

EMSL Analytical, Inc.

<http://www.emsl.com>

3 Cooper St.
Westmont, NJ 08108
Phone: (856) 858-4800
Fax: (856) 858-4571

Attn: **Jennifer Morris**
CSS, Inc. / NASA Ames Research Center
Code QH, MS: 223-6
Moffett Field, CA 94035

12/5/2011

Phone: (650) 604-6295
Fax: (650) 604-2034

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 11/29/2011. The results are tabulated on the attached data pages for the following client designated project:

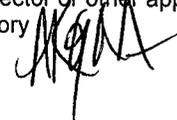
N231/234A - Demo

The reference number for these samples is EMSL Order #011105969. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 858-4800.

Reviewed and Approved By:



Julie Smith - Laboratory Director or other approved signatory



The test results contained within this report meet the requirements of NELAC and/or the specific certification program that is applicable, unless otherwise noted.

NELAP Certifications: NJ 04653, NY 10896, PA 68-00367

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

**EMSL Analytical, Inc.**

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4571 Email: jsmith@emsl.com



Attn: **Jennifer Morris**
CSS, Inc. / NASA Ames Research Center
Code QH, MS: 223-6
Moffett Field, CA 94035

Customer ID: CSSI78
 Customer PO:
 Received: 11/29/11 11:30 AM
 EMSL Order: 011105969

Fax: (650) 604-2034 Phone: (650) 604-6295
 Project: N231/234A - Demo

Analytical Results

Client Sample Description 111811-Shere-01 *Collected:* 11/18/2011 *Lab ID:* 0001

<i>Method</i>	<i>Parameter</i>	<i>Result</i>	<i>Reporting</i>		<i>Analysis Date</i>	<i>Analyst</i>
			<i>Limit</i>	<i>Units</i>		
6010B	Cadmium	0.42	0.37	mg/Kg	12/1/2011	bely
3060A/7196A	Hexavalent Chromium	ND	4.0	mg/Kg	12/2/2011	sstorey

Client Sample Description 111811-Tank-02 *Collected:* 11/18/2011 *Lab ID:* 0002

<i>Method</i>	<i>Parameter</i>	<i>Result</i>	<i>Reporting</i>		<i>Analysis Date</i>	<i>Analyst</i>
			<i>Limit</i>	<i>Units</i>		
6010B	Cadmium	ND	0.40	mg/Kg	12/1/2011	bely
3060A/7196A	Hexavalent Chromium	190	50	mg/Kg	12/2/2011	sstorey

Definitions:

ND - indicates that the analyte was not detected at the reporting limit



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

011105969
Lead (Pb) Chain of Custody
EMSL Order ID (Lab Use Only):

09113258

EMSL ANALYTICAL, INC.
2235 POLVOROSA DRIVE,
SUITE 230
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

Company: <u>CSS</u>		EMSL-Bill to: <input type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**		
Street:		Third Party Billing requires written authorization from third party		
City:	State/Province:	Zip/Postal Code:	Country:	
Report To (Name): <u>Jennifer Morris</u>		Fax #:		
Telephone #:		Email Address: <u>Jenn.F.Morris@NASA.gov</u>		
Project Name/Number: <u>N231/234A - Demo</u>				
Please Provide Results: <input type="checkbox"/> Fax <input type="checkbox"/> Email		Purchase Order:	U.S. State Samples Taken:	
Turnaround Time (TAT) Options* - Please Check				
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input checked="" type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week	
<small>*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide</small>				
Matrix	Method	Instrument	Reporting Limit	Check
Chips <input checked="" type="checkbox"/> % by wt. <input type="checkbox"/> mg/cm ² <input type="checkbox"/> ppm	SW846-7000B/7420 or AOAC 974.02	Flame Atomic Absorption	0.01%	<input type="checkbox"/>
	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	<input type="checkbox"/>
Air	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	<input type="checkbox"/>
	NIOSH 7300 modified	ICP-AES	0.5 µg/filter	<input type="checkbox"/>
Wipe* <input type="checkbox"/> ASTM <input type="checkbox"/> non ASTM <small>*if no box is checked, non-ASTM Wipe is assumed</small>	SW846-7000B/7420	Flame Atomic Absorption	10 µg/wipe	<input type="checkbox"/>
	SW846-6010B or C	ICP-AES	0.5 µg/wipe	<input type="checkbox"/>
TCLP	SW846-1311/7420/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW846-6010B or C	ICP-AES	0.1 mg/L (ppm)	<input type="checkbox"/>
Soil	SW846-7000B/7420	Flame Atomic Absorption	40 mg/kg (ppm)	<input type="checkbox"/>
	SW846-7421	Graphite Furnace AA	0.3 mg/kg (ppm)	<input type="checkbox"/>
	SW846-6010B or C	ICP-AES	1 mg/kg (ppm)	<input type="checkbox"/>
Wastewater	SM3111B or SW846-7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	SW846-6010B or C	ICP-AES	1 mg/kg (ppm)	<input type="checkbox"/>
Drinking Water	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
Other:		Preservation Method (Water):		
Name of Sampler:		Signature of Sampler:		
Sample #	Location	Volume/Area	Date/Time Sampled	
① 111811-Share-01				
② 111811-TANL-02				
Client Sample #'s		Total # of Samples:		
Relinquished (Client): <u>Jennifer Morris</u>	Date: <u>11/23/11</u>	Time: <u>Drop off</u>		
Received (Lab): <u>J. Lab</u>	Date: <u>11/23/11</u>	Time: <u>14:25</u>		
Comments: <u>Lead</u>	<u>11/29/11</u>	<u>11:30 AM</u>		

Relinquished by EMSL Analytical - San Leandro Lab

Date/Time: 11/28/11 10:20 (name): Mey

per Jennifer,
3 Day TAT OK
TA 11/29 12:30pm