

**Addendum OP-5a-5**

**Laboratory Report**



## 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

**LABORATORY ANALYTICAL REPORT**

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

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



Sample ID	Client Sample ID	Analysis	EC SatPst	Saturation SatPst	Lime as CaCO3	pH SatPst	Ca SatPst	Mg SatPst	Na SatPst	SAR	Sand	Silt	Clay	Texture	Se-ABDTPA
		Units	mmhos/cm	%	%	s_u	meq/L	meq/L	meq/L	unitless	%	%	%		mg/kg-dry
		Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
C08090808-001	MV1PR35-0-8	0.78	53.8	2.0	6.1	3.84	1.70	0.17	0.10	0.10	31	44	25	L	0.011
C08090808-002	MV1PR35-8-18	0.31	34.1	1.1	6.5	1.86	0.86	0.20	0.17	0.17	38	40	22	L	0.005
C08090808-003	MV1PR35-18-34	2.77	43.2	1.3	6.3	1.96	0.8	0.3	0.25	0.25	28	44	28	CL	0.009
C08090808-004	MV1PR35-34-48	0.53	40.7	1.2	6.6	3.21	1.38	0.41	0.27	0.27	44	33	23	L	0.004
C08090808-005	MV1PR33-0-12	0.39	27.1	1.1	7.0	2.77	1.16	0.55	0.39	0.39	58	24	18	SL	< 0.002
C08090808-006	MV1PR33-12-33	0.51	34.4	0.9	7.0	3.26	1.42	1.03	0.68	0.68	84	4	12	LS	< 0.002
C08090808-007	MV1PR50-0-6	0.47	41.5	1.0	7.8	2.54	1.13	1.13	0.84	0.84	72	10	18	SL	0.007
C08090808-008	MV1PR50-6-60	0.47	35.1	0.7	7.7	2.94	1.30	0.70	0.48	0.48	80	6	14	SL	0.005
C08090808-009	MV1PR13-0-10	0.48	27.1	0.8	7.8	3.22	1.03	1.20	0.83	0.83	66	16	18	SL	< 0.002
C08090808-010	MV1PR15-0-24	0.52	37.0	1.0	7.6	4.02	1.85	0.44	0.26	0.26	42	38	20	L	0.003
C08090808-011	MV1PR15-24-60	0.57	31.6	0.7	6.9	4.14	1.69	0.58	0.34	0.34	52	28	20	L	0.004
C08090808-012	MV1PR23-0-10	0.55	31.7	1.1	7.3	3.56	1.83	0.85	0.52	0.52	68	16	16	SL	0.005
C08090808-013	MV1PR23-10-60	1.82	30.6	0.9	8.0	7.80	3.33	10.2	4.34	4.34	82	6	12	SL	0.007

**ENERGY LABORATORIES, INC.** • 2393 Salk Creek Highway (R2601) • 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

**LABORATORY ANALYTICAL REPORT**

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

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

Sample ID	Client Sample ID	Analysis	B-CACL2	Organic Matter
		Units	mg/kg-dry	%
		Results	Res	ults
C08090808-001	MVIPR35-0-8	0.78		5.6
C08090808-002	MVIPR35-8-18	0.21		1.2
C08090808-003	MVIPR35-18-34	0.27		0.9
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	MVIPR50-0-6	< 0.20		1.5
C08090808-008	MVIPR50-6-60	< 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



ENERGY LABORATORIES, INC. • 2993 Salt Creek Highway (82801) • P.O. Box 3258 • Casper, WY 82602  
 Toll Free 888.236.0315 • 307.236.0315 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com



### 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> <span style="float: right;">Batch: 20140</span>									
<b>Sample ID: LCS-20140</b>	Laboratory Control Sample								
Sand	90.0	%	1.0	93	85	115			10/17/08 07:01
<b>Run: PSA_081017A</b>									
<b>Sample ID: C08091132-001ADUP</b>	Sample Duplicate								
Sand	76.0	%	1.0				0	20	10/17/08 07:02
Silt	16.0	%	1.0				0	20	
Clay	8.00	%	1.0				0	20	
<b>Run: PSA_081017A</b>									
<b>Method: ASA29-3</b> <span style="float: right;">Batch: 20046</span>									
<b>Sample ID: MBLK-1</b>	Method Blank								
Organic Carbon, Total (TOC)	ND	%	0.02						10/09/08 14:03
Organic Matter, Total (TOM)	ND	%	0.03						
<b>Run: HACH DR3000_081009C</b>									
<b>Sample ID: LCS-2</b>	Laboratory Control Sample								
Organic Carbon, Total (TOC)	1.5	%	0.10	106	70	120			10/09/08 14:03
Organic Matter, Total (TOM)	2.6	%	0.17	102	70	120			
<b>Run: HACH DR3000_081009C</b>									
<b>Sample ID: C08091057-007ADUP</b>	Sample Duplicate								
Organic Carbon, Total (TOC)	0.060	%	0.10				0	20	10/09/08 14:07
Organic Matter, Total (TOM)	0.10	%	0.17				0	20	
<b>Run: HACH DR3000_081009C</b>									
<b>Method: ASAM10-3</b> <span style="float: right;">Batch: 20053</span>									
<b>Sample ID: LCS-20053</b>	Laboratory Control Sample								
Conductivity, paste extract	3.13	mmhos/cm	0.010	101	70	130			10/10/08 07:21
<b>Run: COND1-C_081010A</b>									
<b>Sample ID: C08090808-013ADUP</b>	Sample Duplicate								
Conductivity, paste extract	1.80	mmhos/cm	0.010				0.9	20	10/10/08 07:24
<b>Run: COND1-C_081010A</b>									
<b>Method: ASAM10-3.2</b> <span style="float: right;">Batch: 20053</span>									
<b>Sample ID: LCS-20053</b>	Laboratory Control Sample								
pH, sat. paste	2.1	s.u.	0.10	91	80	120			10/10/08 07:21
<b>Run: COND1-C_081010A</b>									
<b>Sample ID: C08090808-013ADUP</b>	Sample Duplicate								
pH, sat. paste	8.1	s.u.	0.10				1	20	10/10/08 07:24
<b>Run: COND1-C_081010A</b>									

**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> <span style="float: right;">Batch: 19918</span>									
<b>Sample ID: MB-19918</b>	Method Blank								
Boron	ND	mg/kg-dry	0.09						Run: ICP2-C_080930A 09/30/08 23:37
<b>Sample ID: LCS-19918</b>	Laboratory Control Sample								
Boron	1.3	mg/kg-dry	0.20	98	80	120			Run: ICP2-C_080930A 09/30/08 23:41
<b>Sample ID: C08090808-013AMS</b>	Sample Matrix Spike								
Boron	1.6	mg/kg-dry	0.20	94	80	120			Run: ICP2-C_080930A 10/01/08 00:55
<b>Sample ID: C08090808-013AMSD</b>	Sample Matrix Spike Duplicate								
Boron	1.6	mg/kg-dry	0.20	97	80	120	2	20	Run: ICP2-C_080930A 10/01/08 00:59
<b>Method: SW6010B</b> <span style="float: right;">Batch: 20053</span>									
<b>Sample ID: MB-20053</b>	Method Blank								
Calcium	ND	mg/L	0.2						Run: ICP2-C_081013A 10/13/08 23:17
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						
<b>Sample ID: LCS-20053</b>	Laboratory Control Sample								
Calcium	61.7	mg/L	0.50	123	70	130			Run: ICP2-C_081013A 10/13/08 23:21
Magnesium	62.3	mg/L	0.50	125	70	130			
Sodium	51.3	mg/L	0.50	103	70	130			
<b>Sample ID: C08090808-001AMS2</b>	Sample Matrix Spike								
Calcium	183	mg/L	0.50	212	75	125			Run: ICP2-C_081013A 10/13/08 23:30 S
Magnesium	129	mg/L	0.50	217	75	125			S
Sodium	106	mg/L	0.54	204	75	125			S
<b>Sample ID: C08090808-001AMSD2</b>	Sample Matrix Spike Duplicate								
Calcium	190	mg/L	0.50	227	75	125	4.2	20	Run: ICP2-C_081013A 10/13/08 23:34 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
<b>Sample ID: C08090808-013ADUP</b>	Sample Duplicate								
Calcium	146	mg/L	0.79				6.7	20	Run: ICP2-C_081013A 10/14/08 00:55
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  
 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: 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

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

Company Name: <u>AATA INT'L</u>		Project Name, PWS, Permit, Etc.		Sample Origin State:	EPA/State Compliance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																											
Report Mail Address: <u>2240 BLAKE ST. STE 210 DENVER, CO 80205</u>		Contact Name: <u>ETHAN BROWN</u>	Phone/Fax: <u>720-974-2550</u>	Email: <u>ethan.brown@at2.com</u>	Sampler: (Please Print) <u>JAN CIARA</u>																											
Invoice Address: <u>SAME</u>		Invoice Contact & Phone:		Purchase Order: <u>301-805</u>	Quote/Bottle Order: <u>C2932</u>																											
Special Report/Formats – ELI must be notified prior to sample submittal for the following:  <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> GSA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/WWTP                        Format: _____ <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC		Number of Containers Sample Type: <input type="checkbox"/> A W <input type="checkbox"/> S <input type="checkbox"/> V <input type="checkbox"/> B <input type="checkbox"/> O <input type="checkbox"/> Air <input type="checkbox"/> Water <input type="checkbox"/> Soils/Solids <input type="checkbox"/> Vegetation <input type="checkbox"/> Bioassay <input type="checkbox"/> Other	ANALYSIS REQUESTED			R U S H  Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page  Comments:	Shipped by: <u>DIE</u>																									
			SEE ATTACHED				Normal Turnaround (TAT)	Cooler ID(s): <u>C-2226</u>																								
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)    Collection Date    Collection Time    MATRIX		WDEQ TOSSOL  ↓ ↓  ↓ ↓			Receipt Temp: <u>-19</u> °C																											
1 <u>MU1 PR35-0-8</u> <u>9/9/08</u> <u>11:20</u> <u>S</u>					LABORATORY USE ONLY			On Ice:    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																								
2 <u>MU1 PR35-8-18</u> <u>9/9/08</u> <u>11:26</u>								C-2226			Custody Seal Intact:    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																					
3 <u>MU1 PR35-18-34</u> <u>9/9/08</u> <u>11:20</u>											Signature Match:    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			RECEIVED																		
4 <u>MU1 PR35-34-48</u> <u>9/9/08</u> <u>11:20</u>															RECEIVED																	
5 <u>MU1 PR35-0-12</u> <u>9/9/08</u> <u>14:50</u>																		RECEIVED														
6 <u>MU1 PR35-12-33</u> <u>9/9/08</u> <u>14:50</u>																					RECEIVED											
7 <u>MU1 PR50-0-6</u> <u>9/11/08</u> <u>13:22</u>																								RECEIVED								
8 <u>MU1 PR50-6-60</u> <u>9/11/08</u> <u>13:22</u>																											RECEIVED					
9																														RECEIVED		
10		RECEIVED																														
Custody Record MUST be Signed					Relinquished by (print): <u>Duncan Eccles</u>	Date/Time: <u>9/13/08</u>	Signature: <u>[Signature]</u>																									
					Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:																						
Sample Disposal:    Return to Client: _____    Lab Disposal: <input checked="" type="checkbox"/>					Received by Laboratory:		Date/Time:	Signature:																								

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.



