

February 18, 2008

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. 0078854

Subject: First Quarter 2008 Monitoring Data Transmittal  
Former Cameron Iron Works Facility, Houston, Texas  
VCP No. 221



Dear Mr. Riggle:

On behalf of Cameron International Corporation (Cameron), Environmental Resources Management (ERM) is providing this transmittal of ground water data to the Texas Commission on Environmental Quality (TCEQ) for your records. This report presents a summary of the actions undertaken in responses to an apparent movement of the plume in some areas downgradient of the Former Cameron Iron Works Facility (the facility). A summary table (Table 1) has been created to convey this information, as well as the future course of action for each area.

Eight ground water samples were collected on January 21 and 22, 2008 at monitor well locations (MW-70, MW-78, MW-79, MW-93, MW-96, MW-125, MW-126, and MW-166) and analyzed for the site-specific constituents of concern (COCs). These sample locations are located in the residential neighborhood south of the facility. This quarterly sampling event was performed at MW-70, MW-78, MW-79, MW-93, MW-96, MW-125, and MW-126, because the results from October 2007 exceeded the method quantitation limits (MQLs). MW-166 was sampled to delineate elevated ground water concentrations at MW-96.

A change to the list of "trigger wells" (defined as a boundary monitor well) was submitted to the TCEQ in a letter dated February 18, 2008 due to apparent plume movement in the areas of MW-78 and MW-79, MW-96, and MW-126. The proposed replacement trigger wells (MW-74, MW-139, MW-146, MW-167, and MW-168) will be sampled semiannually and abide by the same trigger components set forth for MW-78, MW-79, MW-96, and MW-126.

A summary of the ground water analytical data for the First Quarter 2008 Sampling Event is presented in Table 2. The data usability summaries and laboratory reports are provided as Attachment 2. The ground water analytical results were compared to the response action items outlined in the *Response Action Plan* (RAP) dated August 28, 2003 and summarized in Table 1.

*Conclusion*

The following response actions will be initiated to meet the requirements of the RAP:

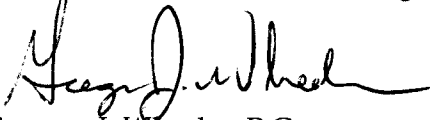
- COC concentrations will be monitored at the new trigger wells (MW-132, MW-139, MW-146, MW-167, and MW-168) on a semiannual basis;
- COC concentrations will be monitored at MW-70, MW-93, and MW-125 on a quarterly basis;
- In the areas of MW-78, MW-93, and MW-125, monitoring/injection wells (MW-150 through MW-155 and IW-47 through IW-52) will be monitored for the presence of permanganate; and
- The application of additional permanganate injections in the vicinity of MW-78, MW-93, and MW-125 is scheduled to be completed within the first quarter of 2008.

The next quarterly sampling event will be in July 2008 because a regularly scheduled semiannual event is scheduled for April 2008.

Please contact Mr. Ted Fasting of Cameron International Corporation at (713) 513-3325 or me at (281) 600-1074 with any questions or comments.

Sincerely,

Environmental Resources Management



Gregory J. Wheeler, P.G.

GJW/skd  
Attachments

cc: Marsha Hill, Texas Commission on Environmental Quality, Region X II  
Ted Fasting, Cameron International Corporation  
Bruce Himmelreich, Cameron International Corporation (without attachments)  
Clayton Trier, Stablewood Property Owners Association  
Robin Morse, Crain, Caton, and James, P.C.  
James Elkins III, Houston Trust Company  
Paul Stefan, Environmental Resources Management (Houston)

**Tables**  
*Attachment 1*

*February 18, 2008*  
*Project No. 0078854*

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

TABLE 1

Summary of Response Action Plan Implementation  
 First Quarter 2008 Monitoring Data Transmittal

Former Cameron Iron Works Facility  
 Houston, Texas

<u>Well</u>	<u>COCs elevated above MQL</u>	<u>COCs elevated above PCL</u>	<u>Need for Additional Notification (Yes or No)</u>	<u>In-situ Treatment (Yes or No)</u>	<u>Sampling Frequency</u>
MW-70	1,1-dichloroethane 1,1-dichloroethene cis-1,2-dichloroethane trichloroethene vinyl chloride	trichloroethene vinyl chloride	no (a)	no (b)	Quarterly
MW-78	1,1-dichloroethane 1,1-dichloroethene	1,1-dichloroethene	no (a)	yes (c)	Semiannually (d)
MW-79	1,1-dichloroethane 1,1-dichloroethene	1,1-dichloroethene	no (a)	yes (c)	Semiannually (d)
MW-93	tetrachloroethene	tetrachloroethene	no (a)	yes (c)	Quarterly
MW-96	1,1-dichloroethene	1,1-dichloroethene	no (a)	yes (c)	Semiannually (d)
MW-125	tetrachloroethene	tetrachloroethene	no (a)	yes (c)	Quarterly
MW-126	1,1-dichloroethane 1,1-dichloroethene cis-1,2-dichloroethane tetrachloroethene trichloroethene	1,1-dichloroethene tetrachloroethene trichloroethene	no (a)	yes (c)	Semiannually (d)

NOTES:

COCs = Chemicals of Concern

MQL = Method Quantitation Limit

PCL = Protective Concentration Level

(a) Properties in the vicinity of the affected ground water have been previously notified.

(b) MW-70 will continue to be monitored on a quarterly basis until the reported concentration of trichloroethene and vinyl chloride are confirmed with four quarters of reported concentrations above the critical PCL.

(c) Injection wells located in this area have been injected with sodium permanganate during 2007. This area is being gauged regularly for the presence of permanganate. If there is no presence of permanganate in this area, additional permanganate will be injected.

(d) The existing trigger wells have been replaced and will be sampled on a semiannual basis. The new trigger wells (MW-74, MW-139, MW-146, MW-167, and MW-168) will also be sampled semiannually unless results exceed specific triggers.

TABLE 2

Summary of Monitor Well Ground Water Data for Trigger Wells  
First Quarter 2008 Monitoring Data Transmittal

Former Cameron Iron Works Facility  
Houston, Texas

Constituent	MQL	Critical PCLs (a)	Location:				
			MW-70	MW-78	MW-79	MW-93	
			Depth: (b)	25	26	33	43
			Date:	1/22/2008	1/21/2008	1/21/2008	1/21/2008
1,1-Dichloroethane	0.0050	4.9		<b>0.021</b>	<b>0.0063</b>	<b>0.0089</b>	ND (0.0050)
1,1-Dichloroethene	0.0050	0.0070		<b>0.0072</b>	<b>0.21</b>	<b>0.14</b>	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		<b>0.053</b>	ND (0.0050)	0.0019 J	0.00071 J
Tetrachloroethene	0.0050	0.0050		0.0013 J	ND (0.0050)	ND (0.0050)	<b>0.10</b>
Trichloroethene	0.0050	0.0050		<b>0.015</b>	ND (0.0050)	ND (0.0050)	ND (0.0050) J
Vinyl Chloride	0.0020	0.0020		<b>0.0031</b>	ND (0.0020)	ND (0.0020)	ND (0.0020)

Constituent	MQL	Critical PCLs (a)	Location:				
			MW-96	MW-125	MW-126	MW-166	
			Depth: (b)	33	32	25	35
			Date:	1/22/2008	1/21/2008	1/22/2008	1/22/2008
1,1-Dichloroethane	0.0050	4.9		0.0012 J	ND (0.0050)	<b>0.0053</b>	0.0012 J
1,1-Dichloroethene	0.0050	0.0070		<b>0.019</b>	ND (0.0050)	<b>0.0077</b>	<b>0.017</b>
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)	<b>0.023</b>	ND (0.0050)
Tetrachloroethene	0.0050	0.0050		ND (0.0050)	<b>0.0078</b>	<b>0.018</b>	ND (0.0050)
Trichloroethene	0.0050	0.0050		ND (0.0050)	ND (0.0050)	<b>0.0028</b> J	ND (0.0050)
Vinyl Chloride	0.0020	0.0020		ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)

## NOTES:

The reported concentrations are in mg/L.

**0.0028** = exceedance of TCEQ Texas Risk Reduction Program (TRRP) Tier 1 Residential Class 2 Ground Water critical PCLs.

**Bold** values exceed the MQL.

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

MQL = Method Quantitation Limit.

(a) TCEQ Texas Risk Reduction Program (TRRP) Tier 1 Residential Class 2 Ground Water PCLs, Table 3, table for TRRP Rule dated June 26, 2007.

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

J = Estimated data, the reported sample concentration is approximated due to exceedance of QC requirements.

**Data Usability Summaries and Laboratory Reports**  
*Attachment 2*

*February 18, 2008*  
*Project No. 0078854*

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

**Data Usability Summary and Laboratory Report (0801487)**  
**First Quarter 2008 Monitoring Data Transmittal**  
*Attachment 2*

Former Cameron Iron Works Facility  
Houston, Texas

Environmental Resources Management (ERM) reviewed a laboratory analytical data package (0801487) from e-Lab Analytical, Inc. of Houston, Texas for the analysis of nine ground water samples collected on January 21 and 22, 2008 south of 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 downgradient of the facility as a response actions triggered by the October 2008 results.

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

Analysis requested included:

SW-846 8260B – 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

Nine ground water samples including one duplicate ground water sample and one field blank were provided to the laboratory for analysis. Thirteen samples were analyzed for seven volatile organic compounds (VOCs) (1,1-dichloroethene, 1,1-dichloroethane, 1,2-dichloroethane, cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride). One trip blank was provided to the laboratory but was not analyzed per ERM's request. Rinsate and equipment blanks were not provided to the laboratory for analysis. Table 2-1 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 detection limit (SDL) 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 temperatures were within the acceptance criteria of  $4 \pm 2$  °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 VOC. The LRC also documents satisfactory instrument performance calibrations (GC/MS tunes) for VOC analyses.

**Blanks**

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

**Surrogate Recoveries**

VOC sample surrogate recoveries were within the TRRP defined acceptance 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 TRRP defined acceptance limits for VOCs.

**Matrix Spike/Matrix Spike Duplicates**

Batch R59359 matrix spike/matrix spike duplicate (MS/MSD) recoveries were within the TRRP defined acceptance limits for 1,1-Dichloroethene.

VOC analysis batches R59201 and R59246 were not project related; therefore they were not assessed.

**Field Precision**

One field duplicate sample was collected and analyzed in this laboratory package (MW-78 / Dup-1).

Sample MW-78 and duplicate sample Dup-1 were reported as detected for 1,1-dichloroethane, and 1,1-dichloroethene. The sample/duplicate precision comparison for both samples had RPD less than the 20% acceptance criteria for the compounds listed; therefore, qualifiers were not necessary. Sample/duplicate precision calculations are included in Table 2-2.

**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 downgradient of the Former Cameron Iron Works Facility.

**TABLE 2-1**

Cross Reference Field Sample Identifications and Laboratory Identifications  
First Quarter 2008 Monitoring Data Transmittal

Former Cameron Iron Works Facility  
Houston, Texas

<b>Field ID</b>	<b>Laboratory ID</b>
0801487-01	MW-93
0801487-02	MW-125
0801487-03	MW-78
0801487-04	MW-79
0801487-05	Dup-1
0801487-06	MW-96
0801487-07	MW-166
0801487-08	MW-126
0801487-09	MW-70
0801487-10	FB-1
0801487-11	Trip Blank

**TABLE 2-2**

Field Precision  
First Quarter 2008 Monitoring Data Transmittal  
Former Cameron Iron Works Facility  
Houston, Texas

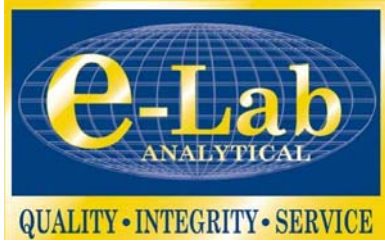
Field Identification	Analyte	Sample Result	Duplicate Result	RPD	
				Absolute Value	Qualified
MW-78/Dup-1	1,1-dichloroethane	0.0063	0.0068	7.634	A
	1,1-dichloroethene	0.21	0.19	10.000	A

NOTES:

Results reported as mg/kg.

$RPD = ((SR-DR)*200)/(SR+DR)$

A = Acceptable data



January 30, 2008

Marcel St. Marie  
ERM Southwest, Inc.  
15810 Park Ten Place  
Suite 300  
Houston, TX 77084

Tel: (281) 600-1130  
Fax: (281) 600-1001

Re: Former Cameron Iron Works

Work Order : **0801487**

Dear Marcel St. Marie,

e-Lab Analytical, Inc. received 11 samples on 1/23/2008 01:35 PM 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 24.

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

Sincerely,

Electronically approved by: Glenda H. Ramos

Lora Terrill  
VP Lab Operations



Certificate No: T104704231-06-TX

**e.Lab Analytical, Inc.**

Part of the **ALS Laboratory Group**  
10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338

Phone: (281) 530-5656 Fax: (281) 530-5887

[www.elabi.com](http://www.elabi.com) [www.alsglobal.com](http://www.alsglobal.com)

A Campbell Brothers Limited Company

**CLIENT:** ERM Southwest, Inc.  
**Project:** Former Cameron Iron Works  
**Work Order:** 0801487

**TRRP Laboratory Data  
Package Cover Page**

This data package consists of all or some of the following as applicable:

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.

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 labor in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed 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 sign the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this c package and is by signature affirming the above release statement is true.



Lora Terrill  
VP Lab Operations

Laboratory Review Checklist: Reportable Data							
Laboratory Name: e-Lab Analytical, Inc.				LRC Date: 01/30/2008			
Project Name: Former Cameron Iron Works				Laboratory Job Number: 0801487			
Reviewer Name: Lora Terrill				Prep Batch Number(s): R59201, R59246, R59359			
# <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: 01/30/2008				
Project Name: Former Cameron Iron Works			Laboratory Job Number: 0801487				
Reviewer Name: Lora Terrill			Prep Batch Number(s): R59201, R59246, R59359				
# <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?	XX		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: 01/30/2008
Project Name: Former Cameron Iron Works	Laboratory Job Number: 0801487
Reviewer Name: Lora Terrill	Prep Batch Number(s): R59201, R59246, R59359
<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:** Former Cameron Iron Works  
**Work Order:** 0801487

**Work Order Sample Summary**

<u>Lab Samp 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>
0801487-01	MW-93	Water		1/21/2008 10:05	1/23/2008 13:35	<input type="checkbox"/>
0801487-02	MW-125	Water		1/21/2008 11:35	1/23/2008 13:35	<input type="checkbox"/>
0801487-03	MW-78	Water		1/21/2008 14:40	1/23/2008 13:35	<input type="checkbox"/>
0801487-04	MW-79	Water		1/21/2008 16:05	1/23/2008 13:35	<input type="checkbox"/>
0801487-05	Dup-1	Water		1/21/2008 14:45	1/23/2008 13:35	<input type="checkbox"/>
0801487-06	MW-96	Water		1/22/2008 10:10	1/23/2008 13:35	<input type="checkbox"/>
0801487-07	MW-166	Water		1/22/2008 11:55	1/23/2008 13:35	<input type="checkbox"/>
0801487-08	MW-126	Water		1/22/2008 14:15	1/23/2008 13:35	<input type="checkbox"/>
0801487-09	MW-70	Water		1/22/2008 15:40	1/23/2008 13:35	<input type="checkbox"/>
0801487-10	FB-1	Water		1/22/2008 17:30	1/23/2008 13:35	<input type="checkbox"/>
0801487-11	Trip Blank	Water		1/22/2008 17:30	1/23/2008 13:35	<input type="checkbox"/>

**Client:** ERM Southwest, Inc.  
**Project:** Former Cameron Iron Works  
**Sample ID:** MW-93  
**Collection Date:** 1/21/2008 10:05:00 AM

**Work Order:** 0801487  
**Lab ID:** 0801487-01  
**Matrix:** WATER

Analyses	Result	Qual	SDL	MLL	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	1/24/2008
1,1-Dichloroethene	U		0.00060	0.0050	mg/L	1	1/24/2008
1,2-Dichloroethane	U		0.00050	0.0050	mg/L	1	1/24/2008
<b>cis-1,2-Dichloroethene</b>	<b>0.00071</b>	J	<b>0.00050</b>	<b>0.0050</b>	<b>mg/L</b>	1	1/24/2008
<b>Tetrachloroethene</b>	<b>0.10</b>		<b>0.00050</b>	<b>0.0050</b>	<b>mg/L</b>	1	1/24/2008
Trichloroethene	U		0.00070	0.0050	mg/L	1	1/24/2008
Vinyl chloride	U		0.00060	0.0020	mg/L	1	1/24/2008
Surr: 1,2-Dichloroethane-d4	86.4			70-125	%REC	1	1/24/2008
Surr: 4-Bromofluorobenzene	99.9			72-125	%REC	1	1/24/2008
Surr: Dibromofluoromethane	98.7			71-125	%REC	1	1/24/2008
Surr: Toluene-d8	101			75-125	%REC	1	1/24/2008

**Qualifiers:** U - Analyzed for but Not Detected      S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits      P - Dual Column results RPD > 40%  
 B - Analyte detected in the associated Method Blank      E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level      H - Analyzed outside of Hold Time

**Client:** ERM Southwest, Inc.  
**Project:** Former Cameron Iron Works  
**Sample ID:** MW-125  
**Collection Date:** 1/21/2008 11:35:00 AM

**Work Order:** 0801487  
**Lab ID:** 0801487-02  
**Matrix:** WATER

Analyses	Result	Qual	SDL	MLL	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	1/24/2008
1,1-Dichloroethene	U		0.00060	0.0050	mg/L	1	1/24/2008
1,2-Dichloroethane	U		0.00050	0.0050	mg/L	1	1/24/2008
cis-1,2-Dichloroethene	U		0.00050	0.0050	mg/L	1	1/24/2008
<b>Tetrachloroethene</b>	<b>0.0078</b>		<b>0.00050</b>	<b>0.0050</b>	<b>mg/L</b>	1	1/24/2008
Trichloroethene	U		0.00070	0.0050	mg/L	1	1/24/2008
Vinyl chloride	U		0.00060	0.0020	mg/L	1	1/24/2008
Surr: 1,2-Dichloroethane-d4	92.9			70-125	%REC	1	1/24/2008
Surr: 4-Bromofluorobenzene	97.1			72-125	%REC	1	1/24/2008
Surr: Dibromofluoromethane	101			71-125	%REC	1	1/24/2008
Surr: Toluene-d8	99.0			75-125	%REC	1	1/24/2008

**Qualifiers:** U - Analyzed for but Not Detected S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits P - Dual Column results RPD > 40%  
 B - Analyte detected in the associated Method Blank E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level H - Analyzed outside of Hold Time

**Client:** ERM Southwest, Inc.  
**Project:** Former Cameron Iron Works  
**Sample ID:** MW-78  
**Collection Date:** 1/21/2008 2:40:00 PM

**Work Order:** 0801487  
**Lab ID:** 0801487-03  
**Matrix:** WATER

Analyses	Result	Qual	SDL	SQL	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>			Method: <b>SW8260</b>			Analyst: <b>PC</b>	
1,1-Dichloroethane	<b>0.0063</b>		<b>0.00050</b>	<b>0.0050</b>	mg/L	1	1/25/2008
1,1-Dichloroethene	<b>0.21</b>		<b>0.0030</b>	<b>0.025</b>	mg/L	5	1/29/2008
1,2-Dichloroethane	U		0.00050	0.0050	mg/L	1	1/25/2008
cis-1,2-Dichloroethene	U		0.00050	0.0050	mg/L	1	1/25/2008
Tetrachloroethene	U		0.00050	0.0050	mg/L	1	1/25/2008
Trichloroethene	U		0.00070	0.0050	mg/L	1	1/25/2008
Vinyl chloride	U		0.00060	0.0020	mg/L	1	1/25/2008
Surr: 1,2-Dichloroethane-d4	94.4			70-125	%REC	1	1/25/2008
Surr: 1,2-Dichloroethane-d4	93.3			70-125	%REC	5	1/29/2008
Surr: 4-Bromofluorobenzene	99.8			72-125	%REC	1	1/25/2008
Surr: 4-Bromofluorobenzene	96.8			72-125	%REC	5	1/29/2008
Surr: Dibromofluoromethane	105			71-125	%REC	1	1/25/2008
Surr: Dibromofluoromethane	98.8			71-125	%REC	5	1/29/2008
Surr: Toluene-d8	103			75-125	%REC	1	1/25/2008
Surr: Toluene-d8	101			75-125	%REC	5	1/29/2008

**Qualifiers:** U - Analyzed for but Not Detected      S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits      P - Dual Column results RPD > 40%  
 B - Analyte detected in the associated Method Blank      E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level      H - Analyzed outside of Hold Time

**Client:** ERM Southwest, Inc.  
**Project:** Former Cameron Iron Works  
**Sample ID:** MW-79  
**Collection Date:** 1/21/2008 4:05:00 PM

**Work Order:** 0801487  
**Lab ID:** 0801487-04  
**Matrix:** WATER

Analyses	Result	Qual	SDL	MLL	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>			Method: <b>SW8260</b>			Analyst: <b>PC</b>	
1,1-Dichloroethane	0.0089		0.00050	0.0050	mg/L	1	1/25/2008
1,1-Dichloroethene	0.14		0.00060	0.0050	mg/L	1	1/25/2008
1,2-Dichloroethane	U		0.00050	0.0050	mg/L	1	1/25/2008
cis-1,2-Dichloroethene	0.0019	J	0.00050	0.0050	mg/L	1	1/25/2008
Tetrachloroethene	U		0.00050	0.0050	mg/L	1	1/25/2008
Trichloroethene	U		0.00070	0.0050	mg/L	1	1/25/2008
Vinyl chloride	U		0.00060	0.0020	mg/L	1	1/25/2008
Surr: 1,2-Dichloroethane-d4	97.0			70-125	%REC	1	1/25/2008
Surr: 4-Bromofluorobenzene	97.2			72-125	%REC	1	1/25/2008
Surr: Dibromofluoromethane	107			71-125	%REC	1	1/25/2008
Surr: Toluene-d8	99.6			75-125	%REC	1	1/25/2008

**Qualifiers:** U - Analyzed for but Not Detected S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits P - Dual Column results RPD > 40%  
 B - Analyte detected in the associated Method Blank E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level H - Analyzed outside of Hold Time

**Client:** ERM Southwest, Inc.  
**Project:** Former Cameron Iron Works  
**Sample ID:** Dup-1  
**Collection Date:** 1/21/2008 2:45:00 PM

**Work Order:** 0801487  
**Lab ID:** 0801487-05  
**Matrix:** WATER

Analyses	Result	Qual	SDL	MLL	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>			Method: <b>SW8260</b>			Analyst: <b>PC</b>	
1,1-Dichloroethane	<b>0.0068</b>		<b>0.00050</b>	<b>0.0050</b>	mg/L	1	1/25/2008
1,1-Dichloroethene	<b>0.19</b>		<b>0.0030</b>	<b>0.025</b>	mg/L	5	1/29/2008
1,2-Dichloroethane	U		0.00050	0.0050	mg/L	1	1/25/2008
cis-1,2-Dichloroethene	U		0.00050	0.0050	mg/L	1	1/25/2008
Tetrachloroethene	U		0.00050	0.0050	mg/L	1	1/25/2008
Trichloroethene	U		0.00070	0.0050	mg/L	1	1/25/2008
Vinyl chloride	U		0.00060	0.0020	mg/L	1	1/25/2008
Surr: 1,2-Dichloroethane-d4	97.6			70-125	%REC	1	1/25/2008
Surr: 1,2-Dichloroethane-d4	87.2			70-125	%REC	5	1/29/2008
Surr: 4-Bromofluorobenzene	97.5			72-125	%REC	1	1/25/2008
Surr: 4-Bromofluorobenzene	103			72-125	%REC	5	1/29/2008
Surr: Dibromofluoromethane	107			71-125	%REC	1	1/25/2008
Surr: Dibromofluoromethane	95.8			71-125	%REC	5	1/29/2008
Surr: Toluene-d8	101			75-125	%REC	1	1/25/2008
Surr: Toluene-d8	107			75-125	%REC	5	1/29/2008

**Qualifiers:** U - Analyzed for but Not Detected      S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits      P - Dual Column results RPD > 40%  
 B - Analyte detected in the associated Method Blank      E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level      H - Analyzed outside of Hold Time

**Client:** ERM Southwest, Inc.  
**Project:** Former Cameron Iron Works  
**Sample ID:** MW-96  
**Collection Date:** 1/22/2008 10:10:00 AM

**Work Order:** 0801487  
**Lab ID:** 0801487-06  
**Matrix:** WATER

Analyses	Result	Qual	SDL	MLL	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>			Method: <b>SW8260</b>			Analyst: <b>PC</b>	
1,1-Dichloroethane	0.0012	J	0.00050	0.0050	mg/L	1	1/25/2008
1,1-Dichloroethene	0.019		0.00060	0.0050	mg/L	1	1/25/2008
1,2-Dichloroethane	U		0.00050	0.0050	mg/L	1	1/25/2008
cis-1,2-Dichloroethene	U		0.00050	0.0050	mg/L	1	1/25/2008
Tetrachloroethene	U		0.00050	0.0050	mg/L	1	1/25/2008
Trichloroethene	U		0.00070	0.0050	mg/L	1	1/25/2008
Vinyl chloride	U		0.00060	0.0020	mg/L	1	1/25/2008
Surr: 1,2-Dichloroethane-d4	100			70-125	%REC	1	1/25/2008
Surr: 4-Bromofluorobenzene	102			72-125	%REC	1	1/25/2008
Surr: Dibromofluoromethane	109			71-125	%REC	1	1/25/2008
Surr: Toluene-d8	104			75-125	%REC	1	1/25/2008

**Qualifiers:** U - Analyzed for but Not Detected      S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits      P - Dual Column results RPD > 40%  
 B - Analyte detected in the associated Method Blank      E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level      H - Analyzed outside of Hold Time

**Client:** ERM Southwest, Inc.  
**Project:** Former Cameron Iron Works  
**Sample ID:** MW-166  
**Collection Date:** 1/22/2008 11:55:00 AM

**Work Order:** 0801487  
**Lab ID:** 0801487-07  
**Matrix:** WATER

Analyses	Result	Qual	SDL	MLL	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>			Method: <b>SW8260</b>			Analyst: <b>PC</b>	
1,1-Dichloroethane	0.0012	J	0.00050	0.0050	mg/L	1	1/25/2008
1,1-Dichloroethene	0.017		0.00060	0.0050	mg/L	1	1/25/2008
1,2-Dichloroethane	U		0.00050	0.0050	mg/L	1	1/25/2008
cis-1,2-Dichloroethene	U		0.00050	0.0050	mg/L	1	1/25/2008
Tetrachloroethene	U		0.00050	0.0050	mg/L	1	1/25/2008
Trichloroethene	U		0.00070	0.0050	mg/L	1	1/25/2008
Vinyl chloride	U		0.00060	0.0020	mg/L	1	1/25/2008
Surr: 1,2-Dichloroethane-d4	98.3			70-125	%REC	1	1/25/2008
Surr: 4-Bromofluorobenzene	99.0			72-125	%REC	1	1/25/2008
Surr: Dibromofluoromethane	104			71-125	%REC	1	1/25/2008
Surr: Toluene-d8	98.3			75-125	%REC	1	1/25/2008

**Qualifiers:** U - Analyzed for but Not Detected S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits P - Dual Column results RPD > 40%  
 B - Analyte detected in the associated Method Blank E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level H - Analyzed outside of Hold Time



**Client:** ERM Southwest, Inc.  
**Project:** Former Cameron Iron Works  
**Sample ID:** MW-126  
**Collection Date:** 1/22/2008 2:15:00 PM

**Work Order:** 0801487  
**Lab ID:** 0801487-08  
**Matrix:** WATER

Analyses	Result	Qual	SDL	MLL	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>			Method: <b>SW8260</b>			Analyst: <b>PC</b>	
1,1-Dichloroethane	0.0053		0.00050	0.0050	mg/L	1	1/25/2008
1,1-Dichloroethene	0.0077		0.00060	0.0050	mg/L	1	1/25/2008
1,2-Dichloroethane	U		0.00050	0.0050	mg/L	1	1/25/2008
cis-1,2-Dichloroethene	0.023		0.00050	0.0050	mg/L	1	1/25/2008
Tetrachloroethene	0.018		0.00050	0.0050	mg/L	1	1/25/2008
Trichloroethene	0.0028	J	0.00070	0.0050	mg/L	1	1/25/2008
Vinyl chloride	U		0.00060	0.0020	mg/L	1	1/25/2008
Surr: 1,2-Dichloroethane-d4	100			70-125	%REC	1	1/25/2008
Surr: 4-Bromofluorobenzene	101			72-125	%REC	1	1/25/2008
Surr: Dibromofluoromethane	108			71-125	%REC	1	1/25/2008
Surr: Toluene-d8	98.2			75-125	%REC	1	1/25/2008

**Qualifiers:** U - Analyzed for but Not Detected      S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits      P - Dual Column results RPD > 40%  
 B - Analyte detected in the associated Method Blank      E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level      H - Analyzed outside of Hold Time

Client: ERM Southwest, Inc.  
 Project: Former Cameron Iron Works  
 Sample ID: MW-70  
 Collection Date: 1/22/2008 3:40:00 PM

Work Order: 0801487  
 Lab ID: 0801487-09  
 Matrix: WATER

Analyses	Result	Qual	SDL	MLL	Units	Dilution Factor	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>			Method: <b>SW8260</b>			Analyst: <b>PC</b>	
1,1-Dichloroethane	0.021		0.00050	0.0050	mg/L	1	1/25/2008
1,1-Dichloroethene	0.0072		0.00060	0.0050	mg/L	1	1/25/2008
1,2-Dichloroethane	U		0.00050	0.0050	mg/L	1	1/25/2008
cis-1,2-Dichloroethene	0.053		0.00050	0.0050	mg/L	1	1/25/2008
Tetrachloroethene	0.0013	J	0.00050	0.0050	mg/L	1	1/25/2008
Trichloroethene	0.015		0.00070	0.0050	mg/L	1	1/25/2008
Vinyl chloride	0.0031		0.00060	0.0020	mg/L	1	1/25/2008
Surr: 1,2-Dichloroethane-d4	98.6			70-125	%REC	1	1/25/2008
Surr: 4-Bromofluorobenzene	99.0			72-125	%REC	1	1/25/2008
Surr: Dibromofluoromethane	111			71-125	%REC	1	1/25/2008
Surr: Toluene-d8	102			75-125	%REC	1	1/25/2008

**Qualifiers:** U - Analyzed for but Not Detected S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits P - Dual Column results RPD > 40%  
 B - Analyte detected in the associated Method Blank E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level H - Analyzed outside of Hold Time

**Client:** ERM Southwest, Inc.  
**Project:** Former Cameron Iron Works  
**Sample ID:** FB-1  
**Collection Date:** 1/22/2008 5:30:00 PM

**Work Order:** 0801487  
**Lab ID:** 0801487-10  
**Matrix:** WATER

Analyses	Result	Qual	SDL	MLL	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	1/25/2008
1,1-Dichloroethene	U		0.00060	0.0050	mg/L	1	1/25/2008
1,2-Dichloroethane	U		0.00050	0.0050	mg/L	1	1/25/2008
cis-1,2-Dichloroethene	U		0.00050	0.0050	mg/L	1	1/25/2008
Tetrachloroethene	U		0.00050	0.0050	mg/L	1	1/25/2008
Trichloroethene	U		0.00070	0.0050	mg/L	1	1/25/2008
Vinyl chloride	U		0.00060	0.0020	mg/L	1	1/25/2008
Surr: 1,2-Dichloroethane-d4	98.6			70-125	%REC	1	1/25/2008
Surr: 4-Bromofluorobenzene	103			72-125	%REC	1	1/25/2008
Surr: Dibromofluoromethane	107			71-125	%REC	1	1/25/2008
Surr: Toluene-d8	106			75-125	%REC	1	1/25/2008

**Qualifiers:** U - Analyzed for but Not Detected      S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits      P - Dual Column results RPD > 40%  
 B - Analyte detected in the associated Method Blank      E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level      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

CLIENT: ERM Southwest, Inc.

**QC BATCH REPORT**

Work Order: 0801487

Project: Former Cameron Iron Works

Batch ID: **R59201**

Instrument ID **VOA1**

Method: **SW8260**

MBLK		Sample ID: <b>VBLKW-012408</b>				Units: <b>µg/L</b>			Analysis Date: <b>01/24/08 12:36</b>	
Client ID:		Run ID: <b>VOA1_080124A</b>			SeqNo: <b>1313358</b>		Prep Date:		DF: <b>1</b>	
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								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>44.53</i>	5.0	<i>50</i>	0	<i>89.1</i>	<i>70-125</i>	0			
<i>Surr: 4-Bromofluorobenzene</i>	<i>48.51</i>	5.0	<i>50</i>	0	<i>97</i>	<i>72-125</i>	0			
<i>Surr: Dibromofluoromethane</i>	<i>51.02</i>	5.0	<i>50</i>	0	<i>102</i>	<i>71-125</i>	0			
<i>Surr: Toluene-d8</i>	<i>48.7</i>	5.0	<i>50</i>	0	<i>97.4</i>	<i>75-125</i>	0			

LCS		Sample ID: <b>VLCSW-012408</b>				Units: <b>µg/L</b>			Analysis Date: <b>01/24/08 11:45</b>	
Client ID:		Run ID: <b>VOA1_080124A</b>			SeqNo: <b>1313357</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	50.23	5.0	50	0	100	76-120	0			
1,1-Dichloroethene	46.85	5.0	50	0	93.7	73-124	0			
1,2-Dichloroethane	50.95	5.0	50	0	102	78-120	0			
cis-1,2-Dichloroethene	49.63	5.0	50	0	99.3	78-120	0			
Tetrachloroethene	44.52	5.0	50	0	89	79-120	0			
Trichloroethene	47.42	5.0	50	0	94.8	80-120	0			
Vinyl chloride	44.29	2.0	50	0	88.6	70-127	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>48.41</i>	5.0	<i>50</i>	0	<i>96.8</i>	<i>70-125</i>	0			
<i>Surr: 4-Bromofluorobenzene</i>	<i>47.45</i>	5.0	<i>50</i>	0	<i>94.9</i>	<i>72-125</i>	0			
<i>Surr: Dibromofluoromethane</i>	<i>50.22</i>	5.0	<i>50</i>	0	<i>100</i>	<i>71-125</i>	0			
<i>Surr: Toluene-d8</i>	<i>52.38</i>	5.0	<i>50</i>	0	<i>105</i>	<i>75-125</i>	0			

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in assoc. Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

U - Analyzed for but not detected

O - Referenced analyte value is > 4 times amount spiked

P - Dual Column results percent difference > 40%

E - Value above quantitation range

**CLIENT:** ERM Southwest, Inc.  
**Work Order:** 0801487  
**Project:** Former Cameron Iron Works

# QC BATCH REPORT

Batch ID: **R59201**      Instrument ID **VOA1**      Method: **SW8260**

**MS**      Sample ID: **0801494-01AMS**      Units: **µg/L**      Analysis Date: **01/24/08 15:58**

Client ID:      Run ID: **VOA1\_080124A**      SeqNo: **1313360**      Prep Date:      DF: **1**

Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	51.72	5.0	50	0	103	76-120	0			
1,1-Dichloroethene	48.27	5.0	50	0	96.5	73-124	0			
1,2-Dichloroethane	52.78	5.0	50	0	106	78-120	0			
cis-1,2-Dichloroethene	53.32	5.0	50	0	107	78-120	0			
Tetrachloroethene	78.14	5.0	50	34.09	88.1	79-120	0			
Trichloroethene	48.92	5.0	50	0	97.8	80-120	0			
Vinyl chloride	50.2	2.0	50	0	100	70-127	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	51.62	5.0	50	0	103	70-125	0			
<i>Surr: 4-Bromofluorobenzene</i>	49.23	5.0	50	0	98.5	72-125	0			
<i>Surr: Dibromofluoromethane</i>	51.77	5.0	50	0	104	71-125	0			
<i>Surr: Toluene-d8</i>	50.66	5.0	50	0	101	75-125	0			

**MSD**      Sample ID: **0801494-01AMSD**      Units: **µg/L**      Analysis Date: **01/24/08 16:24**

Client ID:      Run ID: **VOA1\_080124A**      SeqNo: **1313361**      Prep Date:      DF: **1**

Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	50.57	5.0	50	0	101	76-120	51.72	2.25	20	
1,1-Dichloroethene	44.72	5.0	50	0	89.4	73-124	48.27	7.64	20	
1,2-Dichloroethane	51.01	5.0	50	0	102	78-120	52.78	3.41	20	
cis-1,2-Dichloroethene	52.65	5.0	50	0	105	78-120	53.32	1.26	20	
Tetrachloroethene	77.26	5.0	50	34.09	86.3	79-120	78.14	1.14	20	
Trichloroethene	46.41	5.0	50	0	92.8	80-120	48.92	5.27	20	
Vinyl chloride	45.3	2.0	50	0	90.6	70-127	50.2	10.3	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	50.08	5.0	50	0	100	70-125	51.62	3.04	20	
<i>Surr: 4-Bromofluorobenzene</i>	50.11	5.0	50	0	100	72-125	49.23	1.77	20	
<i>Surr: Dibromofluoromethane</i>	52.15	5.0	50	0	104	71-125	51.77	0.731	20	
<i>Surr: Toluene-d8</i>	52.08	5.0	50	0	104	75-125	50.66	2.77	20	

The following samples were analyzed in this batch:

0801487-01A	0801487-02A
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- 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:** 0801487  
**Project:** Former Cameron Iron Works

# QC BATCH REPORT

Batch ID: **R59246**      Instrument ID **VOA1**      Method: **SW8260**

MBLK		Sample ID: <b>VBLKW-012508</b>			Units: <b>µg/L</b>			Analysis Date: <b>01/25/08 11:58</b>		
Client ID:		Run ID: <b>VOA1_080125A</b>			SeqNo: <b>1314263</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MLQ	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								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>44.46</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>88.9</i>	<i>70-125</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>51.49</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>72-125</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>49.03</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.1</i>	<i>71-125</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>51.04</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>75-125</i>	<i>0</i>			

LCS		Sample ID: <b>VLCSW-012508</b>			Units: <b>µg/L</b>			Analysis Date: <b>01/25/08 11:07</b>		
Client ID:		Run ID: <b>VOA1_080125A</b>			SeqNo: <b>1314262</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	49.78	5.0	50	0	99.6	76-120	0			
1,1-Dichloroethene	50.95	5.0	50	0	102	73-124	0			
1,2-Dichloroethane	51.52	5.0	50	0	103	78-120	0			
cis-1,2-Dichloroethene	52.57	5.0	50	0	105	78-120	0			
Tetrachloroethene	48.48	5.0	50	0	97	79-120	0			
Trichloroethene	51.45	5.0	50	0	103	80-120	0			
Vinyl chloride	49.71	2.0	50	0	99.4	70-127	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>48.89</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>97.8</i>	<i>70-125</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>49.77</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>99.5</i>	<i>72-125</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>51.63</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>71-125</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>51</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>75-125</i>	<i>0</i>			

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

**CLIENT:** ERM Southwest, Inc.  
**Work Order:** 0801487  
**Project:** Former Cameron Iron Works

# QC BATCH REPORT

Batch ID: **R59246**      Instrument ID **VOA1**      Method: **SW8260**

MS		Sample ID: <b>0801517-02AMS</b>				Units: <b>µg/L</b>			Analysis Date: <b>01/25/08 14:04</b>	
Client ID:		Run ID: <b>VOA1_080125A</b>			SeqNo: <b>1314267</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	50.29	5.0	50	0	101	76-120	0			
1,1-Dichloroethene	48.79	5.0	50	0	97.6	73-124	0			
1,2-Dichloroethane	52.13	5.0	50	0	104	78-120	0			
cis-1,2-Dichloroethene	51.53	5.0	50	1.005	101	78-120	0			
Tetrachloroethene	47.05	5.0	50	0	94.1	79-120	0			
Trichloroethene	52.32	5.0	50	1.078	102	80-120	0			
Vinyl chloride	50.44	2.0	50	0	101	70-127	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	50.39	5.0	50	0	101	70-125	0			
<i>Surr: 4-Bromofluorobenzene</i>	50.94	5.0	50	0	102	72-125	0			
<i>Surr: Dibromofluoromethane</i>	51.14	5.0	50	0	102	71-125	0			
<i>Surr: Toluene-d8</i>	53.39	5.0	50	0	107	75-125	0			

MSD		Sample ID: <b>0801517-02AMSD</b>				Units: <b>µg/L</b>			Analysis Date: <b>01/25/08 14:30</b>	
Client ID:		Run ID: <b>VOA1_080125A</b>			SeqNo: <b>1314268</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	52.76	5.0	50	0	106	76-120	50.29	4.81	20	
1,1-Dichloroethene	47.54	5.0	50	0	95.1	73-124	48.79	2.59	20	
1,2-Dichloroethane	53.82	5.0	50	0	108	78-120	52.13	3.18	20	
cis-1,2-Dichloroethene	54.1	5.0	50	1.005	106	78-120	51.53	4.86	20	
Tetrachloroethene	44.17	5.0	50	0	88.3	79-120	47.05	6.3	20	
Trichloroethene	50.69	5.0	50	1.078	99.2	80-120	52.32	3.16	20	
Vinyl chloride	48.55	2.0	50	0	97.1	70-127	50.44	3.83	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	50.19	5.0	50	0	100	70-125	50.39	0.397	20	
<i>Surr: 4-Bromofluorobenzene</i>	49.74	5.0	50	0	99.5	72-125	50.94	2.37	20	
<i>Surr: Dibromofluoromethane</i>	50.66	5.0	50	0	101	71-125	51.14	0.939	20	
<i>Surr: Toluene-d8</i>	50.23	5.0	50	0	100	75-125	53.39	6.12	20	

The following samples were analyzed in this batch:

0801487-03A	0801487-04A	0801487-05A
0801487-06A	0801487-07A	0801487-08A
0801487-09A	0801487-10A	

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



**CLIENT:** ERM Southwest, Inc.  
**Work Order:** 0801487  
**Project:** Former Cameron Iron Works

# QC BATCH REPORT

Batch ID: **R59359**      Instrument ID **VOA1**      Method: **SW8260**

MBLK		Sample ID: <b>VBLKW-012908</b>			Units: <b>µg/L</b>			Analysis Date: <b>01/29/08 11:27</b>		
Client ID:		Run ID: <b>VOA1_080129B</b>			SeqNo: <b>1316507</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	5.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	48.02	5.0	50	0	96	70-125	0			
<i>Surr: 4-Bromofluorobenzene</i>	51.38	5.0	50	0	103	72-125	0			
<i>Surr: Dibromofluoromethane</i>	50.72	5.0	50	0	101	71-125	0			
<i>Surr: Toluene-d8</i>	52.52	5.0	50	0	105	75-125	0			

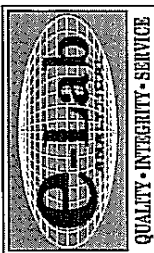
LCS		Sample ID: <b>VLCSW-012908</b>			Units: <b>µg/L</b>			Analysis Date: <b>01/29/08 10:36</b>		
Client ID:		Run ID: <b>VOA1_080129B</b>			SeqNo: <b>1316506</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	44.44	5.0	50	0	88.9	73-124	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	52.8	5.0	50	0	106	70-125	0			
<i>Surr: 4-Bromofluorobenzene</i>	49.36	5.0	50	0	98.7	72-125	0			
<i>Surr: Dibromofluoromethane</i>	52.29	5.0	50	0	105	71-125	0			
<i>Surr: Toluene-d8</i>	52.82	5.0	50	0	106	75-125	0			

MS		Sample ID: <b>0801487-03AMS</b>			Units: <b>µg/L</b>			Analysis Date: <b>01/29/08 16:09</b>		
Client ID: <b>MW-78</b>		Run ID: <b>VOA1_080129B</b>			SeqNo: <b>1316510</b>		Prep Date:		DF: <b>5</b>	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	410.3	25	250	205.4	82	73-124	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	249.9	25	250	0	100	70-125	0			
<i>Surr: 4-Bromofluorobenzene</i>	263.3	25	250	0	105	72-125	0			
<i>Surr: Dibromofluoromethane</i>	244	25	250	0	97.6	71-125	0			
<i>Surr: Toluene-d8</i>	270.8	25	250	0	108	75-125	0			

MSD		Sample ID: <b>0801487-03AMSD</b>			Units: <b>µg/L</b>			Analysis Date: <b>01/29/08 16:35</b>		
Client ID: <b>MW-78</b>		Run ID: <b>VOA1_080129B</b>			SeqNo: <b>1316511</b>		Prep Date:		DF: <b>5</b>	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	391.8	25	250	205.4	74.6	73-124	410.3	4.61	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	241	25	250	0	96.4	70-125	249.9	3.66	20	
<i>Surr: 4-Bromofluorobenzene</i>	243.3	25	250	0	97.3	72-125	263.3	7.93	20	
<i>Surr: Dibromofluoromethane</i>	242.3	25	250	0	96.9	71-125	244	0.688	20	
<i>Surr: Toluene-d8</i>	256.3	25	250	0	103	75-125	270.8	5.48	20	

**The following samples were analyzed in this batch:**      0801487-03A      0801487-05A

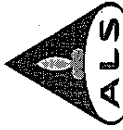
- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- O - Referenced analyte value is > 4 times amount spiked
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- B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



e-Lab Analytical, Inc.  
10450 Stancliff Rd. #210  
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# Chain of Custody Form

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Holland, Michigan 49424  
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QUALITY • INTEGRITY • SERVICE

Customer Information		Project Information		Parameter/Method Request for Analysis																																																																																																																																																																																																																		
Project Name: Former Cameron Iron Works Project Number: #0060761 Bill To Company: ERM Southwest, Inc. Invoice Attn: Marcel St. Marie Address: 15810 Park Ten Place Suite 300 City/State/Zip: Houston, TX 77084 Phone: (281) 600-1000 Fax: (281) 600-1001 e-Mail Address:		Project Manager: <u>BOVIER</u> Parameter/Method Request for Analysis: VOC (8260) List B		<table border="1"> <tr> <th>No.</th> <th>Sample Description</th> <th>Date</th> <th>Time</th> <th>Matrix</th> <th>Pres.</th> <th># Bottles</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>H</th> <th>I</th> <th>J</th> <th>Hold</th> </tr> <tr> <td>1</td> <td>MW-93</td> <td>1/21/08</td> <td>10:05</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>MW-125</td> <td>1/21/08</td> <td>11:35</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>MW-78</td> <td>1/21/08</td> <td>14:40</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>MW-79</td> <td>1/21/08</td> <td>16:05</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>DUP - 1</td> <td>1/21/08</td> <td>14:45</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>MW-96</td> <td>1/22/08</td> <td>10:10</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>7</td> <td>MW-166</td> <td>1/22/08</td> <td>11:55</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>8</td> <td>MW-126</td> <td>1/22/08</td> <td>14:15</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>9</td> <td>MW-70</td> <td>1/22/08</td> <td>15:40</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>FB-1</td> <td>1/22/08</td> <td>17:30</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>													No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold	1	MW-93	1/21/08	10:05	H2O	HCL	3	X											2	MW-125	1/21/08	11:35	H2O	HCL	3	X											3	MW-78	1/21/08	14:40	H2O	HCL	3	X											4	MW-79	1/21/08	16:05	H2O	HCL	3	X											5	DUP - 1	1/21/08	14:45	H2O	HCL	3	X											6	MW-96	1/22/08	10:10	H2O	HCL	3	X											7	MW-166	1/22/08	11:55	H2O	HCL	3	X											8	MW-126	1/22/08	14:15	H2O	HCL	3	X											9	MW-70	1/22/08	15:40	H2O	HCL	3	X											10	FB-1	1/22/08	17:30	H2O	HCL	3	X										
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Shipment Method: Date: 1/22/08 Time: 0900 Received by (Laboratory): <u>Richard P. Patel</u> Received by (Laboratory): <u>Richard P. Patel</u> Checked by (Laboratory): <u>Richard P. Patel</u> Preservative Key: 1-HCl, 2-HNO3, 3-H2SO4, 4-NaOH, 5-Na2S2O3, 6-NaHSO4, 7-Other, 8-4°C, 9-5035		Required Turnaround Time: (Check Box) <input checked="" type="checkbox"/> 5 WK Days <input type="checkbox"/> 10 WK Days <input type="checkbox"/> 2 WK Days <input type="checkbox"/> 24 Hour Notes: 1-23-cx, 10 Day TAT.		<table border="1"> <tr> <th>No.</th> <th>Sample Description</th> <th>Date</th> <th>Time</th> <th>Matrix</th> <th>Pres.</th> <th># Bottles</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>H</th> <th>I</th> <th>J</th> <th>Hold</th> </tr> <tr> <td>1</td> <td>MW-93</td> <td>1/21/08</td> <td>10:05</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>MW-125</td> <td>1/21/08</td> <td>11:35</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>MW-78</td> <td>1/21/08</td> <td>14:40</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>MW-79</td> <td>1/21/08</td> <td>16:05</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>DUP - 1</td> <td>1/21/08</td> <td>14:45</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>MW-96</td> <td>1/22/08</td> <td>10:10</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>7</td> <td>MW-166</td> <td>1/22/08</td> <td>11:55</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>8</td> <td>MW-126</td> <td>1/22/08</td> <td>14:15</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>9</td> <td>MW-70</td> <td>1/22/08</td> <td>15:40</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>FB-1</td> <td>1/22/08</td> <td>17:30</td> <td>H2O</td> <td>HCL</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>													No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold	1	MW-93	1/21/08	10:05	H2O	HCL	3	X											2	MW-125	1/21/08	11:35	H2O	HCL	3	X											3	MW-78	1/21/08	14:40	H2O	HCL	3	X											4	MW-79	1/21/08	16:05	H2O	HCL	3	X											5	DUP - 1	1/21/08	14:45	H2O	HCL	3	X											6	MW-96	1/22/08	10:10	H2O	HCL	3	X											7	MW-166	1/22/08	11:55	H2O	HCL	3	X											8	MW-126	1/22/08	14:15	H2O	HCL	3	X											9	MW-70	1/22/08	15:40	H2O	HCL	3	X											10	FB-1	1/22/08	17:30	H2O	HCL	3	X										
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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.

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Sample Receipt Checklist

Client Name: ERMSW-HOU

Date/Time Received: 1/23/2008 1:35:00 PM

Work Order Number 0801487

Received by: PS

Checklist completed by

*[Signature]*  
Signature

1-24-08  
Date

Reviewed by

*[Initials]* 1/25/08  
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): 2.7c 002
- Cooler(s)/Kit(s): 1449
- 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: Trip blank not on COC--logged in without analysis.

Client contacted: \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted: \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action