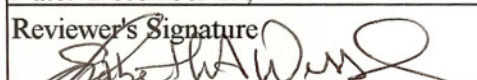


# **CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA**

AMEC Earth & Environmental  
550 South Wadsworth Boulevard  
Suite 500  
Lakewood, CO 80226

Package ID T713WC# 5  
Task Order 313150010  
SDG No. IOJ0739  
No. of Analyses 9

Laboratory Del Mar - Irvine  
Reviewer E. Wessling  
Analysis/Method General Minerals

Date: December 12, 2005  
Reviewer's Signature 

ACTION ITEMS <sup>a</sup>	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g., Holding Times GC/MS Tune/Inst. Performance Calibration Method blanks Surrogates Matrix Spike/Dup LCS Field QC Internal Standard Performance Compound Identification Quantitation System Performance	Qualifications were assigned for the following: - no sample weights for surfactants <del>- estimated values between the MDL and RL</del> <i>Rev 1 MC 02.10.06</i> - HT for MBAS
COMMENTS <sup>b</sup>	
<sup>a</sup> Subcontracted analytical laboratory is not meeting contract and/or method requirements. <sup>b</sup> Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	

# DATA VALIDATION REPORT

Topanga Fire

ANALYSIS: GENERAL MINERALS

SAMPLE DELIVERY GROUP: IOJ0739

Prepared by

AMEC—Denver Operations  
355 South Teller Street, Suite 300  
Lakewood, Colorado 80226

## 1. INTRODUCTION

Task Order Title: Topanga Fire Support  
Contract Task Order #: 313150010  
Sample Delivery Group #: IOJ0739  
Project Manager: P. Costa  
Matrix: Soil and Ash  
Analysis: General Minerals  
QC Level: Level IV  
No. of Samples: 9  
Reviewer: E. Wessling  
Date of Review: December 12, 2005

The sample listed in Table 1 was validated based on the guidelines outlined in the AMEC *Data Validation Procedures* SOP DVP-6, Rev. 2, *USEPA Methods for Chemical Analysis of Water and Wastes Method 300.0, 350.3, and 9014, Standard Methods for the Examination of Water and Wastewater Method SM5540-CMOD*, and validation guidelines outlined in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (2/94)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.



Table 1. Sample identification

Client ID	EPA ID	Laboratory ID	Matrix	COC Method
CF-1-Soil	WL008	IOJ0739-01	Soil	General Minerals
CF-1-Ash	WL009	IOJ0739-02	Ash	General Minerals
PCC-1-Soil	WL010	IOJ0739-03	Soil	General Minerals
PCC-1-Ash	WL011	IOJ0739-04	Ash	General Minerals
WC-1-Ash	WL014	IOJ0739-05	Ash	General Minerals
WC-1-Soil	WL015	IOJ0739-06	Soil	General Minerals
CRP-1-Soil	WL007	IOJ0739-07	Soil	General Minerals
SC-1-Soil	WL012	IOJ0739-08	Soil	General Minerals
SC-1-Ash	WL013	IOJ0739-09	Ash	General Minerals

## 2. DATA VALIDATION FINDINGS

### 2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

#### 2.1.1 Sample Preservation, Handling, and Transport

The samples in these SDGs were received at the laboratory within the temperature limits of  $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$ . No preservation problems were noted by the laboratory. No qualifications were required.

#### 2.1.2 Chain of Custody

The COCs were signed and dated by field and laboratory personnel and accounted for the samples and all analyses presented in these SDGs. No sample qualifications were required.

#### 2.1.3 Holding Times

The holding times were assessed by comparing the dates of collection with the dates of analysis. The analytical holding times for all analyses except MBAS were met. MBAS results were qualified as estimated, "J," for detects. No further qualifications were required.

### 2.2 CALIBRATION

For the applicable analyses, the initial calibration correlation coefficients were  $\geq 0.995$ . Initial and continuing calibration information was acceptable with recoveries within the control limits of 90-110%. No qualifications were required.

### 2.3 BLANKS

Target compounds were not detected in the associated method blanks, (5J12122-BLK1, 5J13079-BLK1, 5J17088-BLK1, 5J18072-BLK1, 5J18106-BLK1, 5J19057-BLK1, 5J19110-BLK1, 5J19114-BLK1, 5J20071-BLK1, 5J20116-LK1, 5J20143-BLK1, 5J22002-BLK1 and 5J18104-BLK1). Raw data was reviewed to verify the blank data. No qualifications were required.

### 2.4 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The laboratory control sample recoveries were within the laboratory-established control limits. Raw data was reviewed to verify the values reported for the LCS recoveries. No qualifications were required.

### 2.5 SURROGATES RECOVERY

Surrogate recovery is not applicable to the analyses presented in this SDG.

## 2.6 LABORATORY DUPLICATES

No MS/MSD or duplicate analyses were performed in association with this SDG; therefore, no assessment was made with respect to this criterion.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

No MS/MSD analyses were performed in association with this SDG; therefore, no assessment was made with respect to this criterion. Method accuracy was based on LCS results. No qualifications were required.

## 2.8 FURNACE ATOMIC ABSORPTION QC

Furnace atomic absorption was not utilized for the analyses of this sample; therefore, furnace atomic absorption QC is not applicable.

## 2.9 ICP SERIAL DILUTION

ICP serial dilution is not applicable to the analyses presented in this data validation report.

## 2.10 SAMPLE RESULT VERIFICATION

A Level IV review was performed for the sample in this data package. Calculations were verified, and the sample results reported on the Form Is were verified against the raw data. Actual sample weights were not recorded for the MBAS analysis. All MBAS data were qualified as estimated, "J," for detects and "UJ," for nondetects. No transcription errors or calculation errors were noted. No further qualifications were required.

## 2.11 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated sample. The following are findings associated with field QC samples:

### 2.11.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no associated field QC samples. No qualifications were required.

### 2.11.2 Field Duplicates

There were no field duplicate pairs associated with this SDG.





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The Boeing Company-SSFL  
 5800 Woolsey Canyon Road  
 Canoga Park, CA 91304-1148  
 Attention: Paul Costa

Project ID: Boeing SSFL-NPDES (ash)  
 TAS# MWH-1112  
 Report Number: IOJ0739

Sampled: 10/07/05-10/10/05  
 Received: 10/10/05

## INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOJ0739-01 (WL008 - Soil)					Sampled: 10/07/05				
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	5J12122	0.10	0.10	88	1	10/12/05	10/12/05	
Sample ID: IOJ0739-02 (WL009 - Solid)					Sampled: 10/07/05				
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	5J12122	0.10	0.10	99	1	10/12/05	10/12/05	
Sample ID: IOJ0739-03 (WL010 - Soil)					Sampled: 10/07/05				
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	5J12122	0.10	0.10	99	1	10/12/05	10/12/05	
Sample ID: IOJ0739-04 (WL011 - Solid)					Sampled: 10/07/05				
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	5J12122	0.10	0.10	100	1	10/12/05	10/12/05	
Sample ID: IOJ0739-05 (WL014 - Solid)					Sampled: 10/10/05				
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	5J18072	0.10	0.10	99	1	10/18/05	10/18/05	
Sample ID: IOJ0739-06 (WL015 - Soil)					Sampled: 10/10/05				
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	5J18072	0.10	0.10	100	1	10/18/05	10/18/05	
Sample ID: IOJ0739-07 (WL007 - Soil)					Sampled: 10/07/05				
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	5J19110	0.10	0.10	99	1	10/19/05	10/19/05	
Sample ID: IOJ0739-08 (WL012 - Soil)					Sampled: 10/10/05				
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	5J19110	0.10	0.10	99	1	10/19/05	10/19/05	
Sample ID: IOJ0739-09 (WL013 - Solid)					Sampled: 10/10/05				
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	5J19110	0.10	0.10	99	1	10/19/05	10/19/05	
Sample ID: IOJ0739-01 (WL008 - Soil)					Sampled: 10/07/05				
Reporting Units: mg/kg dry									
Ammonia-NH3	EPA 350.3 MOD.	5J19114	1.6	6.8	ND	0.998	10/19/05	10/19/05	
Total Cyanide	EPA 9014	5J17088	0.49	0.57	6.7	0.995	10/17/05	10/17/05	
Sulfate	EPA 300.0	5J13079	100	110	4800	19.9	10/13/05	10/14/05	
Surfactants (MBAS)	SM5540-C MOD.	5J18106	0.50	1.1	3.6	0.997	10/18/05	10/18/05	

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Del Mar Analytical, Irvine  
 Michele Harper  
 Project Manager

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The Boeing Company-SSFL  
5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1148  
Attention: Paul Costa

Project ID: Boeing SSFL-NPDES (ash)  
TAS# MWH-1112  
Report Number: IOJ0739

Sampled: 10/07/05-10/10/05  
Received: 10/10/05

### INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOJ0739-02 (WL009 - Solid)					Sampled: 10/07/05				
Reporting Units: mg/kg dry									
Ammonia-NH3	EPA 350.3 MOD.	5J19114	1.4	6.0	ND	1	10/19/05	10/19/05	
Total Cyanide	EPA 9014	5J17088	0.43	0.50	2.8	1	10/17/05	10/17/05	
Sulfate	EPA 300.0	5J13079	230	250	1100	49.8	10/13/05	10/14/05	
Surfactants (MBAS)	SM5540-C MOD.	5J18106	220	500	1400	501	10/18/05	10/18/05	
Sample ID: IOJ0739-03 (WL010 - Soil)					Sampled: 10/07/05				
Reporting Units: mg/kg dry									
Ammonia-NH3	EPA 350.3 MOD.	5J19114	1.4	6.0	10	0.996	10/19/05	10/19/05	
Total Cyanide	EPA 9014	5J17088	0.43	0.50	1.4	0.985	10/17/05	10/17/05	
Sulfate	EPA 300.0	5J13079	230	250	17000	49.6	10/13/05	10/18/05	
Surfactants (MBAS)	SM5540-C MOD.	5J18106	0.44	1.0	3.1	0.999	10/18/05	10/18/05	
Sample ID: IOJ0739-04 (WL011 - Solid)					Sampled: 10/07/05				
Reporting Units: mg/kg dry									
Ammonia-NH3	EPA 350.3 MOD.	5J19114	1.4	6.0	8.7	0.998	10/19/05	10/19/05	
Total Cyanide	EPA 9014	5J17088	0.43	0.50	3.9	0.99	10/17/05	10/17/05	
Sulfate	EPA 300.0	5J13079	230	250	6200	50	10/13/05	10/14/05	
Surfactants (MBAS)	SM5540-C MOD.	5J18106	0.44	1.0	1.7	1	10/18/05	10/18/05	
Sample ID: IOJ0739-05 (WL014 - Solid)					Sampled: 10/10/05				
Reporting Units: mg/kg dry									
Ammonia-NH3	EPA 350.3 MOD.	5J19114	1.4	6.1	3.3	0.998	10/19/05	10/19/05	J
Total Cyanide	EPA 9014	5J18104	0.43	0.51	5.2	1	10/18/05	10/18/05	
Sulfate	EPA 300.0	5J19057	230	250	3800	49.9	10/19/05	10/19/05	
Surfactants (MBAS)	SM5540-C MOD.	5J18106	0.44	1.0	1.3	0.999	10/18/05	10/18/05	
Sample ID: IOJ0739-06 (WL015 - Soil)					Sampled: 10/10/05				
Reporting Units: mg/kg dry									
Ammonia-NH3	EPA 350.3 MOD.	5J19114	1.4	6.0	4.9	0.998	10/19/05	10/19/05	J
Total Cyanide	EPA 9014	5J18104	0.43	0.50	0.58	1	10/18/05	10/18/05	
Sulfate	EPA 300.0	5J19057	4.5	5.0	480	0.998	10/19/05	10/19/05	
Surfactants (MBAS)	SM5540-C MOD.	5J18106	0.44	1.0	1.4	1	10/18/05	10/18/05	
Sample ID: IOJ0739-07 (WL007 - Soil)					Sampled: 10/07/05				
Reporting Units: mg/kg dry									
Ammonia-NH3	EPA 350.3 MOD.	5J20143	1.4	6.1	30	0.998	10/20/05	10/20/05	
Total Cyanide	EPA 9014	5J20116	0.43	0.50	6.6	0.99	10/20/05	10/20/05	
Sulfate	EPA 300.0	5J20071	23	25	1300	4.99	10/20/05	10/20/05	
Surfactants (MBAS)	SM5540-C MOD.	5J22002	0.44	1.0	0.48	1	10/21/05	10/21/05	J

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Michele Harper  
Project Manager

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Report Number: IOJ0739

Sampled: 10/07/05-10/10/05  
Received: 10/10/05

### INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOJ0739-08 (WL012 - Soil)					Sampled: 10/10/05				
Reporting Units: mg/kg dry									
Ammonia-NH3	EPA 350.3 MOD.	5J20143	1.4	6.1	8.7	1	10/20/05	10/20/05	Real Qual
Total Cyanide	EPA 9014	5J20116	0.43	0.50	ND	0.99	10/20/05	10/20/05	u
Sulfate	EPA 300.0	5J20071	4.6	5.1	170	1	10/20/05	10/20/05	
Surfactants (MBAS)	SM5540-C MOD.	5J22002	0.89	2.0	4.8	2	10/21/05	10/21/05	* 10
Sample ID: IOJ0739-09 (WL013 - Solid)					Sampled: 10/10/05				
Reporting Units: mg/kg dry									
Ammonia-NH3	EPA 350.3 MOD.	5J20143	1.4	6.0	14	0.998	10/20/05	10/20/05	
Total Cyanide	EPA 9014	5J20116	0.43	0.50	2.9	0.995	10/20/05	10/20/05	
Sulfate	EPA 300.0	5J20071	90	100	3700	19.9	10/20/05	10/20/05	
Surfactants (MBAS)	SM5540-C MOD.	5J22002	4.4	10	30	10	10/21/05	10/21/05	* 10

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