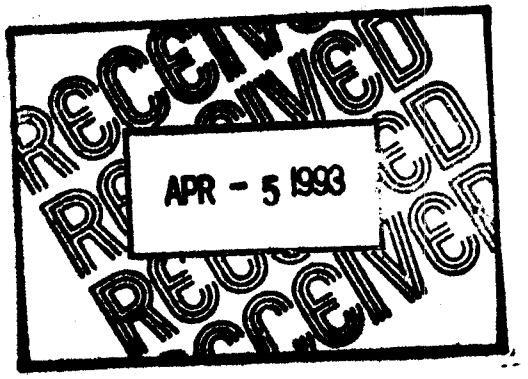
DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 377TH AIR BASE WING (AFMC)

Stephanie File

ENTERED

31 MAR 1993

377 AEW/EM
2000 Wyoming Blvd SE
Kirtland AFB NM 87117-5659



Ms Barbara Hoditschek
Program Manager
Hazardous and Radioactive Materials Bureau
PO Box 26110
525 Camino de Los Marquez
Santa Fe NM 87502

Dear Ms Hoditschek

Attached are the final QA/QC'd analytical results from the resampling of the monitor wells from which earlier sampling indicated the presence of MEK (2 Butanone). No volatile organic compounds were detected. We have been informed by Stephanie Stoddard of your staff that these findings are supported by the analysis of the split-samples collected by the state. As a result, we believe the previous detection of MEK was a laboratory error, and we have demonstrated that the groundwater at both the sewage lagoons and golf course pond is not contaminated. If you have any questions, please contact John Gould at 846-2773.

Sincerely

Thomas A. Norris

THOMAS A. NORRIS, Colonel, USAF
Director
Environmental Management Division

1 Atch
Final Analytical results

cc: NMED (Dave Morgan)
NMED (Stephanie Stoddard)
AFCEE (Jo Mullen)

Rocky Mountain
Analytical Laboratory

Enseco
A Corning Company

March 15, 1993

Ms. Dorothy Walker
U.S. Geological Survey NWQL-CL
12395 West 53rd Street
MS-402
Arvada, CO 80002

Dear Ms. Walker:

Enclosed is the report for eight aqueous samples received at Enseco-Rocky Mountain Analytical Laboratory on February 25, 1993.

Included with the report is a quality control summary.

Please call if you have any questions.

Sincerely,

Kathy McKeeta
Project Administrator

Reviewed by:

Julieann L. Kramer
Program Manager

Enclosures

RMAL #027742

618 002

Enseco Incorporated
4955 Yarrow Street
Arvada, Colorado 80002

Enseco Incorporated

ANALYTICAL RESULTS

FOR

U.S. GEOLOGICAL SURVEY

ENSECO-RMAL NO. 027742

March 15, 1993

Enseco
A Corning Company

Reviewed by:

Kathy McKeeta

Julieann L. Kramer

618 003

Enseco Incorporated
4955 Yarrow Street
Arvada, Colorado 80002

I. OVERVIEW

On February 25, 1993 Enseco-Rocky Mountain Analytical Laboratory received eight aqueous samples from the U.S. Geological Survey.

This report presents the analytical results as well as supporting information to aid in the evaluation and interpretation of the data and is arranged in the following order:

I. Overview
II. Sample Description Information/Analytical Test Requests
III. Analytical Results
IV. Quality Control Report

GC/MS Volatiles

The matrix spike samples 027742-0001MS and -0001SD generally showed good recoveries, typically between 61% and 139% recovered. The following analytes were detected outside of the laboratory determined acceptance windows, bromomethane, 2-butanone,chloroethane, 2-chloroethyl vinyl ether, and xylenes (total). The following table summarizes the out of control points:

	% RECOVERY				
Analyte	MS	SD	DCS1	DCS2	Limits
bromomethane	110	109	104	97.1	80-107
2-butanone	73	71	67.9	75.7	90-138
chloroethane	98	96	91.1	85.7	82-97
2-chloroethyl vinyl ether	34	13	164	176	60-168
xylenes (total)	161	154	151	172	80-119

Bromomethane was out of control high in the matrix spike samples and detected within control limits in the duplicate control samples (DCS), therefore no corrective actions are required.

Chloroethane was out of control limits in the MS, and within control limits in the MSD, DCS1 and DCS2. 2-butanone and xylenes (total) were out of control limits in both the matrix spike and LCS samples. 2-chloroethyl vinyl ether was out of control low in the matrix spike samples, detected above control limits in DCS2, and detected within control limits in DCS1. These analytes were not detected above reporting limits in any of the related samples. The recovery for these analytes did not exceed limits by a degree which would generally indicate adversely affected data.

II. SAMPLE DESCRIPTION INFORMATION/ANALYTICAL TEST REQUESTS

Sample Description Information

The Sample Description Information lists all of the samples received in this project together with the internal laboratory identification number assigned for each sample. Each project received at Enseco - RMAL is assigned a unique six digit number. Samples within the project are numbered sequentially. The laboratory identification number is a combination of the six digit project code and the sample sequence number.

Also given in the Sample Description Information is the Sample Type (matrix), Date of Sampling (if known) and Date of Receipt at the laboratory.

Analytical Test Requests

The Analytical Test Requests lists the analyses that were performed on each sample. The Custom Test column indicates where tests have been modified to conform to the specific requirements of this project.

SAMPLE DESCRIPTION INFORMATION
for
U.S. Geological Survey

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
027742-0001-SA	KAFB061016-2	AQUEOUS	24 FEB 93	14:10	25 FEB 93
027742-0001-MS	KAFB061018-2	AQUEOUS	24 FEB 93	14:11	25 FEB 93
027742-0001-SD	KAFB061019-2	AQUEOUS	24 FEB 93	14:15	25 FEB 93
027742-0002-SA	KAFB050224-2	AQUEOUS	24 FEB 93	12:40	25 FEB 93
027742-0003-SA	KAFB050227-2	AQUEOUS	24 FEB 93	12:45	25 FEB 93
027742-0004-BL	KAFB050226-2	AQUEOUS	24 FEB 93	12:20	25 FEB 93
027742-0005-EB	KAFB050225-2	AQUEOUS	24 FEB 93	08:15	25 FEB 93
027742-0006-TB	KAFB061017-2	AQUEOUS	24 FEB 93	08:20	25 FEB 93

ANALYTICAL TEST REQUESTS
for
U.S. Geological Survey

Lab ID: 027742	Group Code	Analysis Description	Custom Test?
0001 - 0006	A	AFCEE	Y
		Volatile Organics	Y
		Screen -AFCEE Volatile Organics	N
		Volatiles Library Search (10 Compound TID)	N

III. ANALYTICAL RESULTS

The analytical results for this project are presented in the following data tables. Each data table includes sample identification information, and when available and appropriate, dates sampled, received, authorized, prepared and analyzed. The authorization data is the date when the project was defined by the client such that laboratory work could begin. The date prepared is typically the date an extraction or digestion was initiated. For volatile organic compounds in water, the date prepared is the date the screening of the sample was performed.

Data sheets contain a listing of the parameters measured in each test, the analytical results and the Enseco reporting limit. Reporting limits are adjusted to reflect dilution of the sample, when appropriate. Solid and waste samples are reported on an "as received" basis, i.e. no correction is made for moisture content.

Enseco-RMAL does not routinely blank-correcting analytical data. Uncorrected analytical results are reported, along with associated blank results, for all organic and metals analyses. Analytical results and blank results are reported for conventional inorganic parameters as specified in the method. This policy is described in detail in the Enseco Incorporated Quality Assurance Program Plan for Environmental Chemical Monitoring, Revision 3.5, May, 1992.

In addition, surrogate recovery data is presented for all GC/MS analyses. The surrogate recovery is an indication of the affect of the sample matrix on the performance of the method. The results from the Standard Enseco QA/QC Program, which generates data which are independent of matrix effects, is given in Section IV.

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB061016-2
Lab ID: 027742-0001-SA
Matrix: AQUEOUS
Authorized: 25 FEB 93
Sampled: 24 FEB 93
Prepared: 28 FEB 93
Received: 25 FEB 93
Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Acetone	ND	ug/L	10
Benzene	ND	ug/L	2.0
Bromodichloromethane	ND	ug/L	2.0
Bromoform	ND	ug/L	5.0
Bromomethane	ND	ug/L	4.0
2-Butanone (MEK)	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0
Carbon tetrachloride	ND	ug/L	3.0
Chlorobenzene	ND	ug/L	2.0
Chloroethane	ND	ug/L	10
2-Chloroethyl vinyl ether	ND	ug/L	--
Chloroform	ND	ug/L	2.0
Chloromethane	ND	ug/L	6.0
Dibromochloromethane	ND	ug/L	4.0
1,1-Dichloroethane	ND	ug/L	4.0
1,2-Dichloroethane	ND	ug/L	4.0
1,1-Dichloroethene	ND	ug/L	5.0
1,2-Dichloroethene (trans)	ND	ug/L	5.0
1,2-Dichloropropane	ND	ug/L	3.0
cis-1,3-Dichloropropene	ND	ug/L	5.0
trans-1,3-Dichloropropene	ND	ug/L	3.0
Ethylbenzene	ND	ug/L	2.0
2-Hexanone	ND	ug/L	10
Methylene chloride	ND	ug/L	3.0
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10
Styrene	ND	ug/L	5.0
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0
Tetrachloroethene	ND	ug/L	2.0
Toluene	ND	ug/L	3.0
1,1,1-Trichloroethane	ND	ug/L	3.0
1,1,2-Trichloroethane	ND	ug/L	5.0
Trichloroethene	ND	ug/L	3.0
Vinyl acetate	ND	ug/L	7.0
Vinyl chloride	ND	ug/L	4.0
Xylenes (total)	ND	ug/L	5.0
Methyl methacrylate	ND	ug/L	20
Ethyl methacrylate	ND	ug/L	20
Dichlorodifluoromethane	ND	ug/L	20
Acetonitrile	ND	ug/L	200

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks
Approved By: Karen Kuiken

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB061016-2
Lab ID: 027742-0001-SA
Matrix: AQUEOUS Sampled: 24 FEB 93 Received: 25 FEB 93
Authorized: 25 FEB 93 Prepared: 28 FEB 93 Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Iodomethane	ND	ug/L	5.0
Acrolein	ND	ug/L	100
Acrylonitrile	ND	ug/L	100
Propionitrile	ND	ug/L	5.0
Trichlorofluoromethane	ND	ug/L	5.0
Allyl chloride	ND	ug/L	10
Methacrylonitrile	ND	ug/L	5.0
Dibromomethane	ND	ug/L	5.0
Isobutanol	ND	ug/L	200
1,4-Dioxane	ND	ug/L	500
Chloroprene	ND	ug/L	5.0
1,2-Dibromoethane (EDB)	ND	ug/L	10
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0
1,2,3-Trichloropropane	ND	ug/L	5.0
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0
1,2-Dibromo-3-chloro-propane (DBCP)	ND	ug/L	10

Surrogate	Recovery	
Toluene-d8	99	%
4-Bromofluorobenzene	91	%
1,2-Dichloroethane-d4	99	%

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks Approved By: Karen Kuiken

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB050224-2
Lab ID: 027742-0002-SA
Matrix: AQUEOUS Sampled: 24 FEB 93 Received: 25 FEB 93
Authorized: 25 FEB 93 Prepared: 28 FEB 93 Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Acetone	ND	ug/L	10
Benzene	ND	ug/L	2.0
Bromodichloromethane	ND	ug/L	2.0
Bromoform	ND	ug/L	5.0
Bromomethane	ND	ug/L	4.0
2-Butanone (MEK)	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0
Carbon tetrachloride	ND	ug/L	3.0
Chlorobenzene	ND	ug/L	2.0
Chloroethane	ND	ug/L	10
2-Chloroethyl vinyl ether	ND	ug/L	--
Chloroform	ND	ug/L	2.0
Chloromethane	ND	ug/L	6.0
Dibromochloromethane	ND	ug/L	4.0
1,1-Dichloroethane	ND	ug/L	4.0
1,2-Dichloroethane	ND	ug/L	4.0
1,1-Dichloroethene	ND	ug/L	5.0
1,2-Dichloroethene (trans)	ND	ug/L	5.0
1,2-Dichloropropane	ND	ug/L	3.0
cis-1,3-Dichloropropene	ND	ug/L	5.0
trans-1,3-Dichloropropene	ND	ug/L	3.0
Ethylbenzene	ND	ug/L	2.0
2-Hexanone	ND	ug/L	10
Methylene chloride	ND	ug/L	3.0
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10
Styrene	ND	ug/L	5.0
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0
Tetrachloroethene	ND	ug/L	2.0
Toluene	ND	ug/L	3.0
1,1,1-Trichloroethane	ND	ug/L	3.0
1,1,2-Trichloroethane	ND	ug/L	5.0
Trichloroethene	ND	ug/L	3.0
Vinyl acetate	ND	ug/L	7.0
Vinyl chloride	ND	ug/L	4.0
Xylenes (total)	ND	ug/L	5.0
Methyl methacrylate	ND	ug/L	20
Ethyl methacrylate	ND	ug/L	20
Dichlorodifluoromethane	ND	ug/L	20
Acetonitrile	ND	ug/L	200

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks Approved By: Karen Kuiken

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB050224-2
Lab ID: 027742-0002-SA
Matrix: AQUEOUS Sampled: 24 FEB 93 Received: 25 FEB 93
Authorized: 25 FEB 93 Prepared: 28 FEB 93 Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Iodomethane	ND	ug/L	5.0
Acrolein	ND	ug/L	100
Acrylonitrile	ND	ug/L	100
Propionitrile	ND	ug/L	5.0
Trichlorofluoromethane	ND	ug/L	5.0
Allyl chloride	ND	ug/L	10
Methacrylonitrile	ND	ug/L	5.0
Dibromomethane	ND	ug/L	5.0
Isobutanol	ND	ug/L	200
1,4-Dioxane	ND	ug/L	500
Chloroprene	ND	ug/L	5.0
1,2-Dibromoethane (EDB)	ND	ug/L	10
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0
1,2,3-Trichloropropane	ND	ug/L	5.0
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0
1,2-Dibromo-3-chloro-propane (DBCP)	ND	ug/L	10

Surrogate	Recovery	
Toluene-d8	97	%
4-Bromofluorobenzene	93	%
1,2-Dichloroethane-d4	94	%

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks Approved By: Karen Kuiken

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB050227-2
Lab ID: 027742-0003-SA
Matrix: AQUEOUS Sampled: 24 FEB 93 Received: 25 FEB 93
Authorized: 25 FEB 93 Prepared: 28 FEB 93 Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Acetone	ND	ug/L	10
Benzene	ND	ug/L	2.0
Bromodichloromethane	ND	ug/L	2.0
Bromoform	ND	ug/L	5.0
Bromomethane	ND	ug/L	4.0
2-Butanone (MEK)	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0
Carbon tetrachloride	ND	ug/L	3.0
Chlorobenzene	ND	ug/L	2.0
Chloroethane	ND	ug/L	10
2-Chloroethyl vinyl ether	ND	ug/L	--
Chloroform	ND	ug/L	2.0
Chloromethane	ND	ug/L	6.0
Dibromochloromethane	ND	ug/L	4.0
1,1-Dichloroethane	ND	ug/L	4.0
1,2-Dichloroethane	ND	ug/L	4.0
1,1-Dichloroethene	ND	ug/L	5.0
1,2-Dichloroethene (trans)	ND	ug/L	5.0
1,2-Dichloropropane	ND	ug/L	3.0
cis-1,3-Dichloropropene	ND	ug/L	5.0
trans-1,3-Dichloropropene	ND	ug/L	3.0
Ethylbenzene	ND	ug/L	2.0
2-Hexanone	ND	ug/L	10
Methylene chloride	ND	ug/L	3.0
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10
Styrene	ND	ug/L	5.0
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0
Tetrachloroethene	ND	ug/L	2.0
Toluene	ND	ug/L	3.0
1,1,1-Trichloroethane	ND	ug/L	3.0
1,1,2-Trichloroethane	ND	ug/L	5.0
Trichloroethene	ND	ug/L	3.0
Vinyl acetate	ND	ug/L	7.0
Vinyl chloride	ND	ug/L	4.0
Xylenes (total)	ND	ug/L	5.0
Methyl methacrylate	ND	ug/L	20
Ethyl methacrylate	ND	ug/L	20
Dichlorodifluoromethane	ND	ug/L	20
Acetonitrile	ND	ug/L	200

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks Approved By: Karen Kuiken

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB050227-2
Lab ID: 027742-0003-SA
Matrix: AQUEOUS Sampled: 24 FEB 93 Received: 25 FEB 93
Authorized: 25 FEB 93 Prepared: 28 FEB 93 Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Iodomethane	ND	ug/L	5.0
Acrolein	ND	ug/L	100
Acrylonitrile	ND	ug/L	100
Propionitrile	ND	ug/L	5.0
Trichlorofluoromethane	ND	ug/L	5.0
Allyl chloride	ND	ug/L	10
Methacrylonitrile	ND	ug/L	5.0
Dibromomethane	ND	ug/L	5.0
Isobutanol	ND	ug/L	200
1,4-Dioxane	ND	ug/L	500
Chloroprene	ND	ug/L	5.0
1,2-Dibromoethane (EDB)	ND	ug/L	10
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0
1,2,3-Trichloropropane	ND	ug/L	5.0
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0
1,2-Dibromo-3-chloropropane (DBCP)	ND	ug/L	10

Surrogate	Recovery	
Toluene-d8	99	%
4-Bromofluorobenzene	91	%
1,2-Dichloroethane-d4	101	%

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks Approved By: Karen Kuiken

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB050226-2
Lab ID: 027742-0004-BL
Matrix: AQUEOUS
Authorized: 25 FEB 93
Sampled: 24 FEB 93
Prepared: 28 FEB 93
Received: 25 FEB 93
Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Acetone	ND	ug/L	10
Benzene	ND	ug/L	2.0
Bromodichloromethane	ND	ug/L	2.0
Bromoform	ND	ug/L	5.0
Bromomethane	ND	ug/L	4.0
2-Butanone (MEK)	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0
Carbon tetrachloride	ND	ug/L	3.0
Chlorobenzene	ND	ug/L	2.0
Chloroethane	ND	ug/L	10
2-Chloroethyl vinyl ether	ND	ug/L	--
Chloroform	ND	ug/L	2.0
Chloromethane	ND	ug/L	6.0
Dibromochloromethane	ND	ug/L	4.0
1,1-Dichloroethane	ND	ug/L	4.0
1,2-Dichloroethane	ND	ug/L	4.0
1,1-Dichloroethene	ND	ug/L	5.0
1,2-Dichloroethene (trans)	ND	ug/L	5.0
1,2-Dichloropropane	ND	ug/L	3.0
cis-1,3-Dichloropropene	ND	ug/L	5.0
trans-1,3-Dichloropropene	ND	ug/L	3.0
Ethylbenzene	ND	ug/L	2.0
2-Hexanone	ND	ug/L	10
Methylene chloride	ND	ug/L	3.0
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10
Styrene	ND	ug/L	5.0
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0
Tetrachloroethene	ND	ug/L	2.0
Toluene	ND	ug/L	3.0
1,1,1-Trichloroethane	ND	ug/L	3.0
1,1,2-Trichloroethane	ND	ug/L	5.0
Trichloroethene	ND	ug/L	3.0
Vinyl acetate	ND	ug/L	7.0
Vinyl chloride	ND	ug/L	4.0
Xylenes (total)	ND	ug/L	5.0
Methyl methacrylate	ND	ug/L	20
Ethyl methacrylate	ND	ug/L	20
Dichlorodifluoromethane	ND	ug/L	20
Acetonitrile	ND	ug/L	200

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks
Approved By: Karen Kuiken

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB050226-2
Lab ID: 027742-0004-BL
Matrix: AQUEOUS Sampled: 24 FEB 93 Received: 25 FEB 93
Authorized: 25 FEB 93 Prepared: 28 FEB 93 Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Iodomethane	ND	ug/L	5.0
Acrolein	ND	ug/L	100
Acrylonitrile	ND	ug/L	100
Propionitrile	ND	ug/L	5.0
Trichlorofluoromethane	ND	ug/L	5.0
Allyl chloride	ND	ug/L	10
Methacrylonitrile	ND	ug/L	5.0
Dibromomethane	ND	ug/L	5.0
Isobutanol	ND	ug/L	200
1,4-Dioxane	ND	ug/L	500
Chloroprene	ND	ug/L	5.0
1,2-Dibromoethane (EDB)	ND	ug/L	10
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0
1,2,3-Trichloropropane	ND	ug/L	5.0
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0
1,2-Dibromo-3-chloro-propane (DBCP)	ND	ug/L	10

Surrogate	Recovery	
Toluene-d8	98	%
4-Bromofluorobenzene	90	%
1,2-Dichloroethane-d4	102	%

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks Approved By: Karen Kuiken

TENTATIVELY IDENTIFIED COMPOUNDS

FOR

U.S. GEOLOGICAL SURVEY

AFCEE

SAMPLE NUMBER 027742-0004

Compound Name	Fraction	Confidence Level	Estimated Concentration ug/L
Siloxanes	VOA		8.5

NOTES:

Confidence Levels

Level 3 - Confirmed Identification
Level 2 - Confident Identification
Level 1 - Tentative Identification

Please refer to the discussion for further details.

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB050225-2
Lab ID: 027742-0005-EB
Matrix: AQUEOUS Sampled: 24 FEB 93 Received: 25 FEB 93
Authorized: 25 FEB 93 Prepared: 28 FEB 93 Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Acetone	ND	ug/L	10
Benzene	ND	ug/L	2.0
Bromodichloromethane	ND	ug/L	2.0
Bromoform	ND	ug/L	5.0
Bromomethane	ND	ug/L	4.0
2-Butanone (MEK)	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0
Carbon tetrachloride	ND	ug/L	3.0
Chlorobenzene	ND	ug/L	2.0
Chloroethane	ND	ug/L	10
2-Chloroethyl vinyl ether	ND	ug/L	--
Chloroform	ND	ug/L	2.0
Chloromethane	ND	ug/L	6.0
Dibromochloromethane	ND	ug/L	4.0
1,1-Dichloroethane	ND	ug/L	4.0
1,2-Dichloroethane	ND	ug/L	4.0
1,1-Dichloroethene	ND	ug/L	5.0
1,2-Dichloroethene (trans)	ND	ug/L	5.0
1,2-Dichloropropane	ND	ug/L	3.0
cis-1,3-Dichloropropene	ND	ug/L	5.0
trans-1,3-Dichloropropene	ND	ug/L	3.0
Ethylbenzene	ND	ug/L	2.0
2-Hexanone	ND	ug/L	10
Methylene chloride	ND	ug/L	3.0
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10
Styrene	ND	ug/L	5.0
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0
Tetrachloroethene	ND	ug/L	2.0
Toluene	ND	ug/L	3.0
1,1,1-Trichloroethane	ND	ug/L	3.0
1,1,2-Trichloroethane	ND	ug/L	5.0
Trichloroethene	ND	ug/L	3.0
Vinyl acetate	ND	ug/L	7.0
Vinyl chloride	ND	ug/L	4.0
Xylenes (total)	ND	ug/L	5.0
Methyl methacrylate	ND	ug/L	20
Ethyl methacrylate	ND	ug/L	20
Dichlorodifluoromethane	ND	ug/L	20
Acetonitrile	ND	ug/L	200

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks Approved By: Karen Kuiken

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB050225-2
Lab ID: 027742-0005-EB
Matrix: AQUEOUS Sampled: 24 FEB 93 Received: 25 FEB 93
Authorized: 25 FEB 93 Prepared: 28 FEB 93 Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Iodomethane	ND	ug/L	5.0
Acrolein	ND	ug/L	100
Acrylonitrile	ND	ug/L	100
Propionitrile	ND	ug/L	5.0
Trichlorofluoromethane	ND	ug/L	5.0
Allyl chloride	ND	ug/L	10
Methacrylonitrile	ND	ug/L	5.0
Dibromomethane	ND	ug/L	5.0
Isobutanol	ND	ug/L	200
1,4-Dioxane	ND	ug/L	500
Chloroprene	ND	ug/L	5.0
1,2-Dibromoethane (EDB)	ND	ug/L	10
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0
1,2,3-Trichloropropane	ND	ug/L	5.0
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0
1,2-Dibromo-3-chloro-propane (DBCP)	ND	ug/L	10

Surrogate	Recovery	
Toluene-d8	96	%
4-Bromofluorobenzene	89	%
1,2-Dichloroethane-d4	102	%

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks Approved By: Karen Kuiken

TENTATIVELY IDENTIFIED COMPOUNDS

FOR

U.S. GEOLOGICAL SURVEY

AFCEE

SAMPLE NUMBER 027742-0005

Compound Name	Fraction	Confidence Level	Estimated Concentration ug/L
None Detected	VOA		

NOTES:

Confidence Levels

Level 3 - Confirmed Identification
Level 2 - Confident Identification
Level 1 - Tentative Identification

Please refer to the discussion for further details.

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB061017-2
Lab ID: 027742-0006-TB
Matrix: AQUEOUS Sampled: 24 FEB 93 Received: 25 FEB 93
Authorized: 25 FEB 93 Prepared: 28 FEB 93 Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Acetone	ND	ug/L	10
Benzene	ND	ug/L	2.0
Bromodichloromethane	ND	ug/L	2.0
Bromoform	ND	ug/L	5.0
Bromomethane	ND	ug/L	4.0
2-Butanone (MEK)	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0
Carbon tetrachloride	ND	ug/L	3.0
Chlorobenzene	ND	ug/L	2.0
Chloroethane	ND	ug/L	10
2-Chloroethyl vinyl ether	ND	ug/L	--
Chloroform	ND	ug/L	2.0
Chloromethane	ND	ug/L	6.0
Dibromochloromethane	ND	ug/L	4.0
1,1-Dichloroethane	ND	ug/L	4.0
1,2-Dichloroethane	ND	ug/L	4.0
1,1-Dichloroethene	ND	ug/L	5.0
1,2-Dichloroethene (trans)	ND	ug/L	5.0
1,2-Dichloropropane	ND	ug/L	3.0
cis-1,3-Dichloropropene	ND	ug/L	5.0
trans-1,3-Dichloropropene	ND	ug/L	3.0
Ethylbenzene	ND	ug/L	2.0
2-Hexanone	ND	ug/L	10
Methylene chloride	ND	ug/L	3.0
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10
Styrene	ND	ug/L	5.0
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0
Tetrachloroethene	ND	ug/L	2.0
Toluene	ND	ug/L	3.0
1,1,1-Trichloroethane	ND	ug/L	3.0
1,1,2-Trichloroethane	ND	ug/L	5.0
Trichloroethene	ND	ug/L	3.0
Vinyl acetate	ND	ug/L	7.0
Vinyl chloride	ND	ug/L	4.0
Xylenes (total)	ND	ug/L	5.0
Methyl methacrylate	ND	ug/L	20
Ethyl methacrylate	ND	ug/L	20
Dichlorodifluoromethane	ND	ug/L	20
Acetonitrile	ND	ug/L	200

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks Approved By: Karen Kuiken

AFCEE
Volatile Organics
Method 8240

Client Name: U.S. Geological Survey
Client ID: KAFB061017-2
Lab ID: 027742-0006-TB
Matrix: AQUEOUS Sampled: 24 FEB 93 Received: 25 FEB 93
Authorized: 25 FEB 93 Prepared: 28 FEB 93 Analyzed: 10 MAR 93

Parameter	Result	Units	Reporting Limit
Iodomethane	ND	ug/L	5.0
Acrolein	ND	ug/L	100
Acrylonitrile	ND	ug/L	100
Propionitrile	ND	ug/L	5.0
Trichlorofluoromethane	ND	ug/L	5.0
Allyl chloride	ND	ug/L	10
Methacrylonitrile	ND	ug/L	5.0
Dibromomethane	ND	ug/L	5.0
Isobutanol	ND	ug/L	200
1,4-Dioxane	ND	ug/L	500
Chloroprene	ND	ug/L	5.0
1,2-Dibromoethane (EDB)	ND	ug/L	10
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0
1,2,3-Trichloropropane	ND	ug/L	5.0
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0
1,2-Dibromo-3-chloropropane (DBCP)	ND	ug/L	10

Surrogate	Recovery	
Toluene-d8	96	%
4-Bromofluorobenzene	92	%
1,2-Dichloroethane-d4	105	%

ND = Not detected
NA = Not applicable

Reported By: Ann Fairbanks Approved By: Karen Kuiken

TENTATIVELY IDENTIFIED COMPOUNDS

FOR

U.S. GEOLOGICAL SURVEY

AFCEE

SAMPLE NUMBER 027742-0006

Compound Name	Fraction	Confidence Level	Estimated Concentration ug/L
Siloxanes	VOA		6.8

NOTES:

Confidence Levels

Level 3 - Confirmed Identification
Level 2 - Confident Identification
Level 1 - Tentative Identification

Please refer to the discussion for further details.

IV. QUALITY CONTROL REPORT

The Enseco laboratories operate under a vigorous QA/QC program designed to ensure the generation of scientifically valid, legally defensible data by monitoring every aspect of laboratory operations. Routine QA/QC procedures include the use of approved methodologies, independent verification of analytical standards, use of duplicate Laboratory Control Samples to assess the precision and accuracy of the methodology on a routine basis, and a rigorous system of data review.

The standard laboratory QC package is designed to:

1) establish a strong, cost-effective QC program that ensures the generation of scientifically valid, legally defensible data

2) assess the laboratory's performance of the analytical method using control limits generated with a well-defined matrix

3) establish clear-cut guidelines for acceptability of analytical data so that QC decisions can be made immediately at the bench, and

4) provide a standard set of reportables which assures the client of the quality of his data.

The Enseco QC program is based upon monitoring the precision and accuracy of an analytical method by analyzing a set of Duplicate Control Samples (DCS) at frequent, well-defined intervals. Each DCS is a well-characterized matrix which is spiked with target compounds at 5-100 times the reporting limit, depending upon the methodology being monitored. The purpose of the DCS is not to duplicate the sample matrix, but rather to provide an interference-free, homogeneous matrix from which to gather data to establish control limits. These limits are used to determine whether data generated by the laboratory on any given day is in control.

Control limits for accuracy (percent recovery) are based on the average, historical percent recovery +/- 3 standard deviation units. Control limits for precision (relative percent difference) range from 0 (identical duplicate DCS results) to the average, historical relative percent difference + 3 standard deviation units. These control limits are fairly narrow based on the consistency of the matrix being monitored and are updated on a quarterly basis.

For each batch of samples analyzed, an additional control measure is taken in the form of a Single Control Sample (SCS). The SCS consists of a control matrix that is spiked with surrogate compounds appropriate to the method being used. In cases where no surrogate is available, (e.g., metals or conventional analyses) a single DCS serves as the control sample. An SCS is prepared for each sample lot for which the DCS pair are not analyzed. The recovery of the SCS is charted in exactly the same manner as described for the DCS, and provides a daily check on the performance of the method.

Accuracy for DCS and SCS is measured by Percent Recovery.

$$\% \text{ Recovery} = \frac{\text{Measured Concentration}}{\text{Actual Concentration}} \times 100$$

Precision for DCS is measured by Relative Percent Difference (RPD).

$$\text{RPD} = \frac{|\text{ Measured Concentration DCS1 - Measured Concentration DCS2 }|}{(\text{Measured Concentration DCS1 + Measured Concentration DCS2})/2} \times 100$$

All samples analyzed concurrently by the same test are assigned the same QC lot number. Projects which contain numerous samples, analyzed over several days, may have multiple QC lot numbers associated with each test. The QC information which follows includes a listing of the QC lot numbers associated with each of the samples reported, DCS and SCS (where applicable) recoveries from the QC lots associated with the samples, and control limits for these lots. The QC data is reported by test code, in the order that the tests are reported in the analytical results section of this report.

QC LOT ASSIGNMENT REPORT
Volatile Organics by GC/MS

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK)
027742-0001-SA	AQUEOUS	8240-AF-A	10 MAR 93-L	10 MAR 93-L
027742-0001-MS	AQUEOUS	8240-AF-A	10 MAR 93-L	10 MAR 93-L
027742-0001-SD	AQUEOUS	8240-AF-A	10 MAR 93-L	10 MAR 93-L
027742-0002-SA	AQUEOUS	8240-AF-A	10 MAR 93-L	10 MAR 93-L
027742-0003-SA	AQUEOUS	8240-AF-A	10 MAR 93-L	10 MAR 93-L
027742-0004-BL	AQUEOUS	8240-AF-A	10 MAR 93-L	10 MAR 93-L
027742-0005-EB	AQUEOUS	8240-AF-A	10 MAR 93-L	10 MAR 93-L
027742-0006-TB	AQUEOUS	8240-AF-A	10 MAR 93-L	10 MAR 93-L

DUPLICATE CONTROL SAMPLE REPORT
Volatile Organics by GC/MS

Analyte	Concentration Spiked	Measured DCS1	Measured DCS2	AVG	Accuracy Average(%) DCS	Accuracy Limits	Precision (RPD) DCS	Precision (RPD) Limit
Category: 8240-AF-A								
Matrix: AQUEOUS								
QC Lot: 10 MAR 93-L								
Concentration Units: ug/L								
Acetone	100	72.4	77.5	75.0	75	62-141	6.8	37
Benzene	100	111	119	115	115	74-131	7.0	38
Bromodichloromethane	100	119	126	122	123	88-137	5.7	22
Bromoform	100	123	130	126	127	80-159	5.5	40
Bromomethane	100	104	97.1	101	101	80-107	6.9	15
2-Butanone (MEK)	100	67.9	75.7	71.8	72	90-138	11	19
Carbon disulfide	100	92.7	124	108	108	52-127	29	40
Carbon tetrachloride	100	83.4	98.9	91.2	91	71-134	17	40
Chlorobenzene	100	81.8	92.0	86.9	87	77-125	12	34
Chloroethane	100	91.1	85.7	88.4	88	82- 97	6.1	16
2-Chloroethyl vinyl ether	100	164	176	170	170	0- 0	7.1	0
Chloroform	100	103	118	110	111	76-126	14	30
Chloromethane	100	73.0	71.1	72.0	72	45-125	2.6	40
Dibromochloromethane	100	122	122	122	122	78-145	0.0	34
1,1-Dichloroethane	100	105	122	114	114	76-125	15	34
1,2-Dichloroethane	100	92.8	100	96.4	96	75-133	7.5	40
1,1-Dichloroethene	100	72.7	92.7	82.7	83	51-132	24	40
1,2-Dichloroethene (trans)	100	77.2	97.6	87.4	87	67-119	23	25
1,2-Dichloropropane	100	95.3	103	99.2	99	71-151	7.8	40
cis-1,3-Dichloropropene	94.6	74.3	76.8	75.6	80	75-132	3.3	28
trans-1,3-Dichloropropene	106	147	150	148	140	90-143	2.0	26
Ethylbenzene	100	82.4	96.0	89.2	89	75-124	15	40
2-Hexanone	100	60.8	69.5	65.2	65	34-147	13	40
Methylene chloride	100	121	129	125	125	69-134	6.4	24
4-Methyl-2-pentanone (MIBK)	100	101	110	106	106	58-179	8.5	40
Styrene	100	90.9	99.3	95.1	95	72-125	8.8	40
1,1,2,2-Tetrachloroethane	100	113	117	115	115	68-166	3.5	40
Tetrachloroethene	100	74.6	88.5	81.6	82	62-129	17	40
Toluene	100	104	119	112	112	72-127	13	40
1,1,1-Trichloroethane	100	106	123	114	115	69-137	15	40
1,1,2-Trichloroethane	100	97.7	99.8	98.8	99	75-152	2.1	40
Trichloroethene	100	113	125	119	119	79-122	10	21
Vinyl acetate	100	90.3	90.1	90.2	90	72-154	0.2	22
Vinyl chloride	100	77.3	77.6	77.4	77	73-103	0.4	23
Xylenes (total)	100	151	172	162	162	80-119	13	32

Calculations are performed before rounding to avoid round-off errors in calculated results.

SINGLE CONTROL SAMPLE REPORT
Volatile Organics by GC/MS

Analyte	Concentration Spiked	Concentration Measured	Accuracy(%) SCS	Accuracy(%) Limits
Category: 8240-AF-A				
Matrix: AQUEOUS				
QC Lot: 10 MAR 93-L QC Run: 10 MAR 93-L				
Concentration Units: ug/L				
Toluene-d8	50.0	50.0	100	90-112
4-Bromofluorobenzene	50.0	45.9	92	83-113
1,2-Dichloroethane-d4	50.0	50.6	101	82-112

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT
Volatile Organics by GC/MS

Test: 8240-AFCEE-AP
Matrix: AQUEOUS
QC Lot: 10 MAR 93-L QC Run: 10 MAR 93-L

Analyte	Result	Units	Reporting Limit	
Acetone	ND	ug/L	10	
Benzene	ND	ug/L	2.0	
Bromodichloromethane	ND	ug/L	2.0	
Bromoform	ND	ug/L	5.0	
Bromomethane	ND	ug/L	4.0	
2-Butanone (MEK)	ND	ug/L	10	
Carbon disulfide	ND	ug/L	5.0	
Carbon tetrachloride	ND	ug/L	3.0	
Chlorobenzene	ND	ug/L	2.0	
Chloroethane	ND	ug/L	10	
2-Chloroethyl vinyl ether	ND	ug/L	--	
Chloroform	ND	ug/L	2.0	
Chloromethane	ND	ug/L	6.0	
Dibromochloromethane	ND	ug/L	4.0	
1,1-Dichloroethane	ND	ug/L	4.0	
1,2-Dichloroethane	ND	ug/L	4.0	
1,1-Dichloroethene	ND	ug/L	5.0	
1,2-Dichloroethene (trans)	ND	ug/L	5.0	
1,2-Dichloropropane	ND	ug/L	3.0	
cis-1,3-Dichloropropene	ND	ug/L	5.0	
trans-1,3-Dichloropropene	ND	ug/L	3.0	
Ethylbenzene	ND	ug/L	2.0	
2-Hexanone	ND	ug/L	10	
Methylene chloride	1.8	ug/L	3.0	J
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10	
Styrene	ND	ug/L	5.0	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	
Tetrachloroethene	ND	ug/L	2.0	
Toluene	ND	ug/L	3.0	
1,1,1-Trichloroethane	ND	ug/L	3.0	
1,1,2-Trichloroethane	ND	ug/L	5.0	
Trichloroethene	ND	ug/L	3.0	
Vinyl acetate	ND	ug/L	7.0	
Vinyl chloride	ND	ug/L	4.0	
Xylenes (total)	ND	ug/L	5.0	
Methyl methacrylate	ND	ug/L	20	
Ethyl methacrylate	ND	ug/L	20	
Dichlorodifluoromethane	ND	ug/L	20	
Acetonitrile	ND	ug/L	200	

J = Result is detected below the reporting limit or is an estimated concentration.

METHOD BLANK REPORT
Volatile Organics by GC/MS (cont.)

Analyte	Result	Units	Reporting Limit
Test: 8240-AFCEE-AP Matrix: AQUEOUS QC Lot: 10 MAR 93-L QC Run: 10 MAR 93-L			
Iodomethane	ND	ug/L	5.0
Acrolein	ND	ug/L	100
Acrylonitrile	ND	ug/L	100
Propionitrile	ND	ug/L	5.0
Trichlorofluoromethane	ND	ug/L	5.0
Allyl chloride	ND	ug/L	10
Methacrylonitrile	ND	ug/L	5.0
Dibromomethane	ND	ug/L	5.0
Isobutanol	ND	ug/L	200
1,4-Dioxane	ND	ug/L	500
Chloroprene	ND	ug/L	5.0
1,2-Dibromoethane (EDB)	ND	ug/L	10
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0
1,2,3-Trichloropropane	ND	ug/L	5.0
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0
1,2-Dibromo-3-chloro-propane (DBCP)	ND	ug/L	10
Test: 8240-AFCEE-AP Matrix: AQUEOUS QC Lot: 10 MAR 93-L QC Run: 10 MAR 93-L			
Acetone	ND	ug/L	10
Benzene	ND	ug/L	2.0
Bromodichloromethane	ND	ug/L	2.0
Bromoform	ND	ug/L	5.0
Bromomethane	ND	ug/L	4.0
2-Butanone (MEK)	ND	ug/L	10
Carbon disulfide	ND	ug/L	5.0
Carbon tetrachloride	ND	ug/L	3.0
Chlorobenzene	ND	ug/L	2.0
Chloroethane	ND	ug/L	10
2-Chloroethyl vinyl ether	ND	ug/L	--
Chloroform	ND	ug/L	2.0
Chloromethane	ND	ug/L	6.0
Dibromochloromethane	ND	ug/L	4.0
1,1-Dichloroethane	ND	ug/L	4.0
1,2-Dichloroethane	ND	ug/L	4.0
1,1-Dichloroethene	ND	ug/L	5.0

METHOD BLANK REPORT
Volatile Organics by GC/MS (cont.)

Test: 8240-AFCEE-AP
Matrix: AQUEOUS
QC Lot: 10 MAR 93-L QC Run: 10 MAR 93-L

Analyte	Result	Units	Reporting Limit	
1,2-Dichloroethene (trans)	ND	ug/L	5.0	
1,2-Dichloropropane	ND	ug/L	3.0	
cis-1,3-Dichloropropene	ND	ug/L	5.0	
trans-1,3-Dichloropropene	ND	ug/L	3.0	
Ethylbenzene	ND	ug/L	2.0	
2-Hexanone	ND	ug/L	10	
Methylene chloride	1.8	ug/L	3.0	J
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10	
Styrene	ND	ug/L	5.0	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	
Tetrachloroethene	ND	ug/L	2.0	
Toluene	ND	ug/L	3.0	
1,1,1-Trichloroethane	ND	ug/L	3.0	
1,1,2-Trichloroethane	ND	ug/L	5.0	
Trichloroethene	ND	ug/L	3.0	
Vinyl acetate	ND	ug/L	7.0	
Vinyl chloride	ND	ug/L	4.0	
Xylenes (total)	ND	ug/L	5.0	

J = Result is detected below the reporting limit or is an estimated concentration.

MATRIX SPECIFIC QC
ASSIGNMENT REPORT
Volatile Organics by GC/MS

QC SAMPLE TYPE	TEST	LABORATORY SAMPLE NUMBER	QC LOT
MATRIX SPIKE DUPLICATE	8240-AFCEE-AP	027742-0001-SD	10 MAR 93-L
MATRIX SPIKE	8240-AFCEE-AP	027742-0001-MS	10 MAR 93-L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Volatile Organics by GC/MS

Analyte	Sample	Concentration Matrix Spike	Concentration Matrix Spike Dup	Spiked MS	Spiked MSD	%Recovery MS	%Recovery MSD	% RPD
Test: 8240-AFCEE-AP								
Matrix AQUEOUS								
Sample: 027742-0001								
Units: ug/L								
Acetone	ND	74	72	100	100	74	72	3
Benzene	ND	110	110	100	100	109	109	0
Bromodichloromethane	ND	120	120	100	100	120	115	4
Bromoform	ND	120	120	100	100	118	117	1
Bromomethane	ND	110	110	100	100	110	109	1
2-Butanone (MEK)	ND	72	70	100	100	73	71	3
Carbon disulfide	ND	130	120	100	100	127	116	9
Carbon tetrachloride	ND	92	88	100	100	92	88	4
Chlorobenzene	ND	85	82	100	100	85	82	4
Chloroethane	ND	98	96	100	100	98	96	2
2-Chloroethyl vinyl ether	ND	34	13	100	100	34	13	90
Chloroform	ND	110	110	100	100	113	106	6
Chloromethane	ND	76	73	100	100	76	73	4
Dibromochloromethane	ND	120	120	100	100	116	116	0
1,1-Dichloroethane	ND	120	110	100	100	116	110	5
1,2-Dichloroethane	ND	94	89	100	100	94	89	6
1,1-Dichloroethene	ND	94	89	100	100	95	89	6
1,2-Dichloroethene (trans)	ND	95	87	100	100	95	87	8
1,2-Dichloropropane	ND	91	91	100	100	91	91	1
cis-1,3-Dichloropropene	ND	74	72	96	96	77	75	2
trans-1,3-Dichloropropene	ND	140	140	100	100	139	136	3
Ethylbenzene	ND	91	86	100	100	91	86	5
2-Hexanone	ND	61	64	100	100	61	64	4
Methylene chloride	ND	130	120	100	100	132	123	7
4-Methyl-2-pentanone (MIBK)	ND	99	100	100	100	99	100	1
Styrene	ND	95	89	100	100	95	89	6
1,1,2,2-Tetrachloroethane	ND	120	110	100	100	116	113	3
Tetrachloroethene	ND	87	84	100	100	87	84	3
Toluene	ND	110	110	100	100	109	106	3
1,1,1-Trichloroethane	ND	110	110	100	100	112	110	2
1,1,2-Trichloroethane	ND	92	90	100	100	92	90	2
Trichloroethene	ND	110	120	100	100	114	115	1
Vinyl acetate	ND	87	91	100	100	87	91	5
Vinyl chloride	ND	86	86	100	100	86	86	0
Xylenes (total)	ND	160	150	100	100	161	154	4

ND = Not detected
NC = Not calculated, calculation not applicable

All calculations are performed before rounding to avoid round-off errors in calculated results.