

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

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

Package ID T713WC6

Task Order 313150010

SDG No. Multiple

No. of Analyses 4

Laboratory Del Mar Analytical - Irvine

Reviewer E. Wessling

Analysis/Method General Minerals

Date: December 7, 2005

Reviewer's 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

Qualifications were assigned for the following:

-- J values annotated as DNQ per the permit requirements

COMMENTS^b

^a 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

NPDES Monitoring

ANALYSIS: GENERAL MINERALS

SAMPLE DELIVERY GROUP: IOJ1234, IOJ1235, IOJ1236, IOJ1337

Prepared by

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

1. INTRODUCTION

Task Order Title: NPDES Monitoring
Contract Task Order #: 313150010
Sample Delivery Group #: IOJ1234, IOJ1235, IOJ1236, and IOJ1337
Project Manager: P. Costa
Matrix: Water
Analysis: General Minerals
QC Level: Level IV
No. of Samples: 4
Reviewer: E. Wessling
Date of Review: December 6, 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 413.1, 300.0, and 160.2, Standard Methods for the Examination of Water and Wastewater Method SM2540C*, 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
PCC-1	WL034	IOJ1234-01	Water	General Minerals
CF-1	WL033	IOJ1235-01	Water	General Minerals
SSM-1	WL032	IOJ1236-01	Water	General Minerals
WC-1	WL035	IOJ1337-01	Water	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 $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$ with the exception of with the exception of WC-1 that was received at 17°C . As the samples were couriered directly from the site to the laboratory, this sampled 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 total cyanide and MBAS were met. No 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%. No qualifications were required.

2.3 BLANKS

Neither MBAS nor total cyanide was detected in the three associated method blanks, (5J21096-BLK1, 5J24085-BKL1 or 5J19122-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 (MBAS and total cyanide) 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. No transcription errors or calculation errors were noted. Results reported by the laboratory between the MDL and reporting limit were qualified as "J" values with the annotation of "DNQ" in accordance with the requirements of the NPDES permit. 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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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Offsite Storm Water Samples
Palo Comado Canyon
Report Number: IOJ1234

Sampled: 10/18/05
Received: 10/18/05

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOJ1234-01 (WL034 - Water) - cont.									
Reporting Units: mg/l									
Total Cyanide	EPA 335.2	5J21096	0.0022	0.0050	0.0061	1	10/21/05	10/21/05	
Surfactants (MBAS)	SM5540-C	5J19122	0.044	0.10	0.16	1	10/19/05	10/19/05	

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Del Mar Analytical, Irvine
Michele Harper
Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Offsite Storm Water Samples
China Flat
Report Number: IOJ1235

Sampled: 10/18/05
Received: 10/18/05

INORGANICS

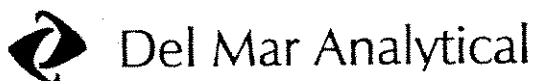
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOJ1235-01 (WL033 - Water) - cont. Reporting Units: mg/l									
Total Cyanide	EPA 335.2	SJ21096	0.0022	0.0050	0.0058	1	10/21/05	10/21/05	
Surfactants (MBAS)	SM5540-C	SJ19122	0.044	0.10	0.24	1	10/19/05	10/19/05	

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Michele Harper
Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Offsite Storm Water Samples
Santa Susana Mts
Report Number: IOJ1236

Sampled: 10/18/05
Received: 10/18/05

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOJ1236-01 (WL032 - Water) - cont.									
Reporting Units: mg/l									
Total Cyanide	EPA 335.2	SJ21096	0.0022	0.0050	0.0064	1	10/21/05	10/21/05	
Surfactants (MBAS)	SM5540-C	SJ19122	0.22	0.50	0.24	5	10/19/05	10/19/05	RL-1, J J

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Michele Harper
Project Manager

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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Offsite Storm Water Samples
Wildwood Canyon
Report Number: IOJ1337

Sampled: 10/18/05
Received: 10/19/05

INORGANICS

INORGANICS										
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	
Sample ID: IOJ1337-01 (WL035 - Water) - cont.										
Reporting Units: mg/l										
Total Cyanide	EPA 335.2	SJ24085	0.0022	0.0050	0.0046	1	10/24/05	10/24/05	J	J
Surfactants (MBAS)	SM5540-C	SJ19122	0.044	0.10	0.11	1	10/19/05	10/19/05		

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