Rockwell ER Program
Rocky Flats Plant

(06/15/89)

ER PROGRAM DATA ASSESSMENT SUMMARY REPORT FORM

Batch No. E88-2939/3rd Quarter 1988 **Site** Area 2 - 881 Hillside

Laboratory 881 **No. of Samples/Matrix** 21/Low Water

SOW # 10/86 Rev. 8/87 **Reviewer Org.** TechLaw, Inc.

Sample Numbers 56-86, 70-86, 2-87, 62-86, 6-87, 4-87, 4-87MS, 4-87MSD, TB7-18, FB7-18, 69-86, 61-86, 52-87, 10-74, 5-87, 9-74, 43-87, 1-87, 3-87, 8-87, 45-87.

Data Assessment Summary

		VOA	Comments
1.	Holding Times	V	
2.	GC/MS Tune/Instr. Perf.	R	Deviation of Statement of Work, page 2 Action Items
3.	Calibrations	A	See Action Items, page 2.
4.	Blanks	R	See Action Items, page 2.
5.	Surrogates	R	See Action Items discussion of 4-87MSD & MB7-31, page 2.
6.	Matrix Spike/Dup.	A	Surrogates Toluene-d8 and BFB out on 4-87MSD.
7.	Other QC	R	Twelve hour curve not met. See Action Items, page 2.
8.	Internal Standards	V	
9.	Compound Identification	V	
10.	System Performance	V	
11.	Overall Assessment	R	See Comments, page 3.

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: The data contained in this package have been reviewed and found to be rejected. Please refer to the Action Items and Comments sections on the following page(s).

ADMIN RECORD

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

REVIEWED FOR CLASSIFICATION/UCNI
By George H. Setlock
Date (U) 6/27/90

A-OU01-000038

Action Items: 1) GC/MS Tune/Instrument Performance: The GC/MS tune criteria was not met because the BFB tune was performed simultaneously to the analysis of the method blank, before the BFB tune could be demonstrated separately. According to the case narrative, the BFB tune was run simultaneously with the first initial calibration standard run on 7/14/88. The Statement of Work for Organic Analysis 10/86 Section E page 10 paragraph 1.1.1 and 1.1.2 stipulates that BFB criteria must be met before any standards, samples or blanks are analyzed. The Statement of Work also stipulates that the tune must not be performed simultaneously with the analysis of any blanks or standards. The data for all standards, samples and blanks are rejected (R) because of these deviations.

2) Blanks: Acetone, chloroform, methylene chloride, and trichloroethene was found in all of the method blanks associated with this batch. The blank contaminants are a potential interference affecting the resolution and sensitivity of instrument tune. As a result, the data associated with these blanks are rejected (R).

3) Surrogates: The sample 4-87MSD had the surrogates toluene-d8 and BFB out of the contract required QC limits for percent recovery. A method blank (MB7-31) had the surrogate toluene-d8 out of the QC limit. Although positive results of samples would be flagged as "J" and negative results as "UJ" normally, neither of these samples were re-purged in order to meet the contract requirements. The Statement of Work (10/86) page E-19 paragraph 4.3.2 requires that surrogate recoveries out of specification be repurged, reinjected or reextracted. The Statement of Work for Organics Analysis page E-19 paragraph 4.3.1.4 requires that all method blank surrogate recoveries meet QC limits. These are additive problems to those Action Items discussed above, and as a result all data are rejected (R).

4) Other QC: The twelve hour frequency requirement for analyses run on 7/28/88 was exceeded for samples 43-87, 1-87, 3-87, 8-87 and 45-87. The Statement of Work for Organic Analysis 10/86 Section E page 10 paragraph 1.1.1 stipulates that the BFB criterion must be demonstrated daily or for each twelve hour time period, which ever is more frequent. As a result the data for the samples mentioned in this item are rejected (R).

5) Calibrations: Compounds with a % relative standard deviation >30% in an initial calibration were the following: SPCCs Chloromethane and Bromoform; CCCs Vinyl Chloride and 1,1-Dichloroethene; target compounds Bromomethane and Chloroethane. Positive values are estimated (J) and non-detects are estimated and undetected (UJ). The Continuing calibration of 7-19-88 has the following compounds with a (%D>25)

% difference: SPCC Chloromethane and target compound 2-Butanone. Samples affected are 56-86, 70-86, 2-87, 62-86, 6-87, 4-87, 4-87 duplicate, 4-87MS, and 4-87MSD. Positive values are estimated (J) and non-detects are estimated and undetected (UJ). Continuing calibration of 7/28/88 has the following compounds with a %D>25: SPCC Chloromethane, CCC 1,1-Dichloroethene, target compounds Bromomethane, Acetone, Vinyl acetate, 2-Hexanone and 1,2-Dichloroethane-d4. Samples affected are TB7-18, FB7-18, 69-86, 61-86, 52-87, 10-74, 5-87, 9-74, 43-87, 1-87, 3-87, 8-87, and 45-87. Positive values are estimated (J) and non-detects are estimated and undetected (UJ). Continuing calibration of 7/31/88 has the following compounds with a %D>25: SPCCs Chloromethane and 1,1,2,2-Tetrachloroethane; target compounds 2-Butanone, Vinyl acetate, Cis-1,3-Dichloropropene, 4-Methyl-2-pentanone, 2-Hexanone, Styrene and Xylenes (total). Samples affected are 10-74DL, 9-74DL and 43-87DL. Positive values are estimated (J) and non-detects are estimated and undetected (UJ).

Comments: Due to major problems with the GC/MS tune, blank contamination, method blank surrogate recovery, and sample surrogate recovery all data are rejected.

Note: Data Summary Tables are attached.

Anthony N. Toth
Reviewer Signature

6-15-89
Date

TABLE #: 1-E88-2939 **Page** 1 **of** 4

SITE NAME: Area 2 - 881 Hillside

SAMPLING DATE: 7/13, 7/14/88

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

Sample Location																
Sample Number		MB7-19	56-86		70-86		2-87		62-86		6-87		4-87		4-87	
Sampling Date			7/13/88		7/13/88		7/13/88		7/14/88		7/14/88		7/14/88		7/14/88	
Remarks		Method Blank													Duplicate	
Volatile Organic Compound	Detection Limit (ppb)			(DQ)		(DQ)		(DQ)		(DQ)		(DQ)		(DQ)		(DQ)
Chloromethane	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R
Bromomethane	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R
Vinyl Chloride	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R
Chloroethane	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R
Methylene Chloride	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Acetone	10	2 ppb	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R
Carbon Disulfide	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
1,1-Dichloroethene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
1,1-Dichloroethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
1,2-Dichloroethene (Total)	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Chloroform	5	10 ppb	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
1,2-Dichloroethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
2-Butanone	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R
1,1,1-Trichloroethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	4	R	4	R
Carbon Tetrachloride	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Vinyl Acetate	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R
Bromodichloromethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
1,2-Dichloropropane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
cis-1,3 Dichloropropene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Trichloroethene	5		5 U	R	5 U	R	5 U	R	5 U	R	15	R	33	R	33	R
Dibromochloromethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
1,1,2-Trichloroethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Benzene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Trans-1,3-Dichloropropene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Bromoform	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
4-Methyl-2-pentanone	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R
2-Hexanone	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R
Tetrachloroethene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	2	R	2	R
1,1,2,2-Tetrachloroethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Toluene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Chlorobenzene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Ethylbenzene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Styrene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Xylene (Total)	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R
Total volatile organic concentration (ppb)		12	0		0		0		0		15		39		39	

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 (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
R Valid
A Acceptable with qualifications
R Rejected, data unusable
E Exceeds calib. range; diluted & reanalyzed

Form R-1

TABLE #: 1-E88-2939 **Page** 2 **of** 4

SITE NAME: Area 2 - 881 Hillside

SAMPLING DATE: 7/18, 7/19, 7/21/88

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

Sample Location																
Sample Number		MB7-28	TB7-18		FB7-18		69-86		61-86		52-87		10-74		10-74DL	
Sampling Date			7/18/88		7/18/88		7/18/88		7/18/88		7/18/88		7/19/88		7/19/88	
Remarks		Method Blank	Trip Blank		Field Blank										X50	
Volatile Organic Compound	Detection Limit (ppb)			(DQ)		(DQ)		(DQ)		(DQ)		(DQ)		(DQ)		(DQ)
Chloromethane	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	500 U	R
Bromomethane	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	500 U	R
Vinyl Chloride	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	500 U	R
Chloroethane	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	500 U	R
Methylene Chloride	5	2 ppb	4	R	43	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Acetone	10	4 ppb	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	500 U	R
Carbon Disulfide	5		5 U	R	5 U	R	5 U	R	11	R	5 U	R	5 U	R	250 U	R
1,1-Dichloroethene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
1,1-Dichloroethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
1,2-Dichloroethene (Total)	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Chloroform	5	9 ppb	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	42	R	500	R
1,2-Dichloroethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
2-Butanone	10		10 U	R	46	R	10 U	R	10 U	R	10 U	R	10 U	R	500 U	R
1,1,1-Trichloroethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Carbon Tetrachloride	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	4700 E	R	4100	R
Vinyl Acetate	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	500 U	R
Bromodichloromethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
1,2-Dichloropropane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
cis-1,3 Dichloropropene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Trichloroethene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	1600 E	R	1000 U	R
Dibromochloromethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
1,1,2-Trichloroethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Benzene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Trans-1,3-Dichloropropene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Bromoform	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
4 Methyl-2-pentanone	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	500 U	R
2-Hexanone	10		10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	10 U	R	500 U	R
Tetrachloroethene	5		5 U	R	5 U	R	5 U	R	5 U	R	1	R	5 U	R	250 U	R
1,1,2,2-Tetrachloroethane	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Toluene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Chlorobenzene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Ethylbenzene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Styrene	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Xylene (Total)	5		5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	5 U	R	250 U	R
Total volatile organic concentration (ppb)		15	0		89		0		0		1		6342		5600	

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 (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
R Valid
A Acceptable with qualifications
R Rejected, data unusable
E Exceeds calib. range; diluted & reanalyzed

Form R-1

TABLE #: 1-E88-2939 Page 3 of 4

SITE NAME: Area 2 - 881 Hillside

SAMPLING DATE: 7/19, 7/20, 7/21/88

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

Sample Location																	
Sample Number		5-87		9-74		9-74DL		43-87		43-87DL		1-87		3-87		8-87	
Sampling Date		7/19/88		7/20/88		7/20/88		7/20/88		7/20/88		7/20/88		7/21/88		7/21/88	
Remarks						X100				X100							
Volatile Organic Compound	Detection Limit (ppb)		(DQ)		(DQ)		(DQ)		(DQ)		(DQ)		(DQ)		(DQ)		(DQ)
Chloromethane	10	10 U	R	10 U	R	1000 U	R	10 U	R	1000 U	R	10 U	R	10 U	R	10 U	R
Bromomethane	10	10 U	R	10 U	R	1000 U	R	10 U	R	1000 U	R	10 U	R	10 U	R	10 U	R
Vinyl Chloride	10	10 U	R	10 U	R	1000 U	R	10 U	R	1000 U	R	10 U	R	10 U	R	10 U	R
Chloroethane	10	10 U	R	10 U	R	1000 U	R	10 U	R	1000 U	R	10 U	R	10 U	R	10 U	R
Methylene Chloride	5	2	R	5 U	R	500 U	R	46	R	280 U	R	2	R	5 U	R	4	R
Acetone	10	10 U	R	10 U	R	1000 U	R	10 U	R	1000 U	R	10 U	R	10 U	R	10 U	R
Carbon Disulfide	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
1,1-Dichloroethene	5	5 U	R	1600 E	R	4100	R	920 E	R	19000	R	4	R	5 U	R	5 U	R
1,1-Dichloroethane	5	5 U	R	14	R	500 U	R	370 E	R	390	R	5 U	R	5 U	R	5 U	R
1,2 Dichloroethene (Total)	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
Chloroform	5	5 U	R	2	R	920	R	2	R	920	R	5 U	R	5 U	R	5 U	R
1,2-Dichloroethane	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
2-Butanone	10	10 U	R	10 U	R	1000 U	R	10 U	R	1000 U	R	10 U	R	10 U	R	10 U	R
1,1,1-Trichloroethane	5	5 U	R	6000 E	R	7200	R	3900 E	R	32000 E	R	14	R	5 U	R	5 U	R
Carbon Tetrachloride	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
Vinyl Acetate	10	10 U	R	10 U	R	1000 U	R	10 U	R	1000 U	R	10 U	R	10 U	R	10 U	R
Bromodichloromethane	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
1,2-Dichloropropane	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
cis-1,3 Dichloropropene	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
Trichloroethene	5	5 U	R	5500 E	R	5400	R	4100 E	R	19000	R	5	R	2	R	5 U	R
Dibromochloromethane	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
1,1,2-Trichloroethane	5	5 U	R	50	R	500 U	R	73	R	500 U	R	5 U	R	5 U	R	5 U	R
Benzene	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
Trans-1,3-Dichloropropene	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
Bromoform	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
4-Methyl-2-pentanone	10	10 U	R	10 U	R	1000 U	R	10 U	R	1000 U	R	10 U	R	10 U	R	10 U	R
2-Hexanone	10	10 U	R	10 U	R	1000 U	R	10 U	R	1000 U	R	10 U	R	10 U	R	10 U	R
Tetrachloroethene	5	5 U	R	2300 E	R	1500	R	4200 E	R	8700	R	4	R	2	R	5 U	R
1,1,2,2-Tetrachloroethane	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
Toluene	5	5 U	R	2	R	500 U	R	210 E	R	250	R	5 U	R	5 U	R	5 U	R
Chlorobenzene	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
Ethylbenzene	5	5 U	R	5 U	R	500 U	R	23	R	500 U	R	5 U	R	5 U	R	5 U	R
Styrene	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
Xylene (Total)	5	5 U	R	5 U	R	500 U	R	5 U	R	500 U	R	5 U	R	5 U	R	5 U	R
Total volatile organic concentration (ppb)		2		15468		19620		13844		80540		29		4		4	

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 (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
R Valid
A Acceptable with qualifications
R Rejected, data unusable
E Exceeds calib. range; diluted & reanalyzed

Form R-1

TABLE #: 1-E88-2939 Page 4 of 4
SITE NAME: Area 2 - 881 Hillside
SAMPLING DATE: 7/21/88
CLP VOLATILE ORGANIC ANALYSIS: Low Water ANALYTICAL RESULTS (ppb)

Sample Location										
Sample Number		45-87		MB7-31						
Sampling Date		7/21/88								
Remarks				Method Blank						
Volatile Organic Compound	Detection Limit (ppb)		(DQ)							
Chloromethane	10	10 U	R							
Bromomethane	10	10 U	R							
Vinyl Chloride	10	10 U	R							
Chloroethane	10	10 U	R							
Methylene Chloride	5	2	R	2 ppb						
Acetone	10	10 U	R	8 ppb						
Carbon Disulfide	5	5 U	R							
1,1-Dichloroethene	5	5 U	R							
1,1-Dichloroethane	5	5 U	R							
1,2-Dichloroethene (Total)	5	5 U	R							
Chloroform	5	5 U	R	14 ppb						
1,2-Dichloroethane	5	5 U	R							
2-Butanone	10	10 U	R							
1,1,1-Trichloroethane	5	5 U	R							
Carbon Tetrachloride	5	5 U	R							
Vinyl Acetate	10	10 U	R							
Bromodichloromethane	5	5 U	R							
1,2-Dichloropropane	5	5 U	R							
cis-1,3 Dichloropropene	5	5 U	R							
Trichloroethene	5	5 U	R	1 ppb						
Dibromochloromethane	5	5 U	R							
1,1,2-Trichloroethane	5	5 U	R							
Benzene	5	5 U	R							
Trans-1,3-Dichloropropene	5	5 U	R							
Bromoform	5	5 U	R							
4-Methyl-2-pentanone	10	10 U	R							
2-Hexanone	10	10 U	R							
Tetrachloroethene	5	5 U	R							
1,1,2,2-Tetrachloroethane	5	5 U	R							
Toluene	5	5 U	R							
Chlorobenzene	5	5 U	R							
Ethylbenzene	5	5 U	R							
Styrene	5	5 U	R							
Xylene (Total)	5	5 U	R							
Total volatile organic concentration (ppb)		2		25						

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 (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
R Valid
A Acceptable with qualifications
R Rejected, data unusable
E Exceeds calib. range; diluted & reanalyzed

Form R-1