

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

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

Package ID T713WC 3
Task Order 313150010
SDG No. IOJ1120

No. of Analyses 2

Laboratory Del Mar - Irvine

Date: December 12, 2005

Reviewer E. Wessling

Reviewer's Signature

Analysis/Method General Minerals

[Signature]

ACTION ITEMS*

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	<p>Qualifications were assigned for the following:</p> <ul style="list-style-type: none"> - no sample weights for surfactants - estimated values between the MDL and RL - Closing CCV outlier for cyanide MBAD - HT for MBAD

COMMENTS^b

* Subcontracted analytical laboratory is not meeting contract and/or method requirements.

^b 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: IOJ1120

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 #: IOJ1120
Project Manager: P. Costa
Matrix: Soil and Ash
Analysis: General Minerals
QC Level: Level IV
No. of Samples: 2
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.

DATA VALIDATION REPORT

Project: Fire support
SDG No.: IOJ1120
Analysis: General Minerals

Table 1. Sample identification

Client ID	EPA ID	Laboratory ID	Matrix	COC Method
SMM-1-Soil	WL022	IOJ1120-01	Soil	General Minerals
SMM-1-Ash	WL023	IOJ1122-02	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 above the temperature limits of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$ at 17°C . As the samples were couriered directly from the site to the laboratory, this sample did not have sufficient time to cool. 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 and "UJ," for nondetects. No further qualifications were required.

2.2 CALIBRATION

For the applicable analyses, the initial calibration correlation coefficients were ≥ 0.995 . Initial and continuing calibration information was acceptable with recoveries within the control limits of 90-110% with the exception of the closing CCV for the MBAS analysis which was above the control limits. The detects for MBAS was qualified as estimated, "J." No qualifications were required.

2.3 BLANKS

Target compounds were not detected in the associated method blanks, (5J18066-BLK1, 5J19111-BLK1, 5J19117-BLK1, 5J24113-BLK1 and 5J26001-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. Results reported by the laboratory between the MDL and reporting limit were qualified as "J." 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.



Del Mar Analytical

17461 Derian Ave., Suite 100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

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

Project ID: Boeing SSFL-NPDES (ash)
 TAS# MWH-1113
 Report Number: IOJ1120

Sampled: 10/13/05
 Received: 10/14/05

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	Qual	Code
Sample ID: IOJ1120-01 (WL022 - Soil)											
Reporting Units: %											
Percent Solids	EPA 160.3 MOD	5J19111	0.10	0.10	98	1	10/19/05	10/19/05			
Sample ID: IOJ1120-02 (WL023 - Solid)											
Reporting Units: %											
Percent Solids	EPA 160.3 MOD	5J19111	0.10	0.10	97	1	10/19/05	10/19/05			
Sample ID: IOJ1120-01 (WL022 - Soil)											
Reporting Units: mg/kg dry											
Ammonia-NH3	EPA 350.3 MOD.	5J24113	1.4	6.1	3.5	1	10/24/05	10/24/05	J	J	
Total Cyanide	EPA 9014	5J19117	0.43	0.50	0.73	0.99	10/19/05	10/20/05			
Sulfate	EPA 300.0	5J18066	4.6	5.1	140	1	10/18/05	10/18/05			
Surfactants (MBAS)	SM5540-C MOD.	5J26001	2.2	5.1	ND	5	10/24/05	10/26/05	RL-1	us	*10
Sample ID: IOJ1120-02 (WL023 - Solid)											
Reporting Units: mg/kg dry											
Ammonia-NH3	EPA 350.3 MOD.	5J24113	1.4	6.2	23	1	10/24/05	10/24/05			
Total Cyanide	EPA 9014	5J19117	0.44	0.51	2.4	0.995	10/19/05	10/20/05			
Sulfate	EPA 300.0	5J18066	46	51	2400	10	10/18/05	10/19/05			
Surfactants (MBAS)	SM5540-C MOD.	5J26001	0.91	2.1	3.2	2.01	10/24/05	10/26/05		J	R, xl

Del Mar Analytical, Irvine
 Michele Harper
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

IOJ1120 <Page 3 of 12>