

SDG CASE NARRATIVE

TechLaw
KNM

SDG Executive Summary

This case narrative applies to samples received on May 02, 2012 through May 03, 2012. All samples were scheduled for analysis in accordance with parameters outlined on the field chain of custody record, the TriMatrix bid form, and/or oral and written correspondence between TechLaw and TriMatrix Laboratories, Inc.

Each sample receipt event was assigned a unique TriMatrix work order number. Sample receipt documentation is included in section A of this data package.

Project Technical Issues/Problems

Project-related data qualification designations and reporting conventions are included in Attachment 1 - *Project Technical Narrative*.

QA/QC Data Qualifications/Narrations

Quality assurance issues and/or quality control data qualifications and narrations related to the analysis and reporting of this SDG are presented in Attachment 2 - *Statement of Data Qualifications*. The absence of a statement page for a particular analyte group (e.g. Percent Solids) implies that no qualifying statements were generated for that analyte.

Data Review and Approval

All data was peer-reviewed by a second analyst, and then by appropriate data management staff against laboratory quality control requirements and project specifications. It was then reviewed and approved by the group supervisor/manager prior to further review by the project chemist.

Data Deliverables

This report relates only to the sample(s) as received. Estimates of analytical uncertainties for the test results contained within the report are available upon request. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Conference (NELAC), and one or more of the following certification programs:

ACLASS DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#10-046-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#002841); Kansas DPH (#E-10302); Kentucky DEP (#0021); Louisiana DEP (#03068); Michigan DPH (#0034); Minnesota DPH (#367345); New York ELAP (#44950); North Carolina DNRE (#659); Texas CEQ (#T104704495-11-1); Virginia DCLS (#1239); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-09-00163).

SDG CASE NARRATIVE

The data deliverables, both hardcopy and/or electronic (EDD), that comprise this data package are intended to comply with the documents referenced in the introductory section of this narrative. The EDD, if requested, will be issued separately from this hardcopy report. Hold time reports for each test procedure are presented following the CLP-like forms section of this report.



Gary L. Wood, Project Chemist

Date

SDG CASE NARRATIVE

Sample Receipt and Login -- Work Order: 1205072

TriMatrix Laboratories received the cooler(s) for this work order on May 02, 2012, at 08:20am. Receiving documents include field chain-of-custody (COC) record(s), sample receipt form(s), and FedEx shipping document(s). The condition of the custody seals, the type and location of the coolant, and the temperatures recorded for each cooler are presented on the TriMatrix *Sample Receiving / Log-In Checklist* provided in section A of this package. The receipt temperature of the samples was determined by using an infrared thermometer to record the temperature of three random samples of varying container types and the accompanying temperature blank, if present.

Samples were scheduled for the analyses listed on the corresponding COC form. Field IDs and assigned laboratory identifiers are presented in the table below.

Field Sample Name	Laboratory Sample ID	Matrix	Date Sampled
106092	1205072-01	Water	5/1/2012

No administrative issues were encountered during the receipt and analysis of this work order.

SDG CASE NARRATIVE

Sample Receipt and Login -- Work Order: 1205073

TriMatrix Laboratories received the cooler(s) for this work order on May 02, 2012, at 08:30am. Receiving documents include field chain-of-custody (COC) record(s), sample receipt form(s), and FedEx shipping document(s). The condition of the custody seals, the type and location of the coolant, and the temperatures recorded for each cooler are presented on the TriMatrix *Sample Receiving / Log-In Checklist* provided in section A of this package. The receipt temperature of the samples was determined by using an infrared thermometer to record the temperature of three random samples of varying container types and the accompanying temperature blank, if present.

Samples were scheduled for the analyses listed on the corresponding COC form. Field IDs and assigned laboratory identifiers are presented in the table below.

Field Sample Name	Laboratory Sample ID	Matrix	Date Sampled
106093	1205073-01	Water	5/1/2012

No administrative issues were encountered during the receipt and analysis of this work order.

SDG CASE NARRATIVE

Sample Receipt and Login -- Work Order: 1205085

TriMatrix Laboratories received the cooler(s) for this work order on May 03, 2012, at 08:00am. Receiving documents include field chain-of-custody (COC) record(s), sample receipt form(s), and FedEx shipping document(s). The condition of the custody seals, the type and location of the coolant, and the temperatures recorded for each cooler are presented on the TriMatrix *Sample Receiving / Log-In Checklist* provided in section A of this package. The receipt temperature of the samples was determined by using an infrared thermometer to record the temperature of three random samples of varying container types and the accompanying temperature blank, if present.

Samples were scheduled for the analyses listed on the corresponding COC form. Field IDs and assigned laboratory identifiers are presented in the table below.

Field Sample Name	Laboratory Sample ID	Matrix	Date Sampled
106036	1205085-01	Water	5/2/2012
106037	1205085-02	Water	5/2/2012

No administrative issues were encountered during the receipt and analysis of this work order.

SDG CASE NARRATIVE

Attachment 1 Project Technical Narrative

Sample Result Reporting Convention

Sample results are reported as RL "U" (e.g. 0.001 U) if the target analyte was not detected above the MDL.

If a sample for an organic analyte is reanalyzed and also reported, the second analysis includes the suffix "RE n " where n = the first, second, etc. reanalysis.

Data Qualifier Designation

If applicable, sample results are qualified with:

- a "J" flag if the analyte was detected, but the concentration is greater than the MDL and less than the RL;
- a "B" flag if the analyte was also detected at or above the RL in the associated method blank, and the sample concentration was less than five times the method blank result;
- a "E" flag if the analyte exceeded the instrument calibration range;
- an asterisk (*) if a report-generated statement of qualification applies; qualifying statements, if any, will be found in Attachment 2 to this narrative.

QC Batch and Analytical Batch Designation

A Quality Control (QC) Batch is a seven-digit number that associates all samples that have been prepared together (or analyzed together if there is no preparation). Quality Control batches are limited to no more than twenty samples, excluding batch QC (method blanks, control spikes, etc.). Some batches may contain multiple sets of method blanks (BLK) and laboratory control samples (BS), where a set of method quality control analyses were prepared in concert with each set of samples on a given day.

An Analytical Batch (or Sequence) is a seven-digit number that associates all samples analyzed as a set under one analytical run.

SDG CASE NARRATIVE

Attachment 2 Statement of Data Qualifications

EDB and DBCP by EPA Method 8011

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%.
The lower concentration result has been reported. The higher concentration result was: 0.140.

Analysis: USEPA-8011

Sample/Analyte: 1205072-01 106092

1,2-Dibromoethane

SDG CASE NARRATIVE

Attachment 2 Statement of Data Qualifications

Volatile Organic Compounds by EPA Method 8260B

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was less than 5 times the MB value, is considered estimated.

Analysis: USEPA-8260B

Sample/Analyte:	1205072-01 106092	Methyl Acetate
	1205073-01 106093	Methyl Acetate
	1205085-01 106036	Methyl Acetate
	1205085-02 106037	Methyl Acetate

SDG CASE NARRATIVE

Attachment 2 Statement of Data Qualifications

Semivolatile Organic Compounds by EPA Method 8270C

Qualification: The quality control batch(s), associated with the following samples and analyses, do not contain an MS/MSD or MS/DUP because client specific matrix QC was not requested. An LCS and LCSD were analyzed as the measure of batch precision and accuracy.

Analysis: USEPA-8270C

Sample/Analyte: 1205072-01 106092
1205073-01 106093

Qualification: Manual integration was performed on this sample for the analyte(s) listed below in accordance with the TriMatrix Manual Integration SOP. All necessary documentation, including the signed review, is included in the raw data section of the data package.

Analysis: USEPA-8270C

Sample/Analyte: 1205072-01 106092 Nitrobenzene-d5

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was less than 5 times the MB value, is considered estimated.

Analysis: USEPA-8270C

Sample/Analyte: 1205072-01 106092	Anthracene
1205072-01 106092	Fluoranthene
1205072-01 106092	Phenanthrene
1205072-01 106092	Pyrene
1205073-01 106093	Anthracene
1205073-01 106093	Fluoranthene

SDG CASE NARRATIVE

Attachment 2 Statement of Data Qualifications

Total Metals by EPA 6000/7000 Series Methods

Qualification: The MS and/or MSD recovery was outside the control limit. The non-spiked sample concentration for the same analyte was less than 4 times the spiked amount; the non-spiked sample result is considered estimated.

Analysis: USEPA-6010C

Sample/Analyte: 1205072-01 106092 Calcium

Qualification: The MS or MSD recovery, but not both, was outside the control limit. The RPD is within the control limit. The unspiked sample result is considered estimated.

Analysis: USEPA-6010C

Sample/Analyte: 1205072-01 106092 Sodium

SDG CASE NARRATIVE

Attachment 2 Statement of Data Qualifications

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was greater than 5 times the MB value, is not considered estimated.

Analysis: ASTM D516-90 (02)

Sample/Analyte:	1205072-01 106092	Sulfate
	1205073-01 106093	Sulfate
	1205085-01 106036	Sulfate
	1205085-02 106037	Sulfate

Analysis: SM 2320 B 20th

Sample/Analyte:	1205072-01 106092	Alkalinity, Bicarbonate
	1205072-01 106092	Alkalinity, Total
	1205073-01 106093	Alkalinity, Bicarbonate
	1205073-01 106093	Alkalinity, Total
	1205085-01 106036	Alkalinity, Bicarbonate
	1205085-01 106036	Alkalinity, Total
	1205085-02 106037	Alkalinity, Bicarbonate
	1205085-02 106037	Alkalinity, Total

Analysis: SM 4500-Cl E 20th

Sample/Analyte:	1205072-01 106092	Chloride
	1205073-01 106093	Chloride
	1205085-01 106036	Chloride
	1205085-02 106037	Chloride