

ER PROGRAM DATA ASSESSMENT  
SUMMARY REPORT FORM

Batch No. 8908S066 Site 881 Hillside  
Laboratory Roy F. Weston - Stockton No. of Samples/Matrix 8/Water  
SOW # 10/86 (Rev. 2/88) Reviewer Org. TechLaw, Inc.  
Sample Numbers G09740889002, G09740889002FB, G0974088900D, GTB0802289002, G10740889002, G10740889002D, G10740889002FB, GTB082389002

Data Assessment Summary

	VOA	Comments
1. Holding Times	<u>A</u>	<u>Action Items 1,2,3</u>
2. GC/MS Tune/Instr. Perf.	<u>V</u>	<u></u>
3. Calibrations	<u>X</u>	<u>Comments 1,2</u>
4. Blanks	<u>A</u>	<u>Action Items 4,5; Comment 3</u>
5. Surrogates	<u>A</u>	<u>Action Item 6; Comment 4</u>
6. Matrix Spike/Dup.	<u>X</u>	<u>Comment 5</u>
7. Other QC	<u>V</u>	<u></u>
8. Internal Standards	<u>X</u>	<u>Comment 6</u>
9. Compound Identification	<u>A</u>	<u>Action Items 7,8; Comments 7,8</u>
10. System Performance	<u>X</u>	<u>Comments 9,10</u>
11. Overall Assessment	<u>A</u>	<u>Data acceptable with qualifications.</u>

V = Data had no problems.  
A = Data acceptable but qualified due to problems.  
R = Data rejected.  
X = Problems, but do not affect data.

Data Quality: Data contained in this batch were reviewed and found to be acceptable with qualifications. Acceptable, qualified data may be used provided that individual values impacted by the "Action Items" listed below are appropriately flagged. (Refer to attached Results Summary Tables.)

**ADMIN RECORD**

"REVIEWED FOR CLASSIFICATION  
By R. B. Hoffman (U)  
Date 7-11-90

REVIEWED FOR CLASSIFICATION/UCMJ  
By George H. Setlock  
Date @ 6/28/90

8s066/voa

A-DU01-000084

**Action Items:** 1) Non-detected results for aromatic compounds in samples G09740889002, G09740889002FB, G09740889002D, GTB082289002, G10740889002, G10740889002D, G10740889002FB, and GTB082389002 are estimated and undetected (UJ) and the positive Toluene results are estimated (J) in samples G09740889002, G09740889002D, G10740889002, G10740889002D and G10740889002FB because the holding time exceeded seven days.

2) All positive results are estimated (J) and all non-detect results are rejected (R) in the dilutions of samples G09740889002 and G09740889002D because the holding times exceeded fourteen days and the time from VTSR to sample analysis exceeded ten days.

3) All positive results are estimated (J) and all non-detect results are estimated and undetected (UJ) in the dilutions of samples G10740889002 and G10740889002D because the holding times exceeded seven days and the time from VTSR to sample analysis exceeded ten days.

4) As a result of method blank contamination, the positive Acetone and Methylene Chloride results in samples G09740889002FB, GTB082289002, G10740889002, G10740889002D, G10740889002FB, and GTB082389002 and the positive Acetone results in samples G09740889002 and G09740889002D are estimated and undetected (UJ) as per the Functional Guidelines criteria (5x and 10x rules).

5) As a result of method blank contamination, the positive Methylene Chloride results in the dilutions for samples G09740889002, G09740889002D, G10740889002 and G10740889002D are estimated and undetected (UJ) as per the Functional Guidelines criteria (5x and 10x rules).

6) Surrogate recovery criteria were not met for samples G09740889002 and G09740889002D. Therefore, all positive results are estimated (J) and all non-detect results are estimated and undetected (UJ) for these two samples.

7) In the dilution of sample G10740889002 a false positive was reported for Vinyl Acetate. Based on Relative Retention Times and mass spectral data, this compound appears to be 2-Butanone rather than Vinyl Acetate. Therefore, Vinyl Acetate is reported as undetected on the Data Summary Table. The non-detected result for 2-Butanone is rejected (R).

8) A mass spectrum was not provided to confirm the identity of trans-1,3,-Dichloropropene in sample G09740889002. However, since the retention time met criteria, the positive value is reported and estimated (J) on the Data Summary Table.

**Comments:** 1) Bromoform's %RSD exceeded 30% in the 8/31/89 initial calibration and Chloromethane's %D exceeded 25% in the 9/6/89 continuing calibration. No action is necessary as these compounds were undetected in all samples.

2) In the initial calibration, the surrogates should have been run at five concentration levels. This does not affect the overall quality of the data.

3) Method blank, VBLK-831, was contaminated with 4-Methyl-2-pentanone, 2-Hexanone and 1,1,2,2-Tetrachloroethane. No action is necessary as these compounds were undetected in the associated samples.

4) The surrogate recovery results for sample G09740889002 were incorrectly transcribed from the raw data to Form 2A. The correct surrogate recovery results indicate one surrogate was outside criteria (see Action Item 6).

5) The MS/MSD of sample G10740889002, although analyzed and included, was not useful because the sample contained very high levels of 1,1-Dichloroethene and Trichloroethene. The Chain of Transfer Record indicated MS/MSD analyses were to be done on sample G09740889002; however this was not done probably because this sample also contained a high level of Trichloroethene. Apparently for this reason, MS/MSD data for sample SWA303002 from batch 8908S065 was included with this case. Therefore this additional data is used as the appropriate MS/MSD.

6) Several samples analyzed on 9/6/89 had internal standard retention times that did not meet criteria. Data did not appear to be affected.

7) An unidentified peak in sample G09740889002 and its duplicate was not reported or quantitated. Additionally, the mass spectra for Methylene Chloride in several samples indicated the presence of an unknown co-eluting compound that was not reported or quantitated.

8) The mass spectra for several of the chlorinated hydrocarbons in samples G09740889002, G10740889002 and their duplicates contained extraneous ions causing a poor match with the reference spectra and suggesting the presence of other compounds. The mass spectra from the diluted analyses indicated a better match.

9) Samples G10740889002 and G10740889002D were run at a 20x dilution because Carbon Tetrachloride's concentration exceeded the calibration range in the original analyses. However, a further dilution should have been run as Carbon Tetrachloride's concentration still exceeded the calibration range.

**Comments: (cont)** 10) Samples G09740889002FB, GTB082289002, and G10740889002FB were  
contaminated with various compounds which appear to be carryover from the previous samples. These compounds  
were not detected in the reanalyses of these samples; however, it cannot be determined whether these compounds  
were actually present due to carryover, or lost during extended holding times. Since the holding times for the  
reanalyses were exceeded, the data from the original analyses is reported.

**Note: Data Summary Tables are attached.**

William T. Fee 5/8/90  
Reviewer Signature Date

TABLE #: 8908S066

Page 1 of 2

SITE NAME: 881 Hillside

CLP VOLATILE ORGANIC ANALYSIS: Low Water

ANALYTICAL RESULTS (ppb)

Sample Location										
Sample Number	VBLK831	G09740889002	G09740889002FB	G09740889002D	GTB082289002	G10740889002	G10740889002D	G10740889002FB	GTB082289002	
Sampling Date		8/22/89	8/22/89	8/22/89	8/22/89	8/23/89	8/23/89	8/23/89	8/23/89	8/23/89
Remarks	Method Blank		Field Blank	Duplicate	Trip Blank		Duplicate	Field Blank	Trip Blank	
Volatiles	CRQL									
Compound	ug/L (ppb)	DQ	DQ	DQ	DQ	DQ	DQ	DQ	DQ	DQ
Chloromethane	10		10 U A	10 U V	10 U A	10 U V	10 U V	10 U V	10 U V	10 U V
Bromomethane	10		10 U A	10 U V	10 U A	10 U V	10 U V	10 U V	10 U V	10 U V
Vinyl chloride	10		10 U A	10 U V	10 U A	10 U V	10 U V	10 U V	10 U V	10 U V
Chloroethane	10		10 U A	10 U V	10 U A	10 U V	10 U V	10 U V	10 U V	10 U V
Methylene chloride	5	1 ppb	95 J A	6 U A	99 J A	8 U A	5 U A	5 U A	5 U A	5 U A
Acetone	10	5 ppb	10 U A	10 U A	10 U A	10 U A	10 U A	10 U A	10 U A	10 U A
Carbon disulfide	5		5 U A	5 U V	5 U A	5 U V	5 U V	5 U V	5 U V	5 U V
1,1-Dichloroethene	5		3000 E	2 J A	3020 E	2 J A	120 V	89 V	36 V	5 U V
1,1-Dichloroethane	5		32 J A	5 U V	33 J A	5 U V	1 J A	1 J A	5 U V	5 U V
1,2-Dichloroethene (Total)	5		5 U A	5 U V	5 U A	5 U V	5 U V	5 U V	5 U V	5 U V
Chloroform	5		5 J A	5 U V	5 J A	5 U V	40 V	56 V	2 J A	5 U V
1,2-Dichloroethane	5		5 U A	5 U V	5 U A	5 U V	5 U V	5 U V	5 U V	5 U V
2-Butanone	10		10 U A	10 U V	10 U A	10 U V	10 U V	10 U V	10 U V	10 U V
1,1,1-Trichloroethane	5		1920 E	5 U V	1860 E	5 U V	390 E	250 E	170 V	5 U V
Carbon tetrachloride	5		5 U A	5 U V	5 U A	5 U V	1440 E	2000 E	110 V	5 U V
Vinyl acetate	10		10 U A	10 U V	10 U A	10 U V	10 U V	10 U V	10 U V	10 U V
Bromodichloromethane	5		5 U A	5 U V	5 U A	5 U V	5 U V	5 U V	5 U V	5 U V
1,2-Dichloropropane	5		5 U A	5 U V	5 U A	5 U V	5 U V	5 U V	5 U V	5 U V
cis-1,3-Dichloropropene	5		5 U A	5 U V	5 U A	5 U V	5 U V	5 U V	5 U V	5 U V
Trichloroethene	5		2400 E	3 J A	2340 E	3 J A	910 E	1200 E	180 V	5 U V
Dibromochloromethane	5		5 U A	5 U V	5 U A	5 U V	5 U V	5 U V	5 U V	5 U V
1,1,2-Trichloroethane	5		120 J A	1 J A	130 J A	5 U V	4 J A	3 J A	2 J A	5 U V
Benzene	5		5 U A	5 U A	5 U A	5 U A	5 U A	5 U A	5 U A	5 U A
trans-1,3-Dichloropropene	5		5 J A	5 U V	5 U A	5 U V	5 U V	5 U V	5 U V	5 U V
Bromoform	5		5 U A	5 U V	5 U A	5 U V	5 U V	5 U V	5 U V	5 U V
4-Methyl-2-pentanone	10	6 ppb	10 U A	10 U V	10 U A	10 U V	10 U V	10 U V	10 U V	10 U V
2-Hexanone	10	9 ppb	10 U A	10 U V	10 U A	10 U V	10 U V	10 U V	10 U V	10 U V
Tetrachloroethene	5		1440 E	1 J A	1400 E	1 J A	49 V	35 V	24 V	5 U V
1,1,2,2-Tetrachloroethane	5	2 ppb	5 U A	5 U V	5 U A	5 U V	5 U V	5 U V	5 U V	5 U V
Toluene	5		110 J A	5 U A	120 J A	5 U A	4 J A	3 J A	2 J A	5 U A
Chlorobenzene	5		5 U A	5 U A	5 U A	5 U A	5 U A	5 U A	5 U A	5 U A
Ethylbenzene	5		5 U A	5 U A	5 U A	5 U A	5 U A	5 U A	5 U A	5 U A
Styrene	5		5 U A	5 U A	5 U A	5 U A	5 U A	5 U A	5 U A	5 U A
Xylenes (Total)	5		1 J A	5 U A	2 J A	5 U A	5 U A	5 U A	5 U A	5 U A
Total Organic Concentration (ppb)	23		9128	7	9009	6	2958	3637	526	0

U Indicates the compound was not detected above the Required Quantitation Limit.

J Quantitation is approximate due to limitations identified during the quality control review.

E Exceeds calibration range, dilute &amp; reanalyze.

CRQL Contract Required Quantitation Limit in Micrograms per Liter (ug/L), Parts per billion (ppb).

DQ Data Qualifier

V Valid

A Acceptable with qualifications

R Rejected

s066L/rk48

TABLE #: 8908S066  
 SITE NAME: 881 Hillside  
 CLP VOLATILE ORGANIC ANALYSIS: Low Water

ANALYTICAL RESULTS (ppb)

Sample Location							
Sample Number	VBLK025	G09740889002DL	G09740889002DDL	G10740889002DL	G10740889002DDL		
Sampling Date		8/22/89	8/22/89	8/23/89	8/23/89		
Remarks	Method Blank	50x dilution	50x dilution	20x dilution	20x dilution		
Volatiles	CRQL ug/L (ppb)	DQ	DQ	DQ	DQ	DQ	
Chloromethane	10		500 U R	500 U R	200 UJ A	200 UJ A	
Bromomethane	10		500 U R	500 U R	200 UJ A	200 UJ A	
Vinyl chloride	10		500 U R	500 U R	200 UJ A	200 UJ A	
Chloroethane	10		500 U R	500 U R	200 UJ A	200 UJ A	
Methylene chloride	5	4 ppb	250 UJ A	250 UJ A	100 UJ A	100 UJ A	
Acetone	10		500 U R	500 U R	200 UJ A	200 UJ A	
Carbon disulfide	5		250 U R	250 U R	100 UJ A	100 UJ A	
1,1-Dichloroethene	5		6300 J A	7000 J A	64 J A	39 J A	
1,1-Dichloroethane	5		250 U R	250 U R	100 UJ A	100 UJ A	
1,2-Dichloroethene (Total)	5		250 U R	250 U R	100 UJ A	100 UJ A	
Chloroform	5		250 U R	250 U R	100 UJ A	100 UJ A	
1,2-Dichloroethane	5		250 U R	250 U R	100 UJ A	100 UJ A	
2-Butanone	10		500 U R	500 U R	200 U R	200 UJ A	
1,1,1-Trichloroethane	5		8600 J A	9300 J A	220 J A	160 J A	
Carbon tetrachloride	5		250 U R	250 U R	4100 E	6640 E	
Vinyl acetate	10		500 U R	500 U R	200 UJ A	200 UJ A	
Bromodichloromethane	5		250 U R	250 U R	100 UJ A	100 UJ A	
1,2-Dichloropropane	5		250 U R	250 U R	100 UJ A	100 UJ A	
cis-1,3-Dichloropropene	5		250 U R	250 U R	100 UJ A	100 UJ A	
Trichloroethene	5		9100 J A	9600 J A	1600 J A	2100 J A	
Dibromochloromethane	5		250 U R	250 U R	100 UJ A	100 UJ A	
1,1,2-Trichloroethane	5		85 J A	77 J A	100 UJ A	100 UJ A	
Benzene	5		250 U R	250 U R	100 UJ A	100 UJ A	
trans-1,3-Dichloropropene	5		250 U R	250 U R	100 UJ A	100 UJ A	
Bromoform	5		250 U R	250 U R	100 UJ A	100 UJ A	
4-Methyl-2-pentanone	10		500 U R	500 U R	200 UJ A	200 UJ A	
2-Hexanone	10		500 U R	500 U R	200 UJ A	200 UJ A	
Tetrachloroethene	5		2800 J A	2900 J A	44 J A	30 J A	
1,1,2,2-Tetrachloroethane	5		250 U R	250 U R	100 UJ A	100 UJ A	
Toluene	5		62 J A	81 J A	100 UJ A	100 UJ A	
Chlorobenzene	5		250 U R	250 U R	100 UJ A	100 UJ A	
Ethylbenzene	5		250 U R	250 U R	100 UJ A	100 UJ A	
Styrene	5		250 U R	250 U R	100 UJ A	100 UJ A	
Xylenes (Total)	5		250 U R	250 U R	100 UJ A	100 UJ A	
Total Organic Concentration (ppb)	4		26947	28958	6028	8969	

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 J Quantitation is approximate due to limitations identified during the quality control review.  
 E Exceeds calibration range, dilute & reanalyze.  
 CRQL Contract Required Quantitation Limit in Micrograms per Liter (ug/L), Parts per billion (ppb).

DQ Data Qualifier  
 V Valid  
 A Acceptable with qualifications  
 R Rejected