

February 28, 2006

Mr. Mark Riggle  
Project Manager  
Voluntary Cleanup Section  
Texas Commission on Environmental Quality  
Mail Code 221  
12118 North IH 35, Building D  
Austin, Texas 78753

Project No. 0043480

Subject: First Quarter 2006 Monitoring Data Transmittal  
Former Cameron Iron Works Facility, Houston, Texas  
VCP No. 221

**Environmental  
Resources  
Management**

15810 Park Ten Place  
Suite 300  
Houston, Texas 77084  
(281) 600-1000  
(281) 600-1001 (fax)



Dear Mr. Riggle:

On behalf of Cooper Cameron Corporation (Cooper Cameron), Environmental Resources Management (ERM) is providing this transmittal of surface water and ground water data collected on January 17, 2006 for your records. A total of five samples were collected at one surface water sample location (SWD-14) and four monitor well locations (MW-70, MW-81, MW-93 and MW-125) and analyzed for the site-specific constituents of concern (COCs). These sample locations are located in the residential neighborhood south of the Former Cameron Iron Works Facility (the facility). This quarterly sampling event was performed at these locations because the results for October 2005 exceeded the following trigger levels:

- 80% of the critical Protective Concentration Level (PCL) at SWD-14;
- the method quantitation limit (MQL) at MW-70; and
- the critical PCL at MW-81, MW-93 and MW-125.

The following discussion presents the results from the January 17, 2006 sampling event for each location and a recommendation for the appropriate course of action.

#### **SWD-14**

The COCs analyzed in the surface water sample collected at SWD-14 were reported as *Not Detected* above the MQL with one exception. 1,1-dichloroethene had a reported concentration of 0.0083 mg/L above a MQL of 0.0050 mg/L (Attachment 1, Table 1). 1,1-dichloroethane had an estimated concentration of 0.0014 mg/L below a MQL of 0.0050 mg/L (indicated by a J qualifier in the laboratory report, Attachment 2). These concentrations are below the 80% critical PCL; therefore, it is proposed that the surface water sampling at this location return to the semiannual sampling schedule. The next semiannual sampling event is scheduled for April 2006.

February 28, 2006  
Mr. Mark Riggle  
Texas commission on Environmental Quality  
Page 2

### **MW-70**

The reported concentrations at MW-70 for 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, and trichloroethene were 0.011 mg/L, 0.0032 mg/L, 0.0065 mg/L, and 0.0011 mg/L, respectively. The reported concentrations for the COCs do not exceed the critical PCLs. 1,1-dichloroethene and trichloroethene have estimated concentrations (indicated by a J qualifiers in the laboratory report, Attachment 2) below MQLs of 0.0050 mg/L. The reported concentrations for 1,1-dichloroethane and cis-1,2-dichloroethene at MW-70 are above the MQL of 0.0050 mg/L (Attachment 1, Table 2). The reported concentrations at MW-70 have been stable or decreasing over time.

MW-70 is located approximately 200 feet south of the I-10 feeder road on Buckingham Drive. It is possible that the concentrations are related to ground water flow conditions from subsurface construction and dewatering activities related to the expansion of Interstate 10. For a response action, Cooper Cameron will continue quarterly monitoring for the chemicals of concern (COCs) at MW-70. The quarterly sampling events would be completed in April 2006 and July 2006, unless further action is necessary.

### **MW-81**

The constituents analyzed in the ground water sample collected at MW-81 were reported as *Not Detected* above the MQLs (Attachment 1, Table 2). It is proposed that the ground water sampling at this location return to the semiannual sampling schedule. The next semiannual sampling event will be in April 2006.

### **MW-93**

The constituents analyzed in the ground water sample collected at MW-93 were reported as *Not Detected* above the MQLs with one exception. Tetrachloroethene had a reported concentration of 0.087 mg/L (Attachment 1, Table 2). This concentration is in exceedance of the 0.0050 mg/L critical PCL for tetrachloroethene. The reported concentrations at MW-91 have been stable or decreasing over time.

As a response action, Cooper Cameron injected a chemical oxidant (potassium permanganate) in the vicinity (six injection wells) of MW-93, on September 21, 2005, to address the elevated concentration of tetrachloroethene. Cooper Cameron will continue quarterly monitoring for tetrachloroethene at MW-93.

February 28, 2006  
Mr. Mark Riggle  
Texas commission on Environmental Quality  
Page 3

### MW-125

The reported concentration at MW-125 for tetrachloroethene was 0.0062 mg/L (Attachment 1, Table 2). This concentration is in exceedance of the 0.0050 mg/L critical PCL for tetrachloroethene by a trace level. The remaining constituents were reported as *Not Detected* above the MQLs. The reported concentrations at MW-125 have decreased from October 2005 to January 2006.

For a response action, Cooper Cameron will continue quarterly monitoring for the COCs at MW-125. The quarterly sampling events would be completed in April 2006 and July 2006, unless further action is necessary.

### Conclusion

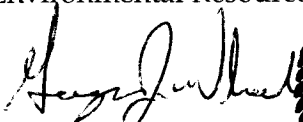
Cooper Cameron will transmit a summary of the data for the quarterly sampling events to the Texas Commission on Environmental Quality within 30 days after it receives a Final Laboratory Report.

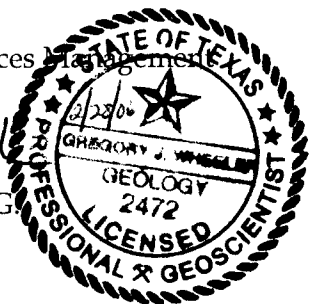
As described in the past, the reported concentrations at MW-93 and MW-125 are not associated with a release from the facility. Despite this fact, Cooper Cameron will follow the plan outlined in the approved Response Action Plan.

Please contact Mr. Ted Fasting of Cooper Cameron Corporation at (713) 513-3325 or me at (218) 600-1074 with any questions or comments.

Sincerely,

Environmental Resources Management

  
Gregory J. Wheeler, P.G.



GJW/rjp  
Attachments

- cc: Ted Fasting, Cooper Cameron Corporation  
Bruce Himmelreich, Cooper Cameron Corporation, (without attachments)  
Paul Stefan, Environmental Resources Management (Houston)  
Marsha Hill, Texas Commission on Environmental Quality, Region X II  
Robin Morse, Crain, Caton & James (without attachments)  
Alan Feinsilver, Creekstone Builders Inc.

**Tables**  
*Attachment 1*

*February 28, 2006*  
*Project No. 0043480*

**Environmental Resources Management**  
15810 Park Ten Place, Suite 300  
Houston, Texas 77084  
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TABLE 1

Summary of Surface Water Data  
 First Quarter 2006 Monitoring Data Transmittal

Former Cameron Iron Works Facility  
 Houston, Texas

Constituent	80% Critical PCL (a)	Critical PCLs (a)	Location: Date:	SWD-14	
				10/27/2005	1/17/2006
1,1-Dichloroethane	4.10	5.13		0.0083	0.0014 J
1,1-Dichloroethene	0.05	0.06		<b>0.054</b>	0.0083
1,2-Dichloroethane	0.443	0.554		ND (0.0050)	ND (0.0050)
cis-1,2-Dichloroethene	7.49	9.36		0.0020 J	ND (0.0050)
Tetrachloroethene	0.632	0.790		0.0037 J	ND (0.0050)
Trichloroethene	0.888	1.110		0.0043 J	ND (0.0050)
Vinyl Chloride	0.0269	0.0336		0.0063	ND (0.0020)

NOTES:

The reported concentrations are in mg/L.

ND (0.0050) = *Not Detected* above the method quantitation limit given in parentheses.

J = Estimated data, the reported sample concentration is below the quantitation limit.

**Bold** value indicates an exceedence of the 80% critical Protective Concentration Level (PCL).

(a) Taken from the critical PCLs calculated in the *Human Health Ecological Risk Assessment for Surface Water and Sediment*, dated June 2003.

SWD = Surface Water Harris County Flood Control Ditch.

TABLE 2

Summary of Monitor Well Ground Water Data  
First Quarter 2006 Monitoring Data Transmittal

Former Cameron Iron Works Facility  
Houston, Texas

Constituent	MQL	Critical PCLs (a)	MW-70		MW-81	
			10/26/2005	1/17/2006	10/26/2005	11/22/2005
1,1-Dichloroethane	0.0050	2.4	<b>0.011</b>	<b>0.011</b>	ND (0.0050)	ND (0.0050)
1,1-Dichloroethene	0.0050	0.0070	0.0035 J	0.0032 J	<b>0.094</b>	ND (0.0050)
1,2-Dichloroethane	0.0050	0.0050	ND (0.0050)	ND (0.0050)	<b>0.011</b>	ND (0.0050)
cis-1,2-Dichloroethene	0.0050	0.070	<b>0.0073</b>	<b>0.0065</b>	ND (0.0050)	ND (0.0050)
Tetrachloroethene	0.0050	0.0050	ND (0.0050)	ND (0.0050)	<b>0.0074</b>	ND (0.0050)
Trichloroethene	0.0050	0.0050	0.0012 J	0.0011 J	ND (0.0050)	ND (0.0050)
Vinyl Chloride	0.0020	0.0020	ND (0.0020)	ND (0.0020)	<b>0.0039</b>	ND (0.0020)

Constituent	MQL	Critical PCLs (a)	MW-93		MW-125	
			10/27/2005	11/22/2005	10/27/2005	11/22/2005
1,1-Dichloroethane	0.0050	2.4	<b>0.079</b>	<b>0.090</b>	<b>0.017</b>	<b>0.0063</b>
1,1-Dichloroethene	0.0050	0.0070	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
1,2-Dichloroethane	0.0050	0.0050	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
cis-1,2-Dichloroethene	0.0050	0.070	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
Tetrachloroethene	0.0050	0.0050	<b>0.087</b>	<b>0.087</b>	<b>0.017</b>	<b>0.0062</b>
Trichloroethene	0.0050	0.0050	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
Vinyl Chloride	0.0020	0.0020	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)

NOTES:

**0.039** = exceedance of TCEQ Texas Risk Reduction Program (TRRP) Tier 1 Residential Class 2 Groundwater critical PCLs.

**Bold** values exceed the MQL.

The reported concentrations are in mg/L.

ND (0.0050) = *Not Detected* above the method quantitation limit given in parentheses.

MQL = Method Quantitation Limit.

(a) TCEQ Texas Risk Reduction Program (TRRP) Tier 1 Residential Class 2 Groundwater PCLs, 30-acre source area, Table 3, table for TRRP Rule dated April 12, 2005.

(b) The sample depths are reported in feet below ground surface.

J = Estimated data, the reported sample concentration is below the sample quantitation limit.

**Data Usability Summary and Laboratory Report**  
*Attachment 2*

*February 28, 2006*  
*Project No. 0043480*

**Environmental Resources Management**  
15810 Park Ten Place, Suite 300  
Houston, Texas 77084  
(281) 600-1000

## Attachment 2

Data Usability Summary (0601187)  
First Quarter 2006 Monitoring Event

Former Cameron Iron Works Facility  
Houston, Texas

Environmental Resources Management Southwest, Inc. (ERM) reviewed a laboratory analytical data package (0601187) from e-Lab Analytical, Inc. of Houston, Texas for the analysis of five ground water samples and one surface water sample collected on January 17, 2006 at the Former Cameron Iron Works Site in Houston, Texas (the facility). Data were reviewed to assess conformance with the requirements of the *Review and Reporting of COC Concentration Data* TRRP-13 (December 2002), and adherence to project data quality objectives.

**Purpose of Sampling Event:** Quarterly sampling event to monitor select VOCs beneath and downgradient of the facility.

The data generated were evaluated in terms of representativeness, precision, accuracy, completeness and comparability.

Analysis requested included:

SW-846 8260 – Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Data were reviewed and validated as described in the TRRP-13 Guidance Document and the results of the review/validation are discussed in this Data Usability Summary (DUS).

### Introduction

One surface water sample and five ground water samples including one duplicate and were collected and analyzed for volatile organic compounds (VOCs). One field blank was collected. A trip blank, rinsate blank, and equipment blank were not provided to the laboratory for analysis. Table 1 lists the sample identifications cross-referenced to laboratory identifications.

### Data Review / Validation Results

#### Analytical Results

Sample data is reported in mg/L for ground water samples. *Not Detected* results are reported as less than the value of the sample quantitation limit as defined by the TRRP rule. Method detection limits (MDLs) and method quantitation limits (MQLs) were also provided as part of the analytical results.



## **Preservation and Holding Times**

The samples were evaluated for agreement with the chain-of-custody (COC). The samples were received in the appropriate containers and in good condition with the paperwork filled out properly. Sample receipt temperature was within the acceptance criteria of 4 +/- 2 degrees C. The samples were preserved in the field as specified in SW-846 TABLE 2-36. Samples were prepared and analyzed within holding times as specified in SW-846 TABLE 2-36.

## **Calibrations and Tunes**

Initial and continuing calibration verification was within method acceptance limits for the VOC analysis as per the laboratory review checklist (LRC). The LRC also documented satisfactory instrument performance calibrations (GC/MS tunes) for the VOC analysis.

## **Blanks**

VOCs were reported as *Not Detected* in the method blank and the field blank.

## **Surrogate Recoveries**

VOC sample surrogate recoveries were within the laboratory control limits.

## **Internal Standards**

According to the LRC, the internal standards were within method-required limits.

## **Laboratory Control Samples**

The laboratory control sample/ laboratory control sample duplicates (LCS/LCSD) recoveries met the laboratory-defined acceptable ranges for VOCs.

## **Matrix Spike/Matrix Spike Duplicates**

The MS/MSD sample was not project related for Batch (0601187); therefore, the MS/MSD was not assessed.

## **Field Precision**

One field duplicate sample was collected during this sampling event (MW-93/ DUP-011706). Sample MW-93 and duplicate sample DUP-011706 were reported as detected for tetrachloroethene. The sample/ duplicate precision comparison had RPD less than the 20% acceptance criteria for the compounds listed. Sample/ duplicate precision calculations are included in Table 2.

## **Field Procedures**

The samples were collected using documented sampling procedures.

## **SUMMARY**

The data quality objectives and characteristics (i.e., representativeness, precision and accuracy, completeness, and comparability) for the project were met. Therefore, the ground water analytical data are useable for the purpose of providing current data on concentrations of chemicals of concern (COCs) in the ground water beneath and downgradient of the Former Cameron Iron Works Facility.

**TABLE 1**

Cross Reference Field Sample Identifications and Laboratory Identifications

Field ID	Laboratory ID
SWD-14	0601187-01
MW-81	0601187-02
MW-70	0601187-03
MW-93	0601187-04
FB-011706	0601187-05
MW-125	0601187-06
Dup-011706	0601187-07

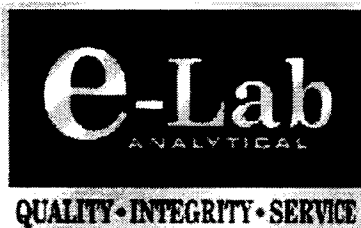
**TABLE 2**

Field Precision

Field Identification	Analyte	Sample Result	Duplicate Result	RPD	Qualified
SWD-14/Dup-011706	tetrachloroethene	0.087	0.091	4.494	A

**Notes:**

Values are in mg/L.  
RPD =  $((SR-DR)*200)/(SR+DR)$ .  
A = Acceptable data.



**e-Lab Analytical, Inc.**

10450 Standliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

February 01, 2006

Greg Wheeler  
ERM - Southwest, Inc.  
15810 Park Ten Place  
Suite 300  
Houston, TX 77084

Tel: (281) 600-1000  
Fax: (281) 600-1001

Re: Cameron Iron Works

Work Order : **0601187**

Dear Greg Wheeler,

e-Lab Analytical, Inc. received 7 samples on 1/18/2006 7:00:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 19.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

*Lora Terrill*

Electronically approved by: Patrina A. Dathorne

Lora Terrill  
VP Lab Operations



Certificate No: LA 03087

# Laboratory Data Package Cover Page

This data package consists of:

- This signature page, the laboratory review checklist, and the following reportable data:
  - R1 Field chain-of-custody documentation;
  - R2 Sample identification cross-reference;
  - R3 Test reports (analytical data sheets) for each environmental sample that includes:
    - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
    - b) dilution factors,
    - c) preparation methods,
    - d) cleanup methods, and
    - e) if required for the project, tentatively identified compounds (TICs).
  - R4 Surrogate recovery data including:
    - a) Calculated recovery (%R), and
    - b) The laboratory's surrogate QC limits.
  - R5 Test reports/summary forms for blank samples;
  - R6 Test reports/summary forms for laboratory control samples (LCSs) including:
    - a) LCS spiking amounts,
    - b) Calculated %R for each analyte, and
    - c) The laboratory's LCS QC limits.
  - R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
    - a) Samples associated with the MS/MSD clearly identified,
    - b) MS/MSD spiking amounts,
    - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
    - d) Calculated %Rs and relative percent differences (RPDs), and
    - e) The laboratory's MS/MSD QC limits
  - R8 Laboratory analytical duplicate (if applicable) recovery and precision:
    - a) the amount of analyte measured in the duplicate,
    - b) the calculated RPD, and
    - c) the laboratory's QC limits for analytical duplicates.
  - R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;?
  - R10 Other problems or anomalies.
- The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

**Release Statement:** I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

**Check, if applicable:** [NA] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

**e-Lab Analytical, Inc. Work Order Number: 0601187**

Lora Terrill	<i>Lora Terrill</i>	V.P. Laboratory Operations	02/01/06
Name (Printed)	Signature	Official Title (printed)	Date

### Laboratory Review Checklist: Reportable Data

Laboratory Name: e-Lab Analytical, Inc.		LRC Date: 02/01/2006					
Project Name: Cameron Iron Works		Laboratory Job Number: 0601187					
Reviewer Name: Lora Terrill		Prep Batch Number(s): R34546					
# <sup>1</sup>	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
R1	OI	<b>CHAIN-OF-CUSTODY (C-O-C)</b>					
		1) Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		2) Were all departures from standard conditions described in an exception report?	X				
R2	OI	<b>SAMPLE AND QUALITY CONTROL (QC) IDENTIFICATION</b>					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	<b>TEST REPORTS</b>					
		1) Were all samples prepared and analyzed within holding times?	X				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		3) Were calculations checked by a peer or supervisor?	X				
		4) Were all analyte identifications checked by a peer or supervisor?	X				
		5) Were sample quantitation limits reported for all analytes not detected?	X				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			X		
		7) Was % moisture (or solids) reported for all soil and sediment samples?			X		
		8) If required for the project, TICs reported?			X		
R4	O	<b>SURROGATE RECOVERY DATA</b>					
		1) Were surrogates added prior to extraction?	X				
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	<b>TEST REPORTS/SUMMARY FORMS FOR BLANK SAMPLES</b>					
		1) Were appropriate type(s) of blanks analyzed?	X				
		2) Were blanks analyzed at the appropriate frequency?	X				
		3) Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		4) Were blank concentrations < MQL?	X				
R6	OI	<b>LABORATORY CONTROL SAMPLES (LCS):</b>					
		1) Were all COCs included in the LCS?	X				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		3) Were LCSs analyzed at the required frequency?	X				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		6) Was the LCSD RPD within QC limits?			X		
R7	OI	<b>MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) DATA</b>					
		1) Were the project/method specified analytes included in the MS and MSD?	X				
		2) Were MS/MSD analyzed at the appropriate frequency?	X				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		4) Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	<b>ANALYTICAL DUPLICATE DATA</b>					
		1) Were appropriate analytical duplicates analyzed for each matrix?	X				
		2) Were analytical duplicates analyzed at the appropriate frequency?	X				
		3) Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	<b>METHOD QUANTITATION LIMITS (MQLS):</b>					
		1) Are the MQLs for each method analyte listed and included in the laboratory data package?	X				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		3) Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	<b>OTHER PROBLEMS/ANOMALIES</b>					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		2) Were all necessary corrective actions performed for the reported data?	X				
		3) If requested, is the justification for elevated SQLs documented?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted in o the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

3 NA = Not applicable;

4 NR = Not Reviewed;

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

### Laboratory Review Checklist: Supporting Data

Laboratory Name: e-lab Analytical, Inc			LRC Date: 02/01/2006				
Project Name: Cameron Iron Works			Laboratory Job Number: 0601187				
Reviewer Name: Lora Terrill			Prep Batch Number(s): R34546				
# <sup>1</sup>	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
S1	OI	<b>INITIAL CALIBRATION (ICAL)</b>					
		1) Were response factors (RFs) and/or relative response factors (RRFs) for each analyte within the QC limits?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Was the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICAL data available for all instruments used?	X				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	<b>INITIAL AND CONTINUING CALIBRATION VERIFICATION (ICCV AND CCV) AND</b>					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences for each analyte within the method-required QC limits?	X				
		3) Was the ICAL curve verified for each analyte?	X				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	<b>MASS SPECTRAL TUNING:</b>					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC limits?	X				
S4	O	<b>INTERNAL STANDARDS (IS):</b>					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	<b>RAW DATA (NELAC SECTION 1 APPENDIX A GLOSSARY, AND SECTION 5.12 OR</b>					
		1) Were the raw data (e.g., chromatograms, spectral data) reviewed by an analyst?	X				
		2) Were data associated with manual integrations flagged on the raw data?	X				
S6	O	<b>DUAL COLUMN CONFIRMATION</b>					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	<b>TENTATIVELY IDENTIFIED COMPOUNDS (TICS):</b>					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	<b>INTERFERENCE CHECK SAMPLE (ICS) RESULTS:</b>					
		Were percent recoveries within method QC limits?			X		
S9	I	<b>SERIAL DILUTIONS, POST DIGESTION SPIKES, AND METHOD OF STANDARD</b>					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	<b>PROFICIENCY TEST REPORTS:</b>					
		Are proficiency testing or inter-laboratory comparison results on file?	X				
S11	OI	<b>METHOD DETECTION LIMIT (MDL) STUDIES</b>					
		1) Was a MDL study performed for each reported analyte?	X				
		2) Is the MDL either adjusted or supported by the analysis of DCSS?	X				
S12	OI	<b>STANDARDS DOCUMENTATION</b>					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	<b>COMPOUND/ANALYTE IDENTIFICATION PROCEDURES</b>					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	<b>DEMONSTRATION OF ANALYST COMPETENCY (DOC)</b>					
		1) Was DOC conducted consistent with NELAC 5C or ISO/IEC 4.2.2?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	<b>VERIFICATION/VALIDATION DOCUMENTATION FOR METHODS</b>					
		Are all the methods used to generate the data documented, verified, and validated, where applicable, (NELAC 5.10.2 or ISO/IEC 17025 Section 5.4.5)?	X				
S16	OI	<b>LABORATORY STANDARD OPERATING PROCEDURES (SOPS):</b>					
		Are laboratory SOPs current and on file for each method performed?	X				

- 1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- 2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
- 3 NA = Not applicable.
- 4 NR = Not Reviewed.
- 5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

<b>Laboratory Review Checklist: Exception Report</b>	
Laboratory Name: e-Lab Analytical, Inc.	LRC Date: 02/01/2006
Project Name: Cameron Iron Works	Laboratory Job Number: 0601187
Reviewer Name: Lora Terrill	Prep Batch Number(s): R34546
<b>ER #<sup>1</sup></b>	<b>DESCRIPTION</b>
	No Exceptions

- 1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)



**CLIENT:** ERM Southwest, Inc.  
**Project:** Cameron Iron Works  
**Work Order:** 0601187

**Work Order Sample Summary**

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
0601187-01	SWD-14	Water		1/17/2006 09:40	1/18/2006 07:00	<input type="checkbox"/>
0601187-02	MW-81	Water		1/17/2006 13:10	1/18/2006 07:00	<input type="checkbox"/>
0601187-03	MW-70	Water		1/17/2006 13:52	1/18/2006 07:00	<input type="checkbox"/>
0601187-04	MW-93	Water		1/17/2006 14:47	1/18/2006 07:00	<input type="checkbox"/>
0601187-05	FB-011706	Water		1/17/2006 15:00	1/18/2006 07:00	<input type="checkbox"/>
0601187-06	MW-125	Water		1/17/2006 16:09	1/18/2006 07:00	<input type="checkbox"/>
0601187-07	Dup-011706	Water		1/17/2006 12:00	1/18/2006 07:00	<input type="checkbox"/>

**e-Lab Analytical, Inc.**

Date: February 01, 2006

**CLIENT:** ERM - Southwest, Inc.  
**Work Order:** 0601187  
**Project:** Cameron Iron Works  
**Lab ID:** 0601187-01

**Client Sample ID:** SWD-14  
**Collection Date:** 1/17/2006 9:40:00 AM  
**Matrix:** WATER

Analyses	Result	SQL	ML	Qual	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>		Method: <b>SW8260</b>					Analyst: <b>PC</b>
1,1-Dichloroethane	0.0014	0.00050	0.0050	J	mg/L	1	1/18/2006
1,1-Dichloroethene	0.0083	0.00060	0.0050		mg/L	1	1/18/2006
1,2-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
cis-1,2-Dichloroethene	U	0.00050	0.0050		mg/L	1	1/18/2006
Tetrachloroethene	U	0.00050	0.0050		mg/L	1	1/18/2006
Trichloroethene	U	0.00070	0.0050		mg/L	1	1/18/2006
Vinyl chloride	U	0.00060	0.0020		mg/L	1	1/18/2006
Surr: 1,2-Dichloroethane-d4	108	0	70-125		%REC	1	1/18/2006
Surr: 4-Bromofluorobenzene	89.6	0	72.4-125		%REC	1	1/18/2006
Surr: Dibromofluoromethane	109	0	71.2-125		%REC	1	1/18/2006
Surr: Toluene-d8	93.6	0	75-125		%REC	1	1/18/2006

**Qualifiers:** U - Analyzed for but Not Detected  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results RPD > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: February 01, 2006

**CLIENT:** ERM - Southwest, Inc.  
**Work Order:** 0601187  
**Project:** Cameron Iron Works  
**Lab ID:** 0601187-02

**Client Sample ID:** MW-81  
**Collection Date:** 1/17/2006 1:10:00 PM  
**Matrix:** WATER

Analyses	Result	SQL	ML	Qual	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>		Method: <b>SW8260</b>					Analyst: <b>PC</b>
1,1-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
1,1-Dichloroethene	U	0.00060	0.0050		mg/L	1	1/18/2006
1,2-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
cis-1,2-Dichloroethene	U	0.00050	0.0050		mg/L	1	1/18/2006
Tetrachloroethene	U	0.00050	0.0050		mg/L	1	1/18/2006
Trichloroethene	U	0.00070	0.0050		mg/L	1	1/18/2006
Vinyl chloride	U	0.00060	0.0020		mg/L	1	1/18/2006
Surr: 1,2-Dichloroethane-d4	84.7	0	70-125		%REC	1	1/18/2006
Surr: 4-Bromofluorobenzene	89.6	0	72.4-125		%REC	1	1/18/2006
Surr: Dibromofluoromethane	94.2	0	71.2-125		%REC	1	1/18/2006
Surr: Toluene-d8	91.2	0	75-125		%REC	1	1/18/2006

**Qualifiers:** U - Analyzed for but Not Detected  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results RPD > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: February 01, 2006

CLIENT: ERM - Southwest, Inc.  
 Work Order: 0601187  
 Project: Cameron Iron Works  
 Lab ID: 0601187-03

Client Sample ID: MW-70  
 Collection Date: 1/17/2006 1:52:00 PM  
 Matrix: WATER

Analyses	Result	SQL	ML	Qual	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>		Method: <b>SW8260</b>					Analyst: <b>PC</b>
1,1-Dichloroethane	0.011	0.00050	0.0050		mg/L	1	1/18/2006
1,1-Dichloroethene	0.0032	0.00060	0.0050	J	mg/L	1	1/18/2006
1,2-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
cis-1,2-Dichloroethene	0.0065	0.00050	0.0050		mg/L	1	1/18/2006
Tetrachloroethene	U	0.00050	0.0050		mg/L	1	1/18/2006
Trichloroethene	0.0011	0.00070	0.0050	J	mg/L	1	1/18/2006
Vinyl chloride	U	0.00060	0.0020		mg/L	1	1/18/2006
Surr: 1,2-Dichloroethane-d4	110	0	70-125		%REC	1	1/18/2006
Surr: 4-Bromofluorobenzene	89.2	0	72.4-125		%REC	1	1/18/2006
Surr: Dibromofluoromethane	110	0	71.2-125		%REC	1	1/18/2006
Surr: Toluene-d8	93.1	0	75-125		%REC	1	1/18/2006

**Qualifiers:** U - Analyzed for but Not Detected  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results RPD > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: February 01, 2006

**CLIENT:** ERM - Southwest, Inc.  
**Work Order:** 0601187  
**Project:** Cameron Iron Works  
**Lab ID:** 0601187-04

**Client Sample ID:** MW-93  
**Collection Date:** 1/17/2006 2:47:00 PM  
**Matrix:** WATER

Analyses	Result	SQL	ML	Qual	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>		Method: <b>SW8260</b>					Analyst: <b>PC</b>
1,1-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
1,1-Dichloroethene	U	0.00060	0.0050		mg/L	1	1/18/2006
1,2-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
cis-1,2-Dichloroethene	U	0.00050	0.0050		mg/L	1	1/18/2006
Tetrachloroethene	0.087	0.00050	0.0050		mg/L	1	1/18/2006
Trichloroethene	U	0.00070	0.0050		mg/L	1	1/18/2006
Vinyl chloride	U	0.00060	0.0020		mg/L	1	1/18/2006
Surr: 1,2-Dichloroethane-d4	81.0	0	70-125		%REC	1	1/18/2006
Surr: 4-Bromofluorobenzene	93.2	0	72.4-125		%REC	1	1/18/2006
Surr: Dibromofluoromethane	83.6	0	71.2-125		%REC	1	1/18/2006
Surr: Toluene-d8	90.4	0	75-125		%REC	1	1/18/2006

**Qualifiers:** U - Analyzed for but Not Detected  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results RPD > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: February 01, 2006

**CLIENT:** ERM - Southwest, Inc.  
**Work Order:** 0601187  
**Project:** Cameron Iron Works  
**Lab ID:** 0601187-05

**Client Sample ID:** FB-011706  
**Collection Date:** 1/17/2006 3:00:00 PM  
**Matrix:** WATER

Analyses	Result	SQL	ML	Qual	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>		Method: <b>SW8260</b>					Analyst: <b>PC</b>
1,1-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
1,1-Dichloroethene	U	0.00060	0.0050		mg/L	1	1/18/2006
1,2-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
cis-1,2-Dichloroethene	U	0.00050	0.0050		mg/L	1	1/18/2006
Tetrachloroethene	U	0.00050	0.0050		mg/L	1	1/18/2006
Trichloroethene	U	0.00070	0.0050		mg/L	1	1/18/2006
Vinyl chloride	U	0.00060	0.0020		mg/L	1	1/18/2006
Surr: 1,2-Dichloroethane-d4	73.5	0	70-125		%REC	1	1/18/2006
Surr: 4-Bromofluorobenzene	92.0	0	72.4-125		%REC	1	1/18/2006
Surr: Dibromofluoromethane	78.6	0	71.2-125		%REC	1	1/18/2006
Surr: Toluene-d8	88.2	0	75-125		%REC	1	1/18/2006

**Qualifiers:** U - Analyzed for but Not Detected  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results RPD > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: February 01, 2006

**CLIENT:** ERM - Southwest, Inc.  
**Work Order:** 0601187  
**Project:** Cameron Iron Works  
**Lab ID:** 0601187-06

**Client Sample ID:** MW-125  
**Collection Date:** 1/17/2006 4:09:00 PM  
**Matrix:** WATER

Analyses	Result	SQL	ML	Qual	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>		Method: <b>SW8260</b>					Analyst: <b>PC</b>
1,1-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
1,1-Dichloroethene	U	0.00060	0.0050		mg/L	1	1/18/2006
1,2-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
cis-1,2-Dichloroethene	U	0.00050	0.0050		mg/L	1	1/18/2006
Tetrachloroethene	0.0062	0.00050	0.0050		mg/L	1	1/18/2006
Trichloroethene	U	0.00070	0.0050		mg/L	1	1/18/2006
Vinyl chloride	U	0.00060	0.0020		mg/L	1	1/18/2006
Surr: 1,2-Dichloroethane-d4	80.5	0	70-125		%REC	1	1/18/2006
Surr: 4-Bromofluorobenzene	90.1	0	72.4-125		%REC	1	1/18/2006
Surr: Dibromofluoromethane	85.8	0	71.2-125		%REC	1	1/18/2006
Surr: Toluene-d8	88.6	0	75-125		%REC	1	1/18/2006

**Qualifiers:** U - Analyzed for but Not Detected  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results RPD > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time

**e-Lab Analytical, Inc.**

Date: February 01, 2006

**CLIENT:** ERM - Southwest, Inc.  
**Work Order:** 0601187  
**Project:** Cameron Iron Works  
**Lab ID:** 0601187-07

**Client Sample ID:** Dup-011706  
**Collection Date:** 1/17/2006 12:00:00 PM  
**Matrix:** WATER

Analyses	Result	SQL	ML	Qual	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>		Method: <b>SW8260</b>					Analyst: <b>PC</b>
1,1-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
1,1-Dichloroethene	U	0.00060	0.0050		mg/L	1	1/18/2006
1,2-Dichloroethane	U	0.00050	0.0050		mg/L	1	1/18/2006
cis-1,2-Dichloroethene	U	0.00050	0.0050		mg/L	1	1/18/2006
Tetrachloroethene	0.091	0.00050	0.0050		mg/L	1	1/18/2006
Trichloroethene	U	0.00070	0.0050		mg/L	1	1/18/2006
Vinyl chloride	U	0.00060	0.0020		mg/L	1	1/18/2006
Surr: 1,2-Dichloroethane-d4	73.8	0	70-125		%REC	1	1/18/2006
Surr: 4-Bromofluorobenzene	91.9	0	72.4-125		%REC	1	1/18/2006
Surr: Dibromofluoromethane	77.4	0	71.2-125		%REC	1	1/18/2006
Surr: Toluene-d8	87.5	0	75-125		%REC	1	1/18/2006

**Qualifiers:** U - Analyzed for but Not Detected  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 P - Dual Column results RPD > 40%  
 E - Value above quantitation range  
 H - Analyzed outside of Hold Time



Test Code: 8260\_TCL\_W  
Test Number: SW8260  
Test Name: TCL Volatile Organics  
Matrix: Aqueous Units: mg/L

**METHOD DETECTION /  
REPORTING LIMITS**

Type	Analyte	CAS	MDL	Unadjusted MQL
A	1,1-Dichloroethane	75-34-3	0.0005	0.005
A	1,1-Dichloroethene	75-35-4	0.0006	0.005
A	1,2-Dichloroethane	107-06-2	0.0005	0.005
A	cis-1,2-Dichloroethene	156-59-2	0.0005	0.005
A	Tetrachloroethene	127-18-4	0.0005	0.005
A	Trichloroethene	79-01-6	0.0007	0.005
A	Vinyl chloride	75-01-4	0.0006	0.002
S	Surr: 1,2-Dichloroethane-d4	17060-07-0	0	0
S	Surr: 4-Bromofluorobenzene	460-00-4	0	0
S	Surr: Dibromofluoromethane	1868-53-7	0	0
S	Surr: Toluene-d8	2037-26-5	0	0

e-Lab Analytical, Inc.

Date: Feb 01 2006

CLIENT: ERM Southwest, Inc.  
 Work Order: 0601187  
 Project: Cameron Iron Works

QC BATCH REPORT

Batch ID: R34546 InstrumentID: VOA1

MBLK		Sample ID: VBLKW-0118			Test Code: SW8260		Units: µg/L		Analysis Date: 01/18/06 17:48		
Client ID:		Run ID: VOA1_060118A		SeqNo: 788327		Prep Date:		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
1,1-Dichloroethane	U	5.0									
1,1-Dichloroethene	U	5.0									
1,2-Dichloroethane	U	5.0									
cis-1,2-Dichloroethene	U	5.0									
Tetrachloroethene	U	5.0									
Trichloroethene	U	5.0									
Vinyl chloride	U	2.0									
Surr: 1,2-Dichloroethane-d4	45.42	5.0	50	0	90.8	70-125		0			
Surr: 4-Bromofluorobenzene	46.38	5.0	50	0	92.8	72.4-125		0			
Surr: Dibromofluoromethane	45.62	5.0	50	0	91.2	71.2-125		0			
Surr: Toluene-d8	45.28	5.0	50	0	90.6	75-125		0			

LCS		Sample ID: VLCSW-0118			Test Code: SW8260		Units: µg/L		Analysis Date: 01/18/06 16:52		
Client ID:		Run ID: VOA1_060118A		SeqNo: 788326		Prep Date:		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
1,1-Dichloroethane	47.08	5.0	50	0	94.2	74.2-122		0			
1,1-Dichloroethene	47.53	5.0	50	0	95.1	75.8-122		0			
1,2-Dichloroethane	49.07	5.0	50	0	98.1	78.8-120		0			
cis-1,2-Dichloroethene	47.64	5.0	50	0	95.3	80-120		0			
Tetrachloroethene	50.65	5.0	50	0	101	80-120		0			
Trichloroethene	50.53	5.0	50	0	101	80-120		0			
Vinyl chloride	45.39	2.0	50	0	90.8	76.2-121		0			
Surr: 1,2-Dichloroethane-d4	47.74	5.0	50	0	95.5	70-125		0			
Surr: 4-Bromofluorobenzene	44.4	5.0	50	0	88.8	72.4-125		0			
Surr: Dibromofluoromethane	45.34	5.0	50	0	90.7	71.2-125		0			
Surr: Toluene-d8	44.54	5.0	50	0	89.1	75-125		0			

ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 O - Referenced analyte value is > 4 times amount spiked  
 S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 B - Analyte detected in assoc. Method Blank  
 U - Analyzed for but not detected  
 E - Value above quantitation range

**CLIENT:** ERM Southwest, Inc.  
**Work Order:** 0601187  
**Project:** Cameron Iron Works

# QC BATCH REPORT

Batch ID: **R34546** InstrumentID: **VOA1**

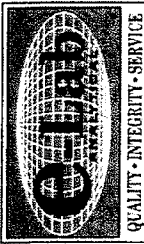
MS		Sample ID: <b>0601154-06AMS</b>			Test Code: <b>SW8260</b>		Units: <b>µg/L</b>		Analysis Date: <b>01/18/06 20:07</b>		
Client ID:		Run ID: <b>VOA1_060118A</b>			SeqNo: <b>788329</b>		Prep Date:		DF: <b>50</b>		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
1,1-Dichloroethane	2868	250	2500	0	115	74.2-122	0				
1,1-Dichloroethene	2857	250	2500	0	114	75.8-122	0				
1,2-Dichloroethane	2923	250	2500	0	117	78.8-120	0				
cis-1,2-Dichloroethene	2932	250	2500	0	117	80-120	0				
Tetrachloroethene	2367	250	2500	0	94.7	80-120	0				
Trichloroethene	2622	250	2500	0	105	80-120	0				
Vinyl chloride	2107	100	2500	0	84.3	76.2-121	0				
Surr: 1,2-Dichloroethane-d4	2710	250	2500	0	108	70-125	0				
Surr: 4-Bromofluorobenzene	2229	250	2500	0	89.2	72.4-125	0				
Surr: Dibromofluoromethane	2674	250	2500	0	107	71.2-125	0				
Surr: Toluene-d8	2288	250	2500	0	91.5	75-125	0				

MSD		Sample ID: <b>0601154-06AMSD</b>			Test Code: <b>SW8260</b>		Units: <b>µg/L</b>		Analysis Date: <b>01/18/06 20:35</b>		
Client ID:		Run ID: <b>VOA1_060118A</b>			SeqNo: <b>788330</b>		Prep Date:		DF: <b>50</b>		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
1,1-Dichloroethane	2879	250	2500	0	115	74.2-122	2868	0.399	20		
1,1-Dichloroethene	2813	250	2500	0	113	75.8-122	2857	1.56	20		
1,2-Dichloroethane	2956	250	2500	0	118	78.8-120	2923	1.13	20		
cis-1,2-Dichloroethene	2972	250	2500	0	119	80-120	2932	1.34	20		
Tetrachloroethene	2409	250	2500	0	96.4	80-120	2367	1.78	20		
Trichloroethene	2618	250	2500	0	105	80-120	2622	0.151	20		
Vinyl chloride	2049	100	2500	0	81.9	76.2-121	2107	2.82	20		
Surr: 1,2-Dichloroethane-d4	2713	250	2500	0	109	70-125	2710	0.13	20		
Surr: 4-Bromofluorobenzene	2220	250	2500	0	88.8	72.4-125	2229	0.406	20		
Surr: Dibromofluoromethane	2700	250	2500	0	108	71.2-125	2674	0.959	20		
Surr: Toluene-d8	2288	250	2500	0	91.5	75-125	2288	0.0239	20		

The following samples were analyzed in this batch:

0601187-01A	0601187-02A	0601187-03A
0601187-04A	0601187-05A	0601187-06A
0601187-07A		

ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 O - Referenced analyte value is > 4 times amount spiked  
 S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 P - Dual Column results percent difference > 40%  
 B - Analyte detected in assoc. Method Blank  
 U - Analyzed for but not detected  
 E - Value above quantitation range



e-Lab Analytical, Inc.  
10450 Stanchiff Rd. #210  
Houston, Texas 77099  
(Tel) 281.530.5656  
(Fax) 281.530.5887

# Chain of Custody Form

Page 1 of 1

e-Lab Analytical, Inc.  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

Customer Information		Project Information		e-Lab Project Manager: <u>0601197</u>													
Project Name		Cameron Iron Works		Parameter/Method Request for Analysis													
Project Number		14347 0043480		Volatiles (List B)													
Bill To Company		ERM Southwest, Inc.															
Invoice Attn		Greg Wheeler															
Address		15810 Park Ten Place															
Suite		Suite 300															
City/State/Zip		Houston, TX 77084															
Phone		(281) 600-1015															
Fax		(281) 600-1001															
e-Mail Address																	
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	SWD-14	1/17/06	940	WATER	HCL	3		X									
2	MW-81		1310			3		X									
3	MW-70		1352			3		X									
4	MW-93		1447			3		X									
5	FB-011706		1500			3		X									
6	MW-125		1609			3		X									
7	DUP-011706		1200			3		X									
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
Andy Dickson		Pick up		<input type="checkbox"/> Std 10 WK Days	<input type="checkbox"/> 5 WK Days	<input checked="" type="checkbox"/> 24 Hour	
Relinquished by:	Date: 1/17/06	Time: 1745	Received by:	Notes: 24 Hr TAT			
Relinquished by:	Date: 1-18-06	Time: 0735	Received by:	Notes: 1800 0735			
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	Notes:			
Preservative Key:	1-HCl	2-HNO <sub>3</sub>	3-H <sub>2</sub> SO <sub>4</sub>	4-NaOH	5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	6-NaHSO <sub>3</sub>	7-Other
						8-4°C	9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.  
2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name ERMSW-HOU

Date/Time Received: 1/18/2006 7:00:00 AM

Work Order Number 0601187

Received by: PS

Checklist completed by RICHARD SANCHEZ 1-18-06  
Signature Date

Reviewed by LT 1/18/06  
Initials Date

Matrix: W

Carrier name E-Lab

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No
- Temperature(s)/Thermometer(s): 2.2c 002
- Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted
- Water - pH acceptable upon receipt? Yes  No  N/A

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

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Client contacted \_\_\_\_\_ Date contacted: 1/18/06 Person contacted LT  
Contacted by: Greg Regarding: 14:37  
Comments: Not Rush


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Corrective Action \_\_\_\_\_

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0601187

	<b>e-Lab Analytical, Inc.</b>
	10450 Stancliff Rd., Suite 210
	Houston, Texas 77099
	Tel. 281.530.5656 Fax. 218.530.5887
Date: <u>1/07/</u>	
Name: <u>Ac</u>	
Company: _____	

<b>CUSTODY SEAL</b>	Seal Broken By:
<u>26</u> Time: <u>1745</u>	<u>RS</u>
by <u>Dickson</u>	Date:
<u>ERM-JW</u>	<u>1-18-00</u>