

## **Addendum MU1 3-1-4**

### **Laboratory Report**



ENERGY LABORATORIES, INC. • 2393 Salt Creek Highway (82601) • P.O. Box 3258 • Casper, WY 82602  
Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

## ANALYTICAL SUMMARY REPORT

October 26, 2008

AATA International Inc  
300 E Boardwalk Dr STE 4A  
Fort Collins, CO 80525

Workorder No.: C08090808

Quote ID: C2932 - Topsoil Suitability

Project Name: Not Indicated

Energy Laboratories, Inc. received the following 13 samples from AATA International Inc on 9/19/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C08090808-001	MV1PR35-0-8	09/09/08 11:20	09/19/08	Soil	Saturated Paste Electrical Conductivity Selenium, ABDTPA Extractable Metals, CaCl2 Extractable Metals, Soluble Lime as CaCO3 Organic Carbon Saturation Percentage Saturated Paste pH ABDTPA Soil Extraction CaCl2 Hot Water Soil Extraction Lime Percentage Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C08090808-002	MV1PR35-8-18	09/09/08 11:20	09/19/08	Soil	Same As Above
C08090808-003	MV1PR35-18-34	09/09/08 11:20	09/19/08	Soil	Same As Above
C08090808-004	MV1PR35-34-48	09/09/08 11:20	09/19/08	Soil	Same As Above
C08090808-005	MV1PR33-0-12	09/09/08 14:50	09/19/08	Soil	Same As Above
C08090808-006	MV1PR33-12-33	09/09/08 14:50	09/19/08	Soil	Same As Above
C08090808-007	MV1PR50-0-6	09/11/08 13:22	09/19/08	Soil	Same As Above
C08090808-008	MV1PR50-6-60	09/11/08 13:22	09/19/08	Soil	Same As Above
C08090808-009	MV1PR13-0-10	09/11/08 12:46	09/19/08	Soil	Same As Above
C08090808-010	MV1PR15-0-24	09/11/08 12:00	09/19/08	Soil	Same As Above
C08090808-011	MV1PR15-24-60	09/11/08 12:00	09/19/08	Soil	Same As Above
C08090808-012	MV1PR23-0-10	09/11/08 15:00	09/19/08	Soil	Same As Above
C08090808-013	MV1PR23-10-60	09/11/08 15:00	09/19/08	Soil	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

  
STEVE CARLSTON

Summary Report: Page 1 of 1



LABORATORY ANALYTICAL REPORT

Report Date: 10/26/08  
 Date Received: 09/19/08

Client: AATA International Inc  
 Project: Not Indicated  
 Workorder: C08090808

Sample ID	Client Sample ID	Analysis		EC SatPst	SatPst	SatPst	Lime as CaCO3	pH	Ca SatPst	Mg SatPst	Na SatPst	SAR	Sand	Silt	Clay	Texture	Se-ABDTPA		
		Units	Results															Results	Results
C08090808-001	MV1PR35-0-9	mmhos/cm	0.76	%	53.8		2.0	s_u	6.1	meq/L	3.84	meq/L	1.70	%	44	%	25	L	0.011
C08090808-002	MV1PR35-4-18		0.31		34.1		1.1		6.5		1.86		0.86		40		22	L	0.005
C08090808-003	MV1PR35-18-34		2.77		43.2		1.3		8.3		1.86		0.8		44		28	CL	0.009
C08090808-004	MV1PR35-34-48		0.53		40.7		1.2		6.6		3.21		1.38		33		23	L	0.004
C08090808-005	MV1PR33-0-12		0.39		27.1		1.1		7.0		2.77		1.16		24		18	SL	<0.002
C08090808-006	MV1PR33-12-33		0.51		34.4		0.9		7.0		3.26		1.42		4		12	LS	<0.002
C08090808-007	MV1PR50-0-6		0.47		41.5		1.0		7.8		2.54		1.13		10		18	SL	0.007
C08090808-008	MV1PR50-6-60		0.47		35.1		0.7		7.7		2.84		1.30		6		14	SL	0.005
C08090808-009	MV1PR13-0-10		0.48		27.1		0.8		7.6		3.22		1.03		18		18	SL	<0.002
C08090808-010	MV1PR15-0-24		0.52		37.0		1.0		7.6		4.02		1.95		38		20	L	0.003
C08090808-011	MV1PR15-24-60		0.57		31.8		0.7		8.9		4.14		1.89		28		20	L	0.004
C08090808-012	MV1PR23-0-10		0.55		31.7		1.1		7.3		3.56		1.83		16		18	SL	0.005
C08090808-013	MV1PR23-10-60		1.82		30.8		0.8		8.0		7.80		3.33		6		12	SL	0.007



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LABORATORY ANALYTICAL REPORT

Report Date: 10/26/08  
 Date Received: 09/19/08

Client: AATA International, Inc  
 Project: Not Indicated  
 Workorder: C08090808

Sample ID	Client Sample ID	Analysis		Organic Matter %
		Units	B-CACL2 mg/kg-dry Results Recs	
C08090808-001	MVIPR35-0-8		0.78	5.8
C08090808-002	MVIPR35-4-18		0.21	1.2
C08090808-003	MVIPR35-18-34		0.27	0.8
C08090808-004	MVIPR35-34-48		0.22	0.7
C08090808-005	MVIPR33-0-12		< 0.20	0.8
C08090808-006	MVIPR33-12-33		< 0.20	0.5
C08090808-007	MVIPR30-0-6		< 0.20	1.5
C08090808-008	MVIPR30-6-60		< 0.20	0.5
C08090808-009	MVIPR13-0-10		0.23	1.0
C08090808-010	MVIPR15-0-24		0.63	2.4
C08090808-011	MVIPR15-24-60		0.29	0.9
C08090808-012	MVIPR23-0-10		< 0.20	0.9
C08090808-013	MVIPR23-10-60		0.31	0.3



### QA/QC Summary Report

Client: AATA International Inc  
 Project: Not Indicated

Report Date: 10/26/08  
 Work Order: C08090808

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: ASA15-5</b>									Batch: 20140
Sample ID: LCS-20140	Laboratory Control Sample					Run: PSA_081017A			10/17/08 07:01
Sand	90.0	%	1.0	93	85	115			
Sample ID: C08091132-001ADUP	Sample Duplicate					Run: PSA_081017A			10/17/08 07:02
Sand	76.0	%	1.0				0	20	
Silt	16.0	%	1.0				0	20	
Clay	8.00	%	1.0				0	20	
<b>Method: ASA20-3</b>									Batch: 20046
Sample ID: MBLK-1	Method Blank					Run: HACH DR3000_081009C			10/09/08 14:03
Organic Carbon, Total (TOC)	ND	%	0.02						
Organic Matter, Total (TOM)	ND	%	0.03						
Sample ID: LCS-2	Laboratory Control Sample					Run: HACH DR3000_081009C			10/09/08 14:03
Organic Carbon, Total (TOC)	1.5	%	0.10	106	70	120			
Organic Matter, Total (TOM)	2.6	%	0.17	102	70	120			
Sample ID: C08091057-007ADUP	Sample Duplicate					Run: HACH DR3000_081009C			10/09/08 14:07
Organic Carbon, Total (TOC)	0.060	%	0.10				0	20	
Organic Matter, Total (TOM)	0.10	%	0.17				0	20	
<b>Method: ASAM10-3</b>									Batch: 20053
Sample ID: LCS-20053	Laboratory Control Sample					Run: COND1-C_081010A			10/10/08 07:21
Conductivity, paste extract	3.13	mmhos/cm	0.010	101	70	130			
Sample ID: C08090808-013ADUP	Sample Duplicate					Run: COND1-C_081010A			10/10/08 07:24
Conductivity, paste extract	1.80	mmhos/cm	0.010				0.9	20	
<b>Method: ASAM10-3.2</b>									Batch: 20053
Sample ID: LCS-20053	Laboratory Control Sample					Run: COND1-C_081010A			10/10/08 07:21
pH, sat. paste	2.1	s.u.	0.10	91	80	120			
Sample ID: C08090808-013ADUP	Sample Duplicate					Run: COND1-C_081010A			10/10/08 07:24
pH, sat. paste	8.1	s.u.	0.10				1	20	

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



### QA/QC Summary Report

Client: AATA International Inc  
 Project: Not Indicated

Report Date: 10/26/08  
 Work Order: C08090808

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: SW6010B</b>							Batch: 19918		
Sample ID: MB-19918	Method Blank					Run: ICP2-C_080930A		09/30/08 23:37	
Boron	ND	mg/kg-dry	0.09						
Sample ID: LCS-19918	Laboratory Control Sample					Run: ICP2-C_080930A		09/30/08 23:41	
Boron	1.3	mg/kg-dry	0.20	98	80	120			
Sample ID: C08090808-013AMS	Sample Matrix Spike					Run: ICP2-C_080930A		10/01/08 00:55	
Boron	1.6	mg/kg-dry	0.20	94	80	120			
Sample ID: C08090808-013AMSD	Sample Matrix Spike Duplicate					Run: ICP2-C_080930A		10/01/08 00:59	
Boron	1.6	mg/kg-dry	0.20	97	80	120	2	20	
<b>Method: SW8010B</b>							Batch: 20053		
Sample ID: MB-20053	Method Blank					Run: ICP2-C_081013A		10/13/08 23:17	
Calcium	ND	mg/L	0.2						
Magnesium	ND	mg/L	0.2						
Sodium	ND	mg/L	0.3						
Calcium, sat. paste	ND	meq/L	0.008						
Magnesium, sat. paste	ND	meq/L	0.02						
Sodium, sat. paste	ND	meq/L	0.01						
Sample ID: LCS-20053	Laboratory Control Sample					Run: ICP2-C_081013A		10/13/08 23:21	
Calcium	61.7	mg/L	0.50	123	70	130			
Magnesium	62.3	mg/L	0.50	125	70	130			
Sodium	51.3	mg/L	0.50	103	70	130			
Sample ID: C08090808-001AMS2	Sample Matrix Spike					Run: ICP2-C_081013A		10/13/08 23:30	
Calcium	183	mg/L	0.50	212	75	125			S
Magnesium	129	mg/L	0.50	217	75	125			S
Sodium	106	mg/L	0.54	204	75	125			S
Sample ID: C08090808-001AMSD2	Sample Matrix Spike Duplicate					Run: ICP2-C_081013A		10/13/08 23:34	
Calcium	190	mg/L	0.50	227	75	125	4.2	20	S
Magnesium	134	mg/L	0.50	226	75	125	3.4	20	S
Sodium	105	mg/L	0.54	203	75	125	0.6	20	S
Sample ID: C08090808-013ADUP	Sample Duplicate					Run: ICP2-C_081013A		10/14/08 00:55	
Calcium	146	mg/L	0.79				6.7	20	
Magnesium	37.0	mg/L	0.95				7.8	20	
Sodium	227	mg/L	1.3				3.3	20	
Calcium, sat. paste	7.29	meq/L	0.040						
Magnesium, sat. paste	3.08	meq/L	0.080						
Sodium, sat. paste	9.89	meq/L	0.058						

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



### QA/QC Summary Report

Client: AATA International Inc

Report Date: 10/26/08

Project: Not Indicated

Work Order: C08090808

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: SW7742</b>									Batch: 19919
Sample ID: MB-19919	Method Blank								Run: CVAA-C202_081001B 10/01/08 15:06
Selenium	ND	mg/kg-dry	0.001						
Sample ID: LCS-19919	Laboratory Control Sample								Run: CVAA-C202_081001B 10/01/08 15:15
Selenium	0.272	mg/kg-dry	0.0020	80	80	120			
Sample ID: C08090808-013AMSD	Sample Matrix Spike Duplicate								Run: CVAA-C202_081001B 10/01/08 16:00
Selenium	0.392	mg/kg-dry	0.0040	116	80	120	2.7	20	
Sample ID: C08090808-013AMS	Sample Matrix Spike								Run: CVAA-C202_081001B 10/01/08 16:04
Selenium	0.382	mg/kg-dry	0.0040	113	80	120			
<b>Method: USDA23c</b>									Batch: 19920
Sample ID: MB-19920	Method Blank								Run: ORION 3 STAR PH_080927A 09/27/08 11:44
Lime as CaCO3	0.2	%	0.1						
Sample ID: LCS-19920	Laboratory Control Sample								Run: ORION 3 STAR PH_080927A 09/27/08 11:45
Lime as CaCO3	2.75	%	0.10	102	70	120			
Sample ID: C08090808-013ADUP	Sample Duplicate								Run: ORION 3 STAR PH_080927A 09/27/08 11:58
Lime as CaCO3	0.744	%	0.10				18	20	
<b>Method: USDA27a</b>									Batch: R109023
Sample ID: LCS-20053	Laboratory Control Sample								Run: SARTORIUS_081010A 10/08/08 15:42
Saturation Percentage	49.3	%	0.10	99	80	120			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



# Chain of Custody and Analytical Request Record

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PLEASE PRINT- Provide as much information as possible.

<b>Company Name:</b> AATA INT'L		<b>Project Name, PWS, Permit, Etc.</b>		<b>Sample Origin</b> State:		<b>EPA/State Compliance:</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
<b>Report Mail Address:</b> 2240 LAKE ST. STE 210 DENVER CO 80205		<b>Contact Name:</b> ETHAN BROWN Phone/Fax: 720-974-2550 Email: e.brown@ata.com		<b>Sampler: (Please Print)</b> JAY CIPRA		<b>Shipped by:</b> DIE	
<b>Invoice Address:</b> SAME		<b>Invoice Contact &amp; Phone:</b>		<b>Purchase Order:</b> 301-805		<b>Receipt Temp:</b> -19 °C	
<b>Special Report/Formats - ELI must be notified prior to sample submittal for the following:</b> <input type="checkbox"/> DW <input type="checkbox"/> GSA <input type="checkbox"/> POT/WWTP <input type="checkbox"/> State: <input type="checkbox"/> Other:		<input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC		<b>Comments:</b> R U S H		<b>On Ice:</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
<b>Number of Containers</b> Sample Type: A W S B O Vegetation Glossary Air Water Soils/Solids WDEQ Lab Soil		<b>MATRIX</b>		<b>Normal Turnaround (TAT)</b> SEE ATTACHED		<b>Cooler ID(s):</b> C-2226	
<b>SAMPLE IDENTIFICATION</b> (Name, Location, Interval, etc.)		<b>Collection Date</b>		<b>Collection Time</b>		<b>Signature Match</b> Y/N Y/N Y/N	
1 MUI PR 35-0-8		9/5/08		11:20		Custody Seal Y/N	
2 MUI PR 35-8-18		9/9/08		11:26		Intact Y/N	
3 MUI PR 35-18-34		9/9/08		11:20		Signature Match Y/N	
4 MUI PR 35-34-48		9/9/08		11:20		LABORATORY USE ONLY	
5 MUI PR 35-0-12		9/9/08		14:50			
6 MUI PR 33-12-33		9/9/08		14:50			
7 MUI PR 50-0-6		9/11/08		13:22			
8 MUI PR 50-6-60		9/11/08		13:22			
9							
10							
<b>Retinquished by (print):</b> Ethan Brown		<b>Date/Time:</b> 9/13/08		<b>Signature:</b> [Signature]		<b>Received by (print):</b> Jay Cipra	
<b>Retinquished by (print):</b>		<b>Date/Time:</b>		<b>Signature:</b>		<b>Received by (print):</b> Jay Cipra	
<b>Sample Disposal:</b>		<b>Return to Client:</b>		<b>Lab Disposal:</b>		<b>Received by Laboratory:</b>	
<b>Custody Record MUST be Signed</b>		<b>Date/Time:</b>		<b>Signature:</b>		<b>Date/Time:</b>	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.





# Chain of Custody and Analytical Request Record

Page      of     

**PLEASE PRINT - Provide as much information as possible.**

Project Name, PWS, Permit, Etc. IVE-CC      Sample Origin WY      EPA/State Compliance: Yes  No

Contact Name: ETHAN BLAND      Phone/Fax: 760-974-2550      Email: ethan\_bland@262.com      Sampler: (Please Print) Jim Cirpa

Invoice Contact & Phone: CALLINS      Purchase Order: 301-805      Quote/Bottle Order: C2932

Special Report/Formats - ELI must be notified prior to sample submittal for the following:

DW       A2LA       EDD/EDT (Electronic Data)       GSA       POTW/WWTP       State:       LEVEL IV       Other:       NELAC

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED		Normal Turnaround (TAT)	Comments:	Shipped by:	Cooler ID(s):	Receipt Temp	On Ice:	Custody Seal	Intact	Signature Match
				Vegetation	Soils/Solids									
1 <u>MU1 PR 13-0-10</u>	<u>9/11/08</u>	<u>12:46</u>	<u>S</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
2 <u>MU1 PR 15-0-24</u>	<u>9/11/08</u>	<u>12:00</u>		<input type="checkbox"/>	<input type="checkbox"/>									
3 <u>MU1 PR 15-24-60</u>	<u>9/11/08</u>	<u>12:00</u>		<input type="checkbox"/>	<input type="checkbox"/>									
4 <u>MU1 PR 23-0-10</u>	<u>9/11/08</u>	<u>15:00</u>		<input type="checkbox"/>	<input type="checkbox"/>									
5 <u>MU1 PR 23-10-60</u>	<u>9/11/08</u>	<u>15:00</u>		<input type="checkbox"/>	<input type="checkbox"/>									
6				<input type="checkbox"/>	<input type="checkbox"/>									
7				<input type="checkbox"/>	<input type="checkbox"/>									
8				<input type="checkbox"/>	<input type="checkbox"/>									
9				<input type="checkbox"/>	<input type="checkbox"/>									
10				<input type="checkbox"/>	<input type="checkbox"/>									

LABORATORY USE ONLY

Received by (print): ASHLEY HARRIS      Date/Time: 9-19-08 10:20      Signature: [Signature]

Received by (print): ASHLEY HARRIS      Date/Time: 9-19-08 10:20      Signature: [Signature]

Sample Disposal: Return to Client      Lab Disposal:

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.