

January 12, 2005

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. 0014347

Subject: Second Half 2004 Confirmation Data Transmittal
 Former Cameron Iron Works Facility, Houston, Texas
 VCP No. 221

Dear Mr. Riggle:

On behalf of Cooper Cameron Corporation (Cooper Cameron), Environmental Resources Management (ERM) is providing this transmittal of ground water confirmation data collected on December 10, 2004 at three monitor wells (MW-70, MW-93, and MW-126) for your records. These monitor wells are located in the residential neighborhood south of the Former Cameron Iron Works Facility out side of the plume boundary. Resampling was initiated after increases in concentrations were apparent in the ground water results for October 2004.

Background

In a December 9, 2004 *Response to TCEQ Comments, Dated October 25, 2004*, Cooper Cameron proposed to collect ground water samples within 30 days from select monitor wells with a reported concentration of the Constituents of Concern (COC) above the critical Protective Concentration Levels (PCL). In a December 30, 2004 letter, the Texas Commission on Environmental Quality (TCEQ) agreed to Cooper Cameron's proposed method for determining the necessity for additional sampling in excess of the agreed semiannual sampling and the confirmation of reported concentrations above the critical PCLs. With the concurrence of the TCEQ, Cooper Cameron initiated the collection of ground water samples from MW-70, MW-93, and MW-126 to confirm the reported concentrations of some of the COCs in exceedance of the critical PCLs for samples collected during the Second Half 2004 semiannual sampling event in October 2004. These data were transmitted to the TCEQ in the *Second Half 2004 Monitoring Data Transmittal*, dated December 9, 2004. Table 1 of Attachment 1 provides a summary of the ground water data that were collected during a confirmation sampling event conducted on December 10, 2004. Attachment 2 provides a Data Usability Summary and Laboratory Report for the ground water samples collected on December 10, 2004. The following sections discuss the results for each monitor well.

Summary of Results for MW-126

A review of the ground water data indicates that the October 27, 2004 reported ground water concentrations for MW-126 are apparently anomalous compared with the historical ground water results. The concentrations for the COCs from MW-126 on December 10, 2004 were reported as *Not Detected* at the reporting limit. These ground water results are consistent with the historical concentrations from MW-126. Therefore, the ground water concentrations from MW-126 have been confirmed to be below the MQLs and it is proposed that the sampling of this monitor well return to the semiannual sampling schedule. Once approved, MW-126 will be scheduled to be sampled during the next semiannual sampling event in April 2005.

Summary of Results for MW-93

The December 10, 2004 ground water data from MW-93 confirmed the reported concentration for trichloroethene of 0.010 mg/L for a ground water sample collected on October 27, 2004. The reported concentration of trichloroethene on December 10, 2004 from MW-93 was 0.016 mg/L. These concentrations are in exceedance of the 0.0050 mg/L critical PCL for trichloroethene.

Summary of Results for MW-70

The October 26, 2004 reported concentrations from MW-70 for 1,1-dichloroethane and cis-1,2-dichloroethene of 0.011 mg/L and 0.0082 mg/L respectively were confirmed with reported concentrations of 0.011 mg/L and 0.0074 mg/L respectively from a sample collected on December 10, 2004. These reported concentrations exceed the MQL of 0.0050 mg/L. The reported concentrations of 1,1-dichloroethene in a sample collected from MW-70 on December 10, 2004 is 0.0094 mg/L. This data confirmed the reported concentration for 1,1-dichloroethene of 0.015 mg/L on October 26, 2004 and exceeds the critical PCL for 1,1-dichloroethene of 0.0070 mg/L.

Proposed Action for MW-93 and MW-70

Cooper Cameron agreed with the TCEQ in the December 9, 2004 *Response to TCEQ Comments, Dated October 25, 2004* that if the confirmation results are above the critical PCL, a response action would be undertaken to address the change in concentrations. The magnitude of the reported concentrations for COCs at MW-93 and MW-70 were only slightly higher than the critical PCLs (Table 1). It is possible that the increase in concentrations is related to slight changes in ground water flow conditions from an extremely wet summer and fall 2004 and subsurface construction and dewatering activities related to the expansion of Interstate 10. As the response action for the apparent increase, Cooper Cameron proposes quarterly monitoring for one year for the COCs at MW-93 and MW-70. The quarterly sampling events would be scheduled for January, April, July, and October 2005. In addition, Cooper Cameron will transmit a summary of the data to the TCEQ within 30 days after it receives a Final Laboratory Report.

Proposed Change to Sampling Analysis Plan

As mentioned in the *Second Half 2004 Monitoring Data Transmittal*, dated December 9, 2004, the ground water concentrations for antimony and copper in the Cooling Water Pond Area (Table 2) do not exceed the critical PCLs. In the Cooling Water Pond Area, there has been over 13 years of ground water concentration results compiled for antimony and copper that are below the critical PCLs. In addition, 53 of the 57 reported concentrations were *Not Detected* at the reporting limit or an estimated concentration below the MQL. Based on the historical ground water data for antimony and copper in ground water beneath the facility, Cooper Cameron propose no further analyses of antimony and copper for ground water in the Cooling Water Pond Area.

Please contact Mr. Jesse McKendree of Cooper Cameron Corporation at (713) 513-3325 with any questions or comments.

Sincerely,

Environmental Resources Management

Gregory J. Wheeler, P.G.

GJW/mnt
Attachments

cc: Jesse McKendree, Cooper Cameron Corporation
Bruce Himmelreich, Cooper Cameron Corporation, (without attachments)
Lance Shea, Fulbright & Jaworski L.L.P. (without attachments)
David Corban, Fulbright & Jaworski L.L.P.
Paul Stefan, Environmental Resources Management (Houston)
Marsha Hill, Texas Commission on Environmental Quality, Region X II
Robin Morse, Crain, Caton & James (without attachments)
Scott Leafe, SKA Consulting (without attachments)
Alan Feinsilver, Creekstone Builders Inc.

Tables
Attachment 1

January 12, 2005
Project No. 0014347

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

TABLE 1

Summary of Volatile Organic Ground Water Data
Second Half 2004 Confirmation Letter

Former Cameron Iron Works Facility
Houston, Texas

Constituent	Critical PCLs (a)	Location: MW-70		MW-93		MW-126	
		Depth: (b) 25		43		25	
		Date: 10/26/2004	12/10/2004	10/27/2004	12/10/2004	10/27/2004	12/10/2004
1,1-Dichloroethane	2.4	0.011	0.011	ND (0.0050)	ND (0.0050)	0.0093	ND (0.0050)
1,1-Dichloroethene	0.0070	0.015	0.0094	ND (0.0050)	ND (0.0050)	0.014 JH	ND (0.0050)
1,2-Dichloroethane	0.0050	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
cis-1,2-Dichloroethene	0.070	0.0082	0.0074	ND (0.0050)	ND (0.0050)	0.0048 J	ND (0.0050)
Tetrachloroethene	0.0050	ND (0.0050)	ND (0.0050)	0.010	0.016	0.069	ND (0.0050)
Trichloroethene	0.0050	0.0018 J	ND (0.0050)	ND (0.0050)	ND (0.0050)	0.0095	ND (0.0050)
Vinyl Chloride	0.0020	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)

NOTES:

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

Bold Value = exceedance of the Method Quantitation Limit (MQL) at a monitor well south of I-10 outside of the plume boundary.

The reported concentrations are in mg/L.

ND (0.0050) = *Not Detected* at the MQL given in parentheses.

(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 March 31, 2004.

(b) The sample depths are reported in feet below ground surface to the middle of the screen interval.

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

H = Bias in sample result likely to be high.

TABLE 2

Summary of Antimony and Copper Concentrations in the Cooling Water Pond Area
Second Half 2004 Confirmation Letter

Former Cameron Iron Works Facility
Houston, Texas

		Location: KMW-11				
		Depth (b) 25				
Constituent	Critical PCLs (a)	Date: 6/21/1991	3/4/2002	9/17/2002	3/18/2003	10/27/2004
Antimony	0.0060	ND(0.05)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.00500)
Copper	1.3	ND(0.002)	NA	ND(0.005)	0.00195 J	0.00108 J

		Location: KMW-13						
		Depth (b) 25						
Constituent	Critical PCLs (a)	Date: 6/21/1991	11/5/1991	1/24/1997	3/4/2002	9/16/2002	6/17/2003	10/27/2004
Antimony	0.0060	ND(0.05)	ND(0.05)	ND(0.025)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.00500)
Copper	1.3	ND(0.002)	ND(0.002)	0.03	NA	ND(0.005)	0.00166 UJ	0.000917 J

		Location: KMW-14					
		Depth (b) 25					
Constituent	Critical PCLs (a)	Date: 6/21/1991	1/24/1997	3/5/2002	9/16/2002	6/17/2003	10/27/2004
Antimony	0.0060	ND(0.05)	ND(0.025)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.00500)
Copper	1.3	ND(0.002)	0.02	NA	ND(0.005)	0.00122 UJ	ND(0.00500)

		Location: KMW-15						
		Depth (b) 25						
Constituent	Critical PCLs (a)	Date: 6/21/1991	11/5/1991	2/6/1997	3/5/2002	9/17/2002	6/17/2003	10/27/2004
Antimony	0.0060	ND(0.05)	ND(0.05)	ND(0.025)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.00500)
Copper	1.3	ND(0.002)	ND(0.002)	0.01	NA	ND(0.005)	0.00215 UJ	0.00216 J

		Location: KMW-16					
		Depth (b) 25					
Constituent	Critical PCLs (a)	Date: 6/21/1991	2/10/1997	3/5/2002	9/17/2002	6/17/2003	10/27/2004
Antimony	0.0060	ND(0.05)	ND(0.06)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.00500)
Copper	1.3	ND(0.002)	0.03	NA	ND(0.005)	0.00210 UJ	0.00114 J

NOTES:

The reported concentrations are in mg/L.

NA = Not Analyzed.

ND (0.0050) = *Not Detected* at the Reporting Limit given in parentheses.

(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 March 31, 2004.

(b) The sample depths are reported in feet below ground surface to the middle of the screen interval.

UJ = Not Detected, sample quantitation limit is estimated.

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

Data Usability Summary and Laboratory Report
Attachment 2

January 12, 2005
Project No. 0014347

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

ATTACHMENT 2

Data Usability Summary and Laboratory Report Second Half 2004 Confirmation Data Transmittal

Former Cameron Iron Works Facility
Houston, Texas

ERM reviewed a laboratory analytical data package (0412163) from e-Lab, Inc. of Houston, Texas for the analysis of ground water samples collected on December 10, 2004 for the Former Cameron Iron Works 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: To confirm prior sampling event results of select VOCs downgradient of the facility.

The data generated were evaluated in terms of representativeness, precision and 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 draft TRRP-13 Guidance Document and the results of the review/validation are discussed in this Data Usability Summary (DUS). The following laboratory submittals were reviewed by ERM:

- Analytical data report and chain-of-custody (COC);
- Laboratory review checklists (LRCs); and
- Associated exception reports (ERs).

The results of supporting quality control (QC) analyses are summarized on the LRCs and ERs, and both were included in this review. The LRCs, associated ERs, and analytical data report are included as attachments to this report.

Introduction

Three ground water samples and one duplicate ground water sample were analyzed for seven volatile organic compounds (VOCs) (1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, cis-1,2-dichloroethene, tetrachloroethene, trichloroethene and vinyl chloride). One Field Blank was collected and analyzed for the seven select VOCs listed above in association with the ground water samples. Table 1 lists the sample identifications cross-referenced to laboratory identifications.

Data Review/Validation Results

Analytical Results

Non-Detected results are reported as less than the value of the sample quantitation limit (SQL) as defined by the TRRP rule.

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 for the coolers received by the laboratory. 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

According to the LRCs, initial calibration and continuing calibration data met SW-846 method requirements for VOC analysis. The LRCs also document satisfactory instrument performance calibrations (GC/MS) for VOC analysis.

Blanks

VOCs were reported as *Not-Detected* at the reporting limits in the method blanks. The Field Blank (FB-121004) was reported as *Not-Detected* at the reporting limits for VOCs.

Internal Standard, Interference Check Samples and Surrogate Recoveries

Surrogate recoveries for VOC analysis were within the laboratory-defined acceptable ranges. According to the LRCs, internal standard areas were within SW-846 method acceptance criteria.

Laboratory Control Samples

Laboratory Control Spike (LCS) was analyzed for VOCs. The LCS recoveries were within laboratory defined acceptance limits.

Matrix Spike/Matrix Spike Duplicates

A matrix spike/matrix spike duplicate (MS/MSD) was performed for SW-846 method requirements for VOC analysis. The MS/MSD were within laboratory acceptance criteria.

Field Precision

One field duplicate sample was collected during this sampling event (MW-70/ Dup-1). Sample MW-70 and duplicate sample Dup-1 were reported as detected for 1,1-dichloroethane, 1,1-dichloroethene, and cis-1,2-dichloroethene. 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.

ATTACHMENT 2
TABLE 1

Cross-Reference Field Sample Identifications and Laboratory Identifications
Laboratory Package 0412163

Former Cameron Iron Works Facility
Houston, Texas

<u>Field Identification</u>	<u>Laboratory Identification</u>
MW-126	0412163-01
FB-121004	0412163-02
MW-93	0412163-03
MW-70	0412163-04
Dup-1	0412163-05

ATTACHMENT 2
TABLE 2

Field Precision
Laboratory Package 0412163

Former Cameron Iron Works Facility
Houston, Texas

Field Identification	Analyte	Sample Result	Duplicate Result	RPD	Qualified
MW-70/ DUP-1	1,1-Dichloroethane	0.011	0.011	0	A
	1,1-Dichloroethene	0.0094	0.0099	-5.18134715	A
	cis-1,2-Dichloroethene	0.0074	0.0075	-1.342281879	A

NOTES:

results reported as mg/L

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

A = Acceptable data



e-Lab Analytical, Inc.

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

December 13, 2004

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 : **0412163**

Dear Greg Wheeler,

e-Lab Analytical, Inc. received 6 samples on 12/10/2004 3:00:00 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. The total number of pages in this report is 17.

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

Sincerely,

Lora Terrill

Electronically approved by: John Robert Paddison

Lora Terrill
VP Lab Operations

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: 0412163

Lora Terrill	<i>Lora Terrill</i>	V.P. Laboratory Operations	12/13/04
Name (Printed)	Signature	Official Title (printed)	Date

Laboratory Review Checklist: Reportable Data

Laboratory Name: e-Lab Analytical, Inc.		LRC Date: 12/13/2004					
Project Name: Cameron Iron		Laboratory Job Number: 0412163					
Reviewer Name: Robert Paddison		Prep Batch Number(s): R25194					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	CHAIN-OF-CUSTODY (C-O-C)					
		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	SAMPLE AND QUALITY CONTROL (QC) IDENTIFICATION					
		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	TEST REPORTS					
		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	SURROGATE RECOVERY DATA					
		1) Were surrogates added prior to extraction?	X				
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	TEST REPORTS/SUMMARY FORMS FOR BLANK SAMPLES					
		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	LABORATORY CONTROL SAMPLES (LCS):					
		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	MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) DATA					
		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	ANALYTICAL DUPLICATE DATA					
		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	METHOD QUANTITATION LIMITS (MQLS):					
		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	OTHER PROBLEMS/ANOMALIES					
		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: 12/13/2004			
Project Name: Cameron Iron				Laboratory Job Number: 0412163			
Reviewer Name: Robert Paddison				Prep Batch Number(s): R25194			
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	INITIAL CALIBRATION (ICAL)					
		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	INITIAL AND CONTINUING CALIBRATION VERIFICATION (ICCV AND CCV) AND					
		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	MASS SPECTRAL TUNING:					
		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	INTERNAL STANDARDS (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	RAW DATA (NELAC SECTION 1 APPENDIX A GLOSSARY, AND SECTION 5.12 OR					
		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	DUAL COLUMN CONFIRMATION					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	TENTATIVELY IDENTIFIED COMPOUNDS (TICS):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	INTERFERENCE CHECK SAMPLE (ICS) RESULTS:					
		Were percent recoveries within method QC limits?			X		
S9	I	SERIAL DILUTIONS, POST DIGESTION SPIKES, AND METHOD OF STANDARD					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	PROFICIENCY TEST REPORTS:					
		Are proficiency testing or inter-laboratory comparison results on file?	X				
S11	OI	METHOD DETECTION LIMIT (MDL) STUDIES					
		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	STANDARDS DOCUMENTATION					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	COMPOUND/ANALYTE IDENTIFICATION PROCEDURES					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	DEMONSTRATION OF ANALYST COMPETENCY (DOC)					
		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	VERIFICATION/VALIDATION DOCUMENTATION FOR METHODS					
		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	LABORATORY STANDARD OPERATING PROCEDURES (SOPS):					
		Are laboratory SOPs current and on file for each method performed?	X				

- 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.
- O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
- NA = Not applicable.
- NR = Not Reviewed.
- ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Report	
Laboratory Name: e-Lab Analytical, Inc.	LRC Date: 12/13/2004
Project Name: Cameron Iron	Laboratory Job Number: 0412163
Reviewer Name: Robert Paddison	Prep Batch Number(s): R25194
ER #¹	DESCRIPTION
	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: 0412163

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>
0412163-01	MW-126	Water		12/10/2004 09:27	12/10/2004 15:00	<input type="checkbox"/>
0412163-02	FB-121004	Water		12/10/2004 09:35	12/10/2004 15:00	<input type="checkbox"/>
0412163-03	MW-93	Water		12/10/2004 10:47	12/10/2004 15:00	<input type="checkbox"/>
0412163-04	MW-70	Water		12/10/2004 11:57	12/10/2004 15:00	<input type="checkbox"/>
0412163-05	Dup-1	Water		12/10/2004	12/10/2004 15:00	<input type="checkbox"/>
0412163-06	Trip Blank	Water		12/10/2004	12/10/2004 15:00	<input checked="" type="checkbox"/>

e-Lab Analytical, Inc.

Date: December 13, 2004

CLIENT: ERM - Southwest, Inc.
Work Order: 0412163
Project: Cameron Iron Works
Lab ID: 0412163-01

Client Sample ID: MW-126
Collection Date: 12/10/2004 9:27:00 AM
Matrix: WATER

Analyses	Result	SQL	MQL	Qual	Units	Dilution Factor	Date Analyzed
TCL VOLATILE ORGANICS		SW8260		Prep:		Analyst: PC	
1,1-Dichloroethane	U	0.00043	0.0050		mg/L	1	12/11/2004
1,1-Dichloroethene	U	0.00053	0.0050		mg/L	1	12/11/2004
1,2-Dichloroethane	U	0.00038	0.0050		mg/L	1	12/11/2004
cis-1,2-Dichloroethene	U	0.00074	0.0050		mg/L	1	12/11/2004
Tetrachloroethene	U	0.00043	0.0050		mg/L	1	12/11/2004
Trichloroethene	U	0.00070	0.0050		mg/L	1	12/11/2004
Vinyl chloride	U	0.00079	0.0020		mg/L	1	12/11/2004
Surr:1,2-Dichloroethane-d4	101	0	71-126		%REC	1	12/11/2004
Surr:4-Bromofluorobenzene	82.0	0	74-125		%REC	1	12/11/2004
Surr: Dibromofluoromethane	91.9	0	73-126		%REC	1	12/11/2004
Surr: Toluene-d8	87.6	0	75-125		%REC	1	12/11/2004

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 percent difference > 40%
 E - Value above quantitation range
 H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: December 13, 2004

CLIENT: ERM - Southwest, Inc.
Work Order: 0412163
Project: Cameron Iron Works
Lab ID: 0412163-02

Client Sample ID: FB-121004
Collection Date: 12/10/2004 9:35:00 AM
Matrix: WATER

Analyses	Result	SQL	ML	Qual	Units	Dilution Factor	Date Analyzed
TCL VOLATILE ORGANICS		SW8260		Prep:		Analyst: PC	
1,1-Dichloroethane	U	0.00043	0.0050		mg/L	1	12/11/2004
1,1-Dichloroethene	U	0.00053	0.0050		mg/L	1	12/11/2004
1,2-Dichloroethane	U	0.00038	0.0050		mg/L	1	12/11/2004
cis-1,2-Dichloroethene	U	0.00074	0.0050		mg/L	1	12/11/2004
Tetrachloroethene	U	0.00043	0.0050		mg/L	1	12/11/2004
Trichloroethene	U	0.00070	0.0050		mg/L	1	12/11/2004
Vinyl chloride	U	0.00079	0.0020		mg/L	1	12/11/2004
Surr:1,2-Dichloroethane-d4	109	0	71-126		%REC	1	12/11/2004
Surr:4-Bromofluorobenzene	84.6	0	74-125		%REC	1	12/11/2004
Surr: Dibromofluoromethane	99.1	0	73-126		%REC	1	12/11/2004
Surr: Toluene-d8	91.3	0	75-125		%REC	1	12/11/2004

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 percent difference > 40%
 E - Value above quantitation range
 H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: December 13, 2004

CLIENT: ERM - Southwest, Inc.
Work Order: 0412163
Project: Cameron Iron Works
Lab ID: 0412163-03

Client Sample ID: MW-93
Collection Date: 12/10/2004 10:47:00 AM
Matrix: WATER

Analyses	Result	SQL	ML	Qual	Units	Dilution Factor	Date Analyzed
TCL VOLATILE ORGANICS		SW8260		Prep:		Analyst: PC	
1,1-Dichloroethane	U	0.00043	0.0050		mg/L	1	12/11/2004
1,1-Dichloroethene	U	0.00053	0.0050		mg/L	1	12/11/2004
1,2-Dichloroethane	U	0.00038	0.0050		mg/L	1	12/11/2004
cis-1,2-Dichloroethene	U	0.00074	0.0050		mg/L	1	12/11/2004
Tetrachloroethene	0.016	0.00043	0.0050		mg/L	1	12/11/2004
Trichloroethene	U	0.00070	0.0050		mg/L	1	12/11/2004
Vinyl chloride	U	0.00079	0.0020		mg/L	1	12/11/2004
Surr:1,2-Dichloroethane-d4	100	0	71-126		%REC	1	12/11/2004
Surr:4-Bromofluorobenzene	81.1	0	74-125		%REC	1	12/11/2004
Surr: Dibromofluoromethane	91.0	0	73-126		%REC	1	12/11/2004
Surr: Toluene-d8	88.2	0	75-125		%REC	1	12/11/2004

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 percent difference > 40%
 E - Value above quantitation range
 H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: December 13, 2004

CLIENT: ERM - Southwest, Inc.
Work Order: 0412163
Project: Cameron Iron Works
Lab ID: 0412163-04

Client Sample ID: MW-70
Collection Date: 12/10/2004 11:57:00 AM
Matrix: WATER

Analyses	Result	SQL	ML	Qual	Units	Dilution Factor	Date Analyzed
TCL VOLATILE ORGANICS		SW8260		Prep:		Analyst: PC	
1,1-Dichloroethane	0.011	0.00043	0.0050		mg/L	1	12/11/2004
1,1-Dichloroethene	0.0094	0.00053	0.0050		mg/L	1	12/11/2004
1,2-Dichloroethane	U	0.00038	0.0050		mg/L	1	12/11/2004
cis-1,2-Dichloroethene	0.0074	0.00074	0.0050		mg/L	1	12/11/2004
Tetrachloroethene	U	0.00043	0.0050		mg/L	1	12/11/2004
Trichloroethene	U	0.00070	0.0050		mg/L	1	12/11/2004
Vinyl chloride	U	0.00079	0.0020		mg/L	1	12/11/2004
Surr:1,2-Dichloroethane-d4	104	0	71-126		%REC	1	12/11/2004
Surr:4-Bromofluorobenzene	79.6	0	74-125		%REC	1	12/11/2004
Surr: Dibromofluoromethane	95.4	0	73-126		%REC	1	12/11/2004
Surr: Toluene-d8	87.7	0	75-125		%REC	1	12/11/2004

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 percent difference > 40%
 E - Value above quantitation range
 H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: December 13, 2004

CLIENT: ERM - Southwest, Inc.
Work Order: 0412163
Project: Cameron Iron Works
Lab ID: 0412163-05

Client Sample ID: Dup-1
Collection Date: 12/10/2004
Matrix: WATER

Analyses	Result	SQL	ML	Qual	Units	Dilution Factor	Date Analyzed
TCL VOLATILE ORGANICS		SW8260		Prep:		Analyst: PC	
1,1-Dichloroethane	0.011	0.00043	0.0050		mg/L	1	12/11/2004
1,1-Dichloroethene	0.0099	0.00053	0.0050		mg/L	1	12/11/2004
1,2-Dichloroethane	U	0.00038	0.0050		mg/L	1	12/11/2004
cis-1,2-Dichloroethene	0.0075	0.00074	0.0050		mg/L	1	12/11/2004
Tetrachloroethene	U	0.00043	0.0050		mg/L	1	12/11/2004
Trichloroethene	U	0.00070	0.0050		mg/L	1	12/11/2004
Vinyl chloride	U	0.00079	0.0020		mg/L	1	12/11/2004
Surr:1,2-Dichloroethane-d4	107	0	71-126		%REC	1	12/11/2004
Surr:4-Bromofluorobenzene	80.9	0	74-125		%REC	1	12/11/2004
Surr: Dibromofluoromethane	95.5	0	73-126		%REC	1	12/11/2004
Surr: Toluene-d8	87.2	0	75-125		%REC	1	12/11/2004

Qualifiers: U - Analyzed for but Not Detected S - Spike Recovery outside accepted recovery limits
 J - Analyte detected below quantitation limits P - Dual Column results percent difference > 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	0.00043	0.005
A	1,1-Dichloroethene	75-35-4	0.00053	0.005
A	1,2-Dichloroethane	107-06-2	0.00038	0.005
A	cis-1,2-Dichloroethene	156-59-2	0.00074	0.005
A	Tetrachloroethene	127-18-4	0.00043	0.005
A	Trichloroethene	79-01-6	0.0007	0.005
A	Vinyl chloride	75-01-4	0.00079	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: Dec 13 2004

CLIENT: ERM Southwest, Inc.

QC BATCH REPORT

Work Order: 0412163

Project: Cameron Iron Works

Batch ID: R25194 InstrumentID: VOA2

MBLK Sample ID: VBLKW-1211 Test Code: SW8260 Units: µg/L Analysis Date: 12/11/04 12:00

Client ID: Run ID: VOA2_041211A SeqNo: 587221 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	48.34	5.0	50	0	96.7	71-126	0			
Surr:4-Bromofluorobenzene	41.67	5.0	50	0	83.3	74-125	0			
Surr:Dibromofluoromethane	44.24	5.0	50	0	88.5	73-126	0			
Surr:Toluene-d8	44.42	5.0	50	0	88.8	75-125	0			

LCS Sample ID: VLCSW-1211 Test Code: SW8260 Units: µg/L Analysis Date: 12/11/04 11:35

Client ID: Run ID: VOA2_041211A SeqNo: 587220 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	50.38	5.0	50	0	101	76.9-120	0			
1,1-Dichloroethene	49.51	5.0	50	0	99	72.6-123	0			
1,2-Dichloroethane	50.27	5.0	50	0	101	80-120	0			
cis-1,2-Dichloroethene	53.38	5.0	50	0	107	77.6-120	0			
Tetrachloroethene	50.38	5.0	50	0	101	68.5-130	0			
Trichloroethene	50.38	5.0	50	0	101	78.9-120	0			
Vinyl chloride	48.66	2.0	50	0	97.3	72.7-128	0			
Surr:1,2-Dichloroethane-d4	45.57	5.0	50	0	91.1	71-126	0			
Surr:4-Bromofluorobenzene	45.59	5.0	50	0	91.2	74-125	0			
Surr:Dibromofluoromethane	42.19	5.0	50	0	84.4	73-126	0			
Surr:Toluene-d8	45.24	5.0	50	0	90.5	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: 0412163
Project: Cameron Iron Works

QC BATCH REPORT

Batch ID: **R25194** InstrumentID: **VOA2**

MS Sample ID: **0412163-03AMS** Test Code: **SW8260** Units: **µg/L** Analysis Date: **12/11/04 12:51**

Client ID: **MW-93** Run ID: **VOA2_041211A** SeqNo: **587223** 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	48.71	5.0	50	0	97.4	76.9-120	0			
1,1-Dichloroethene	49.03	5.0	50	0	98.1	72.6-123	0			
1,2-Dichloroethane	51.07	5.0	50	0	102	80-120	0			
cis-1,2-Dichloroethene	52.07	5.0	50	0	104	77.6-120	0			
Tetrachloroethene	66.2	5.0	50	16.38	99.6	68.5-130	0			
Trichloroethene	49.33	5.0	50	0	98.7	78.9-120	0			
Vinyl chloride	47.2	2.0	50	0	94.4	72.7-128	0			
Surr:1,2-Dichloroethane-d4	44.11	5.0	50	0	88.2	71-126	0			
Surr:4-Bromofluorobenzene	43.82	5.0	50	0	87.6	74-125	0			
Surr:Dibromofluoromethane	41.01	5.0	50	0	82	73-126	0			
Surr:Toluene-d8	43.98	5.0	50	0	88	75-125	0			

MSD Sample ID: **0412163-03AMSD** Test Code: **SW8260** Units: **µg/L** Analysis Date: **12/11/04 13:17**

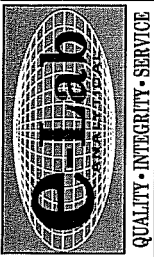
Client ID: **MW-93** Run ID: **VOA2_041211A** SeqNo: **587224** Prep Date: DF: **1**

Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethane	49.22	5.0	50	0	98.4	76.9-120	48.71	1.05	20	
1,1-Dichloroethene	48.86	5.0	50	0	97.7	72.6-123	49.03	0.338	20	
1,2-Dichloroethane	51.52	5.0	50	0	103	80-120	51.07	0.867	20	
cis-1,2-Dichloroethene	52.54	5.0	50	0	105	77.6-120	52.07	0.895	20	
Tetrachloroethene	65.07	5.0	50	16.38	97.4	68.5-130	66.2	1.72	20	
Trichloroethene	49.26	5.0	50	0	98.5	78.9-120	49.33	0.133	20	
Vinyl chloride	47.12	2.0	50	0	94.2	72.7-128	47.2	0.181	20	
Surr:1,2-Dichloroethane-d4	44.35	5.0	50	0	88.7	71-126	44.11	0.529	20	
Surr:4-Bromofluorobenzene	44.43	5.0	50	0	88.9	74-125	43.82	1.4	20	
Surr:Dibromofluoromethane	41.48	5.0	50	0	83	73-126	41.01	1.15	20	
Surr:Toluene-d8	44.33	5.0	50	0	88.7	75-125	43.98	0.808	20	

The following samples were analyzed in this batch:

0412163-01A	0412163-02A	0412163-03A
0412163-04A	0412163-05A	

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 Stancil 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 Work Order #: <u>042163</u>													
Project Name		Parameter/Method Request for Analysis															
Project Number		Volatiles 8260 Select: B															
Bill To Company		Cameron Iron															
Invoice Attn		0023692															
Address		ERM Southwest, Inc.															
City/State/Zip		Greg Wheeler															
Phone		15810 Park Ten Place															
Fax		Suite 300															
e-Mail Address		Houston, TX 77084															
		(281) 600-1010															
		(281) 600-1001															
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-126	12/10/04	0927	W	1	3	X										
2	FB-121004	12/10/04	0935	W	1	3	X										
3	MW-93	12/10/04	1047	W	1	3	X										
4	MW-93 MS	12/10/04	1050	W	1	3	X										
5	MW-93 MSD	12/10/04	1055	W	1	3	X										
6	MW-70	12/10/04	1157	W	1	3	X										
7	Dup-1	12/10/04	000	W	1	3	X										
8	Trip Blank	—	—	W	1	2	X										
9																	
10																	

Sampler(s) Please Print & Sign: Andy Soudan
 Shipment Method: Std. 10 WK Days 5 WK Days 2 WK Days 24 Hour
 Required Turnaround Time: (Check Box) Other: _____
 Results Due Date: _____

Relinquished by: [Signature] Date: 12/10/04
 Relinquished by: [Signature] Date: 12-10-04
 Logged by (Laboratory): _____
 Received by: [Signature] Time: 12:35
 Received by (Laboratory): [Signature] Time: 12:10WJ 1556
 Checked by (Laboratory): _____

QC Package: (Check One Box Below)
 Level II Std QC TRRP Checklist
 Level III Std QC/Raw Data TRRP Level IV
 Level IV SW846/CLP Other _____

Notes:
 Cooler Temp: _____
 e-lab Cooler ID: _____

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₃ 6-NaHSO₄ 7-Other 8-4°C 9-5035

Sample Receipt Checklist

Client Name ERMSW-HOU

Date/Time Received: 12/10/2004 3:00:00 PM

Work Order Number 0412163

Received by: PS

Checklist completed by RICHARD SANCHEZ 12-10-04
Signature Date

Reviewed by LT 12/13/04
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): 2.9c 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.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

042163



e-Lab Analytical, Inc.
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 218.530.5887

QUALITY • INTEGRITY • SERVICE

CUSTODY SEAL		Seal Broken By:
Date: <u>12/10/04</u>	Time: <u>1230</u>	<u>RS</u>
Name: <u>Andy Sander</u>		Date: <u>12/10/04</u>
Company: <u>ERM-SW</u>		