS	FD4738.D	2	10/27/10	JB	10/27/10	OP2704	GFD206
OP2704-MSD	FD4739.D	2	10/27/10	JB	10/27/10	OP2704	GFD206
D18462-5	FD4740.D	2	10/27/10	JB	10/27/10	OP2704	GFD206

The QC reported here applies to the following samples:

Method: SW846-8015B

D18496-1, D18496-2

CAS No.	Compound	D18462-5 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	3540		780	3920	49* a	3950	53* a	1	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D18462-5	Limits
84-15-1	o-Terphenyl	101%	98%	100%	63-130%

(a) Outside control limits due to high level in sample relative to spike amount.

## Metals Analysis

### QC Data Summaries

---

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D18496  
Account: CORCCOGJ - Olsson Associates  
Project: WGV 21-23(010-1405\_100\_100001)

QC Batch ID: MP3257  
Matrix Type: SOLID

Methods: SW846 6020  
Units: mg/kg

Prep Date: 10/27/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	.14	1.2		
Antimony	0.20	.001	.0095		
Arsenic	0.40	.049	.22	-0.086	<0.40
Barium	1.0	.0035	.1		
Beryllium	0.10	.0075	.014		
Boron	20	.97	1		
Cadmium	0.050	.023	.048		
Calcium	200	1.8	8.2		
Chromium	1.0	.021	.24		
Cobalt	0.10	.0033	.003		
Copper	1.0	.011	.063		
Iron	20	.81	3.7		
Lead	0.25	.0012	.015		
Magnesium	50	.067	2.6		
Manganese	0.50	.007	.029		
Molybdenum	0.50	.0044	.023		
Nickel	1.0	.0029	.031		
Phosphorus	30	1.8	3.5		
Potassium	100	2	3.2		
Selenium	0.20	.075	.19		
Silver	0.050	.0008	.002		
Sodium	250	.8	4.4		
Strontium	10	.004	.04		
Thallium	0.10	.015	.02		
Tin	5.0	.006	.028		
Titanium	1.0	.035	.062		
Uranium	0.25	.00038	.0009		
Vanadium	2.0	.052	.29		
Zinc	5.0	.039	.12		

Associated samples MP3257: D18496-3, D18496-4, D18496-5, D18496-6, D18496-7

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D18496  
 Account: CORCCOGJ - Olsson Associates  
 Project: WGV 21-23(010-1405\_100\_100001)

QC Batch ID: MP3257  
 Matrix Type: SOLID

Methods: SW846 6020  
 Units: mg/kg

Prep Date: 10/27/10

Metal	D18496-3 Original MS		Spikelot MPICPALL % Rec		QC Limits
Aluminum					
Antimony					
Arsenic	3.8	227	274	81.4	60-119
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP3257: D18496-3, D18496-4, D18496-5, D18496-6, D18496-7

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D18496  
 Account: CORCCOGJ - Olsson Associates  
 Project: WGV 21-23(010-1405\_100\_100001)

QC Batch ID: MP3257  
 Matrix Type: SOLID

Methods: SW846 6020  
 Units: mg/kg

Prep Date: 10/27/10

Metal	D18496-3 Original	MSD	Spikelot MPICPAL	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	3.8	244	283	84.9	7.2	20
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP3257: D18496-3, D18496-4, D18496-5, D18496-6, D18496-7

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested



## SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D18496

Account: CORCCOGJ - Olsson Associates

Project: WGV 21-23(010-1405\_100\_100001)

QC Batch ID: MP3257

Methods: SW846 6020

Matrix Type: SOLID

Units: mg/kg

Prep Date: 10/27/10

Metal	BSP Result	Spikelot MPICPALL	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	189	200	94.5	80-120
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP3257: D18496-3, D18496-4, D18496-5, D18496-6, D18496-7

Results &lt; IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: D18496  
 Account: CORCCOGJ - Olsson Associates  
 Project: WGV 21-23(010-1405\_100\_100001)

QC Batch ID: MP3257  
 Matrix Type: SOLID

Methods: SW846 6020  
 Units: ug/l

Prep Date: 10/27/10

Metal	D18496-3			QC	
	Original	SDL 5:25	%DIF	Limits	
Aluminum					
Antimony					
Arsenic	26.7	28.9	8.0	0-10	
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP3257: D18496-3, D18496-4, D18496-5, D18496-6, D18496-7

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.4  
7

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D18496  
Account: CORCCOGJ - Olsson Associates  
Project: WGV 21-23(010-1405\_100\_100001)

QC Batch ID: MP3287  
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B  
Units: ug/l

Prep Date: 11/01/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	500	35	250		
Antimony	150	8.5	65		
Arsenic	130	14	33		
Barium	50	.7	12		
Beryllium	50	7	22		
Boron	250	18	93		
Cadmium	50	1.1	6		
Calcium	2000	85	46	56.0	<2000
Chromium	50	1.4	8		
Cobalt	25	2.4	1.5		
Copper	25	8	14		
Iron	350	39	50		
Lead	250	6.5	16		
Lithium	10	3.8	8		
Magnesium	1000	29	62	-35	<1000
Manganese	25	1.1	3.5		
Molybdenum	50	2.1	6		
Nickel	150	1.9	3		
Phosphorus	500	75	270		
Potassium	5000	1900	2700		
Selenium	250	14	36		
Silicon	250	60	100		
Silver	150	4.9	1.5		
Sodium	2000	1200	110	-180	<2000
Strontium	25	.46	17		
Thallium	50	16	11		
Tin	250	70	22		
Titanium	50	.49	3.5		
Uranium	250	11	20		
Vanadium	50	1.4	1.5		
Zinc	150	3.8	8.5		

Associated samples MP3287: D18496-3A

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D18496  
Account: CORCCOGJ - Olsson Associates  
Project: WGV 21-23(010-1405\_100\_100001)

QC Batch ID: MP3287  
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B  
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D18496  
 Account: CORCCOGJ - Olsson Associates  
 Project: WGV 21-23(010-1405\_100\_100001)

QC Batch ID: MP3287  
 Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B  
 Units: ug/l

Prep Date: 11/01/10 11/01/10

Metal	D18496-3A Original MS		Spikelot MPICPALL % Rec		QC Limits	D18496-3A Original MS		Spikelot MPICPALL % Rec		QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Boron										
Cadmium										
Calcium	10200	128000	125000	94.2	75-125	10200	129000	125000	95.0	75-125
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Lithium										
Magnesium	2030	117000	125000	92.0	75-125	2030	117000	125000	92.0	75-125
Manganese										
Molybdenum										
Nickel										
Phosphorus										
Potassium										
Selenium										
Silicon										
Silver										
Sodium	6200	130000	125000	99.0	75-125	6200	131000	125000	99.8	75-125
Strontium										
Thallium										
Tin										
Titanium										
Uranium										
Vanadium										
Zinc										

Associated samples MP3287: D18496-3A

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D18496  
Account: CORCCOGJ - Olsson Associates  
Project: WGV 21-23(010-1405\_100\_100001)

QC Batch ID: MP3287  
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B  
Units: ug/l

Prep Date:

Metal

(N) Matrix Spike Rec. outside of QC limits  
(anr) Analyte not requested

## SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D18496

Account: CORCCOGJ - Olsson Associates

Project: WGV 21-23(010-1405\_100\_100001)

QC Batch ID: MP3287

Methods: LADNR29B, SW846 6010B

Matrix Type: AQUEOUS

Units: ug/l

Prep Date:

11/01/10

Metal	BSP Result	Spikelot MPICPALL	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	120000	125000	96.0	80-120
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	116000	125000	92.8	80-120
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	124000	125000	99.2	80-120
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP3287: D18496-3A

Results &lt; IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D18496  
Account: CORCCOGJ - Olsson Associates  
Project: WGV 21-23(010-1405\_100\_100001)

QC Batch ID: MP3287  
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B  
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested



## General Chemistry

### QC Data Summaries

---

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: D18496  
Account: CORCCOGJ - Olsson Associates  
Project: WGV 21-23(010-1405\_100\_100001)

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Specific Conductivity	GP3079/GN6994			umhos/cm	10003	10100	100.6	90-110%
pH	GN6954			su	8.00	7.96	99.5	99.3-100.7%
pH	GN6954			su	8.00	7.96	99.5	99.3-100.7%

Associated Samples:  
Batch GN6954: D18496-3  
Batch GP3079: D18496-3A  
(\*) Outside of QC limits

8.1  
8



06/20/11

Technical Report for

Williams Production RMT Company

WGV 21-23-697

Accutest Job Number: T78336

Sampling Date: 06/10/11

Report to:

Environmental Audit & Assessment  
225 N 5th Street Suite 8  
Grand Junction, CO 81501  
karolina.blaney@williams.com; jsanders@eaa-co.com  
ATTN: J. Sanders

Total number of pages in report: **22**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads 'Paul K Canevaro'.

Paul Canevaro  
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-10-3) AR (88-0756) FL (E87628) KS (E-10366) LA (85695/04004) OK (9103)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.  
Test results relate only to samples analyzed.

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Sample Summary

Williams Production RMT Company  
WGV 21-23-697

Job No: T78336

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T78336-1	06/10/11	10:07	06/11/11	SO	Soil	BG6-WGU2123
T78336-2	06/10/11	10:13	06/11/11	SO	Soil	BG7-WGU2123
T78336-3	06/10/11	10:19	06/11/11	SO	Soil	BG8-WGU2123
T78336-4	06/10/11	10:26	06/11/11	SO	Soil	BG9-WGU2123
T78336-5	06/10/11	10:33	06/11/11	SO	Soil	BG10-WGU2123

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## Sample Results

## Report of Analysis

Report of Analysis

<b>Client Sample ID:</b>	BG6-WGU2123	<b>Date Sampled:</b>	06/10/11
<b>Lab Sample ID:</b>	T78336-1	<b>Date Received:</b>	06/11/11
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	84.6
<b>Project:</b>	WGV 21-23-697		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic <sup>a</sup>	4.7	0.30	0.035	mg/kg	5	06/16/11	06/17/11 ANJ	SW846 6020A <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: N:MA26561  
(2) Prep QC Batch: N:MP58729  
  
(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit  
MDL = Method Detection Limit  
U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL

Report of Analysis

<b>Client Sample ID:</b>	BG7-WGU2123	<b>Date Sampled:</b>	06/10/11
<b>Lab Sample ID:</b>	T78336-2	<b>Date Received:</b>	06/11/11
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	93.1
<b>Project:</b>	WGV 21-23-697		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic <sup>a</sup>	5.1	0.27	0.031	mg/kg	5	06/16/11	06/17/11 ANJ	SW846 6020A <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: N:MA26561  
(2) Prep QC Batch: N:MP58729  
  
(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit  
MDL = Method Detection Limit  
U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL



Report of Analysis

<b>Client Sample ID:</b>	BG8-WGU2123	<b>Date Sampled:</b>	06/10/11
<b>Lab Sample ID:</b>	T78336-3	<b>Date Received:</b>	06/11/11
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	94.3
<b>Project:</b>	WGV 21-23-697		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic <sup>a</sup>	4.0	0.27	0.031	mg/kg	5	06/16/11	06/17/11 ANJ	SW846 6020A <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: N:MA26561  
(2) Prep QC Batch: N:MP58729  
  
(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit  
MDL = Method Detection Limit  
U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL

Report of Analysis

<b>Client Sample ID:</b>	BG9-WGU2123	<b>Date Sampled:</b>	06/10/11
<b>Lab Sample ID:</b>	T78336-4	<b>Date Received:</b>	06/11/11
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	82.2
<b>Project:</b>	WGV 21-23-697		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic <sup>a</sup>	4.4	0.31	0.036	mg/kg	5	06/16/11	06/17/11 ANJ	SW846 6020A <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: N:MA26561  
(2) Prep QC Batch: N:MP58729  
  
(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit  
MDL = Method Detection Limit  
U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL

Report of Analysis

<b>Client Sample ID:</b>	BG10-WGU2123	<b>Date Sampled:</b>	06/10/11
<b>Lab Sample ID:</b>	T78336-5	<b>Date Received:</b>	06/11/11
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	88.9
<b>Project:</b>	WGV 21-23-697		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic <sup>a</sup>	5.5	0.28	0.033	mg/kg	5	06/16/11	06/17/11 ANJ	SW846 6020A <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: N:MA26561  
(2) Prep QC Batch: N:MP58729  
  
(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit  
MDL = Method Detection Limit  
U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

10165 Harwin Dr, Ste 150 Houston, TX 77036  
TEL: 713-271-4700 FAX: 713-271-4770  
www.accutest.com

FED-EX Tracking #		Bottle Order Control #	
Accutest Quote #		Accutest Job # <b>778336</b>	

Client / Reporting Information		Project Information		Requested Analyses		Matrix Codes	
<b>Company Name</b> Environmental Audit + Assessment <b>Street Address</b> 225 N 5th St, Ste B <b>City</b> Grand Junction CO 81501 <b>Project Contact</b> J. SANDERS j.sanders@era-m.com <b>Phone #</b> 970-245-5897 <b>Fax #</b> 970-245-0759 <b>Sampler(s) Name(s)</b> J. SANDERS 970-640-9977		<b>Project Name:</b> WGV 21-23-1697 <b>Street</b> CO <b>State</b> CO <b>Billing Information (if different from Report to)</b> <b>Company Name</b> Williams Bmt Co <b>Street Address</b> 1058 County Road 215 <b>City</b> Parachute CO 81635 <b>State</b> CO <b>Zip</b> 81635 <b>Attention:</b> KAROLINA BLANEY		<b>Requested Analyses</b> ARSENIC 1 - SUBBULG 6020		<b>Matrix Codes</b> DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
<b>Accutest Sample #</b> 1 2 3 4 5		<b>Field ID / Point of Collection</b> BGL6 - WGV2123 BGL7 - WGV2123 BGL8 - WGV2123 BGL9 - WGV2123 BGL10 - WGV2123		<b>Date</b> 10-JUN-11 10-JUN-11 10-JUN-11 10-JUN-11 10-JUN-11		<b>Time</b> 1007 1013 1019 1026 1033	
<b>Sampled By</b> JS JS JS JS JS		<b>Matrix</b> S S S S S		<b># of bottles</b> 1 1 1 1 1		<b>LAB USE ONLY</b>	
<b>Collection</b> HCL NH4H PO4 ZINCALDI HNO3 H2SO4 NO3E DI Value MECH TSP NH4SO4 ENCORE OTHER		<b>Number of preserved bottles</b> X X X X X					
<b>Turnaround Time (Business days)</b> <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush TIA data available VIA Lablink		<b>Approved By (Accutest PM): / Date:</b> _____ _____ _____		<b>Data Deliverable Information</b> <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULT1 (Level 3+4) <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C" <input type="checkbox"/> TRRP <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other - WILLIAMS STD DELIVERABLES Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC & Surrogate Summary		<b>Comments / Special Instructions</b> ARSENIC FOR CORRC TABLE 910-1 WILLIAMS STANDARD DELIVERABLES	
<b>Sample Custody must be documented below each time samples change possession, including courier delivery.</b>							
<b>Relinquished by:</b> J. Sanders <b>Date Time:</b> 6/10/11 17:45		<b>Received By:</b> C. B <b>Date Time:</b> 		<b>Relinquished by:</b> FED-EX <b>Date Time:</b> 		<b>Received By:</b> K. Blaney <b>Date Time:</b> 	
<b>Relinquished by:</b> <b>Date Time:</b>		<b>Received By:</b> <b>Date Time:</b>		<b>Relinquished by:</b> <b>Date Time:</b>		<b>Received By:</b> <b>Date Time:</b>	
<b>Relinquished by:</b> <b>Date Time:</b>		<b>Received By:</b> <b>Date Time:</b>		<b>Relinquished by:</b> <b>Date Time:</b>		<b>Received By:</b> <b>Date Time:</b>	
<b>Custody Seal #</b> <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		<b>Preserved where applicable</b> <input type="checkbox"/>		<b>On Ice</b> <input type="checkbox"/>		<b>Cooler Temp.</b> 	

T78336: Chain of Custody

Page 1 of 3

Accutest Job Number: T78336 Client: ENVIRONMENTAL AUDIT ASSESSMENT Project: WGV 21-23-697  
 Date / Time Received: 6/11/2011 Delivery Method: Airbill #'s: 88706-6705-2447  
 No. Coolers: 1 Therm ID: IRGUN4; Temp Adjustment Factor: -0.1;  
 Cooler Temps (Initial/Adjusted): #1: (4.4/4.3);

**Cooler Security**  
 1. Custody Seals Present: ☒ Y ☐ N 3. COC Present: ☒ Y ☐ N  
 2. Custody Seals Intact: ☒ Y ☐ N 4. Smpl Dates/Time OK: ☒ Y ☐ N

**Cooler Temperature**  
 1. Temp criteria achieved: ☒ Y ☐ N  
 2. Cooler temp verification: IR Gun  
 3. Cooler media: Ice (Bag)

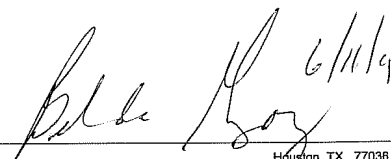
**Quality Control Preservation**  
 1. Trip Blank present / cooler: ☐ Y ☐ N ☒ N/A  
 2. Trip Blank listed on COC: ☐ Y ☐ N ☒ N/A  
 3. Samples preserved properly: ☒ Y ☐ N  
 4. VOCs headspace free: ☐ Y ☐ N ☒ N/A

**Sample Integrity - Documentation**  
 1. Sample labels present on bottles: ☒ Y ☐ N  
 2. Container labeling complete: ☒ Y ☐ N  
 3. Sample container label / COC agree: ☒ Y ☐ N

**Sample Integrity - Condition**  
 1. Sample recvd within HT: ☒ Y ☐ N  
 2. All containers accounted for: ☒ Y ☐ N  
 3. Condition of sample: Intact

**Sample Integrity - Instructions**  
 1. Analysis requested is clear: ☒ Y ☐ N  
 2. Bottles received for unspecified tests: ☐ Y ☒ N  
 3. Sufficient volume recvd for analysis: ☒ Y ☐ N  
 4. Compositing instructions clear: ☐ Y ☐ N ☒ N/A  
 5. Filtering instructions clear: ☐ Y ☐ N ☒ N/A

Comments



## Sample Receipt Log

**Job #:** T78336      **Date / Time Received:** 6/11/2011 11:00:00 AM      **Initials:** BG  
**Client:** ENVIRONMENTAL AUDIT ASSESSMENT

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	T78336-1	16oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IRGUN4	4.4	-0.1	4.3
1	T78336-2	16oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IRGUN4	4.4	-0.1	4.3
1	T78336-3	16oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IRGUN4	4.4	-0.1	4.3
1	T78336-4	16oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IRGUN4	4.4	-0.1	4.3
1	T78336-5	16oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IRGUN4	4.4	-0.1	4.3

**T78336: Chain of Custody**  
**Page 3 of 3**

## Misc. Forms

### Custody Documents and Other Forms

(Accutest New Jersey)

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Includes the following where applicable:

- Chain of Custody



# SUBCONTRACT COC

Page 1 of 1

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

Client Information		Subcontract Information		Requested Analyses												Matrix Codes			
Company Name Accutest Gulf Coast		Subcontract Laboratory ACCUTEST NEW JERSEY																	
Project Contact Sylvia Garza		Laboratory Contact Sample Receiving																	
Email sylvia@accutest.com		Email																	
Address 10165 Harwin Dr, Suite 150		Address																	
City Houston	State TX	Zip 77036	City	State	Zip														
Phone No. 713-271-4700		Phone No.																	
Accutest Sample Number	Collection		Matrix	# of bottles	Number of preserved bottles												Arsenic (6020)	%SOL	LAB USE ONLY
	Date	Time			VC	NaOH	HNO3	H2SO4	Distilled	TSF	NO3	OTHER							
T78336-1	6/10/2011		SO	1												X	X		
T78336-2	6/10/2011		SO	1												X	X	ME28	
T78336-3	6/10/2011		SO	1												X	X		
T78336-4	6/10/2011		SO	1												X	X		
T78336-5	6/10/2011		SO	1												X	X		
Turnaround Time (Business days)		Approved By/ Date:		Data Deliverable Information												Comments / Remarks			
<input type="checkbox"/> STANDARD <input type="checkbox"/> 7 Day <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> Other				<input type="checkbox"/> Commercial "A" <input checked="" type="checkbox"/> Commercial "B" <input type="checkbox"/> Reduced Tier 1 <input type="checkbox"/> Full Data Package <input type="checkbox"/> TRRP-13 <input type="checkbox"/> EDD Format <input type="checkbox"/> Other												REPORT QC WITH DATA			
Real time analytical data available via Lablink				Commercial "A" = Results Only Commercial "B" = Results & Standard QC												602 NMB 6/14/11			
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																			
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:		
1	6/13/11	Feder	2	6/14/11 0932	Feder	3			4			5							
3			4			5													
5																			
Custody Seal #												Preserved where applicable		On Ice		Cooler Temp.			

**T78336: Chain of Custody**  
**Page 1 of 2**  
**Accutest New Jersey**

# Accutest Laboratories Sample Receipt Summary

Accutest Job Number: T78336

Client:

Date / Time Received: 6/14/2011

Project:

No. Coolers: 1

Airbill #'s:

Delivery Method:

## Cooler Security

Y or N

Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

## Cooler Temperature

Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp. criteria achieved:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: |                                     |                          |
| 3. Cooler media:             | Ice (Bag)                           |                          |

## Quality Control Preservation

Y or N

N/A

- |                                 |                                     |                                     |                                     |
|---------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

## Sample Integrity - Documentation

Y or N

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

## Sample Integrity - Condition

Y or N

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |                          |

## Sample Integrity - Instructions

Y or N N/A

- |   |                                     |                                     |                                     |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Comments

## Metals Analysis

5

### QC Data Summaries

(Accutest New Jersey)

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Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: T78336  
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.  
Project: WPRMTCOP: WGV 21-23-697

QC Batch ID: MP58729  
Matrix Type: SOLID

Methods: SW846 6020A  
Units: mg/kg

Prep Date: 06/16/11

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	8.2	.7		
Antimony	0.25	.0084	.073		
Arsenic	0.25	.11	.029	-0.0064	<0.25
Barium	0.50	.021	.079		
Beryllium	0.25	.0064	.0021		
Boron	2.5	.14	.63		
Cadmium	0.25	.0083	.02		
Calcium	130	2	7.2		
Chromium	1.0	.012	.085		
Cobalt	0.25	.0018	.0025		
Copper	1.0	.011	.04		
Iron	25	1.1	2.6		
Lead	0.25	.005	.0078		
Magnesium	130	.14	2.3		
Manganese	0.25	.0061	.018		
Molybdenum	0.50	.011	.025		
Nickel	1.0	.0072	.26		
Potassium	130	2.9	4.9		
Selenium	0.25	.035	.06		
Silver	0.25	.0016	.009		
Sodium	130	1.3	3.8		
Strontium	2.5	.0036	.018		
Thallium	0.25	.022	.035		
Tin	2.5	.0093	.74		
Titanium	0.50	.036	.19		
Vanadium	1.0	.19	.14		

Associated samples MP58729: T78336-1, T78336-2, T78336-3, T78336-4, T78336-5

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T78336  
 Account: ALGC - Accutest Laboratories Gulf Coast, Inc.  
 Project: WPRMTCOP: WGV 21-23-697

QC Batch ID: MP58729  
 Matrix Type: SOLID

Methods: SW846 6020A  
 Units: mg/kg

Prep Date: 06/16/11

Metal	T78336-1 Original MS	Spikelot MPIOS4	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	4.7	452	459	97.4
Barium				75-125
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium	anr			

Associated samples MP58729: T78336-1, T78336-2, T78336-3, T78336-4, T78336-5

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T78336  
 Account: ALGC - Accutest Laboratories Gulf Coast, Inc.  
 Project: WPRMTCOP: WGV 21-23-697

QC Batch ID: MP58729  
 Matrix Type: SOLID

Methods: SW846 6020A  
 Units: mg/kg

Prep Date: 06/16/11

Metal	T78336-1 Original	MSD	Spikelot MPIOS4	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	4.7	470	478	97.4	3.9	20
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron						
Lead	anr					
Magnesium						
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium	anr					

Associated samples MP58729: T78336-1, T78336-2, T78336-3, T78336-4, T78336-5

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

## SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: T78336

Account: ALGC - Accutest Laboratories Gulf Coast, Inc.

Project: WPRMTCOP: WGV 21-23-697

QC Batch ID: MP58729

Methods: SW846 6020A

Matrix Type: SOLID

Units: mg/kg

Prep Date:

06/16/11

Metal	BSP Result	Spikelot MPIOS4	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	406	400	101.5	80-120
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium	anr			

Associated samples MP58729: T78336-1, T78336-2, T78336-3, T78336-4, T78336-5

Results &lt; IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

# SERIAL DILUTION RESULTS SUMMARY

Login Number: T78336  
 Account: ALGC - Accutest Laboratories Gulf Coast, Inc.  
 Project: WPRMTCOP: WGV 21-23-697

QC Batch ID: MP58729  
 Matrix Type: SOLID

Methods: SW846 6020A  
 Units: ug/l

Prep Date: 06/16/11

Metal	T78336-1			QC	
	Original	SDL 5:25	%DIF	Limits	
Aluminum					
Antimony	anr				
Arsenic	38.7	40.3	4.0	0-10	
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium	anr				
Cobalt	anr				
Copper	anr				
Iron					
Lead	anr				
Magnesium					
Manganese	anr				
Molybdenum	anr				
Nickel	anr				
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium	anr				

Associated samples MP58729: T78336-1, T78336-2, T78336-3, T78336-4, T78336-5

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested