

ER PROGRAM DATA ASSESSMENT  
SUMMARY REPORT FORM

Batch No. E89-0052 Site Area 2 - 881 Hillside  
Laboratory 881 Rockwell No. of Samples/Matrix 14/Low Water  
SOW # 10/86 (Rev. 8/87) Reviewer Org. TechLaw  
Sample Numbers 9-74, 10-74, 56-86, 62-86, 69-86, 70-86, 2-87, 3-87, 4-87, 5-87, 8-87, 43-87, 45-87, 52-87.

Data Assessment Summary

	VOA	Comments
1. Holding Times	<u>V</u>	
2. GC/MS Tune/Instr. Perf.	<u>V</u>	
3. Calibrations	<u>A</u>	<u>Initial (4 TCL out) 2-butanone RRF&lt;.05. Continuing (4 CCC out, 21 TCL out - total).</u>
4. Blanks	<u>A</u>	<u>Methylene chloride, chloroform, and toluene contamination.</u>
5. Surrogates	<u>A</u>	<u>Toluene and BFB out on 9-74 and 43-87</u>
6. Matrix Spike/Dup.	<u>A</u>	<u>Toluene out by 2%, toluene out by 1%</u>
7. Other QC	<u>A</u>	<u>1/12 Trip Blank contamination ((PCE)-J all + values), 2-butanone contamination.</u>
8. Internal Standards	<u>V</u>	
9. Compound Identification	<u>A</u>	<u>6 mass spectra missing. (data requested, chemist on vacation) 43-87 value for PCE estimated (J).</u>
10. System Performance	<u>A</u>	<u>Blank contamination, Toluene and BFB surrogates out.</u>
11. Overall Assessment	<u>A</u>	<u>Data acceptable, with qualification.</u>

V = Data had no problems.  
A = Data acceptable but qualified due to problems.  
R = Data rejected, unusable.  
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 Table).

ADMIN RECORD

"REVIEWED FOR CLASSIFICATION

By R. B. Hoffman

Date 7-11-89

REVIEWED FOR CLASSIFICATION/UCNI

By George H. Setlock

Date 6/27/90

A-DU01-000036

Action Items: (1) Initial Calibration - 2-butanone, positive values are estimated (J) and non-detect values are rejected (R) for all samples because the average RRF was <.05. Bromomethane, positive values are estimated (J) and non-detect values are rejected (R) for samples 2-87, 69-86, 4-87, 4-87D, 10-74, 10-74X5 dilution, 56-86, 56-86D, 70-86, 5-87, 52-87, 52-87D, and the associated Trip and Field Blanks because the % Relative Standard Deviation exceeded 50%.

(2) Continuing Calibration - chloromethane and chloroethane positive values are estimated (J) and non-detects are rejected (R) for samples 2-87, 69-86, 4-87, 4-87D, and associated Trip and Field Blanks because the % difference between the initial and continuing calibration was >50%; bromomethane and chloromethane positive values are estimated (J) and non-detects are rejected (R) for samples 10-74, 10-74X5 dilution, 56-86, 56-86D, 70-86, 5-87, 52-87, 52-87D and associated Trip and Field Blanks because the % difference between the initial and continuing calibration was >50%; chloromethane and vinyl chloride positive values are estimated (J) and non-detects are rejected (R) for samples 3-87, 8-87, 62-87, 45-87 and associated Trip and Field Blanks because the % difference between the initial and continuing calibration was >50%; vinyl chloride positive values are estimated (J) and non-detects are rejected (R) for samples 9-74, 9-74X100 dilution, 43-87, 43-87X100 dilution, and associated Trip and Field Blanks because the % difference between the initial and continuing calibration was >50%. Positive values for carbon tetrachloride are estimated (J) for samples 4-87, 4-87D, and 10-74X5 dilution because the % difference between the initial and continuing calibration was >25%. CCC (1,1-dichloroethene and 1,2-dichloropropane) percent difference values were >25% for the continuing calibration run on 1/17/89. CCC (vinyl chloride) percent difference values were >25% for the continuing calibrations run on 1/25/89 and 1/26/89.

(3) Blanks - methylene chloride, toluene and chloroform values were quantitated in all Reagent Blanks. As a result, all positive values in the samples for these parameters are undetected and estimated (UJ). Methylene chloride, toluene and chloroform, were not detected in samples 10-74X5 dilution, 9-74X100 dilution and 43-87X100 dilution, therefore, no action was taken.

(4) Surrogates - surrogate criteria for BFB and toluene were exceeded for samples 9-74 and 43-87. All positive values for these samples are estimated (J) and all non-detects are undetected and estimated (UJ).

(5) Other QC - tetrachloroethene contamination at 35 ug/l found in the Trip Blank for samples collected on

1/12/89. All positive tetrachloroethene values are estimated (J) for samples 2-87, 4-87, and 4-87D.

(6) Compound Identification - the tetrachloroethene value for sample 43-87X100 dilution is currently estimated due to a missing tetrachloroethene MS spectra for the sample. Upon receipt of the spectra the result will be reevaluated and the results updated on the Data Validation Summary Table. Carbon tetrachloride values for sample 62-87, trichloroethene values for 2-87, and tetrachloroethene values for samples 4-87, 4-87D, 1/16/89 Trip Blank, 10-74, 52-87, and 52-87D are estimated (J) because instrument quantitation limits are not yet available from the laboratory.

Comments: Samples that do not meet surrogate recoveries are not currently being reanalyzed. Reagent Blank and Trip Blank contamination present. Instrument quantitation limits have not been supplied by laboratory to evaluate values less than the method detection limits. All values below method detection limits will be estimated (J) and quantified as acceptable until the quantitation limits are supplied.

Note: Worksheets and data summary forms are attached.

Robert L. Thielke  
Reviewer Signature

06/02/89  
Date



SAMPLING DATE: 1/12, 16, 23, 25/89  
 CLP VOLATILE ORGANIC ANALYSIS: Low Water

ANALYTICAL RESULTS (ppb)

Sample Location	RGNTB	TRIP BLANK	FIELD BLANK	10-74	56-86	56-86D	70-86	5-87
Sample Number		1/16/89	1/16/89	1/16/89	1/16/89	1/16/89	1/16/89	1/16/89
Sampling Date								
Remarks								
Volatiles Organic Compound	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)
Detection Limit (ppb)								
Chloromethane	10	10U R	10U R	10U R	10U R	10U R	10U R	10U R
Bromomethane	10	10U R	10U R	10U R	10U R	10U R	10U R	10U R
Vinyl Chloride	10	10U V	10U V	10U V	10U V	10U V	10U V	10U V
Chloroethane	10	10U V	10U V	10U V	10U V	10U V	10U V	10U V
Methylene Chloride	5	8UJ A	7UJ A	6UJ A	6UJ A	6UJ A	6UJ A	5UJ A
Acetone	10	10U V	10U V	10U V	10U V	10U V	10U V	10U V
Carbon Disulfide	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
1,1-Dichloroethane	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
1,1-Dichloroethane	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
1,2-Dichloroethane (Total)	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Chloroform	5	5UJ A	5UJ A	22UJ A	5UJ A	5UJ A	5UJ A	5UJ A
1,2-Dichloroethane	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
2-Butanone	10	10U R	10U R	10U R	10U R	10U R	10U R	10U R
1,1,1-Trichloroethane	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Carbon Tetrachloride	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Vinyl Acetate	10	10U V	10U V	660E A	10U V	10U V	10U V	10U V
Bromodichloromethane	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
1,2-Dichloropropane	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
cis-1,3-Dichloropropene	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Trichloroethane	5	5U V	5U V	410E A	5U V	5U V	5U V	5U V
Dibromochloromethane	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
1,1,2-Trichloroethane	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Benzene	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Trans-1,3-Dichloropropene	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Bromolorm	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
4-Methyl-2-pentanone	10	10U V	10U V	10U V	10U V	10U V	10U V	10U V
2-Hexanone	10	10U V	10U V	10U V	10U V	10U V	10U V	10U V
Tetrachloroethene	5	2J A	5U V	2J A	5U V	5U V	5U V	5U V
1,1,2,2-Tetrachloroethane	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Toluene	5	5UJ A	5UJ A	5UJ A	5UJ A	5UJ A	5UJ A	5UJ A
Chlorobenzene	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Ethylbenzene	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Styrene	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Xylole (Total)	5	5U V	5U V	5U V	5U V	5U V	5U V	5U V
Total volatile organic concentration (ppb)		2	0	1072	0	0	0	0

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 J Quantitation is approximate due to limitations identified during the quality control review (data validation).  
 .. Value is rejected due to other contractual criteria examined during the quality control review (data validation).  
 .. Value is rejected due to blank contamination identified during the quality control review (data validation).  
 ppb Parts per billion.

DQ Data Qualifier  
 V Valid  
 A Acceptable with qualifications  
 R Rejected, data unusable  
 E Exceeds Calib. range; diluted & reanalyzed Form V-1

SITE NAME: Area 2 - 881 Hillside

SAMPLING DATE: 1/12, 16, 23, 25/89

CLP VOLATILE ORGANIC ANALYSIS: Low Water ANALYTICAL RESULTS (ppb)

Sample Location	52-87	D-52-87	10-74 R	RGNTB	TRIP BLANK	FIELD BLANK	3-87	8-87
Sample Number	1/16/89	1/16/89	X5 1/16/89		1/23/89	1/23/89	1/23/89	1/23/89
Remarks	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)
Volatils Organic Compound								
Chloromethane	10 U R	10 U R	10 U R		10 U R	10 U R	10 U R	10 U R
Bromomethane	10 U R	10 U R	10 U R		10 U V	10 U V	10 U V	10 U V
Vinyl Chloride	10 U V	10 U V	10 U V		10 U R	10 U R	10 U R	10 U R
Chloroethane	10 U V	10 U V	10 U V		10 U V	10 U V	10 U V	10 U V
Methylene Chloride	5 6UJ A	6UJ A	5 U V	7 ppb	48 UJ A	37 UJ A	7 UJ A	5 U V
Acetone	10 U V	10 U V	10 U V		10 U V	10 U V	10 U V	10 U V
Carbon Disulfide	5 6 U V	5 U V	5 U V		5 U V	5 U V	5 U V	5 U V
1,1-Dichloroethane	5 6 U V	5 U V	5 U V		5 U V	5 U V	5 U V	5 U V
1,1-Dichloroethane	5 6 U V	5 U V	5 U V		5 U V	5 U V	5 U V	5 U V
1,2-Dichloroethane (Total)	5 6 U V	5 U V	5 U V		5 U V	5 U V	5 U V	5 U V
Chloroform	5 5UJ A	5UJ A	5 U V	9 ppb	5UJ A	5UJ A	5UJ A	5UJ A
1,2-Dichloroethane	5 5 U V	5 U V	5 U V		5 U V	5 U V	5 U V	5 U V
2-Butanone	10 U R	10 U R	10 U R		72 J A	26 J A	10 U R	10 U R
1,1,1-Trichloroethane	5 5 U V	5 U V	5 U V		5 U V	5 U V	5 U V	5 U V
Carbon Tetrachloride	5 5 U V	5 U V	810 J A		5 U V	5 U V	5 U V	5 U V
Vinyl Acetate	10 U V	10 U V	10 U V		10 U V	10 U V	10 U V	10 U V
Bromodichloromethane	5 6 U V	6 U V	6 U V		6 U V	6 U V	6 U V	6 U V
1,2-Dichloropropane	5 6 U V	6 U V	6 U V		6 U V	6 U V	6 U V	6 U V
cis-1,3-Dichloropropane	5 6 U V	6 U V	6 U V		6 U V	6 U V	6 U V	6 U V
Trichloroethane	6 6 U V	6 U V	340 V		6 U V	6 U V	6 U V	6 U V
Dibromochloromethane	5 6 U V	6 U V	5 U V		6 U V	6 U V	6 U V	6 U V
1,1,2-Trichloroethane	5 6 U V	6 U V	6 U V		6 U V	6 U V	6 U V	6 U V
Benzene	5 6 U V	6 U V	6 U V		6 U V	6 U V	6 U V	6 U V
Trans-1,3-Dichloropropane	5 6 U V	6 U V	6 U V		6 U V	6 U V	6 U V	6 U V
Bromoform	5 6 U V	6 U V	6 U V		6 U V	6 U V	6 U V	6 U V
4 Methyl 2-pentanone	10 U V	10 U V	10 U V		10 U V	10 U V	10 U V	10 U V
2-Hexanone	10 U V	10 U V	10 U V		10 U V	10 U V	10 U V	10 U V
Tetrachloroethane	5 1 J A	2 J A	5 U V		5 U V	5 U V	5 U V	5 U V
1,1,2,2-Tetrachloroethane	5 6 U V	6 U V	6 U V		6 U V	6 U V	6 U V	6 U V
Toluene	5 5UJ A	5UJ A	5 U V	4 ppb	5UJ A	5UJ A	5UJ A	5UJ A
Chlorobenzene	5 5 U V	5 U V	5 U V		5 U V	5 U V	5 U V	5 U V
Ethylbenzene	5 5 U V	5 U V	5 U V		5 U V	5 U V	5 U V	5 U V
Styrene	6 6 U V	6 U V	6 U V		6 U V	6 U V	6 U V	6 U V
Xylene (Total)	5 6 U V	6 U V	6 U V		6 U V	6 U V	6 U V	6 U V
Total volatile organic concentration (ppb)	1	2	1160	20	72	26	0	0

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 .. Value is rejected due to blank contamination identified during the quality control review (data validation).  
 ppb Parts per billion.  
 DQ Data Qualifier  
 V Valid  
 A Acceptable with qualifications  
 R Rejected, data unusable  
 E Exceeds Calib. range; diluted & reanalyzed Form V-1

CLP VOLATILE ORGANIC ANALYSIS: Low Water ANALYTICAL RESULTS (ppb)

Sample Location	62-87	45-87	RGNTB	TRIP BLANK	FIELD BLANK	9-74	9-74	43-87
Sample Number	1/23/89	1/23/89		1/25/89	1/25/89	1/25/89	X100	1/25/89
Sampling Date	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)
Remarks	Detection Limit (ppb)							
Volatiles Organic Compound								
Chloromethane	10	10U R	10U R	10U V	10U V	10UJ A	10U V	10UJ A
Bromomethane	10	10U V	10U V	10U V	10U V	10UJ A	10U V	10UJ A
Vinyl Chloride	10	10U R	10U R	10U R	10U R	10UJ A	10U R	10U R
Chloroethane	10	10U V	10U V	10U V	10U V	10UJ A	10U V	10UJ A
Methylene Chloride	5	5U V	5U V	7 ppb	6UJ A	5UJ A	5U V	5UJ A
Acetone	10	10U V	10U V	10U V	10U V	10UJ A	10U V	10UJ A
Carbon Disulfide	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
1,1-Dichloroethane	5	5U V	5U V	5U V	5U V	7200 E A	5300 V	4300 E A
1,1-Dichloroethane	5	5U V	5U V	5U V	5U V	180 J A	5U V	150 J A
1,2-Dichloroethane (Total)	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
Chloroform	5	5UJ A	5UJ A	8 ppb	5UJ A	5UJ A	5U V	5UJ A
1,2-Dichloroethane	5	5U V	5U V	5U V	5U V	17 J A	5U V	16 J A
2-Butanone	10	10U R	10U R	5 J A	5U V	10U R	10U R	10U R
1,1,1-Trichloroethane	5	5U V	5U V	5U V	5U V	4700 E A	10000 V	5200 E A
Carbon Tetrachloride	5	2 J A	5U V	5U V	5U V	5UJ A	5U V	5UJ A
Vinyl Acetate	10	10U V	10U V	10U V	10U V	10UJ A	10U V	10UJ A
Bromodichloromethane	5	5U V	5U V	5U V	5U V	6UJ A	5U V	5UJ A
1,2-Dichloropropane	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
cis-1,3-Dichloropropene	5	5U V	5U V	5U V	5U V	2800 E A	5U V	5UJ A
Trichloroethane	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
Dibromochloromethane	5	5U V	5U V	5U V	5U V	39 J A	5U V	29 J A
1,1,2-Trichloroethane	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
Benzene	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
Trans-1,3-Dichloropropene	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
Bromoform	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
4-Methyl-2-pentanone	10	10U V	10U V	10U V	10U V	10UJ A	10U V	10UJ A
2-Hexanone	10	10U V	10U V	10U V	10U V	10UJ A	10U V	10UJ A
Tetrachloroethane	5	5U V	5U V	5U V	5U V	780 E A	5U V	1400 E A
1,1,2,2-Tetrachloroethane	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
Toluene	5	5UJ A	5UJ A	4 ppb	6UJ A	5UJ A	5U V	9UJ A
Chlorobenzene	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
Ethylbenzene	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
Styrene	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
Xylenes (Total)	5	5U V	5U V	5U V	5U V	5UJ A	5U V	5UJ A
Total volatile organic concentration (ppb)	2	0	19	0	0	16716	23200	15245

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 ppb Parts per billion.  
 DQ Data Qualifier  
 V Valid  
 A Acceptable with qualifications  
 R Rejected, data unusable  
 E Exceeds Calib. range; diluted & reanalyzed Form V-1

SAMPLING DATE: 1/12, 16, 23, 25/89  
 CLP VOLATILE ORGANIC ANALYSIS: Low Water

Sample Location	43-87	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)
Sample Number	X100							
Sampling Date	1/25/89							
Remarks								
Volatiles Organic Compound	Detection Limit (ppb)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)	(DQ)
Chloromethane	10	10 U	V					
Bromomethane	10	10 U	V					
Vinyl Chloride	10	10 U	R					
Chloroethane	10	10 U	V					
Methylene Chloride	5	5 U	V					
Acetone	10	10 U	V					
Carbon Disulfide	5	5 U	V					
1,1-Dichloroethene	5	6300	V					
1,1-Dichloroethane	5	180	V					
1,2-Dichloroethane (Total)	5	5 U	V					
Chloroform	5	5 U	V					
1,2-Dichloroethane	5	5 U	V					
2-Butanone	10	10 U	R					
1,1,1-Trichloroethane	5	15000	V					
Carbon Tetrachloride	5	5 U	V					
Vinyl Acetate	10	10 U	V					
Bromochloromethane	5	5 U	V					
1,2-Dichloropropane	5	5 U	V					
cis-1,3-Dichloropropane	5	5 U	V					
Trichloroethene	5	11000	V					
Dibromochloromethane	5	5 U	V					
1,1,2-Trichloroethane	5	5 U	V					
Benzene	5	5 U	V					
Trans-1,3-Dichloropropane	5	5 U	V					
Bromoform	5	5 U	V					
4-Methyl-2-pentanone	10	10 U	V					
2-Hexanone	10	10 U	V					
Tetrachloroethene	5	3400 J	A					
1,1,2-Tetrachloroethane	5	5 U	V					
Toluene	5	5 U	V					
Chlorobenzene	5	5 U	V					
Ethylbenzene	5	5 U	V					
Styrene	5	5 U	V					
Xylene (Total)	5	5 U	V					
Total volatile organic concentration (ppb)		35880						

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 ppb Parts per billion.  
 DQ Data Qualifier  
 V Acceptable with qualifications  
 A Rejected, data unusable  
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