DISTRIBUTION SHEET

To DISTRIBUTION	From ANALYTICAL SERVICES	Page 1 of 1		
		Date: 03/03/95		
Project Title/Work Order WHC-SD-WM-DP-096, Rev. 0 Concrete Sample Point - 304 Concretion Facility		EDT NO.: EDT-610403		
		ECN NO.: N/A		
Name	MSIN	Text With all Attach	Addendum 1A Only	EDT/ECN Only

ONSITE

Westinghouse Hanford Company

J. G. Adler	H6-23			
M. S. Hendrix	H4-23	X		
J. G. Kristofzski	T6-06	X		
J. A. Remaize	L6-18	X		
M. D. Rollison	T6-06	X		
Central Files	L8-04	2		
EDMC	H6-08	X		
LTIC	T6-03			
OSTI	L8-07	2		X
TFIC (Tank Farm Information Center)	R1-20			X

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OSTI

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ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT

610403

2. To: (Receiving Organization) Distribution		3. From: (Originating Organization) Program Support		4. Related EDT No.: N/A	
5. Proj./Prog./Dept./Div.: 304 Concretion Facility/Waste Management/PS/AS		6. Cog. Engr.: Michelle D. Rollison		7. Purchase Order No.: N/A	
8. Originator Remarks: This document is being released into the Supporting Document System for retrievability purposes.				9. Equip./Component No.: N/A	
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				13. Permit/Permit Application No.: N/A	
				14. Required Response Date: 03/03/95	

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(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	Approval Designator	Reason for Transmittal	Originator Disposition	Receiver Disposition
1	WHC-SD-WM-DP-096	N/A	0	Concrete Sample Point - 304 Concretion Facility	Q	2	1	

16. KEY					
Approval Designator (F)		Reason for Transmittal (G)		Disposition (H) & (I)	
E, S, Q, D or N/A (see WHC-CM-3-5, Sec.12.7)		1. Approval	4. Review	1. Approved	4. Reviewed no/comment
		2. Release	5. Post-Review	2. Approved w/comment	5. Reviewed w/comment
		3. Information	6. Dist. (Receipt Acknow. Required)	3. Disapproved w/comment	6. Receipt acknowledged

17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)										(G)	(H)
Reason	Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(J) Name	(K) Signature	(L) Date	(M) MSIN	Reason	Disp.
2	1	Cog.Eng. M. D. Rollison	<i>m Rollison</i>	3/1/95	TL-20						
2	1	Cog. Mgr. J. G. Kristofzski	<i>John Kristofzski</i>	3/10/95	TL-06						
2	1	QA T.L. Tung	<i>T.L. Tung</i>	3/8/95	S3-30						
		Safety									
		Env.									

18. A.E. Young <i>A.E. Young</i> 3-1-95 Signature of EDT Originator	19. Authorized Representative Date for Receiving Organization	20. <i>John Kristofzski</i> 3/10/95 J.G. Kristofzski Cognizant Manager Date	21. DOE APPROVAL (if required) Ctrl. No. ☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments

BD-7400-172-2 (04/94) GEF097

RELEASE AUTHORIZATION

Document Number: WHC-SD-WM-DP-096, REV 0

Document Title: Concrete Sample Point - 304 Concretion Facility

Release Date: 3/10/95

**This document was reviewed following the
procedures described in WHC-CM-3-4 and is:**

APPROVED FOR PUBLIC RELEASE

WHC Information Release Administration Specialist:

Kara M. Broz

March 10, 1995

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5. Key Words Concrete, Concrete Sample, Concrete Sample Point, 304, 304 Concretion Facility, Concretion	6. Author Name: Michelle D. Rollison <i>Michelle D. Rollison</i> Signature Organization/Charge Code 8E480/MDR21	
7. Abstract N/A		
8. RELEASE STAMP OFFICIAL RELEASE BY WHC DATE MAR 10 1995 55 Sta. 5		

VOLATILE ORGANICS
INVENTORY SHEET

PAGE
NO.

1.	<u>Inventory Sheet</u> (Do not Number)	-
2.	<u>Narrative</u>	1
3.	<u>Volatiles Data</u>	
a.	QC Summary	
	Soil Volatile System	
	Monitoring Compound Recovery Summary	
	(Form II VOA-1)	3
	Soil Volatile Matrix Spike/Matrix Spike	
	Duplicate Recovery Form III-VOA-2)	7
	Volatile Method	
	Blank Summary (Form IV VOA)	8
	Volatile Organic Instrument	
	Performance Check (Form V VOA)	13
	Volatile Internal Standard Area and	
	RT Summary (Form VIII VOA)	17
b.	Sample Data	
	Volatile Organics Analysis	
	Data Sheet - (Form I VOA)	21
	Tentatively Identified Compounds (Form I VOA-TIC)	
	Reconstructed total ion chromatograms (RIC)	
	for each sample	
	For each sample:	
	Raw spectra and background-subtracted	
	mass spectra of target compound identified	
	Mass spectra of all reported TICs with three	
	best library matches	
c.	Standards Data (All Instruments)	
	Initial Calibration Data (Form VI VOA)	239
	RICs and Quant Reports for all Standards	240
	Continuing Calibration Check (Form VII VOA)	275
	RICs and Quant Reports for all Standards	279
d.	QC Data	
	BFB	305
	Blank Data	325
	Matrix Spike Data	437
	Matrix Spike Duplicate Data	444
6.	<u>Miscellaneous Data</u>	
	Chain-of-Custody Records	451
	Request for Special Analysis (RSA)	455
	Tare Weights	460

This Document consists of pages 1 through 462.

MASTER

P.O. Box 1970 Richland, WA 99352

SDG NARRATIVE - CONCRETE
Sample Point - 304 Concretion Facility
February 22, 1995

VOLATILE ORGANIC ANALYSIS (by GC/MS)

The samples were analyzed by method LA-523-435 A-3, using an Hewlett-Packard 5970 GC/MS (WB92426). Data acquisition and reduction were performed on an H.P.-1000 computer, running RTE-A revision F, which includes Aquarius software from Environmental Testing and Certification Corp.

The Method blank used a 5 mL sample size. Holding time was met. The specific holding time for volatile organics analysis is 14 days as found in chapter 4, table 4-1 of SW-846. The samples were extracted into water by sonication and then a 5 mL aliquot was analyzed. Sonication and centrifuge times were changed to 5 min. to reduce losses of target compounds.

The System Monitoring Compounds (SMC), Internal Standard Compounds (IS), and Matrix Spike Compounds (MS) were the same as those used in LA-523-401 A-1. Acceptance criteria for each is also contained in LA-523-401 A-1.

LMCS control limits for the VOA compounds were administratively set to the criteria listed in procedure LA-523-401 A-1 for System Monitoring Compounds (SMC). The LMCS standard for VOA is defined as the method blank analyzed at the start of each 12 hour analysis window. The LMCS codes for the SMC's are R256 for 1,2-Dichloroethane-d4, R258 for Toluene-d8, and R260 for Bromofluorobenzene.

FORMS	INFORMATION	COMMENTS
2A	SMC Recoveries	Meets all requirements
3A	Matrix Spike Recoveries	Meets all requirements
4A	Method Blank Summary	Meets all requirements
5A	Tune/Mass Calibration	Meets all requirements
6A	Initial Calibration	Meets all requirements
7A	Daily Calibration	Meets all requirements
8A	Internal Standards	Meets all requirements

The following is a list of the pertinent GC/MS files, and the sample holding times:

Lab ID	Filename	Holding Time	Customer ID.	Comment
N-4606	>AA30C	0	VBLK44	Method blank
N-4561	>AA30D	7	BOD2K9	Sample
R-6880	>AA31C	0	VBLK45	Method blank
E-9691	>AA31D	8	BOD2K9	Sample
R-6881	>AA31H	0	BOD2D0	Sample

WHC-SD-WM-DP-096, REV. 0

Lab ID	Filename	Holding Time	Customer ID.	Comments
R-6892	>AA31K	0	BOD2D0	Sample
R-6889	>AB13C	0	VBLK50	Method blank
R-6890	>AB13D	13	BOD2G2	Sample
R-6891	>AB13F	13	BOD2G7	Sample
R-6891MS	>AB13H	13	BOD2G7	Matrix Spike
R-6891MSD	>AB13I	13	BOD2G7	Matrix Spike Dup.
R-6899	>AB13J	12	BOD2G9	Sample
R-6904	>AB14D	0	VBLK51	Method blank
R-6905	>AB14E	12	BOD2H9	Sample
VBLK52	>AB14F	0	VBLK52	Method blank
R-6906	>AB14H	12	BOD2J8	Sample

Standards preparation data is kept in a controlled notebook, WHC-N-337
 1. Acetone and 2-Butanone were detected in the sample but not in the Method Blank. Ethyl Acetate was not present in the sample and no other Tentatively Identified Compounds (TIC's) were observed in the sample and blanks except for sample # R-6905 (BOD2H9) which had 2-Propanol. The method detection limit for Acetone in concrete is 86 ppb and 2-Butanone is 53 ppb.

To enable interpretation of summary data for VOA compounds, the following table defines the qualifiers, called Q-flags, used in Form I.

Q-Flag	Definition
U	Indicates the compound was analyzed for but not detected; the U-flagged concentration number is the quantitation limit.
J	Indicates an estimated value for the target or tentatively identified compounds; spectra meet criteria but response is below the quantitation limit for the target compounds.
B	Compound was found in the blank.
D	Analysis was performed on a diluted sample.
E	Indicates that quantitation was above the calibration range.
N	Indicates the presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.

D.E. NELSON
 J.B. DELAROSA-CHANG
 Organic Chemistry

D.E. Nelson 3-9-95
J.B. Delarosa-Chang 3-9-95

2A - RCRA
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: WHCWA Contract: WHC-SD-WM-DP-096, REV. 0
Lab Code: Case No.: SAS No.: SDG No.: CONCRETE

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBK44	102	96	94		0
02	BOD2K9	100	96	95		0
03						
04						
05						
06						
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QC LIMITS

SMC1 (TOL) = Toluene-d8 (84-138)
SMC2 (BFB) = Bromofluorobenzene (59-113)
SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2A - RCRA
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: WHCWA Contract: WHC-SD-WM-DP-096, REV. 0
Lab Code: Case No.: SAS No.: SDG No.: CONCRETE

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLK45	101	100	97		0
02	BOD2K9	105	100	97		0
03	BOD2DO	101	98	96		0
04	BOD2DO	103	99	98		0
05						
06						
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08						
09						
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QC LIMITS

SMC1 (TOL) = Toluene-d8 (84-138)
SMC2 (BFB) = Bromofluorobenzene (59-113)
SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2A - RCRA
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: WHCWA

Contract:

WHC-SD-WM-DP-096, REV. 0

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VLK50	101	101	95		0
02	BOD2G2	99	102	95		0
03	BOD2G7	99	102	94		0
04	BOD2G7MS	98	101	94		0
05	BOD2G7MSD	97	102	94		0
06	BOD2G9	98	102	95		0
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QC LIMITS

SMC1 (TOL) = Toluene-d8 (84-138)
 SMC2 (BFB) = Bromofluorobenzene (59-113)
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2A - RCRA
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: WHCWA

Contract: WHC-SD-WM-DP-096, REV. 0

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLK51	99	98	97		0
02	BOD2H9	99	98	96		0
03	VBLK52	98	96	96		0
04	BOD2H9DL	98	96	97		0
05	BOD2J8	99	99	96		0
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QC LIMITS

SMC1 (TOL) = Toluene-d8 (84-138)
 SMC2 (BFB) = Bromofluorobenzene (59-113)
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: WHCWA

Contract: WHC-SD-WM-DP-096, REV. 0

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix Spike - EPA Sample No.: BOD2G7

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	58.00	0.00	46.00	79	59-172
Trichloroethene	58.00	0.00	46.00	79	62-137
Benzene	58.00	0.00	50.00	86	66-142
Toluene	58.00	0.00	49.00	84	59-139
Chlorobenzene	58.00	0.00	48.00	83	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	57.00	48.00	84	6	22	59-172
Trichloroethene	57.00	48.00	84	6	24	62-137
Benzene	57.00	52.00	91	6	21	66-142
Toluene	57.00	51.00	89	6	21	59-139
Chlorobenzene	57.00	51.00	89	7	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of qc limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A WHC-SD-WM-DP-096, REV. 0
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK44

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Lab File ID: >AA30C

Lab Sample ID: N4606

Date Analyzed: 1/30/95

Time Analyzed: 11:11

GC Column: DB-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: 70 2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BOD2K9	N4561	>AA30D	14:40
02				
03				
04				
05				
06				
07				
08				
09				
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COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK45

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Lab File ID: >AA31C

Lab Sample ID: R6880

Date Analyzed: 1/31/95

Time Analyzed: 9:31

GC Column: DB-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: 70 2

WHC-SD-WM-DP-096, REV. 0

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BOD2K9	E9691	>AA31D	10:06
02	BOD2DO	R6881	>AA31H	13:48
03	BOD2DO	R6892	>AA31K	15:37
04				
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COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK50

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Lab File ID: >AB13C

Lab Sample ID: R6889

Date Analyzed: 2/13/95

Time Analyzed: 10:37

GC Column: DB-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: 70 2

WHC-SD-WM-DP-096, REV. 0

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BOD2G2	R6890	>AB13D	11:39
02	BOD2G7	R6891	>AB13F	13:28
03	BOD2G7MS	R6891MS	>AB13H	14:44
04	BOD2G7MSD	R6891MSD	>AB13I	15:47
05	BOD2G9	R6899	>AB13J	16:24
06				
07				
08				
09				
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COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBK51

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Lab File ID: >AB14D

Lab Sample ID: R6904

Date Analyzed: 2/14/95

Time Analyzed: 10:40

GC Column: DB-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: 70 2

WHC-SD-WM-DP-096, REV. 0

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BOD2H9	R6905	>AB14E	11:15
02				
03				
04				
05				
06				
07				
08				
09				
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COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK52

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Lab File ID: >AB14F

Lab Sample ID: VBLK52

Date Analyzed: 2/14/95

Time Analyzed: 12:51

GC Column: DB-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: 70 2

WHC-SD-WM-DP-096, REV. 0

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BOD2H9DL	R6905DL	>AB14G	13:26
02	BOD2J8	R6906	>AB14H	14:00
03				
04				
05				
06				
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COMMENTS:

5A - RCRA
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

WHC-SD-WM-DP-096, REV. 0

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Lab File ID: >AA30A

BFB Injection Date: 1/30/95

Instrument ID: 70 2

BFB Injection Time: 9:59

GC Column: DB-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% OF MASS 95	17.5
75	30.0 - 60.0% OF MASS 95	47.7
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50% of mass 95	88.9
175	5.0 - 9.0% of mass 174	6.9(7.8)1
176	95.0 - 101.0% of mass 174	89.6(100.8)1
177	5.0 - 9.0% of mass 176	6.0(6.7)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	>AA30B	1/30/95	10:37
02	VBLK44	N4606	>AA30C	1/30/95	11:11
03	BOD2K9	N4561	>AA30D	1/30/95	14:40
04					
05					
06					
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5A - RCRA
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

WHC-SD-WM-DP-096, REV. 0

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Lab File ID: >AA31A

BFB Injection Date: 1/31/95

Instrument ID: 70 2

BFB Injection Time: 8:17

GC Column: DB-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% OF MASS 95	18.0
75	30.0 - 60.0% OF MASS 95	43.4
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50% of mass 95	90.7
175	5.0 - 9.0% of mass 174	7.1(7.8)1
176	95.0 - 101.0% of mass 174	89.0(98.1)1
177	5.0 - 9.0% of mass 176	5.9(6.6)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	>AA31B	1/31/95	8:54
02	VBLK45	R6880	>AA31C	1/31/95	9:31
03	BOD2K9	E9691	>AA31D	1/31/95	10:06
04	BOD2DO	R6881	>AA31H	1/31/95	13:48
05	BOD2DO	R6892	>AA31K	1/31/95	15:37
06					
07					
08					
09					
10					
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15					
16					
17					
18					
19					
20					
21					
22					

5A - RCRA
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

WHC-SD-WM-DP-096, REV. 0

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Lab File ID: >AB13A

BFB Injection Date: 2/13/95

Instrument ID: 70 2

BFB Injection Time: 9:20

GC Column: DB-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% OF MASS 95	19.9
75	30.0 - 60.0% OF MASS 95	45.3
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50% of mass 95	89.6
175	5.0 - 9.0% of mass 174	7.1(8.0)1
176	95.0 - 101.0% of mass 174	86.6(96.7)1
177	5.0 - 9.0% of mass 176	5.5(6.4)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	>AB13B	2/13/95	10:01
02	VBLK50	R6889	>AB13C	2/13/95	10:37
03	BOD2G2	R6890	>AB13D	2/13/95	11:39
04	BOD2G7	R6891	>AB13F	2/13/95	13:28
05	BOD2G7MS	R6891MS	>AB13H	2/13/95	14:44
06	BOD2G7MSD	R6891MSD	>AB13I	2/13/95	15:47
07	BOD2G9	R6899	>AB13J	2/13/95	16:24
08					
09					
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20					
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22					

5A - RCRA
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: WHCWA

Contract: WHC-SD-WM-DP-096, REV. 0

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Lab File ID: >AB14B

BFB Injection Date: 2/14/95

Instrument ID: 70 2

BFB Injection Time: 9:27

GC Column: DB-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% OF MASS 95	18.3
75	30.0 - 60.0% OF MASS 95	45.5
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50% of mass 95	89.7
175	5.0 - 9.0% of mass 174	6.3(7.0)1
176	95.0 - 101.0% of mass 174	87.8(97.9)1
177	5.0 - 9.0% of mass 176	6.4(7.2)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	>AB14C	2/14/95	10:02
02	VBLK51	R6904	>AB14D	2/14/95	10:40
03	BOD2H9	R6905	>AB14E	2/14/95	11:15
04	VBLK52	VBLK52	>AB14F	2/14/95	12:51
05	BOD2H9DL	R6905DL	>AB14G	2/14/95	13:26
06	BOD2J8	R6906	>AB14H	2/14/95	14:00
07					
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8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: WHCWA Contract: WHC-SD-WM-DP-096, REV. 0
 Lab Code: Case No.: SAS No.: SDG No.: CONCRETE
 Lab File ID (Standard): >AA30B Date Analyzed: 1/30/95
 Instrument ID: 70 2 Time Analyzed: 10:37
 GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	145623.	6.04	554135.	8.25	455053.	13.88
UPPER LIMIT	291246.	6.54	1108270.	8.75	910106.	14.38
LOWER LIMIT	72811.	5.54	277067.	7.75	227527.	13.38
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 VBLK44	138613.	6.06	519484.	8.25	432134.	13.88
02 BOD2K9	138267.	6.05	525030.	8.25	434955.	13.87
03						
04						
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21						
22						

IS1 (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
 * Values outside of QC limits

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: WHCWA Contract: WHC-SD-WM-DP-096, REV. 0
Lab Code: Case No.: SAS No.: SDG No.: CONCRETE
Lab File ID (Standard): >AA31B Date Analyzed: 1/31/95
Instrument ID: 70 2 Time Analyzed: 8:54
GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 HOUR STD	141296.	6.04	542615.	8.25	447256.	13.87
UPPER LIMIT	282592.	6.54	1085230.	8.75	894512.	14.37
LOWER LIMIT	70648.	5.54	271307.	7.75	223628.	13.37
EPA SAMPLE NO.						
01 VBLK45	135731.	6.05	521379.	8.26	439035.	13.90
02 BOD2K9	132608.	6.05	512424.	8.26	417814.	13.88
03 BOD2DO	130208.	6.04	500079.	8.25	413022.	13.89
04 BOD2DO	121854.	6.06	485022.	8.26	399412.	13.89
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20						
21						
22						

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

WHC-SD-WM-DP-096, REV. 0

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Lab File ID (Standard): >AB13B

Date Analyzed: 2/13/95

Instrument ID: 70 2

Time Analyzed: 10:01

GC Column: DB-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 HOUR STD	145005.	6.06	566502.	8.28	459897.	13.90
UPPER LIMIT	290010.	6.56	1133004.	8.78	919794.	14.40
LOWER LIMIT	72503.	5.56	283251.	7.78	229948.	13.40
EPA SAMPLE NO.						
01 VBLK50	136049.	6.09	530333.	8.29	435696.	13.92
02 BOD2G2	133277.	6.07	519774.	8.28	425185.	13.90
03 BOD2G7	127014.	6.06	491259.	8.26	404949.	13.90
04 BOD2G7MS	120689.	6.06	469545.	8.26	388810.	13.89
05 BOD2G7MSD	122371.	6.06	482084.	8.27	398596.	13.90
06 BOD2G9	117716.	6.08	465012.	8.27	383580.	13.89
07						
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20						
21						
22						

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: WHCWA Contract: WHC-SD-WM-DP-096, REV. 0
Lab Code: Case No.: SAS No.: SDG No.: CONCRETE
Lab File ID (Standard): >AB14C Date Analyzed: 2/14/95
Instrument ID: 70 2 Time Analyzed: 10:02
GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 HOUR STD	133276.	6.10	515222.	8.31	421386.	13.93
UPPER LIMIT	266552.	6.60	1030444.	8.81	842772.	14.43
LOWER LIMIT	66638.	5.60	257611.	7.81	210693.	13.43
EPA SAMPLE NO.						
01 VBLK51	127351.	6.10	496543.	8.30	418144.	13.93
02 BOD2H9	126012.	6.11	482245.	8.32	402354.	13.94
03 VBLK52	126165.	6.11	490484.	8.31	410708.	13.94
04 BOD2H9DL	121128.	6.12	478037.	8.33	401702.	13.94
05 BOD2J8	119901.	6.12	471589.	8.32	402619.	13.93
06						
07						
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17						
18						
19						
20						
21						
22						

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET
WHC-SD-WM-DP-096, REV. 0

EPA SAMPLE NO.

BOD2DO

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6881

Sample wt/vol: 2.87 (g/mL) G

Lab File ID: >AA31H

Level: (low/med) LOW

Date Received: 01/30/95

% Moisture: not dec.

Date Analyzed: 1/31/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3-----	Chloromethane	17.	U
74-83-9-----	Bromomethane	17.	U
75-01-4-----	Vinyl Chloride	17.	U
75-00-3-----	Chloroethane	17.	U
75-09-2-----	Methylene Chloride	17.	U
67-64-1-----	Acetone	99.	
75-15-0-----	Carbon Disulfide	17.	U
75-35-4-----	1,1-Dichloroethene	17.	U
75-34-3-----	1,1-Dichloroethane	17.	U
540-59-0-----	1,2-Dichloroethene (total)	17.	U
67-66-3-----	Chloroform	17.	U
107-02-2-----	1,2-Dichloroethane	17.	U
78-93-3-----	2-Butanone	17.	U
71-55-6-----	1,1,1-Trichloroethane	17.	U
56-23-5-----	Carbon Tetrachloride	17.	U
75-27-4-----	Bromodichloromethane	17.	U
78-87-5-----	1,2-Dichloropropane	17.	U
10061-01-5-----	cis-1,3-Dichloropropene	17.	U
79-01-6-----	Trichloroethene	17.	U
124-48-1-----	Dibromochloromethane	17.	U
79-00-5-----	1,1,2-Trichloroethane	17.	U
71-43-2-----	Benzene	17.	U
10061-02-6-----	trans-1,3-Dichloropropene	17.	U
75-25-2-----	Bromoform	17.	U
108-10-1-----	4-Methyl-2-pentanone	17.	U
591-78-6-----	2-Hexanone	17.	U
127-18-4-----	Tetrachloroethene	17.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	17.	U
108-88-3-----	Toluene	17.	U
108-90-7-----	Chlorobenzene	17.	U
100-41-4-----	Ethylbenzene	17.	U
100-42-5-----	Styrene	17.	U
133-02-7-----	Xylene (total)	17.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOD2DO

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6881

Sample wt/vol: 2.87 (g/mL) G

Lab File ID: >AA31H

Level: (low/med) LOW

Date Received: 01/30/95

% Moisture: not dec.

Date Analyzed: 1/31/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
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25.				
26.				
27.				
28.				
29.				
30.				

QUANT REPORT

Page 1

Operator ID: JOY *John Ross - Mary*
Output File: ^AA31H::D2
Data File: >AA31H::D5
Name: R6881-A BOD2DO
Misc: CONCRETE 5ML

Quant Rev: 7 Quant Time: 950131 14:20
Injected at: 950131 13:48
Dilution Factor: 1.00000
Instrument ID: VOA-1

Instrument ID: 70 2

WHC-SD-WM-DP-096, REV. 0

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *BROMOCHLOROMETHANE	6.04	128.0	130208	50.00	UG/L	74
~~7) CARBON DISULFIDE~~ <i>No Den 2-3-95</i>	2.45	76.0	1195	.159	UG/L	78
8) ACETONE	2.49	43.0	14610	57.03	UG/L	70
14) 1,2-DICHLOROETHANE-d4	7.20	65.0	146203	47.88	UG/L	83
17) *1,4-DIFLUOROBENZENE	8.25	114.0	500079	50.00	UG/L	87
32) *CHLOROBENZENE-d5	13.89	117.0	413022	50.00	UG/L	84
35) TOLUENE-d8	11.02	98.0	453573	50.59	UG/L	94
~~36) TOLUENE~~ <i>No Den 2-3-95</i>	11.15	91.0	1252	.129	UG/L	76
43) BROMOFLUOROBENZENE	16.45	95.0	318972	49.06	UG/L	87

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA31H::D5

Quant Output File: ^AA31H::D2

Name: R6881-A BOD2DO

Instrument ID: VOA-1

Misc: CONCRETE 5ML

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY

Quant Time : 950131 14:20

Injected at: 950131 13:48

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31H::D5
Name: R6881-A BOD2DO
Misc: CONCRETE 5ML

Quant Output File: ^AA31H::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY
Quant Time : 950131 14:20
Injected at: 950131 13:48

Page 2 of 5

WHC-SD-WM-DP-096, REV. 0

TOTAL ION CHROMATOGRAM

Data File: >AA31H::D5

Quant Output File: ^AA31H::D2

Name: R6881-A BOD2DO

Instrument ID: VOA-1

Misc: CONCRETE 5ML

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY

Quant Time : 950131 14:20

Injected at: 950131 13:48

Page 3 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AA31H::D5

Quant Output File: ^AA31H::D2

Name: R6881-A BOD2DO

Instrument ID: VOA-1

Misc: CONCRETE 5ML

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY

Quant Time : 950131 14:20

Injected at: 950131 13:48

Page 4 of 5

WHC-SD-WM-DP-096, REV. 0

TOTAL ION CHROMATOGRAM

Data File: >AA31H::D5

Quant Output File: ^AA31H::D2

Name: R6881-A BOD2DO

Instrument ID: VOA-1

Misc: CONCRETE 5ML

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY

Quant Time : 950131 14:20

Injected at: 950131 13:48

Page 5 of 5

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31H::D5	Quant Output File: ^AA31H::D2
Name: R6881-A	Instrument ID: VOA-1
Misc: CONCRETE	Instrument ID: 70 2
Quant Time: 950131 14:20	Quant ID File: ID_108::QT
Injected at: 950131 13:48	Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54	

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 403
Retention Time: 6.04 min.
Quant Ion : 128.0
Area : 130208
Concentration : 50.00 UG/L
q-value : 74

Don
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31H::D5 Quant Output File: ^AA31H::D2
Name: R6881-A BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 14:20 Quant ID File: ID_108::QT
Injected at: 950131 13:48 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 7
Compound Name : CARBON DISULFIDE
Scan Number : 144
Retention Time: 2.45 min.
Quant Ion : 76.0
Area : 1195
Concentration : .159 UG/L
q-value : 78

No
Don
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31H::D5 Quant Output File: ^AA31H::D2
Name: R6881-A BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 14:20 Quant ID File: ID_108::QT
Injected at: 950131 13:48 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 8
Compound Name : ACETONE
Scan Number : 147
Retention Time: 2.49 min.
Quant Ion : 43.0
Area : 14610
Concentration : 57.03 UG/L
q-value : 70

Don
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31H::D5 Quant Output File: ^AA31H::D2
Name: R6881-A BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 14:20 Quant ID File: ID 108::QT
Injected at: 950131 13:48 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 487
Retention Time: 7.20 min.
Quant Ion : 65.0
Area : 146203
Concentration : 47.88 UG/L
q-value : 83

Den
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31H::D5 Quant Output File: ^AA31H::D2
Name: R6881-A BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 14:20 Quant ID File: ID_108::QT
Injected at: 950131 13:48 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 563
Retention Time: 8.25 min.
Quant Ion : 114.0
Area : 500079
Concentration : 50.00 UG/L
q-value : 87

Den
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31H::D5 Quant Output File: ^AA31H::D2
Name: R6881-A BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 14:20 Quant ID File: ID_108::QT
Injected at: 950131 13:48 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 970
Retention Time: 13.89 min.
Quant Ion : 117.0
Area : 413022
Concentration : 50.00 UG/L
q-value : 84

Den
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31H::D5 Quant Output File: ^AA31H::D2
Name: R6881-A BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 14:20 Quant ID File: ID 108::QT
Injected at: 950131 13:48 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 763
Retention Time: 11.02 min.
Quant Ion : 98.0
Area : 453573
Concentration : 50.59 UG/L
q-value : 94

Handwritten:
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31H::D5 Quant Output File: ^AA31H::D2
Name: R6881-A BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 14:20 Quant ID File: ID_108::QT
Injected at: 950131 13:48 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 36
Compound Name : TOLUENE
Scan Number : 772
Retention Time: 11.15 min.
Quant Ion : 91.0
Area : 1252
Concentration : .129 UG/L
q-value : 76

No
Den
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31H::D5 Quant Output File: ^AA31H::D2
Name: R6881-A BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 14:20 Quant ID File: ID 108::QT
Injected at: 950131 13:48 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1155
Retention Time: 16.45 min.
Quant Ion : 95.0
Area : 318972
Concentration : 49.06 UG/L
q-value : 87

Den
2-3-95

MS data file header from : >AA31H::D5

WHC-SD-WM-DP-096, REV. 0

Sample: R6881-A BOD2DO Operator: JOY SUPER GRP. 1/31/95 13:48
Misc : CONCRETE 5ML Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	820770.	6.04	1.00 - 7.14
2	50.0	1113460.	8.25	7.14 - 11.07
3	50.0	1203397.	13.89	11.07 - 31.02

Dilution Factor = 1.00 This sample was 2.87000 g or mL

Correction Factor = 1.74

Unknown Concentration = $\frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$

3:49 PM TUE., 7 FEB., 1995

File >AA31H 35.0-350.0 amu. R6881-A BOD2DO CONCRETE 5ML Ins
 CLP ADC TIC
 50 100 150 200 250 300 350 400 450 500

WHC-SD-WM-DP-096, REV. 0

File >AA31H 35.0-350.0 amu. R6881-A BOD2DO CONCRETE 5ML Ins
CLP ADC TIC 600 640 680 720 760
480 520 560

WHC-SD-WM-DP-096, REV. 0

. There were no Unknowns.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOD2DO

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6892

Sample wt/vol: 2.96 (g/mL) G

Lab File ID: >AA31K

Level: (low/med) LOW

Date Received: 01/30/95

% Moisture: not dec.

Date Analyzed: 1/31/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NO.

COMPOUND

Q

74-87-3-----	Chloromethane	17.	U
74-83-9-----	Bromomethane	17.	U
75-01-4-----	Vinyl Chloride	17.	U
75-00-3-----	Chloroethane	17.	U
75-09-2-----	Methylene Chloride	17.	U
67-64-1-----	Acetone	66.	* Below MDL for
75-15-0-----	Carbon Disulfide	17.	Concrete
75-35-4-----	1,1-Dichloroethene	17.	DEM
75-34-3-----	1,1-Dichloroethane	17.	3-9-95
540-59-0-----	1,2-Dichloroethene (total)	17.	U
67-66-3-----	Chloroform	17.	U
107-02-2-----	1,2-Dichloroethane	17.	U
78-93-3-----	2-Butanone	1.	J * Below MDL for
71-55-6-----	1,1,1-Trichloroethane	17.	Concrete
56-23-5-----	Carbon Tetrachloride	17.	DEM
75-27-4-----	Bromodichloromethane	17.	3-9-95
78-87-5-----	1,2-Dichloropropane	17.	U
10061-01-5-----	cis-1,3-Dichloropropene	17.	U
79-01-6-----	Trichloroethene	17.	U
124-48-1-----	Dibromochloromethane	17.	U
79-00-5-----	1,1,2-Trichloroethane	17.	U
71-43-2-----	Benzene	17.	U
10061-02-6-----	trans-1,3-Dichloropropene	17.	U
75-25-2-----	Bromoform	17.	U
108-10-1-----	4-Methyl-2-pentanone	17.	U
591-78-6-----	2-Hexanone	17.	U
127-18-4-----	Tetrachloroethene	17.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	17.	U
108-88-3-----	Toluene	17.	U
108-90-7-----	Chlorobenzene	17.	U
100-41-4-----	Ethylbenzene	17.	U
100-42-5-----	Styrene	17.	U
133-02-7-----	Xylene (total)	1.	JB

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOD2DO

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6892

Sample wt/vol: 2.96 (g/mL) G

Lab File ID: >AA31K

Level: (low/med) LOW

Date Received: 01/30/95

% Moisture: not dec.

Date Analyzed: 1/31/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

QUANT REPORT

Page 1

Operator ID: JOY
Output File: ^AA31K::D2
Data File: >AA31K::D6
Name: R6892dup BOD2DO
Misc: CONCRETE 5ML

Quant Rev: 7 Quant Time: 950131 16:09
Injected at: 950131 15:37
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950131 08:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.06	128.0	121854	50.00	UG/L	80
8)	ACETONE	2.50	43.0	9332	38.92	UG/L	73
12)	2-BUTANONE	5.84	43.0	227	.686	UG/L	100
14)	1,2-DICHLOROETHANE-d4	7.23	65.0	140610	49.20	UG/L	88
17)	*1,4-DIFLUOROBENZENE	8.26	114.0	485022	50.00	UG/L	86
32)	*CHLOROBENZENE-d5	13.89	117.0	399412	50.00	UG/L	90
~~34)~~	~~4 METHYL 2 PENTANONE~~	11.09	43.0	5701M	2.47	UG/L	51
35)	TOLUENE-d8	11.03	98.0	447174	51.58	UG/L	95
~~36)~~	~~TOLUENE~~	11.14	91.0	4263	.455	UG/L	92
41)	XYLENE (TOTAL)	14.57	106.0	2435M	.594	UG/L	81
43)	BROMOFLUOROBENZENE	16.46	95.0	309658	49.25	UG/L	86

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA31K::D6

Quant Output File: ^AA31K::D2

Name: R6892dup BOD2DO

Instrument ID: VOA-1

Misc: CONCRETE 5ML

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY

Quant Time : 950131 16:09

Injected at: 950131 15:37

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31K::D6

Name: R6892dup BOD2DO

Misc: CONCRETE 5ML

Quant Output File: ^AA31K::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY

Quant Time : 950131 16:09

Injected at: 950131 15:37

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31K::D6
Name: R6892dup BOD2DO
Misc: CONCRETE 5ML

Quant Output File: ^AA31K::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY
Quant Time : 950131 16:09
Injected at: 950131 15:37

Page 3 of 5

WHC-SD-WM-DP-096, REV. 0

TOTAL ION CHROMATOGRAM

Data File: >AA31K::D6

Quant Output File: ^AA31K::D2

Name: R6892dup BOD2DO

Instrument ID: VOA-1

Misc: CONCRETE 5ML

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY

Quant Time : 950131 16:09

Injected at: 950131 15:37

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31K::D6

Quant Output File: ^AA31K::D2

Name: R6892dup BOD2DO

Instrument ID: VOA-1

Misc: CONCRETE 5ML

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY

Quant Time : 950131 16:09

Injected at: 950131 15:37

Page 5 of 5

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31K::D6 Quant Output File: ^AA31K::D2
Name: R6892dup BOD2D0 Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 16:09 Quant ID File: ID_108::QT
Injected at: 950131 15:37 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 403
Retention Time: 6.06 min.
Quant Ion : 128.0
Area : 121854
Concentration : 50.00 UG/L
q-value : 80

QEN
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31K::D6 Quant Output File: ^AA31K::D2
Name: R6892dup BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 16:09 Quant ID File: ID_108::QT
Injected at: 950131 15:37 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 8
Compound Name : ACETONE
Scan Number : 146
Retention Time: 2.50 min.
Quant Ion : 43.0
Area : 9332
Concentration : 38.92 UG/L
q-value : 73

Den
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31K::D6	Quant Output File: ^AA31K::D2
Name: R6892dup BOD2D0	Instrument ID: VOA-1
Misc: CONCRETE 5ML	Instrument ID: 70 2
Quant Time: 950131 16:09	Quant ID File: ID_108::QT
Injected at: 950131 15:37	Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54	

Compound No : 12
Compound Name : 2-BUTANONE
Scan Number : 387
Retention Time: 5.84 min.
Quant Ion : 43.0
Area : 227
Concentration : .686 UG/L
q-value : 100

Ren
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31K::D6 Quant Output File: ^AA31K::D2
Name: R6892dup BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 16:09 Quant ID File: ID_108::QT
Injected at: 950131 15:37 Last Calibration: 950130-10:12
Last Qcal Time: 950131 08:54

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 488
Retention Time: 7.23 min.
Quant Ion : 65.0
Area : 140610
Concentration : 49.20 UG/L
q-value : 88

REN
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31K::D6 Quant Output File: ^AA31K::D2
Name: R6892dup BOD2D0 Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 16:09 Quant ID File: ID_108::QT
Injected at: 950131 15:37 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 562
Retention Time: 8.26 min.
Quant Ion : 114.0
Area : 485022
Concentration : 50.00 UG/L
q-value : 86

REN
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31K::D6 Quant Output File: ^AA31K::D2
Name: R6892dup BOD2D0 Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 16:09 Quant ID File: ID_108::QT
Injected at: 950131 15:37 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 968
Retention Time: 13.89 min.
Quant Ion : 117.0
Area : 399412
Concentration : 50.00 UG/L
q-value : 90

WEN
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31K::D6 Quant Output File: ^AA31K::D2
Name: R6892dup BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 16:09 Quant ID File: ID 108::QT
Injected at: 950131 15:37 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 34
Compound Name : 4-METHYL-2-PENTANONE
Scan Number : 766
Retention Time: 11.09 min.
Quant Ion : 43.0
Area : 5701M
Concentration : 2.47 UG/L
q-value : 51

No
De
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31K::D6 Quant Output File: ^AA31K::D2
Name: R6892dup BOD2DO Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 16:09 Quant ID File: ID_108::QT
Injected at: 950131 15:37 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 762
Retention Time: 11.03 min.
Quant Ion : 98.0
Area : 447174
Concentration : 51.58 UG/L
q-value : 95

Den
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31K::D6
Name: R6892dup BOD2D0
Misc: CONCRETE 5ML
Quant Time: 950131 16:09
Injected at: 950131 15:37
Last Qcal Time: 950131 08:54

Quant Output File: ^AA31K::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 36
Compound Name : TOLUENE
Scan Number : 770
Retention Time: 11.14 min.
Quant Ion : 91.0
Area : 4263
Concentration : .455 UG/L
q-value : 92

No
Rem
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31K::D6
Name: R6892dup BOD2DO
Misc: CONCRETE 5ML
Quant Time: 950131 16:09
Injected at: 950131 15:37
Last Qcal Time: 950131 08:54

Quant Output File: ^AA31K::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 41
Compound Name : XYLENE (TOTAL)
Scan Number : 1017
Retention Time: 14.57 min.
Quant Ion : 106.0
Area : 2435M
Concentration : .594 UG/L
q-value : 81

Den
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31K::D6 Quant Output File: ^AA31K::D2
Name: R6892dup BOD2D0 Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 16:09 Quant ID File: ID_108::QT
Injected at: 950131 15:37 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1153
Retention Time: 16.46 min.
Quant Ion : 95.0
Area : 309658
Concentration : 49.25 UG/L
q-value : 86

Pen
2-3-95

2/9/95
Julekko. Aray

2-7-95

Chromatographic temperatures :	10.	160.	0.	0.	0.
Chromatographic times, min. :	4.0	2.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	6.0	0.0	0.0	.5	0.0

WHC-SD-WM-DP-096, REV. 0

Standard	Concentration	Area	Retention Time	Unknown Window	
1	50.0	792959.	6.06	.99 -	7.16
2	50.0	1084288.	8.26	7.16 -	11.07
3	50.0	1165616.	13.89	11.07 -	31.04

Correction Factor = 1.69

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

3:55 PM TUE., 7 FEB., 1995

File >AA31K 35.0-350.0 amu. R6892dup BOD2DO CONCRETE 5ML Ins
CLP ADC TIC
50 100 150 200 250 300 350 400 450 500

WHC-SD-WM-DP-096, REV. 0

WHC-SD-WM-DP-096, REV. 0

. there were no unknowns.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WHC-SD-WM-DP-096, REV. 0

BOD2G2

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6890

Sample wt/vol: 2.76 (g/mL) G

Lab File ID: >AB13D

Level: (low/med) LOW

Date Received: 01/31/95

% Moisture: not dec.

Date Analyzed: 2/13/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3-----	Chloromethane	18.	U
74-83-9-----	Bromomethane	18.	U
75-01-4-----	Vinyl Chloride	18.	U
75-00-3-----	Chloroethane	18.	U
75-09-2-----	Methylene Chloride	18.	U
67-64-1-----	Acetone	29.	U
75-15-0-----	Carbon Disulfide	18.	U
75-35-4-----	1,1-Dichloroethene	18.	U
75-34-3-----	1,1-Dichloroethane	18.	U
540-59-0-----	1,2-Dichloroethene (total)	18.	U
67-66-3-----	Chloroform	18.	U
107-02-2-----	1,2-Dichloroethane	18.	U
78-93-3-----	2-Butanone	18.	U
71-55-6-----	1,1,1-Trichloroethane	18.	U
56-23-5-----	Carbon Tetrachloride	18.	U
75-27-4-----	Bromodichloromethane	18.	U
78-87-5-----	1,2-Dichloropropane	18.	U
10061-01-5-----	cis-1,3-Dichloropropene	18.	U
79-01-6-----	Trichloroethene	18.	U
124-48-1-----	Dibromochloromethane	18.	U
79-00-5-----	1,1,2-Trichloroethane	18.	U
71-43-2-----	Benzene	18.	U
10061-02-6-----	trans-1,3-Dichloropropene	18.	U
75-25-2-----	Bromoform	18.	U
108-10-1-----	4-Methyl-2-pentanone	18.	U
591-78-6-----	2-Hexanone	18.	U
127-18-4-----	Tetrachloroethene	18.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	18.	U
108-88-3-----	Toluene	18.	U
108-90-7-----	Chlorobenzene	18.	U
100-41-4-----	Ethylbenzene	18.	U
100-42-5-----	Styrene	18.	U
133-02-7-----	Xylene (total)	18.	U

* Below MDL for
Concrete
Per
3-8-95

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOD2G2

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6890

Sample wt/vol: 2.76 (g/mL) G

Lab File ID: >AB13D

Level: (low/med) LOW

Date Received: 01/31/95

% Moisture: not dec.

Date Analyzed: 2/13/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
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9.				
10.				
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29.				
30.				

QUANT REPORT

Page 1

Operator ID: JOY *Hederson - Aug*
Output File: ^AB13D::D2
Data File: >AB13D::D5
Name: R-6890
Misc: BOD2G2 CONCRETE
Instrument ID: 70 2

Quant Rev: 7
Quant Time: 950213 12:11
Injected at: 950213 11:39
Dilution Factor: 1.00000
Instrument ID: VOA-1

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950213 10:01

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *BROMOCHLOROMETHANE	6.07	128.0	133277	50.00	UG/L	79
8) ACETONE	2.50	43.0	4735	16.01	UG/L	72
14) 1,2-DICHLOROETHANE-d4	7.23	65.0	146090	47.53	UG/L	82
17) *1,4-DIFLUOROBENZENE	8.28	114.0	519774	50.00	UG/L	87
32) *CHLOROBENZENE-d5	13.90	117.0	425185	50.00	UG/L	88
~~34) 4-METHYL-2-PENTANONE~~ <i>No DEN 2-14-95</i>	11.10	43.0	9227	3.95	UG/L	94
35) TOLUENE-d8	11.05	98.0	451743	49.42	UG/L	95
43) BROMOFLUOROBENZENE	16.48	95.0	326788	50.91	UG/L	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AB13D::D5

Quant Output File: ^AB13D::D2

Name: R-6890

Instrument ID: VOA-1

Misc: BOD2G2 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 12:11

Injected at: 950213 11:39

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13D::D5

Quant Output File: ^AB13D::D2

Name: R-6890

Instrument ID: VOA-1

Misc: BOD2G2 CONCRETE

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 12:11

Injected at: 950213 11:39

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13D::D5

Quant Output File: ^AB13D::D2

Name: R-6890

Instrument ID: VOA-1

Misc: BOD2G2 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 12:11

Injected at: 950213 11:39

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13D::D5

Quant Output File: ^AB13D::D2

Name: R-6890

Instrument ID: VOA-1

Misc: BOD2G2 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 12:11

Injected at: 950213 11:39

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13D::D5

Quant Output File: ^AB13D::D2

Name: R-6890

Instrument ID: VOA-1

Misc: BOD2G2 CONCRETE

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 12:11

Injected at: 950213 11:39

Page 5 of 5

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13D::D5 Quant Output File: ^AB13D::D2
Name: R-6890 Instrument ID: VOA-1
Misc: BOD2G2 CONCRETE Instrument ID: 70 2
Quant Time: 950213 12:11 Quant ID File: ID_108::QT
Injected at: 950213 11:39 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 405
Retention Time: 6.07 min.
Quant Ion : 128.0
Area : 133277
Concentration : 50.00 UG/L
q-value : 79

Den
2-14-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13D::D5	Quant Output File: ^AB13D::D2
Name: R-6890	Instrument ID: VOA-1
Misc: BOD2G2 CONCRETE	Instrument ID: 70 2
Quant Time: 950213 12:11	Quant ID File: ID_108::QT
Injected at: 950213 11:39	Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01	

Compound No : 8
Compound Name : ACETONE
Scan Number : 147
Retention Time: 2.50 min.
Quant Ion : 43.0
Area : 4735
Concentration : 16.01 UG/L
q-value : 72

Den
2-14-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13D::D5 Quant Output File: ^AB13D::D2
Name: R-6890 Instrument ID: VOA-1
Misc: BOD2G2 CONCRETE Instrument ID: 70 2
Quant Time: 950213 12:11 Quant ID File: ID_108::QT
Injected at: 950213 11:39 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 489
Retention Time: 7.23 min.
Quant Ion : 65.0
Area : 146090
Concentration : 47.53 UG/L
q-value : 82

Den
2-14-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13D::D5

Quant Output File: ^AB13D::D2

Name: R-6890

Instrument ID: VOA-1

Misc: BOD2G2 CONCRETE

Instrument ID: 70 2

Quant Time: 950213 12:11

Quant ID File: ID_108::QT

Injected at: 950213 11:39

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 565
Retention Time: 8.28 min.
Quant Ion : 114.0
Area : 519774
Concentration : 50.00 UG/L
q-value : 87

Den
2-14-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13D::D5

Quant Output File: ^AB13D::D2

Name: R-6890

Instrument ID: VOA-1

Misc: BOD2G2 CONCRETE

Instrument ID: 70 2

Quant Time: 950213 12:11

Quant ID File: ID_108::QT

Injected at: 950213 11:39

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 971
Retention Time: 13.90 min.
Quant Ion : 117.0
Area : 425185
Concentration : 50.00 UG/L
q-value : 88

WEN
2-14-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13D::D5

Quant Output File: ^AB13D::D2

Name: R-6890

Instrument ID: VOA-1

Misc: BOD2G2 CONCRETE

Instrument ID: 70 2

Quant Time: 950213 12:11

Quant ID File: ID_108::QT

Injected at: 950213 11:39

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Compound No : 34
Compound Name : 4-METHYL-2-PENTANONE
Scan Number : 769
Retention Time: 11.10 min.
Quant Ion : 43.0
Area : 9227
Concentration : 3.95 UG/L
q-value : 94

No
Den
2-14-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13D::D5

Quant Output File: ^AB13D::D2

Name: R-6890

Instrument ID: VOA-1

Misc: BOD262 CONCRETE

Instrument ID: 70 2

Quant Time: 950213 12:11

Quant ID File: ID_108::QT

Injected at: 950213 11:39

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 765
Retention Time: 11.05 min.
Quant Ion : 98.0
Area : 451743
Concentration : 49.42 UG/L
q-value : 95

Den
2-14-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13D::D5 Quant Output File: ^AB13D::D2
Name: R-6890 Instrument ID: VOA-1
Misc: BOD2G2 CONCRETE Instrument ID: 70 2
Quant Time: 950213 12:11 Quant ID File: ID_108::QT
Injected at: 950213 11:39 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1157
Retention Time: 16.48 min.
Quant Ion : 95.0
Area : 326788
Concentration : 50.91 UG/L
q-value : 94

Don
2-14-95

MS data file header from : >AB13D::D5

Sample: R-6890 Operator: JOY SUPER GRP. 2/13/95 11:39
Misc : BOD2G2 CONCRETE Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	857001.	6.07	1.00 - 7.17
2	50.0	1152400.	8.28	7.17 - 11.09
3	50.0	1244944.	13.90	11.09 - 31.05

Dilution Factor = 1.00 This sample was 2.76000 g or mL

Correction Factor = 1.81

Unknown Concentration = $\frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}}$ * Correction Factor

12:33 PM WED., 15 FEB., 1995

WHC-SD-WM-DP-096, REV. 0

File >AB13D 35.0-350.0 amu. R-6890 BOD2G2 CONCRETE Ins
CLP ADC TIC
480 520 560 600 640 680 720 760 80

. There were no unknowns.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WHC-SD-WM-DP-096, REV. 0

BOD2G7

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6891

Sample wt/vol: 2.86 (g/mL) G

Lab File ID: >AB13F

Level: (low/med) LOW

Date Received: 01/31/95

% Moisture: not dec.

Date Analyzed: 2/13/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3-----	Chloromethane	17.	U
74-83-9-----	Bromomethane	17.	U
75-01-4-----	Vinyl Chloride	17.	U
75-00-3-----	Chloroethane	17.	U
75-09-2-----	Methylene Chloride	17.	U
67-64-1-----	Acetone	16.	J* Below MBL for
75-15-0-----	Carbon Disulfide	17.	Concrete
75-35-4-----	1,1-Dichloroethene	17.	REN
75-34-3-----	1,1-Dichloroethane	17.	3-4-95
540-59-0-----	1,2-Dichloroethene (total)	17.	U
67-66-3-----	Chloroform	17.	U
107-02-2-----	1,2-Dichloroethane	17.	U
78-93-3-----	2-Butanone	17.	U
71-55-6-----	1,1,1-Trichloroethane	17.	U
56-23-5-----	Carbon Tetrachloride	17.	U
75-27-4-----	Bromodichloromethane	17.	U
78-87-5-----	1,2-Dichloropropane	17.	U
10061-01-5-----	cis-1,3-Dichloropropene	17.	U
79-01-6-----	Trichloroethene	17.	U
124-48-1-----	Dibromochloromethane	17.	U
79-00-5-----	1,1,2-Trichloroethane	17.	U
71-43-2-----	Benzene	17.	U
10061-02-6-----	trans-1,3-Dichloropropene	17.	U
75-25-2-----	Bromoform	17.	U
108-10-1-----	4-Methyl-2-pentanone	17.	U
591-78-6-----	2-Hexanone	17.	U
127-18-4-----	Tetrachloroethene	17.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	17.	U
108-88-3-----	Toluene	17.	U
108-90-7-----	Chlorobenzene	17.	U
100-41-4-----	Ethylbenzene	17.	U
100-42-5-----	Styrene	17.	U
133-02-7-----	Xylene (total)	17.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOD2G7

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6891

Sample wt/vol: 2.86 (g/mL) G

Lab File ID: >AB13F

Level: (low/med) LOW

Date Received: 01/31/95

% Moisture: not dec.

Date Analyzed: 2/13/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
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QUANT REPORT

Page 1

Operator ID: JOY *2/22/95 J. J. J. - Chang*
Output File: ^AB13F::D2
Data File: >AB13F::D5
Name: R-6891
Misc: BOD2G7 CONCRETE
Quant Rev: 7
Quant Time: 950213 14:00
Injected at: 950213 13:28
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950213 10:01

Compound	R.T.	Q ion	Area	Conc	Units	g
1) *BROMOCHLOROMETHANE	6.06	128.0	127014	50.00	UG/L	81
8) ACETONE	2.49	43.0	2638	9.36	UG/L	89
~~12) 2-BUTANONE~~ <i>No Den 2-14-95</i>	5.84	43.0	238	.470	UG/L	100
14) 1,2-DICHLOROETHANE-d4	7.22	65.0	137805	47.04	UG/L	86
17) *1,4-DIFLUOROBENZENE	8.26	114.0	491259	50.00	UG/L	86
32) *CHLOROBENZENE-d5	13.90	117.0	404949	50.00	UG/L	86
35) TOLUENE-d8	11.03	98.0	432783	49.71	UG/L	95
43) BROMOFLUOROBENZENE	16.46	95.0	310533	50.79	UG/L	84

* Compound is ISTD

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB13F::D5

Quant Output File: ^AB13F::D2

Name: R-6891

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 14:00

Injected at: 950213 13:28

Page 1 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB13F::D5

Quant Output File: ^AB13F::D2

Name: R-6891

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 14:00

Injected at: 950213 13:28

Page 2 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB13F::D5

Quant Output File: >AB13F::D2

Name: R-6891

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 14:00

Injected at: 950213 13:28

Page 3 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB13F::D5

Quant Output File: ^AB13F::D2

Name: R-6891

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 14:00

Injected at: 950213 13:28

Page 4 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB13F::D5

Quant Output File: ^AB13F::D2

Name: R-6891

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 14:00

Injected at: 950213 13:28

Page 5 of 5

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13F::D5 Quant Output File: ^AB13F::D2
Name: R-6891 Instrument ID: VOA-1
Misc: BOD2G7 CONCRETE Instrument ID: 70 2
Quant Time: 950213 14:00 Quant ID File: ID_108::QT
Injected at: 950213 13:28 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 405
Retention Time: 6.06 min.
Quant Ion : 128.0
Area : 127014
Concentration : 50.00 UG/L
q-value : 81

Den
2-14-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13F::D5

Quant Output File: ^AB13F::D2

Name: R-6891

Instrument ID: VOA-1

Misc: BOD267 CONCRETE

Instrument ID: 70 2

Quant Time: 950213 14:00

Quant ID File: ID_108::QT

Injected at: 950213 13:28

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Compound No : 8
Compound Name : ACETONE
Scan Number : 147
Retention Time: 2.49 min.
Quant Ion : 43.0
Area : 2638
Concentration : 9.36 UG/L
q-value : 89

DEM
2-14-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13F::D5

Quant Output File: ^AB13F::D2

Name: R-6891

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Quant Time: 950213 14:00

Quant ID File: ID_108::QT

Injected at: 950213 13:28

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Compound No : 12
Compound Name : 2-BUTANONE
Scan Number : 389
Retention Time: 5.84 min.
Quant Ion : 43.0
Area : 238
Concentration : .470 UG/L
q-value : 100

No
DEN
2-14-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13F::D5 Quant Output File: ^AB13F::D2
Name: R-6891 Instrument ID: VOA-1
Misc: BOD2G7 CONCRETE Instrument ID: 70 2
Quant Time: 950213 14:00 Quant ID File: ID_108::QT
Injected at: 950213 13:28 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 489
Retention Time: 7.22 min.
Quant Ion : 65.0
Area : 137805
Concentration : 47.04 UG/L
q-value : 86

Den
2-14-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13F::D5 Quant Output File: ^AB13F::D2
Name: R-6891 Instrument ID: VOA-1
Misc: BOD2G7 CONCRETE Instrument ID: 70 2
Quant Time: 950213 14:00 Quant ID File: ID_108::QT
Injected at: 950213 13:28 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 564
Retention Time: 8.26 min.
Quant Ion : 114.0
Area : 491259
Concentration : 50.00 UG/L
q-value : 86

WEN
2-14-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13F::D5

Quant Output File: ^AB13F::D2

Name: R-6891

Instrument ID: VOA-1

Misc: BOD267 CONCRETE

Instrument ID: 70 2

Quant Time: 950213 14:00

Quant ID File: ID_108::QT

Injected at: 950213 13:28

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 971
Retention Time: 13.90 min.
Quant Ion : 117.0
Area : 404949
Concentration : 50.00 UG/L
q-value : 86

DEN
2-14-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13F::D5 Quant Output File: ^AB13F::D2
Name: R-6891 Instrument ID: VOA-1
Misc: BOD2G7 CONCRETE Instrument ID: 70 2
Quant Time: 950213 14:00 Quant ID File: ID 108::QT
Injected at: 950213 13:28 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 764
Retention Time: 11.03 min.
Quant Ion : 98.0
Area : 432783
Concentration : 49.71 UG/L
q-value : 95

DEY
2-14-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13F::D5 Quant Output File: ^AB13F::D2
Name: R-6891 Instrument ID: VOA-1
Misc: BOD2G7 CONCRETE Instrument ID: 70 2
Quant Time: 950213 14:00 Quant ID File: ID 108::QT
Injected at: 950213 13:28 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1156
Retention Time: 16.46 min.
Quant Ion : 95.0
Area : 310533
Concentration : 50.79 UG/L
q-value : 84

Den
2-14-95

MS data file header from : >AB13F::D5

Sample: R-6891 Operator: JOY SUPER GRP. 2/13/95 13:28
Misc : BOD2G7 CONCRETE Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

WHC-SD-WM-DP-096, REV. 0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	802219.	6.06	1.00 - 7.16
2	50.0	1091637.	8.26	7.16 - 11.08
3	50.0	1181999.	13.90	11.08 - 31.02

Dilution Factor = 1.00 This sample was 2.86000 g or mL

Correction Factor = 1.75

Unknown Concentration = $\frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}}$ * Correction Factor

3:37 PM WED., 15 FEB., 1995

WHC-SD-WM-DP-096, REV. 0

. There were no unknowns.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOD2G9

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6899

Sample wt/vol: 2.84 (g/mL) G

Lab File ID: >AB13J

Level: (low/med) LOW

Date Received: 02/01/95

% Moisture: not dec.

Date Analyzed: 2/13/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3	Chloromethane	18.	U
74-83-9	Bromomethane	18.	U
75-01-4	Vinyl Chloride	18.	U
75-00-3	Chloroethane	18.	U
75-09-2	Methylene Chloride	18.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	18.	U
75-35-4	1,1-Dichloroethene	18.	U
75-34-3	1,1-Dichloroethane	18.	U
540-59-0	1,2-Dichloroethene (total)	18.	U
67-66-3	Chloroform	18.	U
107-02-2	1,2-Dichloroethane	18.	U
78-93-3	2-Butanone	18.	U
71-55-6	1,1,1-Trichloroethane	18.	U
56-23-5	Carbon Tetrachloride	18.	U
75-27-4	Bromodichloromethane	18.	U
78-87-5	1,2-Dichloropropane	18.	U
10061-01-5	cis-1,3-Dichloropropene	18.	U
79-01-6	Trichloroethene	18.	U
124-48-1	Dibromochloromethane	18.	U
79-00-5	1,1,2-Trichloroethane	18.	U
71-43-2	Benzene	18.	U
10061-02-6	trans-1,3-Dichloropropene	18.	U
75-25-2	Bromoform	18.	U
108-10-1	4-Methyl-2-pentanone	18.	U
591-78-6	2-Hexanone	18.	U
127-18-4	Tetrachloroethene	18.	U
79-34-5	1,1,2,2-Tetrachloroethane	18.	U
108-88-3	Toluene	18.	U
108-90-7	Chlorobenzene	18.	U
100-41-4	Ethylbenzene	18.	U
100-42-5	Styrene	18.	U
133-02-7	Xylene (total)	18.	U

* Below M.D.L.
Concrete
3-9-95

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOD2G9

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6899

Sample wt/vol: 2.84 (g/mL) G

Lab File ID: >AB13J

Level: (low/med) LOW

Date Received: 02/01/95

% Moisture: not dec.

Date Analyzed: 2/13/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

QUANT REPORT

Page 1

Operator ID: JOY *John Rose - May*
Output File: ^AB13J::D2
Data File: >AB13J::D5
Name: R-6899-RERUN
Misc: BOD2G9 CONCRETE

Quant Rev: 7 Quant Time: 950213 16:56
Injected at: 950213 16:24
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950213 10:01

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.08	128.0	117716	50.00	UG/L	80
8)	ACETONE	2.51	43.0	7466M	28.57	UG/L	80
14)	1,2-DICHLOROETHANE-d4	7.25	65.0	129519	47.71	UG/L	84
17)	*1,4-DIFLUOROBENZENE	8.27	114.0	465012	50.00	UG/L	86
32)	*CHLOROBENZENE-d5	13.89	117.0	383580	50.00	UG/L	86
35)	TOLUENE-d8	11.04	98.0	402314	48.78	UG/L	95
43)	BROMOFLUOROBENZENE	16.46	95.0	296530	51.20	UG/L	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB13J::D5

Quant Output File: ^AB13J::D2

Name: R-6899-RERUN

Instrument ID: VOA-1

Misc: BOD269 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 16:56

Injected at: 950213 16:24

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13J::D5

Quant Output File: ^AB13J::D2

Name: R-6899-RERUN

Instrument ID: VOA-1

Misc: BOD2G9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 16:56

Injected at: 950213 16:24

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13J::D5

Quant Output File: ^AB13J::D2

Name: R-6899-RERUN

Instrument ID: VOA-1

Misc: BOD2G9 CONCRETE

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 16:56

Injected at: 950213 16:24

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13J::D5

Quant Output File: ^AB13J::D2

Name: R-6899-RERUN

Instrument ID: VOA-1

Misc: BOD2G9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 16:56

Injected at: 950213 16:24

Page 4 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB13J::D5

Quant Output File: ^AB13J::D2

Name: R-6899-RERUN

Instrument ID: VOA-1

Misc: BOD269 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 16:56

Injected at: 950213 16:24

Page 5 of 5

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13J::D5 Quant Output File: ^AB13J::D2
Name: R-6899-RERUN Instrument ID: VOA-1
Misc: BOD269 CONCRETE Instrument ID: 70 2
Quant Time: 950213 16:56 Quant ID File: ID_108::QT
Injected at: 950213 16:24 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 406
Retention Time: 6.08 min.
Quant Ion : 128.0
Area : 117716
Concentration: 50.00 UG/L
q-value : 80

Den
2-14-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13J::D5	Quant Output File: ^AB13J::D2
Name: R-6899-RERUN	Instrument ID: VOA-1
Misc: BOD2G9 CONCRETE	Instrument ID: 70 2
Quant Time: 950213 16:56	Quant ID File: ID_108::QT
Injected at: 950213 16:24	Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01	

Compound No : 8
Compound Name : ACETONE
Scan Number : 148
Retention Time: 2.51 min.
Quant Ion : 43.0
Area : 7466M
Concentration : 28.57 UG/L
q-value : 80

Den
2-14-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13J::D5 Quant Output File: ^AB13J::D2
Name: R-6899-RERUN Instrument ID: VOA-1
Misc: BOD269 CONCRETE Instrument ID: 70 2
Quant Time: 950213 16:56 Quant ID File: ID_108::QT
Injected at: 950213 16:24 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 490
Retention Time: 7.25 min.
Quant Ion : 65.0
Area : 129519
Concentration : 47.71 UG/L
q-value : 84

Den
2-14-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13J::D5 Quant Output File: ^AB13J::D2
Name: R-6899-RERUN Instrument ID: VOA-1
Misc: BOD2G9 CONCRETE Instrument ID: 70 2
Quant Time: 950213 16:56 Quant ID File: ID_108::QT
Injected at: 950213 16:24 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 564
Retention Time: 8.27 min.
Quant Ion : 114.0
Area : 465012
Concentration : 50.00 UG/L
q-value : 86

Den

2-14-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13J::D5 Quant Output File: ^AB13J::D2
Name: R-6899-RERUN Instrument ID: VOA-1
Misc: BOD2G9 CONCRETE Instrument ID: 70 2
Quant Time: 950213 16:56 Quant ID File: ID_108::QT
Injected at: 950213 16:24 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 970
Retention Time: 13.89 min.
Quant Ion : 117.0
Area : 383580
Concentration : 50.00 UG/L
q-value : 86

den
2-14-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13J::D5

Name: R-6899-RERUN

Misc: BOD2G9 CONCRETE

Quant Time: 950213 16:56

Injected at: 950213 16:24

Last Qcal Time: 950213 10:01

Quant Output File: ^AB13J::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 764
Retention Time: 11.04 min.
Quant Ion : 98.0
Area : 402314
Concentration : 48.78 UG/L
q-value : 95

DE
2-14-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13J::D5 Quant Output File: ^AB13J::D2
Name: R-6899-RERUN Instrument ID: VOA-1
Misc: BOD269 CONCRETE Instrument ID: 70 2
Quant Time: 950213 16:56 Quant ID File: ID_108::QT
Injected at: 950213 16:24 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1155
Retention Time: 16.46 min.
Quant Ion : 95.0
Area : 296530
Concentration : 51.20 UG/L
q-value : 89

Den
2-14-95

W E Nelson
2-15-95

MS data file header from : >AB13J::D5

Sample: R-6899-RERUN Operator: JOY *2/22/95* SUPER GRP. 2/13/95 16:24
Misc : BOD2G9 CONCRETE Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

WHC-SD-WM-DP-096, REV.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	744638.	6.08	1.00 - 7.18
2	50.0	1023867.	8.27	7.18 - 11.08
3	50.0	1122285.	13.89	11.08 - 31.03

Dilution Factor = 1.00 This sample was 2.84000 g or mL

Correction Factor = 1.76

Unknown Concentration = $\frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$

4:07 PM WED., 15 FEB., 1995

File >AB13J 35.0-350.0 amu. R-6899-RERUN BOD2G9 CONCRETE Ins
CLP ADC TIC 50 100 150 200 250 300 350 400 450 500

WHC-SD-WM-DP-096, REV. 0

File >AB13J 35.0-350.0 amu. R-6899-RERUN BOD2G9 CONCRETE
CLP ADC TIC 600 640 680 720 760

. there were no Unknowns.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOD2H9

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6905

Sample wt/vol: 3.03 (g/mL) G

Lab File ID: >AB14E

Level: (low/med) LOW

Date Received: 02/02/95

% Moisture: not dec.

Date Analyzed: 2/14/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3-----	Chloromethane	17.	U
74-83-9-----	Bromomethane	17.	U
75-01-4-----	Vinyl Chloride	17.	U
75-00-3-----	Chloroethane	17.	U
75-09-2-----	Methylene Chloride	17.	U
67-64-1-----	Acetone	500.	E
75-15-0-----	Carbon Disulfide	17.	U
75-35-4-----	1,1-Dichloroethene	17.	U
75-34-3-----	1,1-Dichloroethane	17.	U
540-59-0-----	1,2-Dichloroethene (total)	17.	U
67-66-3-----	Chloroform	17.	U
107-02-2-----	1,2-Dichloroethane	17.	U
78-93-3-----	2-Butanone	17.	U
71-55-6-----	1,1,1-Trichloroethane	17.	U
56-23-5-----	Carbon Tetrachloride	17.	U
75-27-4-----	Bromodichloromethane	17.	U
78-87-5-----	1,2-Dichloropropane	17.	U
10061-01-5-----	cis-1,3-Dichloropropene	17.	U
79-01-6-----	Trichloroethene	17.	U
124-48-1-----	Dibromochloromethane	17.	U
79-00-5-----	1,1,2-Trichloroethane	17.	U
71-43-2-----	Benzene	17.	U
10061-02-6-----	trans-1,3-Dichloropropene	17.	U
75-25-2-----	Bromoform	17.	U
108-10-1-----	4-Methyl-2-pentanone	33.	
591-78-6-----	2-Hexanone	17.	U
127-18-4-----	Tetrachloroethene	17.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	17.	U
108-88-3-----	Toluene	20.	
108-90-7-----	Chlorobenzene	17.	U
100-41-4-----	Ethylbenzene	1.	J
100-42-5-----	Styrene	17.	U
133-02-7-----	Xylene (total)	7.	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOD2H9

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6905

Sample wt/vol: 3.03 (g/mL) G

Lab File ID: >AB14E

Level: (low/med) LOW

Date Received: 02/02/95

% Moisture: not dec.

Date Analyzed: 2/14/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 67630	2-Propanol	3.12	66.	JN
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

2/22/95

QUANT REPORT

Page 1

Operator ID: JOY *Julie Rose Gray* Quant Rev: 7 Quant Time: 950214 11:47
Output File: ^AB14E::D2 Injected at: 950214 11:15
Data File: >AB14E::D5 Dilution Factor: 1.00000
Name: R6905 Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2

WHC-SD-WM-DP-096, REV. 0

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound	R.T.	Q	ion	Area	Conc	Units	g
1) *BROMOCHLOROMETHANE	6.11	128.0		126012	50.00	UG/L	76
8) ACETONE	2.54	43.0		76513	304.41	UG/L	74
~~12) 2-BUTANONE~~ <i>No Den 2-15-95</i>	5.95	43.0		250	.796	UG/L	100
14) 1,2-DICHLOROETHANE-d4	7.28	65.0		137226	47.84	UG/L	87
17) *1,4-DIFLUOROBENZENE	8.32	114.0		482245	50.00	UG/L	88
~~18) VINYL ACETATE~~ <i>No Den 2-15-95</i>	4.91	43.0		512	.157	UG/L	100
32) *CHLOROBENZENE-d5	13.94	117.0		402354	50.00	UG/L	88
34) 4-METHYL-2-PENTANONE	11.14	43.0		44274	19.80	UG/L	94
35) TOLUENE-d8	11.07	98.0		428777	49.44	UG/L	95
36) TOLUENE	11.20	91.0		116707	12.22	UG/L	98
40) ETHYLBENZENE	14.34	106.0		2550	.753	UG/L	98
41) XYLENE (TOTAL)	14.62	106.0		16299M <i>Den</i>	3.96	UG/L	91
43) BROMOFLUOROBENZENE	16.50	95.0		306500 <i>2-15-95</i>	49.15	UG/L	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV.0

Data File: >AB14E::D5

Quant Output File: ^AB14E::D2

Name: R6905

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 11:47

Injected at: 950214 11:15

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB14E::D5

Quant Output File: ^AB14E::D2

Name: R6905

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 11:47

Injected at: 950214 11:15

Page 2 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14E::D5

Quant Output File: ^AB14E::D2

Name: R6905

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 11:47

Injected at: 950214 11:15

Page 3 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14E::D5

Quant Output File: ^AB14E::D2

Name: R6905

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 11:47

Injected at: 950214 11:15

Page 4 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14E::D5

Quant Output File: ^AB14E::D2

Name: R6905

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 11:47

Injected at: 950214 11:15

Page 5 of 5

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5 Quant Output File: ^AB14E::D2
Name: R6905 Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 11:47 Quant ID File: ID_108::QT
Injected at: 950214 11:15 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 406
Retention Time: 6.11 min.
Quant Ion : 128.0
Area : 126012
Concentration : 50.00 UG/L
q-value : 76

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5

Quant Output File: ^AB14E::D2

Name: R6905

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 11:47

Quant ID File: ID_108::QT

Injected at: 950214 11:15

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 8
Compound Name : ACETONE
Scan Number : 148
Retention Time: 2.54 min.
Quant Ion : 43.0
Area : 76513
Concentration : 304.41 UG/L
q-value : 74

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5

Quant Output File: ^AB14E::D2

Name: R6905

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 11:47

Quant ID File: ID_108::QT

Injected at: 950214 11:15

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 12
Compound Name : 2-BUTANONE
Scan Number : 394
Retention Time: 5.95 min.
Quant Ion : 43.0
Area : 250
Concentration : .796 UG/L
q-value : 100

No
den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5

Quant Output File: ^AB14E::D2

Name: R6905

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 11:47

Quant ID File: ID_108::QT

Injected at: 950214 11:15

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 490
Retention Time: 7.28 min.
Quant Ion : 65.0
Area : 137226
Concentration : 47.84 UG/L
q-value : 87

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WLC SD WM DP-096 REV.0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5

Quant Output File: ^AB14E::D2

Name: R6905

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 11:47

Quant ID File: ID_108::QT

Injected at: 950214 11:15

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 565
Retention Time: 8.32 min.
Quant Ion : 114.0
Area : 482245
Concentration : 50.00 UG/L
q-value : 88

Den
2-15-95

BEST AVAILABLE COPY

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5
Name: R6905
Misc: BOD2H9 CONCRETE
Quant Time: 950214 11:47
Injected at: 950214 11:15
Last Qcal Time: 950214 10:02

Quant Output File: ^AB14E::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 18
Compound Name : VINYL ACETATE
Scan Number : 319
Retention Time: 4.91 min.
Quant Ion : 43.0
Area : 512
Concentration : .157 UG/L
q-value : 100

No
DEN
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5 Quant Output File: ^AB14E::D2
Name: R6905 Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 11:47 Quant ID File: ID_108::QT
Injected at: 950214 11:15 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 971
Retention Time: 13.94 min.
Quant Ion : 117.0
Area : 402354
Concentration : 50.00 UG/L
q-value : 88

REV
2-15-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5

Name: R6905

Misc: BOD2H9 CONCRETE

Quant Time: 950214 11:47

Injected at: 950214 11:15

Last Qcal Time: 950214 10:02

Quant Output File: ^AB14E::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID 106::QT

Last Calibration: 950130 10:12

Compound No : 34
Compound Name : 4-METHYL-2-PENTANONE
Scan Number : 769
Retention Time: 11.14 min.
Quant Ion : 43.0
Area : 44274
Concentration : 19.80 UG/L
q-value : 94

Coelution with Toluene-d8

REN

2-15-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5 Quant Output File: ^AB14E::D2
Name: R6905 Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 11:47 Quant ID File: ID_108::QT
Injected at: 950214 11:15 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 764
Retention Time: 11.07 min.
Quant Ion : 98.0
Area : 428777
Concentration : 49.44 UG/L
q-value : 95

Den
2-15-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5

Name: R6905

Misc: BOD2H9 CONCRETE

Quant Time: 950214 11:47

Injected at: 950214 11:15

Last Qcal Time: 950214 10:02

Quant Output File: ^AB14E::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID 108::QT

Last Calibration: 950130 10:12

Compound No : 36

Compound Name : TOLUENE

Scan Number : 773

Retention Time: 11.20 min.

Quant Ion : 91.0

Area : 116707

Concentration : 12.22 UG/L

q-value : 98

Den
2-15-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5

Name: R6905

Misc: BOD2H9 CONCRETE

Quant Time: 950214 11:47

Injected at: 950214 11:15

Last Qcal Time: 950214 10:02

Quant Output File: ^AB14E::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 40
Compound Name : ETHYLBENZENE
Scan Number : 1000
Retention Time: 14.34 min.
Quant Ion : 106.0
Area : 2550
Concentration : .753 UG/L
q-value : 98

Den
2-15-95

WHC-SD-WM-DP-096, REV.0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5	Quant Output File: ^AB14E::D2
Name: R6905	Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE	Instrument ID: 70 2
Quant Time: 950214 11:47	Quant ID File: ID_108::QT
Injected at: 950214 11:15	Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02	

Compound No : 41
Compound Name : XYLENE (TOTAL)
Scan Number : 1020
Retention Time: 14.62 min.
Quant Ion : 106.0
Area : 16299M
Concentration : 3.96 UG/L
q-value : 91

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14E::D5 Quant Output File: ^AB14E::D2
Name: R6905 Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 11:47 Quant ID File: ID_108::QT
Injected at: 950214 11:15 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1156
Retention Time: 16.50 min.
Quant Ion : 95.0
Area : 306500
Concentration : 49.15 UG/L
q-value : 89

REN
2-15-95

DE Wilson
2-21-95

2/22/95
J. Wilson

MS data file header from : >AB14E::D5

Sample: R6905 Operator: JOY SUPER GRP. 2/14/95 11:15
Misc : BOD2H9 CONCRETE Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

>AB14E R6905 BOD2H9 CONCRETE Instrument ID: 70
35.0| 350.0 CLP TIC
Upslope: .2000 Area Reject: 79109. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IAB14E Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.12	176	190	218	72051	661267	629848	100.00	100.000

Sum of corrected areas: 629848.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	791090.	6.11	1.01 - 7.22
2	50.0	1068962.	8.32	7.22 - 11.13
3	50.0	1174807.	13.94	11.13 - 31.04

Dilution Factor = 1.00 This sample was 3.03000 g or mL

Correction Factor = 1.65

Unknown Concentration = $\frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$

1:16 PM TUE., 21 FEB., 1995

WHC-SD-WM-DP-096, REV. 0

WHC-SD-WM-DP-096, REV. 0

File >AB14E 35.0-350.0 amu. R6905 BOD2H9 CONCRETE Ins
CLP ADC TIC
480 520 560 600 640 680 720 760 80

WHC-SD-WM-DP-096, REV. 0

Instrument ID: VOA-1 Analyzed on: 2/14/95 11:15
 Result 1 in PBM results file: LAB14E
 Retention Time: 3.12 Area: 629848 Tentative Conc: 66.00
 The unknown area is 79.62% of the nearest internal standard

1. 2-Propanol *Den 2-21-95* 60 C3H80
 2. 2-Propanol, 1-chloro- 94 C3H7ClO
 3. Propanoic acid, 2-hydroxy-, methyl ester 104 C4H8O3
 4. Methane, chloromethoxy- 80 C2H5ClO
 5. Propanamide, 2-hydroxy- 89 C3H7NO2
 6. 2-Propanol, 1-bromo- 138 C3H7BrO

Sample file: >AB14E Spectrum #: 190
 Search speed: 3 Tilting option: S No. of ion ranges searched: 223

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	45*	67630	331	NBS49K	32	35	2	0	100	21	17	16
2.	45*	127004	347	NBS49K	33	56	2	0	100	21	17	16
3.	43*	547648	157	NBS49K	26	52	2	0	100	21	17	14
4.	43*	107302	445	NBS49K	26	67	2	0	100	21	17	14
5.	42*	2043438	2198	NBS49K	21	42	2	0	100	21	17	13
6.	42*	19686738	1859	NBS49K	22	57	2	0	100	21	17	13

WHC-SD-WM-DP-096, REV.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOD2H9DL

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6905DL

Sample wt/vol: 3.03 (g/mL) G

Lab File ID: >AB14G

Level: (low/med) LOW

Date Received: 02/02/95

% Moisture: not dec.

Date Analyzed: 2/14/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 2

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3-----	Chloromethane	33.	U D
74-83-9-----	Bromomethane	33.	U D
75-01-4-----	Vinyl Chloride	33.	U D
75-00-3-----	Chloroethane	33.	U D
75-09-2-----	Methylene Chloride	33.	U D
67-64-1-----	Acetone	580.	D
75-15-0-----	Carbon Disulfide	33.	U D
75-35-4-----	1,1-Dichloroethene	33.	U D
75-34-3-----	1,1-Dichloroethane	33.	U D
540-59-0-----	1,2-Dichloroethene (total)	33.	U D
67-66-3-----	Chloroform	33.	U D
107-02-2-----	1,2-Dichloroethane	33.	U D
78-93-3-----	2-Butanone	9.	J D
71-55-6-----	1,1,1-Trichloroethane	33.	U D
56-23-5-----	Carbon Tetrachloride	33.	U D
75-27-4-----	Bromodichloromethane	33.	U D
78-87-5-----	1,2-Dichloropropane	33.	U D
10061-01-5-----	cis-1,3-Dichloropropene	33.	U D
79-01-6-----	Trichloroethene	33.	U D
124-48-1-----	Dibromochloromethane	33.	U D
79-00-5-----	1,1,2-Trichloroethane	33.	U D
71-43-2-----	Benzene	33.	U D
10061-02-6-----	trans-1,3-Dichloropropene	33.	U D
75-25-2-----	Bromoform	33.	U D
108-10-1-----	4-Methyl-2-pentanone	36.	D
591-78-6-----	2-Hexanone	33.	U D
127-18-4-----	Tetrachloroethene	33.	U D
79-34-5-----	1,1,2,2-Tetrachloroethane	33.	U D
108-88-3-----	Toluene	24.	J D
108-90-7-----	Chlorobenzene	33.	U D
100-41-4-----	Ethylbenzene	1.	J D
100-42-5-----	Styrene	.4	J D
133-02-7-----	Xylene (total)	7.	J D

Below m
for conc
DEN
3-9-95

QUANT REPORT

Page 1

2/22/95
Jellison - Aug
Operator ID: JOY
Output File: ^AB14G::D2
Data File: >AB14G::D5
Name: R6905-DL
Misc: BOD2H9 CONCRETE

Quant Rev: 7
Quant Time: 950214 13:58
Injected at: 950214 13:26
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950214 10:02

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *BROMOCHLOROMETHANE	6.12	128.0	121128	50.00	UG/L	81
8) ACETONE	2.54	43.0	42133	174.39	UG/L	78
~~9) METHYLENE CHLORIDE~~ No Den 2-15-95	3.15	84.0	357M	2.15 126	UG/L	64
12) 2-BUTANONE	5.86	43.0	782M	2-15-95 2.59	UG/L	100
14) 1,2-DICHLOROETHANE-d4	7.28	65.0	133677	48.48	UG/L	87
17) *1,4-DIFLUOROBENZENE	8.32	114.0	478037	50.00	UG/L	86
~~18) VINYL ACETATE~~ No Den 2-15-95	4.79	43.0	445	.137	UG/L	100
32) *CHLOROBENZENE-d5	13.95	117.0	401702	50.00	UG/L	88
34) 4-METHYL-2-PENTANONE	11.15	43.0	24387	10.93	UG/L	80
35) TOLUENE-d8	11.08	98.0	425413	49.13	UG/L	95
36) TOLUENE	11.20	91.0	69434	95.28	UG/L	99
40) ETHYLBENZENE	14.36	106.0	1373M	2-15-95 4.06	UG/L	84
41) XYLENE (TOTAL)	14.62	106.0	9171M	2-15-95 2.23	UG/L	90
42) STYRENE	15.47	104.0	754M	2-15-95 1.15	UG/L	89
43) BROMOFLUOROBENZENE	16.51	95.0	297597	47.80	UG/L	

* Compound is ISTD

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14G::D5

Quant Output File: ^AB14G::D2

Name: R6905-DL

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 13:58

Injected at: 950214 13:26

Page 1 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14G::D5

Quant Output File: ^AB14G::D2

Name: R6905-DL

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 13:58

Injected at: 950214 13:26

Page 2 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14G::D5

Quant Output File: ^AB14G::D2

Name: R6905-DL

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 13:58

Injected at: 950214 13:26

Page 3 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14G::D5

Quant Output File: ^AB14G::D2

Name: R6905-DL

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 13:58

Injected at: 950214 13:26

Page 4 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14G::D5

Quant Output File: ^AB14G::D2

Name: R6905-DL

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 13:58

Injected at: 950214 13:26

Page 5 of 5

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5 Quant Output File: ^AB14G::D2
Name: R6905-DL Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 13:58 Quant ID File: ID_108::QT
Injected at: 950214 13:26 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 402
Retention Time: 6.12 min.
Quant Ion : 128.0
Area : 121128
Concentration : 50.00 UG/L
q-value : 81

Qen
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5

Quant Output File: ^AB14G::D2

Name: R6905-DL

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 13:58

Quant ID File: ID_108::QT

Injected at: 950214 13:26

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 8
Compound Name : ACETONE
Scan Number : 143
Retention Time: 2.54 min.
Quant Ion : 43.0
Area : 42133
Concentration : 174.39 UG/L
q-value : 78

DEM
2-15-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5 Quant Output File: ^AB14G::D2
Name: R6905-DL Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 13:58 Quant ID File: ID_108::QT
Injected at: 950214 13:26 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 9
Compound Name : METHYLENE CHLORIDE
Scan Number : 187
Retention Time: 3.15 min.
Quant Ion : 84.0
Area : 357M
Concentration : .126 UG/L
q-value : 64

*No
Pen
2-15-95*

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5 Quant Output File: ^AB14G::D2
Name: R6905-DL Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 13:58 Quant ID File: ID_108::QT
Injected at: 950214 13:26 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 12
Compound Name : 2-BUTANONE
Scan Number : 383
Retention Time: 5.86 min.
Quant Ion : 43.0
Area : 782M
Concentration : 2.59 UG/L
q-value : 100

Don
2-15-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5 Quant Output File: ^AB14G::D2
Name: R6905-DL Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 13:58 Quant ID File: ID_108::QT
Injected at: 950214 13:26 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 486
Retention Time: 7.28 min.
Quant Ion : 65.0
Area : 133677
Concentration : 48.48 UG/L
q-value : 87

REN
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5 Quant Output File: ^AB14G::D2
Name: R6905-DL Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 13:58 Quant ID File: ID 108::QT
Injected at: 950214 13:26 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 561
Retention Time: 8.32 min.
Quant Ion : 114.0
Area : 478037
Concentration : 50.00 UG/L
q-value : 86

Don
2-15-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5
Name: R6905-DL
Misc: BOD2H9 CONCRETE
Quant Time: 950214 13:58
Injected at: 950214 13:26
Last Qcal Time: 950214 10:02

Quant Output File: ^AB14G::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 18
Compound Name : VINYL ACETATE
Scan Number : 306
Retention Time: 4.79 min.
Quant Ion : 43.0
Area : 445
Concentration : .137 UG/L
q-value : 100

No
Rev
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5 Quant Output File: ^AB14G::D2
Name: R6905-DL Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 13:58 Quant ID File: ID_108::QT
Injected at: 950214 13:26 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 967
Retention Time: 13.95 min.
Quant Ion : 117.0
Area : 401702
Concentration : 50.00 UG/L
q-value : 88

Don
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5

Quant Output File: ^AB14G::D2

Name: R6905-DL

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 13:58

Quant ID File: ID_108::QT

Injected at: 950214 13:26

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 34
Compound Name : 4-METHYL-2-PENTANONE
Scan Number : 765
Retention Time: 11.15 min.
Quant Ion : 43.0
Area : 24387
Concentration : 10.93 UG/L
q-value : 80

*Co elution with Toluene-d8
DEN
2-15-95*

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

File >AK17D VBLK02
Bpk Ab 9999.10UL ISTD & SMC
SUB NRM ENHInstru Scan 807
11.62 min.

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >AB146 R6905-DL
Bpk Ab 65224.BOD2H9 CONCRETE
SUBInst Scan 760
11.08 min.

SAMPLE SPECTRUM (UNALTERED)

File >AB146 R6905-DL
Bpk Ab 65224.

BOD2H9 CONCRETE

Inst Scan 760
11.08 min.

Data File: >AB14G::D5

Quant Output File: ^AB14G::D2

Name: R6905-DL

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 13:58

Quant ID File: ID_108::QT

Injected at: 950214 13:26

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 760
Retention Time: 11.08 min.
Quant Ion : 98.0
Area : 425413
Concentration : 49.13 UG/L
q-value : 95

Don
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5 Quant Output File: ^AB14G::D2
Name: R6905-DL Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 13:58 Quant ID File: ID_108::QT
Injected at: 950214 13:26 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 36
Compound Name : TOLUENE
Scan Number : 769
Retention Time: 11.20 min.
Quant Ion : 91.0
Area : 69434
Concentration : 7.28 UG/L
q-value : 99

Den
2-15-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5 Quant Output File: ^AB14G::D2
Name: R6905-DL Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 13:58 Quant ID File: ID_108::QT
Injected at: 950214 13:26 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 40
Compound Name : ETHYLBENZENE
Scan Number : 997
Retention Time: 14.36 min.
Quant Ion : 106.0
Area : 1373M
Concentration : .406 UG/L
q-value : 84

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5 Quant Output File: ^AB14G::D2
Name: R6905-DL Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 13:58 Quant ID File: ID_108::QT
Injected at: 950214 13:26 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 41
Compound Name : XYLENE (TOTAL)
Scan Number : 1016
Retention Time : 14.62 min.
Quant Ion : 106.0
Area : 9171M
Concentration : 2.23 UG/L
q-value : 90

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

File >AI24E RSM-1
Bpk Ab 9999.REF SPECTRA
SUB NRM ENHInstru Scan 1327
15.93 min.

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >AB14G R6905-DL
Bpk Ab 141.BOD2H9 CONCRETE
SUBInst Scan 1077
15.47 min.

SAMPLE SPECTRUM (UNALTERED)

File >AB14G R6905-DL
Bpk Ab 220.

BOD2H9 CONCRETE

Inst Scan 1077
15.47 min.

Data File: >AB14G::D5

Quant Output File: ^AB14G::D2

Name: R6905-DL

Instrument ID: VOA-1

Misc: BOD2H9 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 13:58

Quant ID File: ID_108::QT

Injected at: 950214 13:26

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 42
Compound Name : STYRENE
Scan Number : 1077
Retention Time: 15.47 min.
Quant Ion : 104.0
Area : 754M
Concentration : .115 UG/L
q-value : 89

Don
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14G::D5 Quant Output File: ^AB14G::D2
Name: R6905-DL Instrument ID: VOA-1
Misc: BOD2H9 CONCRETE Instrument ID: 70 2
Quant Time: 950214 13:58 Quant ID File: ID 108::QT
Injected at: 950214 13:26 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1152
Retention Time: 16.51 min.
Quant Ion : 95.0
Area : 297597
Concentration : 47.80 UG/L
q-value : 89

den
2-15-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOD2J8

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6906

Sample wt/vol: 2.88 (g/mL) G

Lab File ID: >AB14H

Level: (low/med) LOW

Date Received: 02/02/95

% Moisture: not dec.

Date Analyzed: 2/14/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L Q

74-87-3-----	Chloromethane	17.	U
74-83-9-----	Bromomethane	17.	U
75-01-4-----	Vinyl Chloride	17.	U
75-00-3-----	Chloroethane	17.	U
75-09-2-----	Methylene Chloride	17.	U
67-64-1-----	Acetone	29.	U
75-15-0-----	Carbon Disulfide	17.	U
75-35-4-----	1,1-Dichloroethene	17.	U
75-34-3-----	1,1-Dichloroethane	17.	U
540-59-0-----	1,2-Dichloroethene (total)	17.	U
67-66-3-----	Chloroform	17.	U
107-02-2-----	1,2-Dichloroethane	17.	U
78-93-3-----	2-Butanone	3.	J
71-55-6-----	1,1,1-Trichloroethane	17.	U
56-23-5-----	Carbon Tetrachloride	17.	U
75-27-4-----	Bromodichloromethane	17.	U
78-87-5-----	1,2-Dichloropropane	17.	U
10061-01-5-----	cis-1,3-Dichloropropene	17.	U
79-01-6-----	Trichloroethene	17.	U
124-48-1-----	Dibromochloromethane	17.	U
79-00-5-----	1,1,2-Trichloroethane	17.	U
71-43-2-----	Benzene	17.	U
10061-02-6-----	trans-1,3-Dichloropropene	17.	U
75-25-2-----	Bromoform	17.	U
108-10-1-----	4-Methyl-2-pentanone	17.	U
591-78-6-----	2-Hexanone	17.	U
127-18-4-----	Tetrachloroethene	17.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	17.	U
108-88-3-----	Toluene	17.	U
108-90-7-----	Chlorobenzene	17.	U
100-41-4-----	Ethylbenzene	17.	U
100-42-5-----	Styrene	17.	U
133-02-7-----	Xylene (total)	17.	U

* Below MDL for
Concrete
REN
3-9-95

* Below MDL for
Concrete
REN 3-9-

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOD2J8

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6906

Sample wt/vol: 2.88 (g/mL) G

Lab File ID: >AB14H

Level: (low/med) LOW

Date Received: 02/02/95

% Moisture: not dec.

Date Analyzed: 2/14/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

QUANT REPORT

Page 1

Operator ID: JOY *Johanna - Aug*
Output File: ^AB14H::D2
Data File: >AB14H::D5
Name: R6906
Misc: BOD2J8 CONCRETE

Quant Rev: 7 Quant Time: 950214 14:32
Injected at: 950214 14:00
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950214 10:02

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.12	128.0	119901	50.00	UG/L	81
8)	ACETONE	2.55	43.0	4041	16.90	UG/L	80
~~9)~~	~~METHYLENE CHLORIDE~~ <i>No Den 2-15-95</i>	3.17	84.0	397	.142	UG/L	78
12)	2-BUTANONE	5.93	43.0	594	1.99	UG/L	100
14)	1,2-DICHLOROETHANE-d4	7.28	65.0	131643	48.23	UG/L	83
17)	*1,4-DIFLUOROBENZENE	8.32	114.0	471589	50.00	UG/L	86
32)	*CHLOROBENZENE-d5	13.93	117.0	402619	50.00	UG/L	87
35)	TOLUENE-d8	11.09	98.0	428296	49.35	UG/L	95
~~36)~~	~~TOLUENE~~ <i>No Den 2-15-95</i>	11.19	91.0	1010	.106	UG/L	63
43)	BROMOFLUOROBENZENE	16.50	95.0	309929	49.67	UG/L	88

* Compound is ISTD

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14H::D5

Quant Output File: ^AB14H::D2

Name: R6906

Instrument ID: VOA-1

Misc: BOD2J8 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 14:32

Injected at: 950214 14:00

Page 1 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14H::D5
Name: R6906
Misc: BOD2J8 CONCRETE

Quant Output File: ^AB14H::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY
Quant Time : 950214 14:32
Injected at: 950214 14:00

Page 2 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14H::D5
Name: R6906
Misc: BOD2J8 CONCRETE

Quant Output File: ^AB14H::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY
Quant Time : 950214 14:32
Injected at: 950214 14:00

Page 3 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14H::D5

Quant Output File: ^AB14H::D2

Name: R6906

Instrument ID: VOA-1

Misc: BOD2J8 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 14:32

Injected at: 950214 14:00

Page 4 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14H::D5
Name: R6906
Misc: BOD2J8 CONCRETE

Quant Output File: ^AB14H::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY
Quant Time : 950214 14:32
Injected at: 950214 14:00

Page 5 of 5

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14H::D5 Quant Output File: ^AB14H::D2
Name: R6906 Instrument ID: VOA-1
Misc: BOD2J8 CONCRETE Instrument ID: 70 2
Quant Time: 950214 14:32 Quant ID File: ID_108::QT
Injected at: 950214 14:00 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 408
Retention Time: 6.12 min.
Quant Ion : 128.0
Area : 119901
Concentration : 50.00 UG/L
q-value : 81

Den
2-15-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14H::D5 Quant Output File: ^AB14H::D2
Name: R6906 Instrument ID: VOA-1
Misc: BOD2J8 CONCRETE Instrument ID: 70 2
Quant Time: 950214 14:32 Quant ID File: ID 108::QT
Injected at: 950214 14:00 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 8
Compound Name : ACETONE
Scan Number : 150
Retention Time: 2.55 min.
Quant Ion : 43.0
Area : 4041
Concentration : 16.90 UG/L
q-value : 80

pen
2-15-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14H::D5 Quant Output File: ^AB14H::D2
Name: R6906 Instrument ID: VOA-1
Misc: BOD2J8 CONCRETE Instrument ID: 70 2
Quant Time: 950214 14:32 Quant ID File: ID_108::QT
Injected at: 950214 14:00 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 9
Compound Name : METHYLENE CHLORIDE
Scan Number : 195
Retention Time: 3.17 min.
Quant Ion : 84.0
Area : 397
Concentration : .142 UG/L
q-value : 78

NO
DEN
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14H::D5

Name: R6906

Misc: BOD2J8 CONCRETE

Quant Time: 950214 14:32

Injected at: 950214 14:00

Last Qcal Time: 950214 10:02

Quant Output File: ^AB14H::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 12
Compound Name : 2-BUTANONE
Scan Number : 394
Retention Time: 5.93 min.
Quant Ion : 43.0
Area : 594
Concentration : 1.99 UG/L
q-value : 100

pen
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14H::D5 Quant Output File: ^AB14H::D2
Name: R6906 Instrument ID: VOA-1
Misc: BOD2J8 CONCRETE Instrument ID: 70 2
Quant Time: 950214 14:32 Quant ID File: ID_108::QT
Injected at: 950214 14:00 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 492
Retention Time: 7.28 min.
Quant Ion : 65.0
Area : 131643
Concentration : 48.23 UG/L
q-value : 83

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14H::D5

Quant Output File: ^AB14H::D2

Name: R6906

Instrument ID: VOA-1

Misc: BOD2J8 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 14:32

Quant ID File: ID_108::QT

Injected at: 950214 14:00

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 567
Retention Time: 8.32 min.
Quant Ion : 114.0
Area : 471589
Concentration : 50.00 UG/L
q-value : 86

pen
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14H::D5

Quant Output File: ^AB14H::D2

Name: R6906

Instrument ID: VOA-1

Misc: BOD2J8 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 14:32

Quant ID File: ID_108::QT

Injected at: 950214 14:00

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 32 (ISTD)

Compound Name : CHLOROBENZENE-d5

Scan Number : 972

Retention Time: 13.93 min.

Quant Ion : 117.0

Area : 402619

Concentration : 50.00 UG/L

q-value : 87

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14H::D5

Quant Output File: ^AB14H::D2

Name: R6906

Instrument ID: VOA-1

Misc: BOD2J8 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 14:32

Quant ID File: ID_108::QT

Injected at: 950214 14:00

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 767
Retention Time: 11.09 min.
Quant Ion : 98.0
Area : 428296
Concentration : 49.35 UG/L
q-value : 95

DEN
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

File >AI24E RSM-1
Bpk Ab 9999.

REF SPECTRA
SUB NRM ENH

Instru Scan 959
11.63 min.

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >AB14H R6906
Bpk Ab 214.

BOD2J8 CONCRETE
SUB

Inst Scan 774
11.19 min.

SAMPLE SPECTRUM (UNALTERED)

File >AB14H R6906
Bpk Ab 4202.

BOD2J8 CONCRETE

Inst Scan 774
11.19 min.

Data File: >AB14H::D5

Quant Output File: ^AB14H::D2

Name: R6906

Instrument ID: VOA-1

Misc: BOD2J8 CONCRETE

Instrument ID: 70 2

Quant Time: 950214 14:32

Quant ID File: ID 108::QT

Injected at: 950214 14:00

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 36
Compound Name : TOLUENE
Scan Number : 774
Retention Time: 11.19 min.
Quant Ion : 91.0
Area : 1010
Concentration : .106 UG/L
q-value : 63

No
DEN
2-15-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14H::D5	Quant Output File: ^AB14H::D2
Name: R6906	Instrument ID: VOA-1
Misc: BOD2J8 CONCRETE	Instrument ID: 70 2
Quant Time: 950214 14:32	Quant ID File: ID_108::QT
Injected at: 950214 14:00	Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02	

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1158
Retention Time: 16.50 min.
Quant Ion : 95.0
Area : 309929
Concentration : 49.67 UG/L
q-value : 88

Den
2-15-95

DE Nelson
2-21-95

MS data file header from : >AB14H::D5

Melrose Aug
2/22/95

Sample: R6906 Operator: JOY SUPER GRP. 2/14/95 14:00
Misc : BOD2J8 CONCRETE Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	766678.	6.12	1.00 - 7.22
2	50.0	1048011.	8.32	7.22 - 11.12
3	50.0	1179949.	13.93	11.12 - 31.02

Dilution Factor = 1.00 This sample was 2.88000 g or mL

Correction Factor = 1.74

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

1:37 PM TUE., 21 FEB., 1995

WHC-SD-WM-DP-096, REV.0

WHC-SD-WM-DP-096, REV. 0

WHC-SD-WM-DP-096, REV. 0

File >AB14H 35.0-350.0 amu. R6906 BOD2J8 CONCRETE Id5
CLP ADC TIC 800 1000 1200 1400 1600 1800 2000 2200

. There were no unknowns.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WHC-SD-WM-DP-096, REV. 0

BOD2K9

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: N4561

Sample wt/vol: 2.83 (g/mL) G

Lab File ID: >AA30D

Level: (low/med) LOW

Date Received: 01/23/95

% Moisture: not dec.

Date Analyzed: 1/30/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

74-87-3-----	Chloromethane	18.	U
74-83-9-----	Bromomethane	18.	U
75-01-4-----	Vinyl Chloride	18.	U
75-00-3-----	Chloroethane	18.	U
75-09-2-----	Methylene Chloride	18.	U
67-64-1-----	Acetone	27.	U
75-15-0-----	Carbon Disulfide	18.	U
75-35-4-----	1,1-Dichloroethene	18.	U
75-34-3-----	1,1-Dichloroethane	18.	U
540-59-0-----	1,2-Dichloroethene (total)	18.	U
67-66-3-----	Chloroform	18.	U
107-02-2-----	1,2-Dichloroethane	18.	U
78-93-3-----	2-Butanone	18.	U
71-55-6-----	1,1,1-Trichloroethane	18.	U
56-23-5-----	Carbon Tetrachloride	18.	U
75-27-4-----	Bromodichloromethane	18.	U
78-87-5-----	1,2-Dichloropropane	18.	U
10061-01-5-----	cis-1,3-Dichloropropene	18.	U
79-01-6-----	Trichloroethene	18.	U
124-48-1-----	Dibromochloromethane	18.	U
79-00-5-----	1,1,2-Trichloroethane	18.	U
71-43-2-----	Benzene	18.	U
10061-02-6-----	trans-1,3-Dichloropropene	18.	U
75-25-2-----	Bromoform	18.	U
108-10-1-----	4-Methyl-2-pentanone	18.	U
591-78-6-----	2-Hexanone	18.	U
127-18-4-----	Tetrachloroethene	18.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	18.	U
108-88-3-----	Toluene	18.	U
108-90-7-----	Chlorobenzene	18.	U
100-41-4-----	Ethylbenzene	18.	U
100-42-5-----	Styrene	18.	U
133-02-7-----	Xylene (total)	18.	U

* Below MDL for
Concrete
Pen
3-9-95

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOD2K9

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: N4561

Sample wt/vol: 2.83 (g/mL) G

Lab File ID: >AA30D

Level: (low/med) LOW

Date Received: 01/23/95

% Moisture: not dec.

Date Analyzed: 1/30/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	20.07	25.	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

QUANT REPORT

Page 1

Operator ID: JOY
Output File: ^AA30D::D2
Data File: >AA30D::D5
Name: N4561-A 5ML
Misc: CONCRETE SAMPLE

Quant Rev: 7 Quant Time: 950130 15:12
Injected at: 950130 14:40
Dilution Factor: 1.00000
Instrument ID: VOA-1

Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950130 10:37

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *BROMOCHLOROMETHANE	6.05	128.0	138267	50.00	UG/L	82
8) ACETONE	2.48	43.0	4364M	15.07	UG/L	63
~~12) 2-BUTANONE~~ No Den 2-3-95	5.79	43.0	234	.527	UG/L	100
14) 1,2-DICHLOROETHANE-d4	7.22	65.0	152073	47.71	UG/L	85
17) *1,4-DIFLUOROBENZENE	8.25	114.0	525030	50.00	UG/L	87
32) *CHLOROBENZENE-d5	13.87	117.0	434955	50.00	UG/L	85
35) TOLUENE-d8	11.01	98.0	471388	49.78	UG/L	95
43) BROMOFLUOROBENZENE	16.44	95.0	334883	48.19	UG/L	86
~~47) 1,2,4-TRIMETHYLBENZENE~~ No Den 2-3-95	18.30	105.0	550M	0477	UG/L	81
~~48) 1,2,3-TRIMETHYLBENZENE~~ No Den 2-3-95	19.17	105.0	611M	.0546	UG/L	78

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA30D::D5
Name: N4561-A 5ML
Misc: CONCRETE SAMPLE

Quant Output File: ^AA30D::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY
Quant Time : 950130 15:12
Injected at: 950130 14:40

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA30D::D5
Name: N4561-A 5ML
Misc: CONCRETE SAMPLE

Quant Output File: ^AA30D::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY
Quant Time : 950130 15:12
Injected at: 950130 14:40

WHC-SD-WM-DP-096, REV. 0

TOTAL ION CHROMATOGRAM

Data File: >AA30D::D5
Name: N4561-A 5ML
Misc: CONCRETE SAMPLE

Quant Output File: ^AA30D::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY
Quant Time : 950130 15:12
Injected at: 950130 14:40

Page 3 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AA30D::D5
Name: N4561-A 5ML
Misc: CONCRETE SAMPLE

Quant Output File: ^AA30D::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY
Quant Time : 950130 15:12
Injected at: 950130 14:40

Page 4 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AA30D::D5

Quant Output File: ^AA30D::D2

Name: N4561-A 5ML

Instrument ID: VOA-1

Misc: CONCRETE SAMPLE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY

Quant Time : 950130 15:12

Injected at: 950130 14:40

Page 5 of 5

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30D::D5	Quant Output File: ^AA30D::D2
Name: N4561-A 5ML	Instrument ID: VOA-1
Misc: CONCRETE SAMPLE	Instrument ID: 70 2
Quant Time: 950130 15:12	Quant ID File: ID_108::QT
Injected at: 950130 14:40	Last Calibration: 950130 10:12
Last Qcal Time: 950130 10:37	

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 402
Retention Time: 6.05 min.
Quant Ion : 128.0
Area : 138267
Concentration : 50.00 UG/L
q-value : 82

den
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30D::D5
Name: N4561-A 5ML
Misc: CONCRETE SAMPLE
Quant Time: 950130 15:12
Injected at: 950130 14:40
Last Qcal Time: 950130 10:37

Quant Output File: ^AA30D::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 8
Compound Name : ACETONE
Scan Number : 145
Retention Time: 2.48 min.
Quant Ion : 43.0
Area : 4364M
Concentration : 15.07 UG/L
q-value : 63

Den
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30D::D5
Name: N4561-A 5ML
Misc: CONCRETE SAMPLE
Quant Time: 950130 15:12
Injected at: 950130 14:40
Last Qcal Time: 950130 10:37

Quant Output File: ^AA30D::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 12
Compound Name : 2-BUTANONE
Scan Number : 383
Retention Time: 5.79 min.
Quant Ion : 43.0
Area : 234
Concentration : .527 UG/L
q-value : 100

No
DEN
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30D::D5 Quant Output File: ^AA30D::D2
Name: N4561-A 5ML Instrument ID: VOA-1
Misc: CONCRETE SAMPLE Instrument ID: 70 2
Quant Time: 950130 15:12 Quant ID File: ID_108::QT
Injected at: 950130 14:40 Last Calibration: 950130 10:12
Last Qcal Time: 950130 10:37

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 486
Retention Time: 7.22 min.
Quant Ion : 65.0
Area : 152073
Concentration : 47.71 UG/L
q-value : 85

WEN
2-3-95

REFERENCE STANDARD SPECTRUM

WHG-SD-WM-DP-096, REV. 0

File >AK17D VBLK02
Bpk Ab 9999.

10UL ISTD & SMC
SUB NRM ENH

Instru Scan 607
8.86 min.

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >AA30D N4561-A
Bpk Ab 76768.

5ML CONCRETE SAMPLE
SUB

Inst Scan 560
8.25 min.

SAMPLE SPECTRUM (UNALTERED)

File >AA30D N4561-A
Bpk Ab 76768.

5ML CONCRETE SAMPLE

Inst Scan 560
8.25 min.

Data File: >AA30D::D5

Quant Output File: ^AA30D::D2

Name: N4561-A 5ML

Instrument ID: VOA-1

Misc: CONCRETE SAMPLE

Instrument ID: 70 2

Quant Time: 950130 15:12

Quant ID File: ID_108::QT

Injected at: 950130 14:40

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Compound No : 17 (ISTD)

Compound Name : 1,4-DIFLUOROBENZENE

Scan Number : 560

Retention Time: 8.25 min.

Quant Ion : 114.0

Area : 525030

Concentration : 50.00 UG/L

q-value : 87

Den
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30D::D5 Quant Output File: ^AA30D::D2
Name: N4561-A 5ML Instrument ID: VOA-1
Misc: CONCRETE SAMPLE Instrument ID: 70 2
Quant Time: 950130 15:12 Quant ID File: ID_108::QT
Injected at: 950130 14:40 Last Calibration: 950130 10:12
Last Qcal Time: 950130 10:37

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 965
Retention Time: 13.87 min.
Quant Ion : 117.0
Area : 434955
Concentration : 50.00 UG/L
q-value : 85

Den
2-3-95

D

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

File >AK17D VBLK02
Bpk Ab 9999.10UL ISTD & SMC
SUB NRM ENHInstru Scan 807
11.62 min.

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >AA30D N4561-A
Bpk Ab 73288.5ML CONCRETE SAMPLE
SUBInst Scan 759
11.01 min.

SAMPLE SPECTRUM (UNALTERED)

File >AA30D N4561-A
Bpk Ab 73288.

5ML CONCRETE SAMPLE

Inst Scan 759
11.01 min.

Data File: >AA30D::D5
 Name: N4561-A 5ML
 Misc: CONCRETE SAMPLE
 Quant Time: 950130 15:12
 Injected at: 950130 14:40
 Last Qcal Time: 950130 10:37

Quant Output File: ^AA30D::D2
 Instrument ID: VOA-1
 Instrument ID: 70 2
 Quant ID File: ID 108::QT
 Last Calibration: 950130 10:12

Compound No : 35
 Compound Name : TOLUENE-d8
 Scan Number : 759
 Retention Time: 11.01 min.
 Quant Ion : 98.0
 Area : 471388
 Concentration : 49.78 UG/L
 q-value : 95

Den
 2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30D::D5 Quant Output File: ^AA30D::D2
Name: N4561-A 5ML Instrument ID: VOA-1
Misc: CONCRETE SAMPLE Instrument ID: 70 2
Quant Time: 950130 15:12 Quant ID File: ID_108::QT
Injected at: 950130 14:40 Last Calibration: 950130 10:12
Last Qcal Time: 950130 10:37

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1150
Retention Time: 16.44 min.
Quant Ion : 95.0
Area : 334883
Concentration : 48.19 UG/L
q-value : 86

den
2-3-95

REFERENCE STANDARD SPECTRUM

File >AL10E RSM-9
Bpk Ab 9999.

REFERENCE SPECTRA
SUB NRM ENH

Instr Scan 1337
18.94 min.

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >AA30D N4561-A
Bpk Ab 111.

5ML

CONCRETE SAMPLE
SUB

Inst Scan 1284
18.30 min.

SAMPLE SPECTRUM (UNALTERED)

File >AA30D N4561-A
Bpk Ab 111.

5ML

CONCRETE SAMPLE

Inst Scan 1284
18.30 min.

Data File: >AA30D::D5

Name: N4561-A 5ML

Misc: CONCRETE SAMPLE

Quant Time: 950130 15:12

Injected at: 950130 14:40

Last Qcal Time: 950130 10:37

Quant Output File: ^AA30D::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 47
Compound Name : 1,2,4-TRIMETHYLBENZENE
Scan Number : 1284
Retention Time: 18.30 min.
Quant Ion : 105.0
Area : 550M
Concentration : .0477 UG/L
q-value : 81

No
Don
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

File >AF28C 1,3,5-TRIMETHYLBENZENE Scan 1355
Bpk Ab 9999. SUB NRM ENH 19.22 min.

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >AA30D N4561-A 5ML CONCRETE SAMPLE Inst Scan 1346
Bpk Ab 99. SUB 19.17 min.

SAMPLE SPECTRUM (UNALTERED)

File >AA30D N4561-A 5ML CONCRETE SAMPLE Inst Scan 1346
Bpk Ab 115. 19.17 min.

Data File: >AA30D::D5 Quant Output File: ^AA30D::D2
Name: N4561-A 5ML Instrument ID: VOA-1
Misc: CONCRETE SAMPLE Instrument ID: 70 2
Quant Time: 950130 15:12 Quant ID File: ID 108::QT
Injected at: 950130 14:40 Last Calibration: 950130 10:12
Last Qcal Time: 950130 10:37

Compound No : 48
Compound Name : 1,2,3-TRIMETHYLBENZENE
Scan Number : 1346
Retention Time: 19.17 min.
Quant Ion : 105.0
Area : 611M
Concentration : .0546 UG/L
q-value : 78

*No
Wen
2-3-95*

BEST AVAILABLE COPY

MS data file header from : >AA30D::D5

Jade Rose - Chang
2/3/95

REM
3-6-95

Sample: N4561-A 5ML Operator: JOY SUPER GRP. 1/30/95 14:40
Misc : CONCRETE SAMPLE Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

>AA30D N4561-A 5ML CONCRETE SAMPLE Instrument ID: 70
35.0| 350.0 CLP TIC
Upslope: .2000 Area Reject: 87331. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IAA30D Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	20.07	1398	1411	1433	45434	360685	347828	100.00	100.000

Sum of corrected areas: 347828.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	873306.	6.05	1.00 - 7.15
2	50.0	1159723.	8.25	7.15 - 11.06
3	50.0	1247120.	13.87	11.06 - 31.02

Dilution Factor = 1.00 This sample was 2.83000 g or mL

Correction Factor = 1.77

Unknown Concentration = $\frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$

2:21 PM MON., 6 FEB., 1995

WHC-SD-WM-DP-096, REV. 0

File >AA30D 35.0-350.0 amu. N4561-A 5ML CONCRETE SAMPLE Ins
CLP ADC TIC 50 100 150 200 250 300 350 400 450 500

WHC-SD-WM-DP-096, REV. 0

File >AA30D 35.0-350.0 amu. N4561-A 5ML CONCRETE SAMPLE Ins
CLP ADC TIC
480 520 560 600 640 680 720 760

File >AA30D N4561-A 5ML CONCRETE SAMPLE Instrume Scan 1411
Bpk Ab 13014. SUB 20.07 min.

File NBS49K 1-Hexene, 5,5-dimethyl- Scan 2367
Bpk Ab 9999. 0.00 min.

File NBS49K 3-Undecene, 6-methyl-, (E)- Scan 12310
Bpk Ab 9999. 0.00 min.

File NBS49K 2-Decene, 5-methyl-, (Z)- Scan 9304
Bpk Ab 9999. 0.00 min.

Instrument ID: VOA-1 Analyzed on: 1/30/95 14:40 WHC-SD-WM-DP-096, REV. 0
 Result 1 in PBM results file: LAA30D
 Retention Time: 20.07 Area: 347828 Tentative Conc: 25.00
 The unknown area is 27.89% of the nearest internal standard

1. 1-Hexene, 5,5-dimethyl-	112 C8H16
2. 3-Undecene, 6-methyl-, (E)-	168 C12H24
3. 2-Decene, 5-methyl-, (Z)-	154 C11H22
4. 1-Pentene, 4,4-dimethyl-	98 C7H14
5. Heptane, 4-(1-methylethyl)-	142 C10H22

Sample file: >AA30D Spectrum #: 1411
 Search speed: 3 Tilting option: S No. of ion ranges searched: 56

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	42	7116861	9104	NBS49K	39	44	2	0	84	24	17	13
2.	42	74630527	9550	NBS49K	40	47	2	0	68	23	17	13
3.	36	74645866	9525	NBS49K	38	43	2	0	100	29	14	13
4.	33*	762629	1234	NBS49K	30	46	1	0	75	35	12	16
5.	26	52896874	9510	NBS49K	36	47	2	0	74	36	10	12

Unknown

DE

3-6-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOD2K9

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: E9691

Sample wt/vol: 2.96 (g/mL) G

Lab File ID: >AA31D

Level: (low/med) LOW

Date Received: 01/23/95

% Moisture: not dec.

Date Analyzed: 1/31/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L Q

74-87-3-----	Chloromethane	17.	U
74-83-9-----	Bromomethane	17.	U
75-01-4-----	Vinyl Chloride	17.	U
75-00-3-----	Chloroethane	17.	U
75-09-2-----	Methylene Chloride	17.	U
67-64-1-----	Acetone	30.	* Below MDL for Concrete PEX 3-9
75-15-0-----	Carbon Disulfide	17.	U
75-35-4-----	1,1-Dichloroethene	17.	U
75-34-3-----	1,1-Dichloroethane	17.	U
540-59-0-----	1,2-Dichloroethene (total)	17.	U
67-66-3-----	Chloroform	17.	U
107-02-2-----	1,2-Dichloroethane	17.	U
78-93-3-----	2-Butanone	4.	J* Below MDL for Concrete PEX 3-9
71-55-6-----	1,1,1-Trichloroethane	17.	U
56-23-5-----	Carbon Tetrachloride	17.	U
75-27-4-----	Bromodichloromethane	17.	U
78-87-5-----	1,2-Dichloropropane	17.	U
10061-01-5-----	cis-1,3-Dichloropropene	17.	U
79-01-6-----	Trichloroethene	17.	U
124-48-1-----	Dibromochloromethane	17.	U
79-00-5-----	1,1,2-Trichloroethane	17.	U
71-43-2-----	Benzene	17.	U
10061-02-6-----	trans-1,3-Dichloropropene	17.	U
75-25-2-----	Bromoform	17.	U
108-10-1-----	4-Methyl-2-pentanone	17.	U
591-78-6-----	2-Hexanone	17.	U
127-18-4-----	Tetrachloroethene	17.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	17.	U
108-88-3-----	Toluene	17.	U
108-90-7-----	Chlorobenzene	17.	U
100-41-4-----	Ethylbenzene	17.	U
100-42-5-----	Styrene	17.	U
133-02-7-----	Xylene (total)	17.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOD2K9

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: E9691

Sample wt/vol: 2.96 (g/mL) G

Lab File ID: >AA31D

Level: (low/med) LOW

Date Received: 01/23/95

% Moisture: not dec.

Date Analyzed: 1/31/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

2/3/95

QUANT REPORT

Page 1

Operator ID: JOY *Helena. Gray*
Output File: ^AA31D::D2
Data File: >AA31D::D5
Name: N4561-B BOD2K9
Misc: CONCRETE 5ML

Quant Rev: 7 Quant Time: 950131 10:37
Injected at: 950131 10:06
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950131 08:54

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*BROMOCHLOROMETHANE	6.05	128.0	132608	50.00	UG/L	8
8)	ACETONE	2.51	43.0	4598	17.62	UG/L	7
12)	2-BUTANONE	5.85	43.0	752M	2.09	UG/L	10
14)	1,2-DICHLOROETHANE-d4	7.22	65.0	151528	48.72	UG/L	8
17)	*1,4-DIFLUOROBENZENE	8.26	114.0	512424	50.00	UG/L	8
32)	*CHLOROBENZENE-d5	13.88	117.0	417814	50.00	UG/L	9
35)	TOLUENE-d8	11.02	98.0	474561	52.32	UG/L	9
43)	BROMOFLUOROBENZENE	16.44	95.0	328905	50.01	UG/L	9

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA31D::D5

Quant Output File: ^AA31D::D2

Name: N4561-B BOD2K9

Instrument ID: VOA-1

Misc: CONCRETE 5ML

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY

Quant Time : 950131 10:37

Injected at: 950131 10:06

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31D::D5

Quant Output File: ^AA31D::D2

Name: N4561-B BOD2K9

Instrument ID: VOA-1

Misc: CONCRETE 5ML

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY

Quant Time : 950131 10:37

Injected at: 950131 10:06

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31D::D5   Quant Output File: ^AA31D::D2
 Name: N4561-B   BOD2K9   Instrument ID: VOA-1
 Misc: CONCRETE   5ML   Instrument ID: 70 2

Id File: ID 108::QT
 Title: VOLATILE ANALYSIS
 Last Calibration: 950130 10:12   Last Qcal Time: 950131 08:54

Operator ID: JOY
 Quant Time : 950131 10:37
 Injected at: 950131 10:06

Page 3 of 5

WHC-SD-WM-DP-096, REV.0

TOTAL ION CHROMATOGRAM

Data File: >AA31D::D5
Name: N4561-B BOD2K9
Misc: CONCRETE 5ML

Quant Output File: ^AA31D::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY
Quant Time : 950131 10:37
Injected at: 950131 10:06

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31D::D5
Name: N4561-B BOD2K9
Misc: CONCRETE 5ML

Quant Output File: ^AA31D::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY
Quant Time : 950131 10:37
Injected at: 950131 10:06

Page 5 of 5

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31D::D5 Quant Output File: ^AA31D::D2
Name: N4561-B BOD2K9 Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 10:37 Quant ID File: ID_108::QT
Injected at: 950131 10:06 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 401
Retention Time: 6.05 min.
Quant Ion : 128.0
Area : 132608
Concentration : 50.00 UG/L
q-value : 80

Den
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31D::D5 Quant Output File: ^AA31D::D2
Name: N4561-B BOD2K9 Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 10:37 Quant ID File: ID_108::QT
Injected at: 950131 10:06 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 8
Compound Name : ACETONE
Scan Number : 145
Retention Time: 2.51 min.
Quant Ion : 43.0
Area : 4598
Concentration : 17.62 UG/L
q-value : 76

DEM
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV.0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31D::D5	Quant Output File: ^AA31D::D2
Name: N4561-B BOD2K9	Instrument ID: VOA-1
Misc: CONCRETE 5ML	Instrument ID: 70 2
Quant Time: 950131 10:37	Quant ID File: ID_108::QT
Injected at: 950131 10:06	Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54	

Compound No : 12
Compound Name : 2-BUTANONE
Scan Number : 386
Retention Time: 5.85 min.
Quant Ion : 43.0
Area : 752M
Concentration : 2.09 UG/L
q-value : 100

Ren
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31D::D5 Quant Output File: ^AA31D::D2
Name: N4561-B BOD2K9 Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 10:37 Quant ID File: ID_108::QT
Injected at: 950131 10:06 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 485
Retention Time: 7.22 min.
Quant Ion : 65.0
Area : 151528
Concentration : 48.72 UG/L
q-value : 85

Den
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31D::D5 Quant Output File: ^AA31D::D2
Name: N4561-B BOD2K9 Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 10:37 Quant ID File: ID_108::QT
Injected at: 950131 10:06 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 560
Retention Time: 8.26 min.
Quant Ion : 114.0
Area : 512424
Concentration : 50.00 UG/L
q-value : 86

WEN
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV.0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31D::D5 Quant Output File: ^AA31D::D2
Name: N4561-B BOD2K9 Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 10:37 Quant ID File: ID_108::QT
Injected at: 950131 10:06 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 966
Retention Time: 13.88 min.
Quant Ion : 117.0
Area : 417814
Concentration : 50.00 UG/L
q-value : 90

DEW
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31D::D5 Quant Output File: ^AA31D::D2
Name: N4561-B BOD2K9 Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 10:37 Quant ID File: ID_108::QT
Injected at: 950131 10:06 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 759
Retention Time: 11.02 min.
Quant Ion : 98.0
Area : 474561
Concentration : 52.32 UG/L
q-value : 96

REN
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31D::D5 Quant Output File: ^AA31D::D2
Name: N4561-B BOD2K9 Instrument ID: VOA-1
Misc: CONCRETE 5ML Instrument ID: 70 2
Quant Time: 950131 10:37 Quant ID File: ID_108::QT
Injected at: 950131 10:06 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1150
Retention Time: 16.44 min.
Quant Ion : 95.0
Area : 328905
Concentration : 50.01 UG/L
q-value : 90

Don
2-3-95

MS data file header from : >AA31D::D5

Sample: N4561-B BOD2K9 Operator: JOY SUPER GRP. 1/31/95 10:06
Misc : CONCRETE 5ML Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	850411.	6.05	1.00 - 7.16
2	50.0	1132289.	8.26	7.16 - 11.07
3	50.0	1227501.	13.88	11.07 - 31.02

Dilution Factor = 1.00 This sample was 2.96000 g or mL

Correction Factor = 1.69

Unknown Concentration = $\frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$

3:37 PM TUE., 7 FEB., 1995

File >AA31D 35.0-350.0 amu. N4561-B BOD2K9 CONCRETE 5ML Ins
CLP ADC TIC
50 100 150 200 250 300 350 400 450 500

WHC-SD-WM-DP-096, REV. 0

File >AA31D 35.0-350.0 amu. N4561-B BOD2K9 CONCRETE 5ML Ins
CLP ADC TIC
480 520 560 600 640 680 720 760

. There were no Unknowns

6A - RCRA
VOLATILE ORGANICS INITIAL CALIBRATION DATA

WHC-SD-WM-DP-096, REV. 0

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Instrument ID: 70 2 Calibration Date(s): 01/26/95 01/26/95

Heated Purge: (Y/N) N Calibration Times: 1049 1312

GC Column: DB-624 ID: 0.53 (mm)

LAB FILE ID:		RRF10 =>AA26C		RRF20 =>AA26E			
RRF50 =>AA26D		RRF100=>AA26H		RRF200=>AA26G			
COMPOUND		RRF10	RRF20	RRF50	RRF100	RRF200	% RSD
Chloromethane	#	.769	.726	.702	.724	.714	3.5#
Bromomethane		1.232	1.211	1.141	1.186	1.180	2.9
Vinyl Chloride	*	.965	.918	.883	.936	.931	3.2*
Chloroethane		.505	.473	.451	.468	.457	4.4
Methylene Chloride		1.180	1.141	1.076	1.104	1.047	4.7
Acetone		.109	.114	.104	.098	.124	9.0
Carbon Disulfide		2.867	2.782	2.719	2.791	2.606	3.5
1,1-Dichloroethene	*	1.140	1.136	1.063	1.074	.966	6.6*
1,1-Dichloroethane	#	1.972	1.947	1.889	1.960	1.919	1.7#
1,2-Dichloroethene (total)		1.273	1.261	1.225	1.271	1.242	1.7
Chloroform	*	2.498	2.443	2.492	2.565	2.596	2.4*
1,2-Dichloroethane		1.405	1.372	1.404	1.441	1.476	2.8
2-Butanone		.213	.158	.144	.154	.153	16.7
1,1,1-Trichloroethane		.501	.515	.524	.521	.535	2.4
Carbon Tetrachloride		.476	.501	.516	.532	.554	5.7
Bromodichloromethane		.561	.584	.612	.630	.664	6.5
1,2-Dichloropropane	*	.359	.349	.346	.349	.358	1.7*
cis-1,3-Dichloropropene		.475	.480	.501	.517	.539	5.2
Trichloroethene		.447	.412	.410	.421	.430	3.5
Dibromochloromethane		.597	.621	.666	.683	.721	7.5
1,1,2-Trichloroethane		.351	.352	.352	.352	.356	.6
Benzene		.751	.755	.755	.767	.776	1.3
trans-1,3-Dichloropropene		.401	.407	.426	.437	.466	6.1
Bromoform	#	.456	.496	.553	.571	.651	13.7#
4-Methyl-2-pentanone		.291	.265	.273	.275	.256	4.9
2-Hexanone		.118	.109	.107	.111	.097	7.0
Tetrachloroethene		.556	.542	.520	.534	.538	2.4
1,1,2,2-Tetrachloroethane	#	.676	.686	.692	.687	.744	3.9#
Toluene	*	1.202	1.163	1.144	1.181	1.059	4.8*
Chlorobenzene	#	.982	.958	.976	.982	.948	1.6#
Ethylbenzene	*	.418	.416	.403	.414	.427	2.0*
Styrene		.841	.795	.794	.806	.850	3.2
Xylene (total)		.511	.500	.492	.504	.501	1.4
=====							
Toluene-d8		1.116	1.126	1.077	1.106	1.026	3.7
Bromofluorobenzene		.793	.793	.784	.800	.818	1.6
1,2-Dichloroethane-d4		1.189	1.187	1.177	1.202	1.172	1.0

* - CCC Compounds must meet a maximum %RSD of 30%

- SPCC compounds must meet a minimum RRF of 0.3 (Bromoform = 0.25)

QUANT REPORT

Page 1

Operator ID: JOY *Johanna*
Output File: ^AA26C::D2
Data File: >AA26C::D5
Name: VSTD010 ID 108
Misc: INITIAL CAL 10PPB Instrument ID: 70 2

Quant Rev: 7 Quant Time: 950127 08:21
Injected at: 950126 10:11
Dilution Factor: 1.00000
Instrument ID: VOA-1

ID File: ID 108::QT

WHC-SD-WM-DP-096, REV.0

Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.06	128.0	140645	50.00	UG/L	79
2)	CHLOROMETHANE	.96	50.0	21660	10.96	UG/L	99
3)	VINYL CHLORIDE	1.06	62.0	26764	10.94	UG/L	98
4)	BROMOMETHANE	1.33	94.0	34236	10.80	UG/L	99
5)	CHLOROETHANE	1.44	64.0	14377	11.18	UG/L	98
6)	1,1-DICHLOROETHENE	2.30	96.0	32063	10.72	UG/L	81
7)	CARBON DISULFIDE	2.45	76.0	80641	10.54	UG/L	97
8)	ACETONE	2.52	43.0	3065	10.50	UG/L	93
9)	METHYLENE CHLORIDE	3.10	84.0	33190	10.96	UG/L	85
10)	1,2-DICHLOROETHENE (TOTAL)	5.61	96.0	71636 <i>MJC</i>	20.79	UG/L	73
11)	1,1-DICHLOROETHANE	4.38	63.0	55473	10.44	UG/L	97
12)	2-BUTANONE	5.85	43.0	5980	14.77	UG/L	100
13)	CHLOROFORM	6.40	83.0	70266	10.02	UG/L	95
14)	1,2-DICHLOROETHANE-d4	7.21	65.0	33436	10.10	UG/L	85
15)	1,2-DICHLOROETHANE	7.37	62.0	39519	10.01	UG/L	97
16)	TETRAHYDROFURAN	6.19	42.0	6157	10.82	UG/L	94
17)	*1,4-DIFLUOROBENZENE	8.26	114.0	558679	50.00	UG/L	86
18)	VINYL ACETATE	4.77	43.0	36762	9.47	UG/L	100
19)	1,1,1-TRICHLOROETHANE	6.50	97.0	56014	9.56	UG/L	95
20)	CARBON TETRACHLORIDE	6.82	117.0	53194	9.22	UG/L	99
21)	BENZENE	7.23	78.0	83909	9.94	UG/L	100
22)	TRICHLOROETHENE	8.60	130.0	49906	10.89	UG/L	87
23)	1,2-DICHLOROPROPANE	9.01	63.0	40124	10.38	UG/L	92
24)	BROMODICHLOROMETHANE	9.70	83.0	62700	9.17	UG/L	99
25)	CIS-1,3-DICHLOROPROPENE	10.60	75.0	53129	9.49	UG/L	97
26)	TRANS-1,3-DICHLOROPROPENE	11.81	75.0	44806	9.42	UG/L	97
27)	1,1,2-TRICHLOROETHANE	12.10	97.0	39208	9.98	UG/L	95
28)	DIBROMOCHLOROMETHANE	12.79	129.0	66714	8.97	UG/L	98
29)	BROMOFORM	15.69	173.0	50957	8.25	UG/L	98
30)	2-PENTANONE	9.26	86.0	3217	10.00	UG/L	100
31)	1-BUTANOL	9.30	56.0	23423 <i>MJC</i>	444.07	UG/L	100
32)	*CHLOROBENZENE-d5	13.89	117.0	453633	50.00	UG/L	85
33)	PYRIDINE	11.08	79.0	37290 <i>MJC</i>	424.34	UG/L	100
34)	4-METHYL-2-PENTANONE	11.08	43.0	26447	10.69	UG/L	83
35)	TOLUENE-d8	11.03	98.0	101253	10.36	UG/L	96
36)	TOLUENE	11.14	91.0	109013	10.51	UG/L	98
37)	TETRACHLOROETHENE	12.18	164.0	50401	10.69	UG/L	99
38)	2-HEXANONE	12.83	43.0	10661	10.94	UG/L	87
39)	CHLOROBENZENE	13.94	112.0	89115	10.07	UG/L	96
40)	ETHYLBENZENE	14.30	106.0	37913	10.36	UG/L	97

QUANT REPORT

Page 2

Operator ID: JOY   Quant Rev: 7   Quant Time: 950127 08:21
Output File: ^AA26C::D2   Injected at: 950126 10:11
Data File: >AA26C::D5   Dilution Factor: 1.00000
Name: VSTD010   ID 108   Instrument ID: VOA-1
Misc: INITIAL CAL 10PPB   Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950126 10:49

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	XYLENE (TOTAL)	14.58	106.0	139115M	31.15	UG/L	95
42)	STYRENE	15.42	104.0	76292	10.59	UG/L	91
43)	BROMOFLUOROBENZENE	16.45	95.0	71922	10.12	UG/L	87
44)	1,1,2,2-TETRACHLOROETHANE	17.02	83.0	61286	9.77	UG/L	95
45)	ISOPROPYLBENZENE	16.23	105.0	136061	10.15	UG/L	97
46)	1,3,5-TRIMETHYLBENZENE	17.54	105.0	112463	10.28	UG/L	97
47)	1,2,4-TRIMETHYLBENZENE	18.31	105.0	117378	9.83	UG/L	99
48)	1,2,3-TRIMETHYLBENZENE	19.17	105.0	113575	10.15	UG/L	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA26C::D5
Name: VSTD010 ID_108
Misc: INITIAL CAL 10PPB

Quant Output File: ^AA26C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:21
Injected at: 950126 10:11

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26C::D5
Name: VSTD010 ID_108
Misc: INITIAL CAL 10PPB

Quant Output File: ^AA26C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:21
Injected at: 950126 10:11

TOTAL ION CHROMATOGRAM

File >AA26C 35.0-350.0 amu. VSTD010 ID_108 INITIAL CAL 10PPB
TIC

Data File: >AA26C::D5

Quant Output File: ^AA26C::D2

Name: VSTD010 ID 108

Instrument ID: VOA-1

Misc: INITIAL CAL 10PPB

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY

Quant Time : 950127 08:21

Injected at: 950126 10:11

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26C::D5

Quant Output File: ^AA26C::D2

Name: VSTD010 ID 108

Instrument ID: VOA-1

Misc: INITIAL CAL 10PPB

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY

Quant Time : 950127 08:21

Injected at: 950126 10:11

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26C::D5

Quant Output File: ^AA26C::D2

Name: VSTD010 ID 108

Instrument ID: VOA-1

Misc: INITIAL CAL 10PPB

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY

Quant Time : 950127 08:21

Injected at: 950126 10:11

Page 5 of 5

QUANT REPORT

Page 1

Operator ID: JOY *Hale Rose - Chay* Quant Rev: 7 Quant Time: 950127 08:24
Output File: ^AA26E::D2 Injected at: 950126 11:26
Data File: >AA26E::D5 Dilution Factor: 1.00000
Name: VSTD020 ID 108 Instrument ID: VOA-1
Misc: INITIAL CAL 20PPB Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950126 10:49

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *BROMOCHLOROMETHANE	6.06	128.0	136217	50.00	UG/L	76
2) CHLOROMETHANE	.94	50.0	39594	20.69	UG/L	98
3) VINYL CHLORIDE	1.06	62.0	49283	20.79	UG/L	97
4) BROMOMETHANE	1.33	94.0	65185	21.23	UG/L	99
5) CHLOROETHANE	1.44	64.0	26105	20.97	UG/L	97
6) 1,1-DICHLOROETHENE	2.32	96.0	61893	21.37	UG/L	80
7) CARBON DISULFIDE	2.46	76.0	151559	20.46	UG/L	99
8) ACETONE	2.51	43.0	6217	21.99	UG/L	70
9) METHYLENE CHLORIDE	3.11	84.0	62141	21.19	UG/L	82
10) 1,2-DICHLOROETHENE (TOTAL)	5.63	96.0	137450M _{JOC}	41.19	UG/L	70
11) 1,1-DICHLOROETHANE	4.38	63.0	106077	20.61	UG/L	98
12) 2-BUTANONE	5.88	43.0	8632	22.02	UG/L	100
13) CHLOROFORM	6.40	83.0	133130	19.61	UG/L	95
14) 1,2-DICHLOROETHANE-d4	7.22	65.0	64699	20.17	UG/L	80
15) 1,2-DICHLOROETHANE	7.39	62.0	74736	19.54	UG/L	98
16) TETRAHYDROFURAN	6.18	42.0	11453	20.78	UG/L	99
17) *1,4-DIFLUOROBENZENE	8.27	114.0	523349	50.00	UG/L	86
18) VINYL ACETATE	4.78	43.0	72293	19.87	UG/L	100
19) 1,1,1-TRICHLOROETHANE	6.50	97.0	107771	19.64	UG/L	95
20) CARBON TETRACHLORIDE	6.82	117.0	104917	19.42	UG/L	98
21) BENZENE	7.23	78.0	158139	20.00	UG/L	100
22) TRICHLOROETHENE	8.61	130.0	86308	20.11	UG/L	99
23) 1,2-DICHLOROPROPANE	9.01	63.0	73047	20.18	UG/L	98
24) BROMODICHLOROMETHANE	9.72	83.0	122172	19.08	UG/L	97
25) CIS-1,3-DICHLOROPROPENE	10.60	75.0	100468	19.16	UG/L	99
26) TRANS-1,3-DICHLOROPROPENE	11.81	75.0	85255	19.13	UG/L	96
27) 1,1,2-TRICHLOROETHANE	12.11	97.0	73698	20.02	UG/L	99
28) DIBROMOCHLOROMETHANE	12.79	129.0	130084	18.66	UG/L	97
29) BROMOFORM	15.69	173.0	103866	17.95	UG/L	97
30) 2-PENTANONE	9.26	86.0	5838	19.38	UG/L	100
31) 1-BUTANOL	9.29	56.0	48750M _{JOC}	986.63	UG/L	100
32) *CHLOROBENZENE-d5	13.89	117.0	429297	50.00	UG/L	87
33) PYRIDINE	11.06	79.0	82810M _{JOC}	995.76	UG/L	100
34) 4-METHYL-2-PENTANONE	11.09	43.0	45506	19.43	UG/L	90
35) TOLUENE-d8	11.02	98.0	193330	20.91	UG/L	93
36) TOLUENE	11.14	91.0	199742	20.35	UG/L	98
37) TETRACHLOROETHENE	12.18	164.0	93032	20.85	UG/L	97
38) 2-HEXANONE	12.81	43.0	18776	20.37	UG/L	90
39) CHLOROBENZENE	13.94	112.0	164505	19.64	UG/L	98
40) ETHYLBENZENE	14.30	106.0	71483	20.64	UG/L	97

QUANT REPORT

Page 2

Operator ID: JOY
Output File: ^AA26E::D2
Data File: >AA26E::D5
Name: VSTD020 ID 108
Misc: INITIAL CAL 20PPB

Quant Rev: 7 Quant Time: 950127 08:24
Injected at: 950126 11:26
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950126 10:49

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	XYLENE (TOTAL)	14.57	106.0	257613M _{inc}	60.96	UG/L	94
42)	STYRENE	15.41	104.0	136449	20.00	UG/L	88
43)	BROMOFLUOROBENZENE	16.45	95.0	136105	20.23	UG/L	87
44)	1,1,2,2-TETRACHLOROETHANE	17.02	83.0	117869	19.85	UG/L	98
45)	ISOPROPYLBENZENE	16.21	105.0	264886	20.89	UG/L	97
46)	1,3,5-TRIMETHYLBENZENE	17.55	105.0	215591	20.82	UG/L	93
47)	1,2,4-TRIMETHYLBENZENE	18.31	105.0	229489	20.32	UG/L	99
48)	1,2,3-TRIMETHYLBENZENE	19.17	105.0	220637	20.83	UG/L	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA26E::D5

Quant Output File: ^AA26E::D2

Name: VSTD020 ID_108

Instrument ID: VOA-1

Misc: INITIAL CAL 20PPB

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY

Quant Time : 950127 08:24

Injected at: 950126 11:26

Page 1 of 5

TOTAL ION CHROMATOGRAM

File >AA26E 35.0-350.0 amu. VSTD020 ID_108 INITIAL CAL 20PPB
TIC

Data File: >AA26E::D5
Name: VSTD020 ID_108
Misc: INITIAL CAL 20PPB

Quant Output File: ^AA26E::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:24
Injected at: 950126 11:26

TOTAL ION CHROMATOGRAM

Data File: >AA26E::D5
Name: VSTD020 ID 108
Misc: INITIAL CAL 20PPB

Quant Output File: ^AA26E::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:24
Injected at: 950126 11:26

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26E::D5 Quant Output File: ^AA26E::D2
Name: VSTD020 ID 108 Instrument ID: VOA-1
Misc: INITIAL CAL 20PPB Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46 Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:24
Injected at: 950126 11:26

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26E::D5

Quant Output File: ^AA26E::D2

Name: VSTD020 ID 108

Instrument ID: VOA-1

Misc: INITIAL CAL 20PPB

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY

Quant Time : 950127 08:24

Injected at: 950126 11:26

Page 5 of 5

1/27/95

Operator ID: JOY *Julekx-amy*
 Output File: ^AA26D::D2
 Data File: >AA26D::D5
 Name: VSTD050 ID 108
 Misc: INITIAL CAL 50PPB

QUANT REPORT
 Quant Rev: 7

Quant Time: 950127 07:55
 Injected at: 950126 10:49
 Dilution Factor: 1.00000
 Instrument ID: VOA-1

Instrument ID: 70 2

ID File: ID 108::QT

WHC-SD-WM-DP-096, REV. 0

Title: VOLATILE ANALYSIS

I/O device error on LU 1 The reason is:

Special driver defined error= 41

Request has been flushed

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.05	128.0	141364	50.00	UG/L	83
2)	CHLOROMETHANE	.94	50.0	99298	50.00	UG/L	98
3)	VINYL CHLORIDE	1.06	62.0	123002	50.00	UG/L	98
4)	BROMOMETHANE	1.31	94.0	159342	50.00	UG/L	97
5)	CHLOROETHANE	1.44	64.0	64602	50.00	UG/L	99
6)	1,1-DICHLOROETHENE	2.30	96.0	150291	50.00	UG/L	79
7)	CARBON DISULFIDE	2.45	76.0	384368	50.00	UG/L	98
8)	ACETONE	2.53	43.0	14669	50.00	UG/L	76
9)	METHYLENE CHLORIDE	3.10	84.0	152145	1/27/95 50.00	UG/L	84
10)	1,2-DICHLOROETHENE (TOTAL)	5.61	96.0	346322	MJoc 99.88	UG/L	71
11)	1,1-DICHLOROETHANE	4.38	63.0	267071	1/27/95 50.00	UG/L	98
12)	2-BUTANONE	5.87	43.0	20341	MJoc 52.66	UG/L	100
13)	CHLOROFORM	6.41	83.0	352335	50.00	UG/L	97
14)	1,2-DICHLOROETHANE-d4	7.22	65.0	166410	50.00	UG/L	93
15)	1,2-DICHLOROETHANE	7.37	62.0	198417	50.00	UG/L	97
16)	TETRAHYDROFURAN	6.19	42.0	28601	50.00	UG/L	99
17)	*1,4-DIFLUOROBENZENE	8.26	114.0	544954	50.00	UG/L	86
18)	VINYL ACETATE	4.77	43.0	189384	50.00	UG/L	100
19)	1,1,1-TRICHLOROETHANE	6.51	97.0	285704	50.00	UG/L	99
20)	CARBON TETRACHLORIDE	6.82	117.0	281265	50.00	UG/L	99
21)	BENZENE	7.23	78.0	411683	50.00	UG/L	100
22)	TRICHLOROETHENE	8.60	130.0	223419	50.00	UG/L	97
23)	1,2-DICHLOROPROPANE	9.01	63.0	188498	50.00	UG/L	95
24)	BROMODICHLOROMETHANE	9.71	83.0	333328	50.00	UG/L	98
25)	CIS-1,3-DICHLOROPROPENE	10.60	75.0	272954	50.00	UG/L	99
26)	TRANS-1,3-DICHLOROPROPENE	11.81	75.0	232004	50.00	UG/L	96
27)	1,1,2-TRICHLOROETHANE	12.10	97.0	191650	50.00	UG/L	98
28)	DIBROMOCHLOROMETHANE	12.79	129.0	362882	50.00	UG/L	99
29)	BROMOFORM	15.68	173.0	301297	50.00	UG/L	99
30)	2-PENTANONE	9.28	86.0	15682	50.00	UG/L	100
31)	1-BUTANOL	9.31	56.0	128626	2500.00	UG/L	100
32)	*CHLOROBENZENE-d5	13.89	117.0	459679	50.00	UG/L	87
33)	PYRIDINE	11.04	79.0	222621	222621.0	NO CALIB	100
34)	4-METHYL-2-PENTANONE	11.10	43.0	125386	50.00	UG/L	84
35)	TOLUENE-d8	11.03	98.0	495121	50.00	UG/L	95
36)	TOLUENE	11.16	91.0	525627	50.00	UG/L	99
37)	TETRACHLOROETHENE	12.18	164.0	238868	50.00	UG/L	95
38)	2-HEXANONE	12.82	43.0	49357	50.00	UG/L	95
39)	CHLOROBENZENE	13.94	112.0	448491	50.00	UG/L	98
40)	ETHYLBENZENE	14.31	106.0	185389	50.00	UG/L	99

QUANT REPORT

Page 2

Operator ID: JOY   Quant Rev: 7   Quant Time: 950127 07:55
Output File: ^AA26D::D2   Injected at: 950126 10:49
Data File: >AA26D::D5   Dilution Factor: 1.00000
Name: VSTD050   ID 108   Instrument ID: VOA-1
Misc: INITIAL CAL 50PPB   Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

WHC-SD-WM-DP-096, REV.0

Last Qcal Time: 950126 10:49

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	XYLENE (TOTAL)	14.57	106.0	678785M	150.18	UG/L	97
42)	STYRENE	15.43	104.0	365175	50.00	UG/L	89
43)	BROMOFLUOROBENZENE	16.45	95.0	360219	50.00	UG/L	90
44)	1,1,2,2-TETRACHLOROETHANE	17.02	83.0	317933	50.00	UG/L	98
45)	ISOPROPYLBENZENE	16.22	105.0	678921	50.00	UG/L	96
46)	1,3,5-TRIMETHYLBENZENE	17.55	105.0	554504	50.00	UG/L	93
47)	1,2,4-TRIMETHYLBENZENE	18.31	105.0	604734	50.00	UG/L	96
48)	1,2,3-TRIMETHYLBENZENE	19.19	105.0	567204	50.00	UG/L	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA26D::D5
Name: VSTD050 ID 108
Misc: INITIAL CAL 50PPB

Quant Output File: ^AA26D::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 07:55
Injected at: 950126 10:49

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26D::D5
Name: VSTD050 ID 108
Misc: INITIAL CAL 50PPB

Quant Output File: ^AA26D::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 07:55
Injected at: 950126 10:49

Page 2 of 5

TOTAL ION CHROMATOGRAM

File >AA26D 35.0-350.0 amu. VSTD050 ID_108 INITIAL CAL 50PPB
TIC

Data File: >AA26D::D5
Name: VSTD050 ID 108
Misc: INITIAL CAL 50PPB

Quant Output File: ^AA26D::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 07:55
Injected at: 950126 10:49

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26D::D5

Quant Output File: ^AA26D::D2

Name: VSTD050 ID 108

Instrument ID: VOA-1

Misc: INITIAL CAL 50PPB

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY

Quant Time : 950127 07:55

Injected at: 950126 10:49

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26D::D5   Quant Output File: ^AA26D::D2
Name: VSTD050   ID 108   Instrument ID: VOA-1
Misc: INITIAL CAL 50PPB   Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46   Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 07:55
Injected at: 950126 10:49

Page 5 of 5

QUANT REPORT

Page 1

Operator ID: JOY *Jub. Rm. Cng*
 Output File: ^AA26H::D2
 Data File: >AA26H::D5
 Name: VSTD100 ID 108
 Misc: INITIAL CAL 100PPB

Quant Rev: 7 Quant Time: 950127 08:29
 Injected at: 950126 14:45
 Dilution Factor: 1.00000
 Instrument ID: VOA-1

Instrument ID: 70 2

WHC-SD-WM-DP-096, REV. 0

ID File: ID 108::QT
 Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.05	128.0	134236	50.00	UG/L	80
2)	CHLOROMETHANE	.96	50.0	194700	103.24	UG/L	97
3)	VINYL CHLORIDE	1.07	62.0	247573	105.98	UG/L	99
4)	BROMOMETHANE	1.33	94.0	314544	103.94	UG/L	97
5)	CHLOROETHANE	1.43	64.0	127272	103.74	UG/L	97
6)	1,1-DICHLOROETHENE	2.30	96.0	288319	101.01	UG/L	77
7)	CARBON DISULFIDE	2.44	76.0	749384	102.66	UG/L	99
8)	ACETONE	2.58	43.0	26302	94.41	UG/L	72
9)	METHYLENE CHLORIDE	3.11	84.0	296409	102.58	UG/L	82
10)	1,2-DICHLOROETHENE (TOTAL)	5.62	96.0	682685	207.59	UG/L	69
11)	1,1-DICHLOROETHANE	4.39	63.0	526118	103.73	UG/L	99
12)	2-BUTANONE	5.89	43.0	41259	106.80	UG/L	100
13)	CHLOROFORM	6.41	83.0	688710	102.92	UG/L	96
14)	1,2-DICHLOROETHANE-d4	7.23	65.0	322782	102.13	UG/L	86
15)	1,2-DICHLOROETHANE	7.37	62.0	386914	102.68	UG/L	98
16)	TETRAHYDROFURAN	6.22	42.0	56622	104.24	UG/L	96
17)	*1,4-DIFLUOROBENZENE	8.26	114.0	536580	50.00	UG/L	86
18)	VINYL ACETATE	4.79	43.0	371103	99.51	UG/L	100
19)	1,1,1-TRICHLOROETHANE	6.51	97.0	559060	99.37	UG/L	98
20)	CARBON TETRACHLORIDE	6.80	117.0	570918	103.07	UG/L	99
21)	BENZENE	7.23	78.0	823012	101.52	UG/L	100
22)	TRICHLOROETHENE	8.61	130.0	451987	102.73	UG/L	99
23)	1,2-DICHLOROPROPANE	9.00	63.0	374819	100.97	UG/L	96
24)	BROMODICHLOROMETHANE	9.71	83.0	676346	103.04	UG/L	99
25)	CIS-1,3-DICHLOROPROPENE	10.60	75.0	554638	103.18	UG/L	98
26)	TRANS-1,3-DICHLOROPROPENE	11.80	75.0	468813	102.61	UG/L	99
27)	1,1,2-TRICHLOROETHANE	12.11	97.0	378210	100.21	UG/L	96
28)	DIBROMOCHLOROMETHANE	12.79	129.0	733221	102.60	UG/L	99
29)	BROMOFORM	15.68	173.0	612959	103.31	UG/L	97
30)	2-PENTANONE	9.28	86.0	31055	100.56	UG/L	100
31)	1-BUTANOL	9.35	56.0	233239	4604.03	UG/L	100
32)	*CHLOROBENZENE-d5	13.89	117.0	443132	50.00	UG/L	89
33)	PYRIDINE	11.05	79.0	463417	5398.43	UG/L	100
34)	4-METHYL-2-PENTANONE	11.11	43.0	244110	100.98	UG/L	89
35)	TOLUENE-d8	11.03	98.0	980341	102.70	UG/L	93
36)	TOLUENE	11.15	91.0	1046369	103.25	UG/L	99
37)	TETRACHLOROETHENE	12.18	164.0	473400	102.79	UG/L	93
38)	2-HEXANONE	12.82	43.0	98158	103.15	UG/L	86
39)	CHLOROBENZENE	13.94	112.0	870208	100.64	UG/L	99
40)	ETHYLBENZENE	14.30	106.0	366882	102.64	UG/L	99

QUANT REPORT

Page 2

Operator ID: JOY   Quant Rev: 7   Quant Time: 950127 08:29
Output File: ^AA26H::D2   Injected at: 950126 14:45
Data File: >AA26H::D5   Dilution Factor: 1.00000
Name: VSTD100   ID 108   Instrument ID: VOA-1
Misc: INITIAL CAL 100PPB   Instrument ID: 70 2

ID File: ID 108::QT

WHC-SD-WM-DP-096, REV. 0

Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	XYLENE (TOTAL)	14.58	106.0	1339799M	307.13	UG/L	72
42)	STYRENE	15.43	104.0	713936	101.40	UG/L	87
43)	BROMOFLUOROBENZENE	16.46	95.0	708805	102.06	UG/L	89
44)	1,1,2,2-TETRACHLOROETHANE	17.03	83.0	609145	99.37	UG/L	99
45)	ISOPROPYLBENZENE	16.22	105.0	1428581	109.14	UG/L	96
46)	1,3,5-TRIMETHYLBENZENE	17.56	105.0	1144270	107.03	UG/L	97
47)	1,2,4-TRIMETHYLBENZENE	18.30	105.0	1225048	105.07	UG/L	98
48)	1,2,3-TRIMETHYLBENZENE	19.18	105.0	1159994	106.07	UG/L	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA26H::D5
Name: VSTD100 ID 108
Misc: INITIAL CAL 100PPB

Quant Output File: ^AA26H::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:29
Injected at: 950126 14:45

Page 1 of 5

TOTAL ION CHROMATOGRAM

File >AA26H 35.0-350.0 amu. VSTD100 ID_108 INITIAL CAL 100PPB
TIC

Data File: >AA26H::D5
Name: VSTD100 ID_108
Misc: INITIAL CAL 100PPB

Quant Output File: ^AA26H::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:29
Injected at: 950126 14:45

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26H::D5
Name: VSTD100 ID_108
Misc: INITIAL CAL 100PPB

Quant Output File: ^AA26H::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:29
Injected at: 950126 14:45

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26H::D5
Name: VSTD100 ID_108
Misc: INITIAL CAL 100PPB

Quant Output File: ^AA26H::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:29
Injected at: 950126 14:45

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26H::D5   Quant Output File: ^AA26H::D2
Name: VSTD100   ID 108   Instrument ID: VOA-1
Misc: INITIAL CAL 100PPB   Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46   Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:29
Injected at: 950126 14:45

Page 5 of 5

QUANT REPORT

Page 1

Operator ID: JOY *Jade Puga - Chang* 1/27/95
 Output File: ^AA26G::D2
 Data File: >AA26G::D5
 Name: VSTD200 ID 108
 Misc: INITIAL CAL 200PPB Instrument ID: 70 2

Quant Rev: 7 Quant Time: 950127 08:26
 Injected at: 950126 14:08
 Dilution Factor: 1.00000
 Instrument ID: VOA-1

ID File: ID 108::QT
 Title: VOLATILE ANALYSIS
 Last Calibration: 941014 09:46

WHC-SD-WM-DP-096, REV.0

Last Qcal Time: 950126 10:49

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.06	128.0	131373	50.00	UG/L	82
2)	CHLOROMETHANE	.96	50.0	375413	203.41	UG/L	99
3)	VINYL CHLORIDE	1.07	62.0	481858	210.77	UG/L	98
4)	BROMOMETHANE	1.33	94.0	612755	206.90	UG/L	97
5)	CHLOROETHANE	1.43	64.0	243045	202.42	UG/L	99
6)	1,1-DICHLOROETHENE	2.29	96.0	507720	181.76	UG/L	84
7)	CARBON DISULFIDE	2.43	76.0	1369652	191.72	UG/L	99
8)	ACETONE	2.64	43.0	64957	238.25	UG/L	78
9)	METHYLENE CHLORIDE	3.11	84.0	550392	194.63	UG/L	84
10)	1,2-DICHLOROETHENE (TOTAL)	5.62	96.0	1305340M	405.58	UG/L	73
11)	1,1-DICHLOROETHANE	4.38	63.0	1008320	203.13	UG/L	97
12)	2-BUTANONE	5.95	43.0	80435	212.75	UG/L	100
13)	CHLOROFORM	6.42	83.0	1364253	208.33	UG/L	97
14)	1,2-DICHLOROETHANE-d4	7.24	65.0	615897	199.13	UG/L	97
15)	1,2-DICHLOROETHANE	7.38	62.0	775587	210.31	UG/L	98
16)	TETRAHYDROFURAN	6.25	42.0	107198	201.65	UG/L	97
17)	*1,4-DIFLUOROBENZENE	8.27	114.0	519221	50.00	UG/L	87
18)	VINYL ACETATE	4.81	43.0	723612	200.51	UG/L	100
19)	1,1,1-TRICHLOROETHANE	6.50	97.0	1110054	203.89	UG/L	99
20)	CARBON TETRACHLORIDE	6.80	117.0	1149869	214.54	UG/L	99
21)	BENZENE	7.24	78.0	1611221	205.39	UG/L	100
22)	TRICHLOROETHENE	8.60	130.0	893012	209.76	UG/L	98
23)	1,2-DICHLOROPROPANE	9.00	63.0	743135	206.89	UG/L	99
24)	BROMODICHLOROMETHANE	9.71	83.0	1378553	217.03	UG/L	94
25)	CIS-1,3-DICHLOROPROPENE	10.61	75.0	1119478	215.23	UG/L	98
26)	TRANS-1,3-DICHLOROPROPENE	11.81	75.0	967975	218.95	UG/L	98
27)	1,1,2-TRICHLOROETHANE	12.11	97.0	739614	202.52	UG/L	96
28)	DIBROMOCHLOROMETHANE	12.80	129.0	1496731	216.45	UG/L	98
29)	BROMOFORM	15.69	173.0	1352966	235.65	UG/L	97
30)	2-PENTANONE	9.30	86.0	60471	202.36	UG/L	100
31)	1-BUTANOL	9.41	56.0	463742M	9460.09	UG/L	100
32)	*CHLOROBENZENE-d5	13.89	117.0	437060	50.00	UG/L	89
33)	PYRIDINE	11.09	79.0	875833M	10344.49	UG/L	100
34)	4-METHYL-2-PENTANONE	11.12	43.0	447081	187.51	UG/L	89
35)	TOLUENE-d8	11.03	98.0	1793801	190.52	UG/L	99
36)	TOLUENE	11.16	91.0	1850804	185.17	UG/L	71
37)	TETRACHLOROETHENE	12.18	164.0	940561	207.07	UG/L	96
38)	2-HEXANONE	12.82	43.0	168914	179.97	UG/L	84
39)	CHLOROBENZENE	13.93	112.0	1657143	194.31	UG/L	91
40)	ETHYLBENZENE	14.31	106.0	745888	211.58	UG/L	64

QUANT REPORT

Page 2

Operator ID: JOY
Output File: ^AA26G::D2
Data File: >AA26G::D5
Name: VSTD200 ID 108
Misc: INITIAL CAL 200PPB

Quant Rev: 7   Quant Time: 950127 08:26
                  Injected at: 950126 14:08
                  Dilution Factor: 1.00000
                  Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950126 10:49

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	XYLENE (TOTAL)	14.59	106.0	2627693M ^{7/27/95}	610.73	UG/L	
42)	STYRENE	15.44	104.0	1486327	214.04	UG/L	92
43)	BROMOFLUOROBENZENE	16.46	95.0	1429287	208.66	UG/L	81
44)	1,1,2,2-TETRACHLOROETHANE	17.03	83.0	1301309	215.24	UG/L	98
45)	ISOPROPYLBENZENE	16.23	105.0	2238938	173.42	UG/L	58
46)	1,3,5-TRIMETHYLBENZENE	17.57	105.0	1997690	189.46	UG/L	66
47)	1,2,4-TRIMETHYLBENZENE	18.31	105.0	2031147	176.63	UG/L	59
48)	1,2,3-TRIMETHYLBENZENE	19.17	105.0	1980047M ^{7/27/95}	183.58	UG/L	74

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA26G::D5

Quant Output File: ^AA26G::D2

Name: VSTD200 ID_108

Instrument ID: VOA-1

Misc: INITIAL CAL 200PPB

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY

Quant Time : 950127 08:26

Injected at: 950126 14:08

Page 1 of 5

TOTAL ION CHROMATOGRAM

File >AA26G 35.0-350.0 amu. VSTD200. ID_108 INITIAL CAL 200PPB
TIC

Data File: >AA26G::D5

Quant Output File: ^AA26G::D2

Name: VSTD200 ID_108

Instrument ID: VOA-1

Misc: INITIAL CAL 200PPB

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY

Quant Time : 950127 08:26

Injected at: 950126 14:08

Page 2 of 5

TOTAL ION CHROMATOGRAM

File >AA266 35.0-350.0 amu. VSTD200 ID_108 INITIAL CAL 200PPB
TIC

Data File: >AA26G::D5
Name: VSTD200 ID 108
Misc: INITIAL CAL 200PPB

Quant Output File: ^AA26G::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:26
Injected at: 950126 14:08

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA26G::D5 Quant Output File: ^AA26G::D2
Name: VSTD200 ID_108 Instrument ID: VOA-1
Misc: INITIAL CAL 200PPB Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 941014 09:46 Last Qcal Time: 950126 10:49

Operator ID: JOY
Quant Time : 950127 08:26
Injected at: 950126 14:08

Page 4 of 5

WHC-SD-WM-DP-096, REV. 0

TOTAL ION CHROMATOGRAM

Data File: >AA26G::D5

Quant Output File: ^AA26G::D2

Name: VSTD200 ID_108

Instrument ID: VOA-1

Misc: INITIAL CAL 200PPB

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 941014 09:46

Last Qcal Time: 950126 10:49

Operator ID: JOY

Quant Time : 950127 08:26

Injected at: 950126 14:08

Page 5 of 5

7A - RCRA
VOLATILE CONTINUING CALIBRATION CHECK

WHC-SD-WM-DP-096, REV. 0

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Instrument ID: 70 2 Calibration Date: 1/30/95 Time: 10:37

Lab File ID: >AA30B Init. Calib. Date(s): 01/26/94 01/26/94

Heated Purge: (Y/N) N Init. Calib. Times: 1011 1445

GC Column: DB-624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	# .727	.729	0.300	.2	
Bromomethane	1.190	1.185		.4	
Vinyl Chloride	* .926	.910		1.8	25.0
Chloroethane	.471	.499		6.0	
Methylene_Chloride	1.110	1.141		2.8	
Acetone	.110	.105		4.5	
Carbon Disulfide	2.753	2.981		8.3	
1,1-Dichloroethene	* 1.076	1.149		6.8	25.0
1,1-Dichloroethane	# 1.937	1.975	0.300	2.0	
1,2-Dichloroethene_(total)	1.255	1.282		2.2	
Chloroform	* 2.519	2.442		3.0	25.0
1,2-Dichloroethane	1.419	1.377		3.0	
2-Butanone	.164	.160		2.3	
1,1,1-Trichloroethane	.519	.528		1.6	
Carbon Tetrachloride	.516	.523		1.4	
Bromodichloromethane	.610	.622		2.0	
1,2-Dichloropropane	* .352	.346		1.7	25.0
cis-1,3-Dichloropropene	.502	.502		.0	
Trichloroethene	.424	.446		5.1	
Dibromochloromethane	.658	.673		2.3	
1,1,2-Trichloroethane	.353	.350		.8	
Benzene	.761	.761		.0	
trans-1,3-Dichloropropene	.427	.428		.1	
Bromoform	# .546	.555	0.250	1.7	
4-Methyl-2-pentanone	.272	.284		4.3	
2-Hexanone	.108	.104		4.1	
Tetrachloroethene	.538	.534		.6	
1,1,2,2-Tetrachloroethane	# .697	.686	0.300	1.5	
Toluene	* 1.149	1.165		1.3	25.0
Chlorobenzene	# .969	.973	0.300	.4	
Ethylbenzene	* .416	.409		1.7	25.0
Styrene	.817	.817		.0	
Xylene_(total)	.502	.501		.2	
Toluene-d8	1.090	1.089		.2	
Bromofluorobenzene	.797	.799		.2	
1,2-Dichloroethane-d4	1.185	1.153		2.8	

* - CCC (Max %D = 25) # SPCC (Min RRF = 0.3 (Bromoform 0.25))

FORM VII VOA

7A - RCRA
VOLATILE CONTINUING CALIBRATION CHECK

WHC-SD-WM-0P-096, REV. 0

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Instrument ID: 70 2 Calibration Date: 1/31/95 Time: 8:54

Lab File ID: >AA31B Init. Calib. Date(s): 01/26/94 01/26/94

Heated Purge: (Y/N) N Init. Calib. Times: 1011 1445

GC Column: DB-624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	# .727	.736	0.300	1.2	
Bromomethane	1.190	1.193		.3	
Vinyl Chloride	* .926	.919		.8	25.0
Chloroethane	.471	.506		7.5	
Methylene Chloride	1.110	1.146		3.3	
Acetone	.110	.098		10.3	
Carbon Disulfide	2.753	2.893		5.1	
1,1-Dichloroethene	* 1.076	1.139		5.9	25.0
1,1-Dichloroethane	# 1.937	1.974	0.300	1.9	
1,2-Dichloroethene (total)	1.255	1.269		1.2	
Chloroform	* 2.519	2.486		1.3	25.0
1,2-Dichloroethane	1.419	1.412		.5	
2-Butanone	.164	.136		17.4	
1,1,1-Trichloroethane	.519	.527		1.5	
Carbon Tetrachloride	.516	.525		1.8	
Bromodichloromethane	.610	.630		3.2	
1,2-Dichloropropane	* .352	.351		.3	25.0
cis-1,3-Dichloropropene	.502	.502		.0	
Trichloroethene	.424	.444		4.8	
Dibromochloromethane	.658	.686		4.3	
1,1,2-Trichloroethane	.353	.354		.4	
Benzene	.761	.763		.3	
trans-1,3-Dichloropropene	.427	.437		2.2	
Bromoform	# .546	.565	0.250	3.5	
4-Methyl-2-pentanone	.272	.289		6.2	
2-Hexanone	.108	.097		10.7	
Tetrachloroethene	.538	.528		1.8	
1,1,2,2-Tetrachloroethane	# .697	.728	0.300	4.4	
Toluene	* 1.149	1.173		2.1	25.0
Chlorobenzene	# .969	.987	0.300	1.8	
Ethylbenzene	* .416	.410		1.4	25.0
Styrene	.817	.818		.1	
Xylene (total)	.502	.513		2.3	
Toluene-d8	1.090	1.085		.4	
Bromofluorobenzene	.797	.787		1.3	
1,2-Dichloroethane-d4	1.185	1.173		1.1	

* - CCC (Max %D = 25) # SPCC (Min RRF = 0.3 (Bromoform 0.25))

FORM VII VOA

7A - RCRA
VOLATILE CONTINUING CALIBRATION CHECK

WHC-SD-WM-DP-096, REV. 0

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Instrument ID: 70 2 Calibration Date: 2/13/95 Time: 10:01

Lab File ID: >AB13B Init. Calib. Date(s): 01/26/94 01/26/94

Heated Purge: (Y/N) N Init. Calib. Times: 1011 1445

GC Column: DB-624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	# .727	.768	0.300	5.6	
Bromomethane	1.190	1.230		3.3	
Vinyl Chloride	* .926	.937		1.1	25.0
Chloroethane	.471	.530		12.6	
Methylene Chloride	1.110	1.148		3.4	
Acetone	.110	.111		1.2	
Carbon Disulfide	2.753	2.916		5.9	
1,1-Dichloroethene	* 1.076	1.160		7.8	25.0
1,1-Dichloroethane	# 1.937	1.695	0.300	12.5	
1,2-Dichloroethene (total)	1.255	1.303		3.9	
Chloroform	* 2.519	2.471		1.9	25.0
1,2-Dichloroethane	1.419	1.397		1.6	
2-Butanone	.164	.199		21.2	
1,1,1-Trichloroethane	.519	.510		1.8	
Carbon Tetrachloride	.516	.503		2.4	
Bromodichloromethane	.610	.608		.3	
1,2-Dichloropropane	* .352	.342		2.9	25.0
cis-1,3-Dichloropropene	.502	.491		2.2	
Trichloroethene	.424	.431		1.7	
Dibromochloromethane	.658	.649		1.3	
1,1,2-Trichloroethane	.353	.345		2.1	
Benzene	.761	.748		1.7	
trans-1,3-Dichloropropene	.427	.418		2.1	
Bromoform	# .546	.532	0.250	2.5	
4-Methyl-2-pentanone	.272	.274		.9	
2-Hexanone	.108	.149		37.6	
Tetrachloroethene	.538	.532		1.1	
1,1,2,2-Tetrachloroethane	# .697	.693	0.300	.5	
Toluene	* 1.149	1.156		.6	25.0
Chlorobenzene	# .969	.968	0.300	.1	
Ethylbenzene	* .416	.406		2.2	25.0
Styrene	.817	.799		2.2	
Xylene (total)	.502	.496		1.1	
Toluene-d8	1.090	1.075		1.4	
Bromofluorobenzene	.797	.755		5.3	
1,2-Dichloroethane-d4	1.185	1.153		2.7	

* - CCC (Max %D = 25) # SPCC (Min RRF = 0.3 (Bromoform 0.25))

FORM VII VOA

7A - RCRA
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WHCWA Contract: WHC-SD-WM-DP-096, REV. 0
Lab Code: Case No.: SAS No.: SDG No.: CONCRETE
Instrument ID: 70 2 Calibration Date: 2/14/95 Time: 10:02
Lab File ID: >AB14C Init. Calib. Date(s): 01/26/94 01/26/94
Heated Purge: (Y/N) N Init. Calib. Times: 1011 1445
GC Column: DB-624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	# .727	.784	0.300	7.8	
Bromomethane	1.190	1.248		4.9	
Vinyl Chloride	* .926	.961		3.7	25.0
Chloroethane	.471	.528		12.1	
Methylene Chloride	1.110	1.169		5.3	
Acetone	.110	.100		9.1	
Carbon Disulfide	2.753	2.836		3.0	
1,1-Dichloroethene	* 1.076	1.151		7.0	25.0
1,1-Dichloroethane	# 1.937	1.981	0.300	2.3	
1,2-Dichloroethene (total)	1.255	1.305		4.0	
Chloroform	* 2.519	2.482		1.5	25.0
1,2-Dichloroethane	1.419	1.429		.6	
2-Butanone	.164	.125		24.2	
1,1,1-Trichloroethane	.519	.513		1.3	
Carbon Tetrachloride	.516	.512		.7	
Bromodichloromethane	.610	.612		.4	
1,2-Dichloropropane	* .352	.347		1.4	25.0
cis-1,3-Dichloropropene	.502	.497		1.1	
Trichloroethene	.424	.444		4.8	
Dibromochloromethane	.658	.664		1.0	
1,1,2-Trichloroethane	.353	.361		2.3	
Benzene	.761	.760		.1	
trans-1,3-Dichloropropene	.427	.423		.9	
Bromoform	# .546	.544	0.250	.3	
4-Methyl-2-pentanone	.272	.278		2.1	
2-Hexanone	.108	.118		9.2	
Tetrachloroethene	.538	.551		2.4	
1,1,2,2-Tetrachloroethane	# .697	.723	0.300	3.7	
Toluene	* 1.149	1.187		3.3	25.0
Chlorobenzene	# .969	.978	0.300	.9	
Ethylbenzene	* .416	.421		1.3	25.0
Styrene	.817	.813		.5	
Xylene (total)	.502	.512		2.0	
Toluene-d8	1.090	1.078		1.1	
Bromofluorobenzene	.797	.775		2.8	
1,2-Dichloroethane-d4	1.185	1.138		4.0	

* - CCC (Max %D = 25) # SPCC (Min RRF = 0.3 (Bromoform 0.25))

FORM VII VOA

QUANT REPORT

Page 1

2/9/95
J. H. H. - C. G.
Operator ID: JOY
Output File: ^AA30B::D2
Data File: >AA30B::D5
Name: VSTD050
Misc: DAILY CAL

Quant Rev: 7 Quant Time: 950130 11:08
Injected at: 950130 10:37
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.04	128.0	145623	50.00	UG/L	80
2)	CHLOROMETHANE	.96	50.0	106096	50.11	UG/L	98
3)	VINYL CHLORIDE	1.05	62.0	132516	49.11	UG/L	99
4)	BROMOMETHANE	1.33	94.0	172535	49.78	UG/L	99
5)	CHLOROETHANE	1.43	64.0	72648	53.00	UG/L	98
6)	1,1-DICHLOROETHENE	2.30	96.0	167286	53.39	UG/L	77
7)	CARBON DISULFIDE	2.44	76.0	434081	54.14	UG/L	99
8)	ACETONE	2.52	43.0	15253	47.75	UG/L	80
9)	METHYLENE CHLORIDE	3.09	84.0	166116	51.40	UG/L	81
10)	1,2-DICHLOROETHENE (TOTAL)	5.60	96.0	373336M	102.17	UG/L	70
11)	1,1-DICHLOROETHANE	4.35	63.0	2876132-795	50.97	UG/L	98
12)	2-BUTANONE	5.85	43.0	23366	48.82	UG/L	100
13)	CHLOROFORM	6.39	83.0	355646	48.48	UG/L	96
14)	1,2-DICHLOROETHANE-d4	7.21	65.0	167866	48.62	UG/L	84
15)	1,2-DICHLOROETHANE	7.35	62.0	200478	48.49	UG/L	98
16)	TETRAHYDROFURAN	6.17	42.0	29362	48.18	UG/L	93
17)	*1,4-DIFLUOROBENZENE	8.25	114.0	554135	50.00	UG/L	85
18)	VINYL ACETATE	4.75	43.0	195985	51.52	UG/L	100
19)	1,1,1-TRICHLOROETHANE	6.49	97.0	292391	50.82	UG/L	98
20)	CARBON TETRACHLORIDE	6.79	117.0	289911	50.71	UG/L	98
21)	BENZENE	7.21	78.0	421657	50.00	UG/L	100
22)	TRICHLOROETHENE	8.59	130.0	246938	52.55	UG/L	99
23)	1,2-DICHLOROPROPANE	8.99	63.0	191753	49.13	UG/L	97
24)	BROMODICHLOROMETHANE	9.69	83.0	344888	51.01	UG/L	97
25)	CIS-1,3-DICHLOROPROPENE	10.60	75.0	278258	49.97	UG/L	98
26)	TRANS-1,3-DICHLOROPROPENE	11.79	75.0	236971	50.03	UG/L	96
27)	1,1,2-TRICHLOROETHANE	12.10	97.0	193853	49.60	UG/L	98
28)	DIBROMOCHLOROMETHANE	12.78	129.0	372938	51.17	UG/L	98
29)	BROMOFORM	15.68	173.0	307398	50.84	UG/L	97
30)	2-PENTANONE	9.26	86.0	16078	50.54	UG/L	100
31)	1-BUTANOL	9.28	56.0	130998M	2640.38	UG/L	100
32)	*CHLOROBENZENE-d5	13.88	117.0	4550532-795	50.00	UG/L	87
33)	PYRIDINE	11.03	79.0	221856M	2537.76	UG/L	100
34)	4-METHYL-2-PENTANONE	11.07	43.0	1291492-795	52.15	UG/L	89
35)	TOLUENE-d8	11.01	98.0	495341	49.92	UG/L	95
36)	TOLUENE	11.14	91.0	530139	50.67	UG/L	97
37)	TETRACHLOROETHENE	12.17	164.0	243206	49.69	UG/L	97
38)	2-HEXANONE	12.79	43.0	47261	47.94	UG/L	82
39)	CHLOROBENZENE	13.93	112.0	442888	50.21	UG/L	99
40)	ETHYLBENZENE	14.29	106.0	185968	49.16	UG/L	99

QUANT REPORT

Page 2

Operator ID: JOY
Output File: ^AA30B::D2
Data File: >AA30B::D5
Name: VSTD050
Misc: DAILY CAL

Quant Rev: 7   Quant Time: 950130 11:08
                  Injected at: 950130 10:37
                  Dilution Factor: 1.00000
                  Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV.0

Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	XYLENE (TOTAL)	14.56	106.0	683841M	149.78	UG/L	98
42)	STYRENE	15.40	104.0	371739	49.99	UG/L	88
43)	BROMOFLUOROBENZENE	16.45	95.0	363526	50.10	UG/L	87
44)	1,1,2,2-TETRACHLOROETHANE	17.02	83.0	312350	49.24	UG/L	99
45)	ISOPROPYLBENZENE	16.21	105.0	710791	52.69	UG/L	97
46)	1,3,5-TRIMETHYLBENZENE	17.54	105.0	575224	51.51	UG/L	96
47)	1,2,4-TRIMETHYLBENZENE	18.31	105.0	602907	51.04	UG/L	99
48)	1,2,3-TRIMETHYLBENZENE	19.15	105.0	585352	51.77	UG/L	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA30B::D5

Name: VSTD050

Misc: DAILY CAL

Quant Output File: ^AA30B::D2

Instrument ID: VOA-1.

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: <none>

Operator ID: JOY

Quant Time : 950130 11:08

Injected at: 950130 10:37

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA30B::D5

Quant Output File: ^AA30B::D2

Name: VSTD050

Instrument ID: VOA-1

Misc: DAILY CAL

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: <none>

Operator ID: JOY

Quant Time : 950130 11:08

Injected at: 950130 10:37

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA30B::D5

Name: VSTD050

Misc: DAILY CAL

Quant Output File: ^AA30B::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: <none>

Operator ID: JOY

Quant Time : 950130 11:08

Injected at: 950130 10:37

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA30B::D5

Quant Output File: ^AA30B::D2

Name: VSTD050

Instrument ID: VOA-1

Misc: DAILY CAL

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: <none>

Operator ID: JOY

Quant Time : 950130 11:08

Injected at: 950130 10:37

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA30B::D5

Name: VSTD050

Misc: DAILY CAL

Quant Output File: ^AA30B::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: <none>

Operator ID: JOY

Quant Time : 950130 11:08

Injected at: 950130 10:37

Page 5 of 5

QUANT REPORT

Page 1

Operator ID: JOY
Output File: ^AA31B::D2
Data File: >AA31B::D5
Name: VSTD050
Misc: DAILY CAL

Quant Rev: 7
Quant Time: 950131 09:26
Injected at: 950131 08:54
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

WHC-SD-WM-DP-096, REV. 0

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.04	128.0	141296	50.00	UG/L	78
2)	CHLOROMETHANE	.95	50.0	103999	50.51	UG/L	98
3)	VINYL CHLORIDE	1.06	62.0	129873	50.50	UG/L	99
4)	BROMOMETHANE	1.33	94.0	168585	50.35	UG/L	99
5)	CHLOROETHANE	1.44	64.0	71485	50.71	UG/L	96
6)	1,1-DICHLOROETHENE	2.30	96.0	160954	49.58	UG/L	81
7)	CARBON DISULFIDE	2.43	76.0	408808	48.53	UG/L	99
8)	ACETONE	2.50	43.0	13901	46.96	UG/L	77
9)	METHYLENE CHLORIDE	3.09	84.0	161923	50.23	UG/L	85
10)	1,2-DICHLOROETHENE (TOTAL)	5.59	96.0	358709M	99.02	UG/L	68
11)	1,1-DICHLOROETHANE	4.36	63.0	278953	49.98	UG/L	99
12)	2-BUTANONE	5.86	43.0	19185	42.31	UG/L	100
13)	CHLOROFORM	6.39	83.0	351260	50.90	UG/L	
14)	1,2-DICHLOROETHANE-d4	7.21	65.0	165694	50.86	UG/L	83
15)	1,2-DICHLOROETHANE	7.35	62.0	199449	51.27	UG/L	97
16)	TETRAHYDROFURAN	6.17	42.0	29143	51.15	UG/L	98
17)	*1,4-DIFLUOROBENZENE	8.25	114.0	542615	50.00	UG/L	86
18)	VINYL ACETATE	4.76	43.0	190519	49.64	UG/L	100
19)	1,1,1-TRICHLOROETHANE	6.50	97.0	285993	49.94	UG/L	99
20)	CARBON TETRACHLORIDE	6.79	117.0	284913	50.18	UG/L	99
21)	BENZENE	7.21	78.0	413975	50.13	UG/L	100
22)	TRICHLOROETHENE	8.58	130.0	241008	49.84	UG/L	95
23)	1,2-DICHLOROPROPANE	9.00	63.0	190465	50.72	UG/L	97
24)	BROMODICHLOROMETHANE	9.69	83.0	341610	50.58	UG/L	97
25)	CIS-1,3-DICHLOROPROPENE	10.60	75.0	272486	50.00	UG/L	99
26)	TRANS-1,3-DICHLOROPROPENE	11.79	75.0	237103	51.09	UG/L	98
27)	1,1,2-TRICHLOROETHANE	12.10	97.0	192012	50.58	UG/L	98
28)	DIBROMOCHLOROMETHANE	12.78	129.0	372124	50.95	UG/L	99
29)	BROMOFORM	15.67	173.0	306397	50.90	UG/L	98
30)	2-PENTANONE	9.25	86.0	16378	52.01	UG/L	100
31)	1-BUTANOL	9.28	56.0	128460	2503.61	UG/L	100
32)	*CHLOROBENZENE-d5	13.87	117.0	447256	50.00	UG/L	87
33)	PYRIDINE	11.03	79.0	226601	2597.98	UG/L	100
34)	4-METHYL-2-PENTANONE	11.08	43.0	129212	50.90	UG/L	87
35)	TOLUENE-d8	11.01	98.0	485440	49.85	UG/L	95
36)	TOLUENE	11.14	91.0	524654	50.35	UG/L	97
37)	TETRACHLOROETHENE	12.17	164.0	236099	49.39	UG/L	95
38)	2-HEXANONE	12.79	43.0	43238	46.54	UG/L	80
39)	CHLOROBENZENE	13.93	112.0	441398	50.70	UG/L	99
40)	ETHYLBENZENE	14.28	106.0	183361	50.16	UG/L	

QUANT REPORT

Page 2

Operator ID: JOY
Output File: ^AA31B::D2
Data File: >AA31B::D5
Name: VSTD050
Misc: DAILY CAL

Quant Rev: 7   Quant Time: 950131 09:26
                  Injected at: 950131 08:54
                  Dilution Factor: 1.00000
                  Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950130 10:37

	Compound	R.T.	Q	ion	Area	Conc	Units	q
41)	XYLENE (TOTAL)	14.57	106.0		688439M	53.64	UG/L	97
42)	STYRENE	15.40	104.0		365847	50.07	UG/L	87
43)	BROMOFLUOROBENZENE	16.44	95.0		352006	49.26	UG/L	90
44)	1,1,2,2-TETRACHLOROETHANE	17.01	83.0		325504	53.01	UG/L	95
45)	ISOPROPYLBENZENE	16.21	105.0		704368	50.41	UG/L	97
46)	1,3,5-TRIMETHYLBENZENE	17.54	105.0		572062	50.59	UG/L	95
47)	1,2,4-TRIMETHYLBENZENE	18.30	105.0		617099	52.07	UG/L	97
48)	1,2,3-TRIMETHYLBENZENE	19.17	105.0		584528	50.80	UG/L	91

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA31B::D5

Quant Output File: ^AA31B::D2

Name: VSTD050

Instrument ID: VOA-1

Misc: DAILY CAL

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY

Quant Time : 950131 09:26

Injected at: 950131 08:54

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31B::D5

Name: VSTD050

Misc: DAILY CAL

Quant Output File: ^AA31B::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY

Quant Time : 950131 09:26

Injected at: 950131 08:54

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31B::D5

Quant Output File: ^AA31B::D2

Name: VSTD050

Instrument ID: VOA-1

Misc: DAILY CAL

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY

Quant Time : 950131 09:26

Injected at: 950131 08:54

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31B::D5

Name: VSTD050

Misc: DAILY CAL

Quant Output File: ^AA31B::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY

Quant Time : 950131 09:26

Injected at: 950131 08:54

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31B::D5
Name: VSTD050
Misc: DAILY CAL

Quant Output File: ^AA31B::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY
Quant Time : 950131 09:26
Injected at: 950131 08:54

Page 5 of 5

QUANT REPORT

Page 1

Operator ID: JOY *2/22/95 Juleen-amy*
 Output File: ^AB13B::D2
 Data File: >AB13B::D5
 Name: VSTD050
 Misc: DAILY CAL

Quant Rev: 7 Quant Time: 950213 10:33
 Injected at: 950213 10:01
 Dilution Factor: 1.00000
 Instrument ID: VOA-1

Instrument ID: 70 2

ID File: ID_108::QT
 Title: VOLATILE ANALYSIS
 Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950206 09:27

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.06	128.0	145005	50.00	UG/L	79
2)	CHLOROMETHANE	.94	50.0	111359	50.81	UG/L	99
3)	VINYL CHLORIDE	1.05	62.0	135860	50.20	UG/L	98
4)	BROMOMETHANE	1.33	94.0	178280	50.85	UG/L	98
5)	CHLOROETHANE	1.44	64.0	76843	51.52	UG/L	96
6)	1,1-DICHLOROETHENE	2.30	96.0	168202	50.94	UG/L	77
7)	CARBON DISULFIDE	2.46	76.0	422898	49.90	UG/L	99
8)	ACETONE	2.51	43.0	16093	50.70	UG/L	79
9)	METHYLENE CHLORIDE	3.11	84.0	166414	49.48	UG/L	83
10)	1,2-DICHLOROETHENE (TOTAL)	5.62	96.0	377968M	100.94	UG/L	72
11)	1,1-DICHLOROETHANE	4.39	63.0	245719	43.21	UG/L	98
12)	2-BUTANONE	5.87	43.0	28881	46.23	UG/L	100
13)	CHLOROFORM	6.41	83.0	358272	49.00	UG/L	98
14)	1,2-DICHLOROETHANE-d4	7.24	65.0	167214	50.94	UG/L	84
15)	1,2-DICHLOROETHANE	7.38	62.0	202526	49.80	UG/L	96
17)	*1,4-DIFLUOROBENZENE	8.28	114.0	566502	50.00	UG/L	86
18)	VINYL ACETATE	4.77	43.0	190671	49.85	UG/L	100
19)	1,1,1-TRICHLOROETHANE	6.52	97.0	288718	47.47	UG/L	97
20)	CARBON TETRACHLORIDE	6.82	117.0	285212	47.19	UG/L	99
21)	BENZENE	7.25	78.0	423604	48.43	UG/L	100
22)	TRICHLOROETHENE	8.62	130.0	244175	50.95	UG/L	99
23)	1,2-DICHLOROPROPANE	9.01	63.0	193639	48.62	UG/L	96
24)	BROMODICHLOROMETHANE	9.72	83.0	344528	47.69	UG/L	95
25)	CIS-1,3-DICHLOROPROPENE	10.61	75.0	278377	47.60	UG/L	99
26)	TRANS-1,3-DICHLOROPROPENE	11.82	75.0	236950	47.17	UG/L	97
27)	1,1,2-TRICHLOROETHANE	12.12	97.0	195644	47.75	UG/L	97
28)	DIBROMOCHLOROMETHANE	12.80	129.0	367563	48.03	UG/L	97
29)	BROMOFORM	15.71	173.0	301335	47.39	UG/L	99
32)	*CHLOROBENZENE-d5	13.90	117.0	459897	50.00	UG/L	87
34)	4-METHYL-2-PENTANONE	11.11	43.0	126211	47.27	UG/L	91
35)	TOLUENE-d8	11.04	98.0	494388	51.08	UG/L	94
36)	TOLUENE	11.17	91.0	531769	48.95	UG/L	97
37)	TETRACHLOROETHENE	12.21	164.0	244521	48.57	UG/L	94
38)	2-HEXANONE	12.83	43.0	68555	49.49	UG/L	82
39)	CHLOROBENZENE	13.96	112.0	445044	48.85	UG/L	98
40)	ETHYLBENZENE	14.32	106.0	186867	49.69	UG/L	98
41)	XYLENE (TOTAL)	14.60	106.0	684770M	146.14	UG/L	98
42)	STYRENE	15.44	104.0	367360	47.94	UG/L	86
43)	BROMOFLUOROBENZENE	16.47	95.0	347174	49.88	UG/L	88
44)	1,1,2,2-TETRACHLOROETHANE	17.04	83.0	318796	49.45	UG/L	99

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AB13B::D5
Name: VSTD050
Misc: DAILY CAL

Quant Output File: ^AB13B::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950206 09:27

Operator ID: JOY
Quant Time : 950213 10:33
Injected at: 950213 10:01

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13B::D5

Name: VSTD050

Misc: DAILY CAL

Quant Output File: ^AB13B::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950206 09:27

Operator ID: JOY

Quant Time : 950213 10:33

Injected at: 950213 10:01

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13B::D5
Name: VSTD050
Misc: DAILY CAL

Quant Output File: ^AB13B::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950206 09:27

Operator ID: JOY
Quant Time : 950213 10:33
Injected at: 950213 10:01

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13B::D5

Quant Output File: ^AB13B::D2

Name: VSTD050

Instrument ID: VOA-1

Misc: DAILY CAL

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950206 09:27

Operator ID: JOY

Quant Time : 950213 10:33

Injected at: 950213 10:01

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13B::D5
Name: VSTD050
Misc: DAILY CAL

Quant Output File: ^AB13B::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950206 09:27

Operator ID: JOY
Quant Time : 950213 10:33
Injected at: 950213 10:01

Page 5 of 5

QUANT REPORT

Page 1

Operator ID: JOY *John Roy Chay*
 Output File: ^AB14C::D2
 Data File: >AB14C::D5
 Name: VSTD050
 Misc: DAILY CAL

Quant Rev: 7 Quant Time: 950214 10:34
 Injected at: 950214 10:02
 Dilution Factor: 1.00000
 Instrument ID: VOA-1

Instrument ID: 70 2

ID File: ID 108::QT
 Title: VOLATILE ANALYSIS
 Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950213 10:01

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.10	128.0	133276	50.00	UG/L	80
2)	CHLOROMETHANE	.96	50.0	104481	51.04	UG/L	99
3)	VINYL CHLORIDE	1.07	62.0	128037	51.27	UG/L	99
4)	BROMOMETHANE	1.34	94.0	166289	50.74	UG/L	96
5)	CHLOROETHANE	1.46	64.0	70334	49.79	UG/L	98
6)	1,1-DICHLOROETHENE	2.33	96.0	153400	49.61	UG/L	81
7)	CARBON DISULFIDE	2.49	76.0	377940	48.62	UG/L	98
8)	ACETONE	2.54	43.0	13292	44.93	UG/L	77
9)	METHYLENE CHLORIDE	3.14	84.0	155760	50.92	UG/L	79
10)	1,2-DICHLOROETHENE (TOTAL)	5.66	96.0	347951	100.16	UG/L	69
11)	1,1-DICHLOROETHANE	4.41	63.0	264073	58.46	UG/L	98
12)	2-BUTANONE	5.89	43.0	16603	31.27	UG/L	100
13)	CHLOROFORM	6.45	83.0	330837	50.23	UG/L	99
14)	1,2-DICHLOROETHANE-d4	7.27	65.0	151704	49.35	UG/L	82
15)	1,2-DICHLOROETHANE	7.40	62.0	190394	51.14	UG/L	99
17)	*1,4-DIFLUOROBENZENE	8.31	114.0	515222	50.00	UG/L	86
18)	VINYL ACETATE	4.81	43.0	174445	50.30	UG/L	100
19)	1,1,1-TRICHLOROETHANE	6.56	97.0	264094	50.29	UG/L	99
20)	CARBON TETRACHLORIDE	6.86	117.0	263895	50.87	UG/L	96
21)	BENZENE	7.28	78.0	391819	50.85	UG/L	100
22)	TRICHLOROETHENE	8.65	130.0	228998	51.56	UG/L	99
23)	1,2-DICHLOROPROPANE	9.04	63.0	178860	50.78	UG/L	96
24)	BROMODICHLOROMETHANE	9.75	83.0	315528	50.35	UG/L	99
25)	CIS-1,3-DICHLOROPROPENE	10.65	75.0	256120	50.58	UG/L	99
26)	TRANS-1,3-DICHLOROPROPENE	11.85	75.0	218139	50.61	UG/L	97
27)	1,1,2-TRICHLOROETHANE	12.15	97.0	185872	52.23	UG/L	95
28)	DIBROMOCHLOROMETHANE	12.83	129.0	342240	51.19	UG/L	97
29)	BROMOFORM	15.72	173.0	280216	51.12	UG/L	99
32)	*CHLOROBENZENE-d5	13.93	117.0	421386	50.00	UG/L	89
34)	4-METHYL-2-PENTANONE	11.14	43.0	117062	50.61	UG/L	90
35)	TOLUENE-d8	11.07	98.0	454157	50.13	UG/L	94
36)	TOLUENE	11.19	91.0	500244	51.33	UG/L	97
37)	TETRACHLOROETHENE	12.22	164.0	232157	51.81	UG/L	96
38)	2-HEXANONE	12.85	43.0	49836	39.67	UG/L	85
39)	CHLOROBENZENE	13.99	112.0	411908	50.51	UG/L	99
40)	ETHYLBENZENE	14.33	106.0	177412	51.81	UG/L	98
41)	XYLENE (TOTAL)	14.61	106.0	646733	154.62	UG/L	96
42)	STYRENE	15.46	104.0	342544	50.88	UG/L	88
43)	BROMOFLUOROBENZENE	16.49	95.0	326536	51.33	UG/L	87
44)	1,1,2,2-TETRACHLOROETHANE	17.06	83.0	304497	52.12	UG/L	99

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AB14C::D5

Name: VSTD050

Misc: DAILY CAL

Quant Output File: ^AB14C::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950214 10:34

Injected at: 950214 10:02

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB14C::D5
Name: VSTD050
Misc: DAILY CAL

Quant Output File: ^AB14C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY
Quant Time : 950214 10:34
Injected at: 950214 10:02

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB14C::D5
Name: VSTD050
Misc: DAILY CAL

Quant Output File: ^AB14C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY
Quant Time : 950214 10:34
Injected at: 950214 10:02

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB14C::D5

Name: VSTD050

Misc: DAILY CAL

Quant Output File: ^AB14C::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950214 10:34

Injected at: 950214 10:02

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB14C::D5
Name: VSTD050
Misc: DAILY CAL

Quant Output File: ^AB14C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY
Quant Time : 950214 10:34
Injected at: 950214 10:02

Page 5 of 5

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

RCRA PROTOCOL

WHC-SD-WM-DP-096, REV. 0

m/z	Ion Abundance Criteria	% Relative Abundance		Status
		Base Peak	Appropriate Peak	
50	15-40% of mass 95	17.14	17.14	Ok
75	30-60% of mass 95	45.58	45.58	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.01	8.01	Ok
173	Less than 2% of mass 174	.25	.28	Ok
174	50-100% of mass 95	89.28	89.28	Ok
175	5-9% of mass 174	7.30	8.18	Ok
176	95-101% of mass 174	88.21	98.80	Ok
177	5-9% of mass 176	6.23	7.06	Ok

Injection Date: 01/26/95

Injection Time: 08:52

Data File: >AA26A

Scan: 167

File >AA26A BFB TUNE
Bpk Ab 10110.

1UL OF BFB
SUB ADD DVC

Instrume

Scan 167
2.78 min.

File >AA26A 35.0-350.0 amu. BFB TUNE
TIC

1UL OF BFB

Ins

File >AA26A BFB TUNE
Bpk Ab 10110.

1UL OF BFB
SUB ADD DUC

Instrume

Scan 167
2.78 min.

WHC-SD-WM-DP-096, REV. 0

WHC-SD-WM-DP-096, REV. 0

>AA26A
167

BFB TUNE
SUB ADD NRM DVC

1UL OF BFB

Instrument ID: 70

File: >AA26A Scan #: 167 Retn. time: 2.78

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	.725	61.95	4.286	83.00	.096	114.80	.063	148.90	.040
37.05	5.377	63.05	2.496	85.00	.079	116.00	.181	149.90	.040
37.95	4.253	63.95	.106	87.00	5.404	116.90	.244	155.00	.290
39.05	.653	66.95	.326	88.00	4.929	117.90	.392	157.90	.040
40.95	.185	67.95	9.845	90.90	.363	118.00	.112	160.20	.046
41.85	.043	69.00	9.281	92.00	2.634	118.30	.053	170.90	.069
42.95	.277	70.10	.613	93.00	3.432	118.90	.382	171.80	.040
45.05	1.500	70.90	.066	94.00	10.481	125.50	.099	172.80	.254
46.25	.227	72.10	.577	95.10	100.000	127.90	.224	174.00	89.282
46.95	1.424	73.00	4.055	96.10	8.015	129.90	.115	174.90	7.303
47.95	.554	74.00	13.699	97.10	.119	130.90	.181	176.00	88.207
48.95	4.266	75.00	45.580	103.90	.392	132.80	.073	177.00	6.228
49.95	17.144	76.10	4.270	104.50	.056	135.10	.142	178.10	.069
51.05	6.004	77.00	.471	104.80	.185	135.90	.049	178.90	.053
51.95	.175	78.00	.900	105.70	.293	136.80	.073	206.75	.079
54.85	.092	79.00	2.450	107.70	.040	137.30	.040	230.05	.043
55.95	1.220	79.90	.804	111.60	.059	140.90	.570	236.05	.073
56.95	2.301	81.00	2.720	112.00	.043	143.00	.656	280.95	.033
59.95	1.101	82.00	.620	113.00	.158	145.80	.119	285.75	.049
60.95	4.243	82.80	.158	114.20	.043	148.00	.224	297.25	.036

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

RCRA PROTOCOL

WHC-SD-WM-DP-096, REV. 0

m/z	Ion Abundance Criteria	% Relative Abundance		Status
		Base Peak	Appropriate Peak	
50	15-40% of mass 95	17.51	17.51	Ok
75	30-60% of mass 95	47.65	47.65	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.27	7.27	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-100% of mass 95	88.93	88.93	Ok
175	5-9% of mass 174	6.92	7.78	Ok
176	95-101% of mass 174	89.62	100.78	Ok
177	5-9% of mass 176	5.97	6.66	Ok

Injection Date: 01/30/95

Injection Time: 09:59

Data File: >AA30A

Scan: 167

File >AA30A BFB TUNE
Bpk Ab 9198.

1UL OF BFB
SUB ADD DUC

Instrume

Scan 167
2.78 min.

WHC-SD-WM-DP-096, REV. 0

>AA30A
167

BFB TUNE
SUB ADD NRM DVC

1UL OF BFB

Instrument ID: 70

WHC-SD-WM-DP-096, REV.0

File: >AA30A Scan #: 167 Retn. time: 2.78

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	.678	59.95	1.047	80.90	2.301	110.90	.040	148.00	.069
36.95	5.302	60.95	3.910	81.90	.797	113.60	.058	150.00	.221
38.05	4.526	61.95	4.490	83.30	.141	114.70	.091	154.90	.312
38.95	1.156	62.95	2.624	83.90	.043	115.80	.214	156.90	.094
40.95	.297	63.85	.330	84.50	.120	116.90	.547	160.80	.083
41.95	.101	66.95	.246	86.30	.294	117.60	.286	172.50	.123
42.35	.065	67.95	9.437	87.00	4.972	119.00	.304	174.00	88.925
42.55	.138	69.10	9.560	88.00	5.269	119.00	.123	174.90	6.918
43.05	.188	70.10	.942	88.60	.112	120.00	.112	176.00	89.621
45.05	1.113	70.70	.036	90.50	.138	122.00	.051	177.00	5.969
45.75	.094	71.40	.116	91.10	.275	127.90	.105	178.00	.101
46.15	.105	71.60	.254	91.90	2.106	129.90	.478	186.80	.062
46.95	1.515	72.00	.388	93.10	3.454	131.00	.279	205.85	.043
47.85	.402	73.00	3.947	94.10	10.259	135.10	.149	207.15	.072
48.95	4.443	74.00	13.793	95.10	100.000	140.30	.047	207.75	.043
49.95	17.511	75.00	47.652	96.10	7.273	140.80	.638	229.35	.043
50.95	5.200	76.10	4.468	97.10	.326	141.60	.080	244.65	.036
54.95	.196	77.10	.333	98.60	.036	142.90	.623	258.25	.087
55.45	.083	77.70	.127	105.80	.341	145.20	.040	264.15	.036
55.85	1.381	78.10	.109	109.80	.043	145.90	.109	273.45	.036
57.05	2.414	78.90	1.624	110.30	.069	146.20	.156	311.15	.054
58.05	.080	80.00	.692						

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

WHC-SD-WM-DP-096, REV. 0

RCRA PROTOCOL

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	18.03	18.03	Ok
75	30-60% of mass 95	43.41	43.41	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.62	7.62	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-100% of mass 95	90.74	90.74	Ok
175	5-9% of mass 174	7.11	7.83	Ok
176	95-101% of mass 174	88.98	98.06	Ok
177	5-9% of mass 176	5.92	6.65	Ok

Injection Date: 01/31/95

Injection Time: 08:17

Data File: >AA31A

Scan: 165

File >AA31A BFB TUNE
Bpk Ab 8999.

1UL OF BFB STD
SUB ADD DVC

Instrume

Scan 165
2.76 min.

File >AA31A 35.0-350.0 amu. BFB TUNE
TIC

1UL OF BFB STD

Ins

File >AA31A BFB TUNE
Bpk Ab 8999.

1UL OF BFB STD
SUB ADD DUC

Instrume Scan 165
2.76 min.

>AA31A
165

BFB TUNE
SUB ADD NRM DVC

1UL OF BFB STD

Instrument ID: 70

WHC-SD-WM-DP-096, REV. 0

File: >AA31A Scan #: 165 Retn. time: 2.76

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	.785	61.05	3.930	81.90	.722	114.90	.078	143.80	.074
36.95	4.893	61.95	3.604	82.90	.059	116.00	.311	146.00	.085
38.05	4.030	63.05	2.815	85.70	.041	117.00	.352	147.90	.141
38.55	.089	63.95	.326	86.00	.204	117.90	.304	149.50	.048
38.95	1.322	65.05	.152	87.00	5.056	118.90	.556	153.00	.107
41.05	.089	67.15	.259	88.00	4.864	119.90	.067	155.00	.182
42.95	.389	67.95	9.135	90.10	.044	125.40	.041	155.80	.052
43.95	1.682	69.00	9.135	90.90	.433	125.80	.100	156.70	.156
45.05	.741	70.10	.626	92.00	2.482	127.70	.274	163.40	.067
45.75	.093	72.20	.537	93.00	3.430	128.20	.159	163.70	.044
46.05	.059	73.00	4.127	94.10	10.513	128.80	.148	168.90	.085
46.95	1.378	74.00	13.276	95.10	100.000	130.00	.282	174.00	90.736
47.95	.637	75.00	43.406	96.10	7.620	130.90	.089	175.00	7.108
48.95	4.419	76.10	4.034	96.90	.085	134.80	.044	176.00	88.980
49.95	18.029	77.00	.256	100.00	.637	135.10	.070	177.00	5.916
50.95	5.045	78.00	.030	100.00	.152	136.80	.130	178.00	.167
51.85	.048	78.90	1.804	105.00	.182	137.20	.044	207.05	.041
55.05	.378	79.70	.204	105.80	.244	141.00	.652	257.25	.041
55.95	.667	80.00	.570	106.10	.104	142.00	.041	281.05	.048
57.05	2.371	80.90	2.449	112.10	.063	143.00	.589	328.55	.056
59.95	1.004								

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

RCRA PROTOCOL

WHC-SD-WM-DP-096, REV. 0

m/z	Ion Abundance Criteria	% Relative Abundance		Status
		Base Peak	Appropriate Peak	
50	15-40% of mass 95	19.85	19.85	Ok
75	30-60% of mass 95	45.28	45.28	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.23	7.23	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-100% of mass 95	89.60	89.60	Ok
175	5-9% of mass 174	7.13	7.96	Ok
176	95-101% of mass 174	86.62	96.68	Ok
177	5-9% of mass 176	5.52	6.37	Ok

Injection Date: 02/13/95

Injection Time: 09:20

Data File: >AB13A

Scan: 168

File >AB13A BFB TUNE
Bpk Ab 9160.

1UL OF BFB
SUB ADD DUC

Instrume

Scan 168
2.78 min.

File >AB13A 35.0-350.0 amu. BFB TUNE
TIC

1UL OF BFB

Ins

File >AB13A BFB TUNE
Bpk Ab 9160.

1UL OF BFB
SUB ADD DUC

Instrume

Scan 168
2.78 min.

>AB13A
168

BFB TUNE
SUB ADD NRM DVC

1UL OF BFB

Instrument ID: 70

WHC-SD-WM-DP-096, REV. 0

File: >AB13A Scan #: 168 Retn. time: 2.78

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.55	.047	59.95	.670	79.90	.422	111.80	.084	142.90	.746
35.95	.640	60.95	4.160	80.90	2.678	112.30	.207	144.80	.040
37.05	5.324	61.95	3.916	81.90	.695	114.90	.058	145.30	.047
37.95	4.112	62.95	2.864	85.00	.091	115.50	.062	146.90	.058
38.95	.768	63.75	.124	87.00	5.160	115.80	.389	147.80	.087
40.85	.277	66.25	.047	88.00	4.775	116.90	.604	152.80	.113
43.05	.429	66.55	.044	90.20	.138	117.90	.346	154.70	.284
45.05	.873	66.95	.218	90.90	.422	118.90	.586	159.00	.084
45.75	.149	67.95	8.738	91.10	.244	119.90	.055	162.00	.044
46.05	.073	69.00	9.509	92.10	2.409	120.20	.044	162.30	.036
46.95	.844	70.00	.990	93.00	2.988	127.90	.488	173.90	89.596
47.95	.448	70.90	.047	94.00	10.364	129.00	.098	175.00	7.133
48.95	4.272	72.00	.691	95.10	100.000	129.70	.247	176.00	86.623
49.95	19.852	72.90	3.767	96.10	7.227	130.00	.106	176.90	5.517
50.95	5.386	74.00	13.872	97.10	.127	130.50	.055	177.90	.084
52.05	.149	75.00	45.282	101.10	.036	131.10	.073	184.90	.102
54.05	.076	76.00	3.705	103.30	.175	136.00	.055	185.10	.058
55.05	.226	77.00	.502	103.50	.047	136.80	.098	246.45	.036
55.15	.073	77.60	.058	103.80	.247	139.00	.055	308.45	.040
55.95	1.201	78.10	.062	104.90	.389	140.90	.735	338.65	.066
56.95	2.453	79.00	2.274	105.80	.455	141.70	.040		

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

RCRA PROTOCOL

WHC-SD-WM-DP-096, REV. 0

m/z	Ion Abundance Criteria	% Relative Abundance		Status
		Base Peak	Appropriate Peak	
50	15-40% of mass 95	18.26	18.26	Ok
75	30-60% of mass 95	45.49	45.49	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.65	7.65	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-100% of mass 95	89.67	89.67	Ok
175	5-9% of mass 174	6.29	7.02	Ok
176	95-101% of mass 174	87.78	97.89	Ok
177	5-9% of mass 176	6.36	7.24	Ok

Injection Date: 02/14/95

Injection Time: 09:27

Data File: >AB14B

Scan: 168

File >AB14B BFB TUNE
Bpk Ab 8032.

1UL OF BFB
SUB ADD DUC

Instrume

Scan 168
2.78 min.

File >AB14B 35.0-350.0 amu. BFB TUNE
TIC

1UL OF BFB

Ins

File >AB14B BFB TUNE
Bpk Ab 8032.

1UL OF BFB
SUB ADD DVC

Instrume Scan 168
2.78 min.

>AB14B
168

BFB TUNE
SUB ADD NRM DVC

1UL OF BFB

Instrument ID: 70

WHC-SD-WM-DP-096, REV.0

File: >AB14B Scan #: 168 Retn. time: 2.78

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	.743	59.95	1.079	79.90	.585	106.00	.170	141.00	.726
37.05	5.379	60.95	3.934	80.90	2.660	106.60	.104	143.00	.544
37.95	3.980	61.95	3.445	82.00	.195	110.20	.079	144.70	.116
38.95	1.486	63.05	2.710	83.70	.042	111.70	.108	144.90	.116
42.95	.427	66.95	.286	87.00	4.955	114.20	.083	145.80	.071
44.95	1.627	67.95	9.259	88.00	5.096	115.00	.042	148.00	.291
45.85	.183	69.00	9.305	90.80	.154	115.70	.237	149.90	.137
47.05	1.681	70.00	.639	91.10	.108	115.90	.237	154.70	.091
47.45	.158	71.30	.054	92.00	2.544	117.00	.652	155.10	.054
47.95	.427	72.00	.552	93.00	3.611	118.10	.137	165.10	.046
49.05	3.930	72.30	.083	94.00	10.351	118.90	.311	174.00	89.666
49.95	18.261	73.00	3.922	95.10	100.000	119.10	.183	175.00	6.292
50.95	5.624	74.00	13.833	96.10	7.649	127.80	.427	176.00	87.778
52.05	.133	75.00	45.491	97.10	.307	129.80	.162	177.00	6.358
55.15	.266	76.00	3.627	99.60	.087	130.80	.220	177.90	.083
55.95	1.498	77.10	1.009	102.50	.062	131.10	.046	187.00	.050
56.95	2.386	78.00	.203	104.70	.083	132.90	.116	257.55	.058
59.05	.108	78.90	2.337	105.00	.237	136.90	.162	341.25	.042

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK44

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) WATER

Lab Sample ID: N4606

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >AA30C

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 1/30/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3-----	Chloromethane	10.	U
74-83-9-----	Bromomethane	10.	U
75-01-4-----	Vinyl Chloride	10.	U
75-00-3-----	Chloroethane	10.	U
75-09-2-----	Methylene Chloride	10.	U
67-64-1-----	Acetone	10.	U
75-15-0-----	Carbon Disulfide	10.	U
75-35-4-----	1,1-Dichloroethene	10.	U
75-34-3-----	1,1-Dichloroethane	10.	U
540-59-0-----	1,2-Dichloroethene (total)	10.	U
67-66-3-----	Chloroform	10.	U
107-02-2-----	1,2-Dichloroethane	10.	U
78-93-3-----	2-Butanone	10.	U
71-55-6-----	1,1,1-Trichloroethane	10.	U
56-23-5-----	Carbon Tetrachloride	10.	U
75-27-4-----	Bromodichloromethane	10.	U
78-87-5-----	1,2-Dichloropropane	10.	U
10061-01-5-----	cis-1,3-Dichloropropene	10.	U
79-01-6-----	Trichloroethene	10.	U
124-48-1-----	Dibromochloromethane	10.	U
79-00-5-----	1,1,2-Trichloroethane	10.	U
71-43-2-----	Benzene	10.	U
10061-02-6-----	trans-1,3-Dichloropropene	10.	U
75-25-2-----	Bromoform	10.	U
108-10-1-----	4-Methyl-2-pentanone	10.	U
591-78-6-----	2-Hexanone	10.	U
127-18-4-----	Tetrachloroethene	10.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10.	U
108-88-3-----	Toluene	10.	U
108-90-7-----	Chlorobenzene	10.	U
100-41-4-----	Ethylbenzene	10.	U
100-42-5-----	Styrene	1.	JB
133-02-7-----	Xylene (total)	10.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK44

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) WATER

Lab Sample ID: N4606

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >AA30C

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 1/30/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

QUANT REPORT

Page 1

Operator ID: JOY
 Output File: ^AA30C::D2
 Data File: >AA30C::D5
 Name: VBLK44
 Misc: METHOD BLANK

Quant Rev: 7
 Quant Time: 950130 12:33
 Injected at: 950130 11:11
 Dilution Factor: 1.00000
 Instrument ID: VOA-1

Instrument ID: 70 2

ID File: ID 108::QT
 Title: VOLATILE ANALYSIS
 Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950130 10:37

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *BROMOCHLOROMETHANE	6.06	128.0	138613	50.00	UG/L	83
12) ~~2-BUTANONE~~ No Den 2-3-95	5.84	43.0	238	.535	UG/L	100
14) 1,2-DICHLOROETHANE-d4	7.23	65.0	150177	46.99	UG/L	87
17) *1,4-DIFLUOROBENZENE	8.25	114.0	519484	50.00	UG/L	85
32) *CHLOROBENZENE-d5	13.88	117.0	432134	50.00	UG/L	88
35) TOLUENE-d8	11.02	98.0	477686	50.78	UG/L	95
36) ~~TOLUENE~~ No Den 2-3-95	11.14	91.0	1632	.162	UG/L	93
40) ~~ETHYLBENZENE~~ No Den 2-3-95	14.31	106.0	388	.110	UG/L	72
41) ~~XYLENE (TOTAL)~~ No Den 2-3-95	14.57	106.0	1284M Den	.297	UG/L	77
42) STYRENE	15.42	104.0	7870 2-3-95	1.11	UG/L	87
43) BROMOFLUOROBENZENE	16.44	95.0	332392	48.14	UG/L	87
45) ~~ISOPROPYLBENZENE~~ No Den 2-3-95	16.21	105.0	1209M	.0896	UG/L	41
48) ~~1,2,3-TRIMETHYLBENZENE~~ No Den 2-3-95	19.14	105.0	464M	.0417	UG/L	59

* Compound is ISTD

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AA30C::D5

Quant Output File: ^AA30C::D2

Name: VBLK44

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY

Quant Time : 950130 12:33

Injected at: 950130 11:11

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA30C::D5

Name: VBLK44

Misc: METHOD BLANK

Quant Output File: ^AA30C::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY

Quant Time : 950130 12:33

Injected at: 950130 11:11

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA30C::D5

Name: VBLK44

Misc: METHOD BLANK

Quant Output File: ^AA30C::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY

Quant Time : 950130 12:33

Injected at: 950130 11:11

Page 3 of 5

WHC-SD-WM-DP-096, REV. 0

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AA30C::D5

Quant Output File: ^AA30C::D2

Name: VBLK44

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY

Quant Time : 950130 12:33

Injected at: 950130 11:11

Page 4 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AA30C::D5

Quant Output File: ^AA30C::D2

Name: VBLK44

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Operator ID: JOY

Quant Time : 950130 12:33

Injected at: 950130 11:11

Page 5 of 5

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5

Quant Output File: ^AA30C::D2

Name: VBLK44

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Quant Time: 950130 12:33

Quant ID File: ID_108::QT

Injected at: 950130 11:11

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 402
Retention Time: 6.06 min.
Quant Ion : 128.0
Area : 138613
Concentration : 50.00 UG/L
q-value : 83

DEM
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5

Name: VBLK44

Misc: METHOD BLANK

Quant Time: 950130 12:33

Injected at: 950130 11:11

Last Qcal Time: 950130 10:37

Quant Output File: ^AA30C::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 12
Compound Name : 2-BUTANONE
Scan Number : 386
Retention Time: 5.84 min.
Quant Ion : 43.0
Area : 238
Concentration : .535 UG/L
q-value : 100

No
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5 Quant Output File: ^AA30C::D2
Name: VBLK44 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950130 12:33 Quant ID File: ID_108::QT
Injected at: 950130 11:11 Last Calibration: 950130 10:12
Last Qcal Time: 950130 10:37

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 486
Retention Time: 7.23 min.
Quant Ion : 65.0
Area : 150177
Concentration : 46.99 UG/L
q-value : 87

Den
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5

Quant Output File: ^AA30C::D2

Name: VBLK44

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Quant Time: 950130 12:33

Quant ID File: ID_108::QT

Injected at: 950130 11:11

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 560
Retention Time: 8.25 min.
Quant Ion : 114.0
Area : 519484
Concentration : 50.00 UG/L
q-value : 85

den
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5

Quant Output File: ^AA30C::D2

Name: VBLK44

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Quant Time: 950130 12:33

Quant ID File: ID_108::QT

Injected at: 950130 11:11

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 965
Retention Time: 13.88 min.
Quant Ion : 117.0
Area : 432134
Concentration : 50.00 UG/L
q-value : 88

Den
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5

Name: VBLK44

Misc: METHOD BLANK

Quant Time: 950130 12:33

Injected at: 950130 11:11

Last Qcal Time: 950130 10:37

Quant Output File: ^AA30C::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 759
Retention Time: 11.02 min.
Quant Ion : 98.0
Area : 477686
Concentration : 50.78 UG/L
q-value : 95

DEY
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5	Quant Output File: ^AA30C::D2
Name: VBLK44	Instrument ID: VOA-1
Misc: METHOD BLANK	Instrument ID: 70 2
Quant Time: 950130 12:33	Quant ID File: ID_108::QT
Injected at: 950130 11:11	Last Calibration: 950130 10:12
Last Qcal Time: 950130 10:37	

Compound No : 36
Compound Name : TOLUENE
Scan Number : 768
Retention Time: 11.14 min.
Quant Ion : 91.0
Area : 1632
Concentration : .162 UG/L
q-value : 93

No
DEN
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5

Name: VBLK44

Misc: METHOD BLANK

Quant Time: 950130 12:33

Injected at: 950130 11:11

Last Qcal Time: 950130 10:37

Quant Output File: ^AA30C::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 40
Compound Name : ETHYLBENZENE
Scan Number : 996
Retention Time: 14.31 min.
Quant Ion : 106.0
Area : 388
Concentration : .110 UG/L
q-value : 72

No
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5 Quant Output File: ^AA30C::D2
Name: VBLK44 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950130 12:33 Quant ID File: ID_108::QT
Injected at: 950130 11:11 Last Calibration: 950130 10:12
Last Qcal Time: 950130 10:37

Compound No : 41
Compound Name : XYLENE (TOTAL)
Scan Number : 1015
Retention Time: 14.57 min.
Quant Ion : 106.0
Area : 1284M
Concentration : .297 UG/L
q-value : 77

No.
[Signature]
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5

Name: VBLK44

Misc: METHOD BLANK

Quant Time: 950130 12:33

Injected at: 950130 11:11

Last Qcal Time: 950130 10:37

Quant Output File: ^AA30C::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 42
Compound Name : STYRENE
Scan Number : 1076
Retention Time: 15.42 min.
Quant Ion : 104.0
Area : 7870
Concentration : 1.11 UG/L
q-value : 87

DEM
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5

Quant Output File: ^AA30C::D2

Name: VBLK44

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Quant Time: 950130 12:33

Quant ID File: ID_108::QT

Injected at: 950130 11:11

Last Calibration: 950130 10:12

Last Qcal Time: 950130 10:37

Compound No : 43

Compound Name : BROMOFLUOROBENZENE

Scan Number : 1150

Retention Time: 16.44 min.

Quant Ion : 95.0

Area : 332392

Concentration : 48.14 UG/L

q-value : 87

Den
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

File >AF28B ISOPROPYLBENZENE & 1,2,4-TRIMETHYLBENZENE Scan 1143
Bpk Ab 9999. SUB NRM ENH 16.27 min.

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >AA30C VBLK44 METHOD BLANK Inst Scan 1133
Bpk Ab 179. SUB 16.21 min.

SAMPLE SPECTRUM (UNALTERED)

File >AA30C VBLK44 METHOD BLANK Inst Scan 1133
Bpk Ab 179. SUB 16.21 min.

Data File: >AA30C::D5

Name: VBLK44

Misc: METHOD BLANK

Quant Time: 950130 12:33

Injected at: 950130 11:11

Last Qcal Time: 950130 10:37

Quant Output File: ^AA30C::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 45
Compound Name : ISOPROPYLBENZENE
Scan Number : 1133
Retention Time: 16.21 min.
Quant Ion : 105.0
Area : 1209M
Concentration : .0896 UG/L
q-value : 41

No
Don
2-3-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA30C::D5 Quant Output File: ^AA30C::D2
Name: VBLK44 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950130 12:33 Quant ID File: ID_108::QT
Injected at: 950130 11:11 Last Calibration: 950130 10:12
Last Qcal Time: 950130 10:37

Compound No : 48
Compound Name : 1,2,3-TRIMETHYLBENZENE
Scan Number : 1345
Retention Time: 19.14 min.
Quant Ion : 105.0
Area : 464M.
Concentration : .0417 UG/L
q-value : 59

No
2-3-95

REV
2-6-95

MS data file header from : >AA30C::D5

Sample: VBLK44 Operator: JOY SUPER GRP. 1/30/95 11:11
Misc : METHOD BLANK Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	883344.	6.06	1.00 - 7.16
2	50.0	1157045.	8.25	7.16 - 11.07
3	50.0	1256170.	13.88	11.07 - 31.04

Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

Unknown Concentration = $\frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}}$ * Correction Factor

2:15 PM MON., 6 FEB., 1995

WHC-SD-WM-DP-096, REV. 0

File >AA30C 35.0-350.0 amu. UBLK44
CLP ADC TIC METHOD BLANK Ins
50 100 150 200 250 300 350 400 450 500

WHC-SD-WM-DP-096, REV. 0

WHC-SD-WM-DP-096, REV. 0

. There were no Unknowns.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WHC-SD-WM-DP-096, REV. 0

VBLK45

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) WATER

Lab Sample ID: R6880

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >AA31C

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 1/31/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3-----	Chloromethane	10.	U
74-83-9-----	Bromomethane	10.	U
75-01-4-----	Vinyl Chloride	10.	U
75-00-3-----	Chloroethane	10.	U
75-09-2-----	Methylene Chloride	10.	U
67-64-1-----	Acetone	10.	U
75-15-0-----	Carbon Disulfide	10.	U
75-35-4-----	1,1-Dichloroethane	10.	U
75-34-3-----	1,1-Dichloroethane	10.	U
540-59-0-----	1,2-Dichloroethene (total)	10.	U
67-66-3-----	Chloroform	10.	U
107-02-2-----	1,2-Dichloroethane	10.	U
78-93-3-----	2-Butanone	10.	U
71-55-6-----	1,1,1-Trichloroethane	10.	U
56-23-5-----	Carbon Tetrachloride	10.	U
75-27-4-----	Bromodichloromethane	10.	U
78-87-5-----	1,2-Dichloropropane	10.	U
10061-01-5-----	cis-1,3-Dichloropropene	10.	U
79-01-6-----	Trichloroethene	10.	U
124-48-1-----	Dibromochloromethane	10.	U
79-00-5-----	1,1,2-Trichloroethane	10.	U
71-43-2-----	Benzene	10.	U
10061-02-6-----	trans-1,3-Dichloropropene	10.	U
75-25-2-----	Bromoform	10.	U
108-10-1-----	4-Methyl-2-pentanone	10.	U
591-78-6-----	2-Hexanone	10.	U
127-18-4-----	Tetrachloroethene	10.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10.	U
108-88-3-----	Toluene	10.	U
108-90-7-----	Chlorobenzene	10.	U
100-41-4-----	Ethylbenzene	10.	U
100-42-5-----	Styrene	1.	JB
133-02-7-----	Xylene (total)	.09	JB

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK45

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) WATER

Lab Sample ID: R6880

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >AA31C

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 1/31/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

QUANT REPORT

Page 1

2/9/95
Johelsson - Craig

Operator ID: JOY
Output File: ^AA31C::D2
Data File: >AA31C::D5
Name: N4606 VBLK45
Misc: METHOD BLANK

Quant Rev: 7   Quant Time: 950131 10:03
                  Injected at: 950131 09:31
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950131 08:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.05	128.0	135731	50.00	UG/L	81
14)	1,2-DICHLOROETHANE-d4	7.22	65.0	154480	48.53	UG/L	84
17)	*1,4-DIFLUOROBENZENE	8.26	114.0	521379	50.00	UG/L	87
32)	*CHLOROBENZENE-d5	13.90	117.0	439035	50.00	UG/L	84
~~33)~~	~~PYRIDINE~~ No Den 2-3-95	11.24	79.0	230	2.59	UG/L	100
35)	TOLUENE-d8	11.04	98.0	480109	50.38	UG/L	95
~~36)~~	~~TOLUENE~~ No Den 2-3-95	11.15	91.0	225	.0218	UG/L	75
41)	XYLENE (TOTAL)	14.57	106.0	425	.0943	UG/L	81
42)	STYRENE	15.42	104.0	7026	.978	UG/L	77
43)	BROMOFLUOROBENZENE	16.46	95.0	344810	49.89	UG/L	85

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AA31C::D5
Name: N4606 VBLK45
Misc: METHOD BLANK

Quant Output File: ^AA31C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY
Quant Time : 950131 10:03
Injected at: 950131 09:31

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31C::D5
Name: N4606 VBLK45
Misc: METHOD BLANK

Quant Output File: ^AA31C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY
Quant Time : 950131 10:03
Injected at: 950131 09:31

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31C::D5
Name: N4606 VBLK45
Misc: METHOD BLANK

Quant Output File: ^AA31C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY
Quant Time : 950131 10:03
Injected at: 950131 09:31

Page 3 of 5

WHC-SD-WM-DP-096, REV.0

TOTAL ION CHROMATOGRAM

Data File: >AA31C::D5
Name: N4606 VBLK45
Misc: METHOD BLANK

Quant Output File: ^AA31C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY
Quant Time : 950131 10:03
Injected at: 950131 09:31

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AA31C::D5

Quant Output File: ^AA31C::D2

Name: N4606 VBLK45

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950131 08:54

Operator ID: JOY

Quant Time : 950131 10:03

Injected at: 950131 09:31

Page 5 of 5

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31C::D5 Quant Output File: ^AA31C::D2
Name: N4606 VBLK45 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950131 10:03 Quant ID File: ID_108::QT
Injected at: 950131 09:31 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 390
Retention Time: 6.05 min.
Quant Ion : 128.0
Area : 135731
Concentration : 50.00 UG/L
q-value : 81

Don
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31C::D5	Quant Output File: ^AA31C::D2
Name: N4606 VBLK45	Instrument ID: VOA-1
Misc: METHOD BLANK	Instrument ID: 70 2
Quant Time: 950131 10:03	Quant ID File: ID_108::QT
Injected at: 950131 09:31	Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54	

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 475
Retention Time: 7.22 min.
Quant Ion : 65.0
Area : 154480
Concentration : 48.53 UG/L
q-value : 84

Den
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31C::D5 Quant Output File: ^AA31C::D2
Name: N4606 VBLK45 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950131 10:03 Quant ID File: ID_108::QT
Injected at: 950131 09:31 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 550
Retention Time: 8.26 min.
Quant Ion : 114.0
Area : 521379
Concentration : 50.00 UG/L
q-value : 87

Don
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31C::D5	Quant Output File: ^AA31C::D2
Name: N4606 VBLK45	Instrument ID: VOA-1
Misc: METHOD BLANK	Instrument ID: 70 2
Quant Time: 950131 10:03	Quant ID File: ID_108::QT
Injected at: 950131 09:31	Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54	

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 957
Retention Time: 13.90 min.
Quant Ion : 117.0
Area : 439035
Concentration : 50.00 UG/L
q-value : 84

Don
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31C::D5 Quant Output File: ^AA31C::D2
 Name: N4606 VBLK45 Instrument ID: VOA-1
 Misc: METHOD BLANK Instrument ID: 70 2
 Quant Time: 950131 10:03 Quant ID File: ID_108::QT
 Injected at: 950131 09:31 Last Calibration: 950130 10:12
 Last Qcal Time: 950131 08:54

Compound No : 33
 Compound Name : PYRIDINE
 Scan Number : 765
 Retention Time: 11.24 min.
 Quant Ion : 79.0
 Area : 230
 Concentration : 2.59 UG/L
 q-value : 100

No
 Pen
 2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31C::D5
Name: N4606 VBLK45
Misc: METHOD BLANK
Quant Time: 950131 10:03
Injected at: 950131 09:31
Last Qcal Time: 950131 08:54

Quant Output File: ^AA31C::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 750
Retention Time: 11.04 min.
Quant Ion : 98.0
Area : 480109
Concentration : 50.38 UG/L
q-value : 95

Don
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31C::D5
Name: N4606 VBLK45
Misc: METHOD BLANK
Quant Time: 950131 10:03
Injected at: 950131 09:31
Last Qcal Time: 950131 08:54

Quant Output File: ^AA31C::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 36
Compound Name : TOLUENE
Scan Number : 758
Retention Time: 11.15 min.
Quant Ion : 91.0
Area : 225
Concentration : .0218 UG/L
q-value : 75

No
Don
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31C::D5 Quant Output File: ^AA31C::D2
Name: N4606 VBLK45 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950131 10:03 Quant ID File: ID_108::QT
Injected at: 950131 09:31 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 41
Compound Name : XYLENE (TOTAL)
Scan Number : 1005
Retention Time: 14.57 min.
Quant Ion : 106.0
Area : 425
Concentration : .0943 UG/L
q-value : 81

den
2-3-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31C::D5	Quant Output File: ^AA31C::D2
Name: N4606 VBLK45	Instrument ID: VOA-1
Misc: METHOD BLANK	Instrument ID: 70 2
Quant Time: 950131 10:03	Quant ID File: ID_108::QT
Injected at: 950131 09:31	Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54	

Compound No : 42
Compound Name : STYRENE
Scan Number : 1066
Retention Time: 15.42 min.
Quant Ion : 104.0
Area : 7026
Concentration : .978 UG/L
q-value : 77

Den
2-3-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AA31C::D5 Quant Output File: ^AA31C::D2
Name: N4606 VBLK45 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950131 10:03 Quant ID File: ID_108::QT
Injected at: 950131 09:31 Last Calibration: 950130 10:12
Last Qcal Time: 950131 08:54

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1141
Retention Time: 16.46 min.
Quant Ion : 95.0
Area : 344810
Concentration : 49.89 UG/L
q-value : 85

Den
2-3-95

MS data file header from : >AA31C::D5

Sample: N4606 VBLK45 Operator: JOY SUPER GRP. 1/31/95 9:31
Misc : METHOD BLANK Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

No peaks found.

WHC-SD-WM-DP-096, REV.0

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	870649.	6.05	1.00 - 7.15
2	50.0	1158675.	8.26	7.15 - 11.08
3	50.0	1275782.	13.90	11.08 - 31.05

Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

Unknown Concentration = $\frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}}$ * Correction Factor

3:30 PM TUE., 7 FEB., 1995

File >AA31C 35.0-350.0 amu. N4606 UBLK45 METHOD BLANK Ins
CLP ADC TIC
50 100 150 200 250 300 350 400 450 50

WHC-SD-WM-DP-096, REV. 0

. There were no Unknowns.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK50

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) WATER

Lab Sample ID: R6889

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >AB13C

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 2/13/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3-----	Chloromethane	10.	U
74-83-9-----	Bromomethane	10.	U
75-01-4-----	Vinyl Chloride	10.	U
75-00-3-----	Chloroethane	10.	U
75-09-2-----	Methylene Chloride	10.	U
67-64-1-----	Acetone	10.	U
75-15-0-----	Carbon Disulfide	10.	U
75-35-4-----	1,1-Dichloroethene	10.	U
75-34-3-----	1,1-Dichloroethane	10.	U
540-59-0-----	1,2-Dichloroethene (total)	10.	U
67-66-3-----	Chloroform	10.	U
107-02-2-----	1,2-Dichloroethane	10.	U
78-93-3-----	2-Butanone	10.	U
71-55-6-----	1,1,1-Trichloroethane	10.	U
56-23-5-----	Carbon Tetrachloride	10.	U
75-27-4-----	Bromodichloromethane	10.	U
78-87-5-----	1,2-Dichloropropane	10.	U
10061-01-5-----	cis-1,3-Dichloropropene	10.	U
79-01-6-----	Trichloroethene	10.	U
124-48-1-----	Dibromochloromethane	10.	U
79-00-5-----	1,1,2-Trichloroethane	10.	U
71-43-2-----	Benzene	10.	U
10061-02-6-----	trans-1,3-Dichloropropene	10.	U
75-25-2-----	Bromoform	10.	U
108-10-1-----	4-Methyl-2-pentanone	10.	U
591-78-6-----	2-Hexanone	10.	U
127-18-4-----	Tetrachloroethene	10.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10.	U
108-88-3-----	Toluene	10.	U
108-90-7-----	Chlorobenzene	10.	U
100-41-4-----	Ethylbenzene	10.	U
100-42-5-----	Styrene	.5	JB
133-02-7-----	Xylene (total)	10.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK50

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) WATER

Lab Sample ID: R6889

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >AB13C

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 2/13/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
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30.				

QUANT REPORT

Page 1

2/24/95
Operator ID: JOY *Johnston. Amy*
Output File: ^AB13C::D2
Data File: >AB13C::D5
Name: R-6889 VBLK50
Misc: METHOD BLANK

Quant Rev: 7   Quant Time: 950213 11:09
                  Injected at: 950213 10:37
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

WHC-SD-WM-DP-096, REV. 0

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *BROMOCHLOROMETHANE	6.09	128.0	136049	50.00	UG/L	83
~~9) METHYLENE CHLORIDE~~ <i>No Den 2-14-95</i>	3.13	84.0	627M <i>Don</i>	201	UG/L	68
14) 1,2-DICHLOROETHANE-d4	7.25	65.0	149147 <i>2-14-95</i>	47.53	UG/L	89
17) *1,4-DIFLUOROBENZENE	8.29	114.0	530333	50.00	UG/L	86
32) *CHLOROBENZENE-d5	13.92	117.0	435696	50.00	UG/L	89
35) TOLUENE-d8	11.06	98.0	471508	50.33	UG/L	95
~~36) TOLUENE~~ <i>No Den 2-14-95</i>	11.17	91.0	324	.0322	UG/L	88
42) STYRENE	15.45	104.0	3284	.472	UG/L	72
43) BROMOFLUOROBENZENE	16.49	95.0	331283	50.36	UG/L	92

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AB13C::D5
Name: R-6889 VBLK50
Misc: METHOD BLANK

Quant Output File: ^AB13C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY
Quant Time : 950213 11:09
Injected at: 950213 10:37

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13C::D5
Name: R-6889 VBLK50
Misc: METHOD BLANK

Quant Output File: ^AB13C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY
Quant Time : 950213 11:09
Injected at: 950213 10:37

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13C::D5
Name: R-6889 VBLK50
Misc: METHOD BLANK

Quant Output File: ^AB13C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY
Quant Time : 950213 11:09
Injected at: 950213 10:37

Page 3 of 5

WHC-SD-WM-DP-096, REV. 0

TOTAL ION CHROMATOGRAM

Data File: >AB13C::D5
Name: R-6889 VBLK50
Misc: METHOD BLANK

Quant Output File: ^AB13C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY
Quant Time : 950213 11:09
Injected at: 950213 10:37

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13C::D5
Name: R-6889 VBLK50
Misc: METHOD BLANK

Quant Output File: ^AB13C::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY
Quant Time : 950213 11:09
Injected at: 950213 10:37

Page 5 of 5

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13C::D5 Quant Output File: ^AB13C::D2
Name: R-6889 VBLK50 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950213 11:09 Quant ID File: ID_108::QT
Injected at: 950213 10:37 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 403
Retention Time: 6.09 min.
Quant Ion : 128.0
Area : 136049
Concentration : 50.00 UG/L
q-value : 83

Den
2-14-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13C::D5	Quant Output File: ^AB13C::D2
Name: R-6889 VBLK50	Instrument ID: VOA-1
Misc: METHOD BLANK	Instrument ID: 70 2
Quant Time: 950213 11:09	Quant ID File: ID_108::QT
Injected at: 950213 10:37	Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01	

Compound No : 9
Compound Name : METHYLENE CHLORIDE
Scan Number : 190
Retention Time: 3.13 min.
Quant Ion : 84.0
Area : 627M
Concentration : .201 UG/L
q-value : 68

No
Den
2-14-95

REFERENCE STANDARD SPECTRUM

File >AK17D VBLK02 10UL ISTD & SMC Instru Scan 533
Bpk Ab 9999. SUB NRM ENH 7.83 min.

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >AB13C R-6889 VBLK50 METHOD BLANK Inst Scan 487
Bpk Ab 22496. SUB 7.25 min.

SAMPLE SPECTRUM (UNALTERED)

File >AB13C R-6889 VBLK50 METHOD BLANK Inst Scan 487
Bpk Ab 22496. 7.25 min.

Data File: >AB13C::D5

Name: R-6889 VBLK50

Misc: METHOD BLANK

Quant Time: 950213 11:09

Injected at: 950213 10:37

Last Qcal Time: 950213 10:01

Quant Output File: ^AB13C::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 487
Retention Time: 7.25 min.
Quant Ion : 65.0
Area : 149147
Concentration : 47.53 UG/L
q-value : 89

Den
2-14-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13C::D5

Quant Output File: ^AB13C::D2

Name: R-6889 VBLK50

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Quant Time: 950213 11:09

Quant ID File: ID 108::QT

Injected at: 950213 10:37

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 562
Retention Time: 8.29 min.
Quant Ion : 114.0
Area : 530333
Concentration : 50.00 UG/L
q-value : 86

Den
2-14-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13C::D5	Quant Output File: ^AB13C::D2
Name: R-6889 VBLK50	Instrument ID: VOA-1
Misc: METHOD BLANK	Instrument ID: 70 2
Quant Time: 950213 11:09	Quant ID File: ID_108::QT
Injected at: 950213 10:37	Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01	

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 969
Retention Time: 13.92 min.
Quant Ion : 117.0
Area : 435696
Concentration : 50.00 UG/L
q-value : 89

WEN
2-14-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13C::D5 Quant Output File: ^AB13C::D2
Name: R-6889 VBLK50 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950213 11:09 Quant ID File: ID_108::QT
Injected at: 950213 10:37 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 762
Retention Time: 11.06 min.
Quant Ion : 98.0
Area : 471508
Concentration : 50.33 UG/L
q-value : 95

Den
2-14-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13C::D5
Name: R-6889 VBLK50
Misc: METHOD BLANK
Quant Time: 950213 11:09
Injected at: 950213 10:37
Last Qcal Time: 950213 10:01

Quant Output File: ^AB13C::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 36
Compound Name : TOLUENE
Scan Number : 770
Retention Time: 11.17 min.
Quant Ion : 91.0
Area : 324
Concentration : .0322 UG/L
q-value : 88

No
den
2-14-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB13C::D5	Quant Output File: ^AB13C::D2
Name: R-6889 VBLK50	Instrument ID: VOA-1
Misc: METHOD BLANK	Instrument ID: 70 2
Quant Time: 950213 11:09	Quant ID File: ID_103::QT
Injected at: 950213 10:37	Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01	

Compound No : 42
Compound Name : STYRENE
Scan Number : 1079
Retention Time: 15.45 min.
Quant Ion : 104.0
Area : 3284
Concentration : .472 UG/L
q-value : 72

den
2-14-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

File >AK17D VBLK02 10UL ISTD & SMC Instru Scan 1202
Bpk Ab 9999. SUB NRM ENH 17.08 min.

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >AB13C R-6889 VBLK50 METHOD BLANK Inst Scan 1154
Bpk Ab 54688. SUB 16.49 min.

SAMPLE SPECTRUM (UNALTERED)

File >AB13C R-6889 VBLK50 METHOD BLANK Inst Scan 1154
Bpk Ab 54688. 16.49 min.

Data File: >AB13C::D5 Quant Output File: ^AB13C::D2
Name: R-6889 VBLK50 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950213 11:09 Quant ID File: ID_108::QT
Injected at: 950213 10:37 Last Calibration: 950130 10:12
Last Qcal Time: 950213 10:01

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1154
Retention Time: 16.49 min.
Quant Ion : 95.0
Area : 331283
Concentration : 50.36 UG/L
q-value : 92

DEW
2-14-95

DE Nelson
2-15-95

MS data file header from : >AB13C::D5

John - Amy
2/24/95 WHC-SD-WM-DP-096, REV. 0

Sample: R-6889 VBLK50 Operator: JOY SUPER GRP. 2/13/95 10:37
Misc : METHOD BLANK Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	878453.	6.09	1.00 - 7.19
2	50.0	1178060.	8.29	7.19 - 11.11
3	50.0	1276729.	13.92	11.11 - 31.07

Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

Unknown Concentration = $\frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}}$ * Correction Factor

10:50 AM WED., 15 FEB., 1995

WHC-SD-WM-DP-096, REV. 0

WHC-SD-WM-DP-096, REV. 0

. There were no Unknowns.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET
WHC-SD-WM-DP-096, REV. 0

EPA SAMPLE NO.

VBK51

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) WATER

Lab Sample ID: R6904

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >AB14D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 2/14/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3-----	Chloromethane	10.	U
74-83-9-----	Bromomethane	10.	U
75-01-4-----	Vinyl Chloride	10.	U
75-00-3-----	Chloroethane	10.	U
75-09-2-----	Methylene Chloride	10.	U
67-64-1-----	Acetone	10.	U
75-15-0-----	Carbon Disulfide	10.	U
75-35-4-----	1,1-Dichloroethene	10.	U
75-34-3-----	1,1-Dichloroethane	10.	U
540-59-0-----	1,2-Dichloroethene (total)	10.	U
67-66-3-----	Chloroform	10.	U
107-02-2-----	1,2-Dichloroethane	10.	U
78-93-3-----	2-Butanone	10.	U
71-55-6-----	1,1,1-Trichloroethane	10.	U
56-23-5-----	Carbon Tetrachloride	10.	U
75-27-4-----	Bromodichloromethane	10.	U
78-87-5-----	1,2-Dichloropropane	10.	U
10061-01-5-----	cis-1,3-Dichloropropene	10.	U
79-01-6-----	Trichloroethene	10.	U
124-48-1-----	Dibromochloromethane	10.	U
79-00-5-----	1,1,2-Trichloroethane	10.	U
71-43-2-----	Benzene	10.	U
10061-02-6-----	trans-1,3-Dichloropropene	10.	U
75-25-2-----	Bromoform	10.	U
108-10-1-----	4-Methyl-2-pentanone	10.	U
591-78-6-----	2-Hexanone	10.	U
127-18-4-----	Tetrachloroethene	10.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10.	U
108-88-3-----	Toluene	10.	U
108-90-7-----	Chlorobenzene	10.	U
100-41-4-----	Ethylbenzene	10.	U
100-42-5-----	Styrene	.4	JB
133-02-7-----	Xylene (total)	10.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK51

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) WATER

Lab Sample ID: R6904

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >AB14D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 2/14/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
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29.				
30.				

QUANT REPORT

Page 1

Operator ID: JOY *Michelle Wang*
Output File: ^AB14D::D2
Data File: >AB14D::D5
Name: VBLK51 R6904
Misc: METHOD BLANK

Quant Rev: 7 Quant Time: 950214 11:12
Injected at: 950214 10:40
Dilution Factor: 1.00000
Instrument ID: VOA-1

Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950214 10:02

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *BROMOCHLOROMETHANE	6.10	128.0	127351	50.00	UG/L	85
~~9) METHYLENE CHLORIDE~~ <i>No Den 2-15-95</i>	3.14	84.0	515M <i>den 2-15-95</i>	.173	UG/L	83
14) 1,2-DICHLOROETHANE-d4	7.27	65.0	140537	48.47	UG/L	84
17) *1,4-DIFLUOROBENZENE	8.30	114.0	496543	50.00	UG/L	87
32) *CHLOROBENZENE-d5	13.93	117.0	418144	50.00	UG/L	88
35) TOLUENE-d8	11.07	98.0	445168	49.39	UG/L	94
~~41) XYLENE (TOTAL)~~ <i>No Den 2-15-95</i>	14.60	106.0	401M <i>den 2-15-95</i>	.0937	UG/L	71
42) STYRENE	15.47	104.0	2534	.373	UG/L	98
43) BROMOFLUOROBENZENE	16.50	95.0	316003	48.76	UG/L	85

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AB14D::D5

Name: VBLK51 R6904

Misc: METHOD BLANK

Quant Output File: ^AB14D::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 11:12

Injected at: 950214 10:40

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB14D::D5
Name: VBLK51 R6904
Misc: METHOD BLANK

Quant Output File: ^AB14D::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY
Quant Time : 950214 11:12
Injected at: 950214 10:40

TOTAL ION CHROMATOGRAM

Data File: >AB14D::D5

Name: VBLK51 R6904

Misc: METHOD BLANK

Quant Output File: ^AB14D::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 11:12

Injected at: 950214 10:40

Page 3 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14D::D5

Quant Output File: ^AB14D::D2

Name: VBLK51 R6904

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 11:12

Injected at: 950214 10:40

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB14D::D5
Name: VBLK51 R6904
Misc: METHOD BLANK

Quant Output File: ^AB14D::D2
Instrument ID: VOA-1
Instrument ID: 70 2

Id File: ID_108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY
Quant Time : 950214 11:12
Injected at: 950214 10:40

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14D::D5	Quant Output File: ^AB14D::D2
Name: VBLK51 R6904	Instrument ID: VOA-1
Misc: METHOD BLANK	Instrument ID: 70 2
Quant Time: 950214 11:12	Quant ID File: ID_108::QT
Injected at: 950214 10:40	Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02	

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 406
Retention Time: 6.10 min.
Quant Ion : 128.0
Area : 127351
Concentration : 50.00 UG/L
q-value : 85

DEW
2-15-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14D::D5

Name: VBLK51 R6904

Misc: METHOD BLANK

Quant Time: 950214 11:12

Injected at: 950214 10:40

Last Qcal Time: 950214 10:02

Quant Output File: ^AB14D::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 9
Compound Name : METHYLENE CHLORIDE
Scan Number : 192
Retention Time: 3.14 min.
Quant Ion : 84.0
Area : 515M
Concentration : .173 UG/L
q-value : 83

No
den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14D::D5 Quant Output File: ^AB14D::D2
Name: VBLK51 R6904 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950214 11:12 Quant ID File: ID 108::QT
Injected at: 950214 10:40 Last Calibration: 950120 10:12
Last Qcal Time: 950214 10:02

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 490
Retention Time: 7.27 min.
Quant Ion : 65.0
Area : 140537
Concentration : 48.47 UG/L
q-value : 84

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14D::D5

Quant Output File: >AB14D::D2

Name: VBLK51 R6904

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Quant Time: 950214 11:12

Quant ID File: ID_108::QT

Injected at: 950214 10:40

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 565
Retention Time: 8.30 min.
Quant Ion : 114.0
Area : 496543
Concentration : 50.00 UG/L
q-value : 87

DEW
2-15-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14D::D5	Quant Output File: ^AB14D::D2
Name: VBLK51 R6904	Instrument ID: VOA-1
Misc: METHOD BLANK	Instrument ID: 70 2
Quant Time: 950214 11:12	Quant ID File: 1D_108::QT
Injected at: 950214 10:40	Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02	

Compound No : 32 (ISTD)
Compound Name : CHLOROBENZENE-d5
Scan Number : 971
Retention Time: 13.93 min.
Quant Ion : 117.0
Area : 418144
Concentration : 50.00 UG/L
q-value : 88

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14D::D5

Name: VBLK51 R6904

Misc: METHOD BLANK

Quant Time: 950214 11:12

Injected at: 950214 10:40

Last Qcal Time: 950214 10:02

Quant Output File: ^AB14D::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 35

Compound Name : TOLUENE-d8

Scan Number : 764

Retention Time: 11.07 min.

Quant Ion : 98.0

Area : 445168

Concentration : 49.39 UG/L

q-value : 94

Den

2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14D::D5
Name: VBLK51 R6904
Misc: METHOD BLANK
Quant Time: 950214 11:12
Injected at: 950214 10:40
Last Qcal Time: 950214 10:02

Quant Output File: ^AB14D::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID 108::QT
Last Calibration: 950130 10:12

Compound No : 41
Compound Name : XYLENE (TOTAL)
Scan Number : 1019
Retention Time: 14.60 min.
Quant Ion : 106.0
Area : 401M
Concentration : .0937 UG/L
q-value : 71

N.
Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14D::D5
Name: VBLK51 R6904
Misc: METHOD BLANK
Quant Time: 950214 11:12
Injected at: 950214 10:40
Last Qcal Time: 950214 10:02

Quant Output File: ^AB14D::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 42
Compound Name : STYRENE
Scan Number : 1082
Retention Time: 15.47 min.
Quant Ion : 104.0
Area : 2534
Concentration : .373 UG/L
q-value : 98

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14D::D5 Quant Output File: ^AB14D::D2
Name: VBLK51 R6904 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950214 11:12 Quant ID File: ID_108::QT
Injected at: 950214 10:40 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1156
Retention Time: 16.50 min.
Quant Ion : 95.0
Area : 316003
Concentration : 48.76 UG/L
q-value : 85

Den
2-15-95

MS data file header from : >AB14D::D5

Sample: VBLK51 R6904 Operator: JOY SUPER GRP. 2/14/95 10:40
Misc : METHOD BLANK Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: VOA-1
Method file: VOMETH Tuning file: BF2TUN No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures : 10. 160. 0. 0. 0.
Chromatographic times, min. : 4.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 .5 0.0

>AB14D VBLK51 R6904 METHOD BLANK Instrument ID: 70
35.0| 350.0 CLP TIC
Upslope: .2000 Area Reject: 81334. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IAB14D Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	.72	4	17	52	201744	1084280	1062783	100.00	100.000

Sum of corrected areas: 1062783.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	813336.	6.10	.50 - 7.20
2	50.0	1107068.	8.30	7.20 - 11.12
3	50.0	1217980.	13.93	11.12 - 31.04

Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

Unknown Concentration = $\frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}}$ * Correction Factor

1:07 PM TUE., 21 FEB., 1995

File >AB14D 35.0-350.0 amu. UBLK51 R6904 METHOD BLANK Ins
CLP ADC TIC
50 100 150 200 250 300 350 400 450 500

WHC-SD-WM-DP-096, REV. 0

File >AB14D 35.0-350.0 amu. UBLK51 R6904 METHOD BLANK Ins
CLP ADC TIC
800 1000 1200 1400 1600 1800 2000 2200

Instrument ID: VOA-1 Analyzed on: 2/14/95 10:40
Result 1 in PBM results file: LAB14D
Retention Time: .72 Area: 1062783 Tentative Conc: 65.00
The unknown area is 130.67% of the nearest internal standard

1. 2-Hexanamine, 4-methyl-	115 C7H17N
2. 2-Hexanamine	101 C6H15N
3. Epinephrine	183 C9H13NO3
4. Benzeneethanamine, 4-fluoro-.alpha.-methyl-	153 C9H12FN

Sample file: >AB14D Spectrum #: 17
Search speed: 3 Tilting option: S No. of ion ranges searched: 188

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	73*	105419	300	NBS49K	64	11	1	2	100	21	32	66
2.	53*	5329793	295	NBS49K	50	27	2	2	100	21	22	25
3.	18*	51434	320	NBS49K	48	44	1	1	60	60	4	28
4.	15	459029	316	NBS49K	36	33	1	0	55	60	3	13

Solvent Peak.

Den

2-21-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WHC-SD-WM-DP-096, REV. 0

VLBK52

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) WATER

Lab Sample ID: VBLK52

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >AB14F

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 2/14/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3-----	Chloromethane	10.	U
74-83-9-----	Bromomethane	10.	U
75-01-4-----	Vinyl Chloride	10.	U
75-00-3-----	Chloroethane	10.	U
75-09-2-----	Methylene Chloride	10.	U
67-64-1-----	Acetone	10.	U
75-15-0-----	Carbon Disulfide	10.	U
75-35-4-----	1,1-Dichloroethene	10.	U
75-34-3-----	1,1-Dichloroethane	10.	U
540-59-0-----	1,2-Dichloroethene (total)	10.	U
67-66-3-----	Chloroform	10.	U
107-02-2-----	1,2-Dichloroethane	10.	U
78-93-3-----	2-Butanone	10.	U
71-55-6-----	1,1,1-Trichloroethane	10.	U
56-23-5-----	Carbon Tetrachloride	10.	U
75-27-4-----	Bromodichloromethane	10.	U
78-87-5-----	1,2-Dichloropropane	10.	U
10061-01-5-----	cis-1,3-Dichloropropene	10.	U
79-01-6-----	Trichloroethene	10.	U
124-48-1-----	Dibromochloromethane	10.	U
79-00-5-----	1,1,2-Trichloroethane	10.	U
71-43-2-----	Benzene	10.	U
10061-02-6-----	trans-1,3-Dichloropropene	10.	U
75-25-2-----	Bromoform	10.	U
108-10-1-----	4-Methyl-2-pentanone	10.	U
591-78-6-----	2-Hexanone	10.	U
127-18-4-----	Tetrachloroethene	10.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10.	U
108-88-3-----	Toluene	10.	U
108-90-7-----	Chlorobenzene	10.	U
100-41-4-----	Ethylbenzene	10.	U
100-42-5-----	Styrene	10.	U
133-02-7-----	Xylene (total)	10.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK52

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) WATER

Lab Sample ID: VBLK52

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >AB14F

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 2/14/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

QUANT REPORT

Page 1

Operator ID: JOY
Output File: ^AB14F::D2
Data File: >AB14F::D5
Name: VBLK52
Misc: METHOD BLANK

2/22/95
Juliana May
Quant Rev: 7
Quant Time: 950214 13:23
Injected at: 950214 12:51
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950214 10:02

Compound	R.T.	Q	ion	Area	Conc	Units	g
1) *BROMOCHLOROMETHANE	6.11	128.0		126165	50.00	UG/L	82
~~9) METHYLENE CHLORIDE~~ <i>No DEN 2-15-95</i>	3.13	84.0		409	.139	UG/L	75
14) 1,2-DICHLOROETHANE-d4	7.27	65.0		138309	48.15	UG/L	83
17) *1,4-DIFLUOROBENZENE	8.31	114.0		490484	50.00	UG/L	85
32) *CHLOROBENZENE-d5	13.94	117.0		410708	50.00	UG/L	88
35) TOLUENE-d8	11.08	98.0		433421	48.96	UG/L	95
~~36) TOLUENE~~ <i>No DEN 2-15-95</i>	11.22	91.0		505M <i>DEN</i>	.0518	UG/L	61
~~42) STYRENE~~ <i>No DEN 2-15-95</i>	15.48	104.0		2031 <i>2-15-95</i>	.304	UG/L	80
43) BROMOFLUOROBENZENE	16.51	95.0		304078	47.77	UG/L	85

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AB14F::D5

Quant Output File: ^AB14F::D2

Name: VBLK52

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 13:23

Injected at: 950214 12:51

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB14F::D5

Name: VBLK52

Misc: METHOD BLANK

Quant Output File: ^AB14F::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 13:23

Injected at: 950214 12:51

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB14F::D5

Name: VBLK52

Misc: METHOD BLANK

Quant Output File: ^AB14F::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 13:23

Injected at: 950214 12:51

Page 3 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14F::D5

Quant Output File: ^AB14F::D2

Name: VBLK52

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 13:23

Injected at: 950214 12:51

Page 4 of 5

TOTAL ION CHROMATOGRAM

WHC-SD-WM-DP-096, REV. 0

Data File: >AB14F::D5

Quant Output File: ^AB14F::D2

Name: VBLK52

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Operator ID: JOY

Quant Time : 950214 13:23

Injected at: 950214 12:51

Page 5 of 5

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14F::D5

Quant Output File: ^AB14F::D2

Name: VBLK52

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Quant Time: 950214 13:23

Quant ID File: ID_108::QT

Injected at: 950214 12:51

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 1 (ISTD)
Compound Name : BROMOCHLOROMETHANE
Scan Number : 408
Retention Time: 6.11 min.
Quant Ion : 128.0
Area : 126165
Concentration : 50.00 UG/L
q-value : 82

Den
2-15-95

WHC-SD-WM-DP-096, REV. 0

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14F::D5 Quant Output File: ^AB14F::D2
Name: VBLK52 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950214 13:23 Quant ID File: ID_108::QT
Injected at: 950214 12:51 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 9
Compound Name : METHYLENE CHLORIDE
Scan Number : 193
Retention Time: 3.13 min.
Quant Ion : 84.0
Area : 409
Concentration : .139 UG/L
q-value : 75

No
Pen
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

File >AK17D VBLK02 10UL ISTD & SMC Instru Scan 533
Bpk Ab 9999. SUB NRM ENH 7.83 min.

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >AB14F VBLK52 METHOD BLANK Inst Scan 492
Bpk Ab 20264. SUB 7.27 min.

SAMPLE SPECTRUM (UNALTERED)

File >AB14F VBLK52 METHOD BLANK Inst Scan 492
Bpk Ab 20264. 7.27 min.

Data File: >AB14F::D5

Name: VBLK52

Misc: METHOD BLANK

Quant Time: 950214 13:23

Injected at: 950214 12:51

Last Qcal Time: 950214 10:02

Quant Output File: ^AB14F::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 14
Compound Name : 1,2-DICHLOROETHANE-d4
Scan Number : 492
Retention Time: 7.27 min.
Quant Ion : 65.0
Area : 138309
Concentration : 48.15 UG/L
q-value : 83

Pen
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14F::D5

Quant Output File: ^AB14F::D2

Name: VBLK52

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Quant Time: 950214 13:23

Quant ID File: ID_108::QT

Injected at: 950214 12:51

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 17 (ISTD)
Compound Name : 1,4-DIFLUOROBENZENE
Scan Number : 567
Retention Time: 8.31 min.
Quant Ion : 114.0
Area : 490484
Concentration : 50.00 UG/L
q-value : 85

REN
2-15-95

REFERENCE STANDARD SPECTRUM

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14F::D5

Name: VBLK52

Misc: METHOD BLANK

Quant Time: 950214 13:23

Injected at: 950214 12:51

Last Qcal Time: 950214 10:02

Quant Output File: ^AB14F::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Quant ID File: ID_108::QT

Last Calibration: 950130 10:12

Compound No : 32 (ISTD)

Compound Name : CHLOROBENZENE-d5

Scan Number : 974

Retention Time: 13.94 min.

Quant Ion : 117.0

Area : 410708

Concentration : 50.00 UG/L

q-value : 88

Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14F::D5
Name: VBLK52
Misc: METHOD BLANK
Quant Time: 950214 13:23
Injected at: 950214 12:51
Last Qcal Time: 950214 10:02

Quant Output File: ^AB14F::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 35
Compound Name : TOLUENE-d8
Scan Number : 767
Retention Time: 11.08 min.
Quant Ion : 98.0
Area : 433421
Concentration : 48.96 UG/L
q-value : 95

Don
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14F::D5

Quant Output File: ^AB14F::D2

Name: VBLK52

Instrument ID: VOA-1

Misc: METHOD BLANK

Instrument ID: 70 2

Quant Time: 950214 13:23

Quant ID File: ID 108::QT

Injected at: 950214 12:51

Last Calibration: 950130 10:12

Last Qcal Time: 950214 10:02

Compound No : 36
Compound Name : TOLUENE
Scan Number : 777
Retention Time: 11.22 min.
Quant Ion : 91.0
Area : 505M
Concentration : .0518 UG/L
q-value : 61

No.
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14F::D5
Name: VBLK52
Misc: METHOD BLANK
Quant Time: 950214 13:23
Injected at: 950214 12:51
Last Qcal Time: 950214 10:02

Quant Output File: ^AB14F::D2
Instrument ID: VOA-1
Instrument ID: 70 2
Quant ID File: ID_108::QT
Last Calibration: 950130 10:12

Compound No : 42
Compound Name : STYRENE
Scan Number : 1085
Retention Time: 15.48 min.
Quant Ion : 104.0
Area : 2031
Concentration : .304 UG/L
q-value : 80

No
Den
2-15-95

REFERENCE STANDARD SPECTRUM

WHC-SD-WM-DP-096, REV. 0

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

SAMPLE SPECTRUM (UNALTERED)

Data File: >AB14F::D5 Quant Output File: ^AB14F::D2
Name: VBLK52 Instrument ID: VOA-1
Misc: METHOD BLANK Instrument ID: 70 2
Quant Time: 950214 13:23 Quant ID File: ID_108::QT
Injected at: 950214 12:51 Last Calibration: 950130 10:12
Last Qcal Time: 950214 10:02

Compound No : 43
Compound Name : BROMOFLUOROBENZENE
Scan Number : 1159
Retention Time: 16.51 min.
Quant Ion : 95.0
Area : 304078
Concentration : 47.77 UG/L
q-value : 85

REV
2-15-95

DE Nelson
2-21-95

2/22/95
Johnston Chang

MS data file header from : >AB14F::D5

Sample: VBLK52   Operator: JOY   SUPER GRP.   2/14/95 12:51
Misc : METHOD BLANK   Instrument ID: 70 2
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0   Equip ID: VOA-1
Method file: VOMETH   Tuning file: BF2TUN   No. of extra records: 2
Source temp.: N/A   Analyzer temp.: N/A   Transfer line temp.: 0

Chromatographic temperatures : 10.   160.   0.   0.   0.
Chromatographic times, min. : 4.0   2.0   0.0   0.0   0.0
Chromatographic rate, deg/min: 6.0   0.0   0.0   .5   0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	805177.	6.11	1.00 - 7.21
2	50.0	1082142.	8.31	7.21 - 11.13
3	50.0	1192970.	13.94	11.13 - 31.03

Dilution Factor = 1.00   This sample was 5.00000 g or mL

Correction Factor = 1.00

$$\text{Unknown Concentration} = \left| \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} \right| * \text{Correction Factor}$$

1:24 PM TUE., 21 FEB., 1995

WHC-SD-WM-DP-096, REV.0

WHC-SD-WM-DP-096, REV. 0

File >AB14F 35.0-350.0 amu. UBLK52 METHOD BLANK Ins
CLP ADC TIC 480 520 560 600 640 680 720 760 800

. There were no unknowns.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WHC-SD-WM-DP-096, REV. 0

BOD2G7MS

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6891MS

Sample wt/vol: 2.89 (g/mL) G

Lab File ID: >AB13H

Level: (low/med) LOW

Date Received: 01/31/95

% Moisture: not dec.

Date Analyzed: 2/13/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NO.

COMPOUND

Q

74-87-3-----	Chloromethane	17.	U
74-83-9-----	Bromomethane	17.	U
75-01-4-----	Vinyl Chloride	.5	J
75-00-3-----	Chloroethane	17.	U
75-09-2-----	Methylene Chloride	17.	U
67-64-1-----	Acetone	9.	J
75-15-0-----	Carbon Disulfide	17.	U
75-35-4-----	1,1-Dichloroethene	46.	
75-34-3-----	1,1-Dichloroethane	17.	U
540-59-0-----	1,2-Dichloroethene (total)	17.	U
67-66-3-----	Chloroform	17.	U
107-02-2-----	1,2-Dichloroethane	17.	U
78-93-3-----	2-Butanone	17.	U
71-55-6-----	1,1,1-Trichloroethane	17.	U
56-23-5-----	Carbon Tetrachloride	17.	U
75-27-4-----	Bromodichloromethane	17.	U
78-87-5-----	1,2-Dichloropropane	17.	U
10061-01-5-----	cis-1,3-Dichloropropene	17.	U
79-01-6-----	Trichloroethene	46.	
124-48-1-----	Dibromochloromethane	17.	U
79-00-5-----	1,1,2-Trichloroethane	17.	U
71-43-2-----	Benzene	50.	
10061-02-6-----	trans-1,3-Dichloropropene	17.	U
75-25-2-----	Bromoform	17.	U
108-10-1-----	4-Methyl-2-pentanone	3.	J
591-78-6-----	2-Hexanone	17.	U
127-18-4-----	Tetrachloroethene	17.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	17.	U
108-88-3-----	Toluene	49.	
108-90-7-----	Chlorobenzene	48.	
100-41-4-----	Ethylbenzene	17.	U
100-42-5-----	Styrene	17.	U
133-02-7-----	Xylene (total)	17.	U

QUANT REPORT

Page 1

2/22/95
Operator ID: JOY *Helena - Aug*
Output File: ^AB13H::D2
Data File: >AB13H::D5
Name: R-6891-MS
Misc: BOD2G7 CONCRETE

Quant Rev: 7 Quant Time: 950213 15:16
Injected at: 950213 14:44
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950213 10:01

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.06	128.0	120689	50.00	UG/L	85
3)	VINYL CHLORIDE	.98	62.0	712	.315	UG/L	54
6)	1,1-DICHLOROETHENE	2.31	96.0	128541	45.91	UG/L	75
8)	ACETONE	2.52	43.0	1393	5.20	UG/L	75
14)	1,2-DICHLOROETHANE-d4	7.22	65.0	131172	47.13	UG/L	85
17)	*1,4-DIFLUOROBENZENE	8.26	114.0	469545	50.00	UG/L	86
21)	BENZENE	7.23	78.0	353034	50.27	UG/L	100
22)	TRICHLOROETHENE	8.61	130.0	187809	46.40	UG/L	96
32)	*CHLOROBENZENE-d5	13.89	117.0	388810	50.00	UG/L	85
34)	4-METHYL-2-PENTANONE	11.16	43.0	3983	1.87	UG/L	51
35)	TOLUENE-d8	11.03	98.0	410837	49.15	UG/L	94
36)	TOLUENE	11.14	91.0	440584	49.00	UG/L	87
39)	CHLOROBENZENE	13.94	112.0	364557	48.45	UG/L	
43)	BROMOFLUOROBENZENE	16.46	95.0	296743	50.55	UG/L	87

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AB13H::D5

Quant Output File: ^AB13H::D2

Name: R-6891-MS

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 15:16

Injected at: 950213 14:44

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13H::D5

Quant Output File: ^AB13H::D2

Name: R-6891-MS

Instrument ID: VOA-1

Misc: BOD267 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 15:16

Injected at: 950213 14:44

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13H::D5

Quant Output File: ^AB13H::D2

Name: R-6891-MS

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 15:16

Injected at: 950213 14:44

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13H::D5

Quant Output File: ^AB13H::D2

Name: R-6891-MS

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 15:16

Injected at: 950213 14:44

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13H::D5

Quant Output File: ^AB13H::D2

Name: R-6891-MS

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 15:16

Injected at: 950213 14:44

Page 5 of 5

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOD2G7MSD

Lab Name: WHCWA

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CONCRETE

Matrix: (soil/water) SOIL

Lab Sample ID: R6891MSD

Sample wt/vol: 2.87 (g/mL) G

Lab File ID: >AB13I

Level: (low/med) LOW

Date Received: 01/31/95

% Moisture: not dec.

Date Analyzed: 2/13/95

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q

74-87-3-----	Chloromethane	17.	U
74-83-9-----	Bromomethane	17.	U
75-01-4-----	Vinyl Chloride	17.	U
75-00-3-----	Chloroethane	17.	U
75-09-2-----	Methylene Chloride	.1	J
67-64-1-----	Acetone	5.	J
75-15-0-----	Carbon Disulfide	17.	U
75-35-4-----	1,1-Dichloroethene	48.	
75-34-3-----	1,1-Dichloroethane	17.	U
540-59-0-----	1,2-Dichloroethene (total)	17.	U
67-66-3-----	Chloroform	17.	U
107-02-2-----	1,2-Dichloroethane	17.	U
78-93-3-----	2-Butanone	17.	U
71-55-6-----	1,1,1-Trichloroethane	17.	U
56-23-5-----	Carbon Tetrachloride	17.	U
75-27-4-----	Bromodichloromethane	17.	U
78-87-5-----	1,2-Dichloropropane	17.	U
10061-01-5-----	cis-1,3-Dichloropropene	17.	U
79-01-6-----	Trichloroethene	48.	
124-48-1-----	Dibromochloromethane	17.	U
79-00-5-----	1,1,2-Trichloroethane	17.	U
71-43-2-----	Benzene	52.	
10061-02-6-----	trans-1,3-Dichloropropene	17.	U
75-25-2-----	Bromoform	17.	U
108-10-1-----	4-Methyl-2-pentanone	17.	U
591-78-6-----	2-Hexanone	17.	U
127-18-4-----	Tetrachloroethene	17.	U
79-34-5-----	1,1,2,2-Tetrachloroethane	17.	U
108-88-3-----	Toluene	51.	
108-90-7-----	Chlorobenzene	51.	
100-41-4-----	Ethylbenzene	17.	U
100-42-5-----	Styrene	17.	U
133-02-7-----	Xylene (total)	17.	U

2/22/95

QUANT REPORT

Page 1

Operator ID: JOY *Delisa Gray*
Output File: ^AB13I::D2
Data File: >AB13I::D5
Name: R-6891-MSD
Misc: BOD2G7 CONCRETE

Quant Rev: 7   Quant Time: 950213 16:19
                  Injected at: 950213 15:47
Dilution Factor: 1.00000
Instrument ID: VOA-1
Instrument ID: 70 2

ID File: ID 108::QT
Title: VOLATILE ANALYSIS
Last Calibration: 950130 10:12

WHC-SD-WM-DP-096, REV. 0

Last Qcal Time: 950213 10:01

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	6.06	128.0	122371	50.00	UG/L	73
6)	1,1-DICHLOROETHENE	2.31	96.0	136022	47.91	UG/L	75
8)	ACETONE	2.50	43.0	818	3.01	UG/L	72
9)	METHYLENE CHLORIDE	3.10	84.0	206	.0733	UG/L	72
14)	1,2-DICHLOROETHANE-d4	7.22	65.0	132786	47.05	UG/L	82
17)	*1,4-DIFLUOROBENZENE	8.27	114.0	482084	50.00	UG/L	87
21)	BENZENE	7.23	78.0	376166	52.18	UG/L	100
22)	TRICHLOROETHENE	8.61	130.0	200948	48.35	UG/L	94
32)	*CHLOROBENZENE-d5	13.90	117.0	398596	50.00	UG/L	88
35)	TOLUENE-d8	11.03	98.0	414587	48.38	UG/L	95
36)	TOLUENE	11.15	91.0	472729	51.28	UG/L	97
39)	CHLOROBENZENE	13.95	112.0	390130	50.57	UG/L	98
43)	BROMOFLUOROBENZENE	16.46	95.0	305754	50.81	UG/L	88

* Compound is ISTD

TOTAL ION CHROMATOGRAM

Data File: >AB13I::D5

Quant Output File: ^AB13I::D2

Name: R-6891-MSD

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 16:19

Injected at: 950213 15:47

Page 1 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13I::D5

Name: R-6891-MSD

Misc: BOD2G7 CONCRETE

Quant Output File: ^AB13I::D2

Instrument ID: VOA-1

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 16:19

Injected at: 950213 15:47

Page 2 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13I::D5

Quant Output File: ^AB13I::D2

Name: R-6891-MSD

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID 108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 16:19

Injected at: 950213 15:47

Page 3 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13I::D5

Quant Output File: ^AB13I::D2

Name: R-6891-MSD

Instrument ID: VOA-1

Misc: BOD267 CONCRETE

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 16:19

Injected at: 950213 15:47

Page 4 of 5

TOTAL ION CHROMATOGRAM

Data File: >AB13I::D5

Quant Output File: ^AB13I::D2

Name: R-6891-MSD

Instrument ID: VOA-1

Misc: BOD2G7 CONCRETE

Instrument ID: 70 2

Id File: ID_108::QT

Title: VOLATILE ANALYSIS

Last Calibration: 950130 10:12

Last Qcal Time: 950213 10:01

Operator ID: JOY

Quant Time : 950213 16:19

Injected at: 950213 15:47

Page 5 of 5

Westinghouse Hanford Company

Chain of Custody / Sample Analysis Request

COPY

C-O-C #: 08785

SAF #: 94-402
Date: 12/13/94

Project Designation: 304 CONCRETION FACILITY

Sampling Location: C

Company Contact: HENDRIX, MICHELLE

Phone: (509) 372-0550

Customer Contact: WRIGHT, J.L.

Phone: (509)

Laboratory: 222-S

Protocol: RCRA

Custody Form Initiator: RZ STEFFLER

Sample Id	Analysis	Analysis Parameters	Sub Analysis	Matrix	Preservative	Sample Date / Time	Container Size/Type
B00200	Rad Screen (Lab specific)	/	/	SOLIDS	None	1-30-95 / 12:45	20 mL P
~~B~~	~~Rad Screen (Lab specific)~~	~~/~~	~~/~~	~~SOLIDS~~	~~None~~	~~/~~	~~20 mL P~~
~~B~~	~~Rad Screen (Lab specific)~~	~~/~~	~~/~~	~~SOLIDS~~	~~None~~	~~/~~	~~20 mL P~~
B00200	VOA (SW-846 8240)	/	/ ethyl acetate, methyl ethyl ketone, (2-butanone)	SOLIDS	Cool to 4 Deg. C.	1-30-95 / 12:45	250 mL aGs
~~B~~	~~VOA (SW-846 8240)~~	~~/~~	~~/ ethyl acetate, methyl ethyl ketone, (2-butanone)~~	~~SOLIDS~~	~~Cool to 4 Deg. C.~~	~~/~~	~~250 mL aGs~~
~~B~~	~~VOA (SW-846 8240)~~	~~/~~	~~/ ethyl acetate, methyl ethyl ketone, (2-butanone)~~	~~SOLIDS~~	~~Cool to 4 Deg. C.~~	~~/~~	~~250 mL aGs~~
B00200	VOA (SW-846 8260)	/	/	SOLIDS	Cool to 4°C	1-30-95 / 12:45	250 mL aGs
~~B~~	~~VOA (SW-846 8260)~~	~~/~~	~~/~~	~~SOLIDS~~	~~Cool to 4°C~~	~~/~~	~~250 mL aGs~~
~~B~~	~~VOA (SW-846 8260)~~	~~/~~	~~/~~	~~SOLIDS~~	~~Cool to 4°C~~	~~/~~	~~250 mL aGs~~

451

WHC-SD-WM-DP-096, REV. 0

Relinquished By	<u>R. J. Steffler</u>	Received By	<u>M. Hendrix</u>	Date/Time:	<u>1-30-95¹⁴⁴⁵</u>
Relinquished By		Received By		Date/Time:	
Relinquished By		Received By		Date/Time:	
Relinquished By		Received By		Date/Time:	
Relinquished By		Received By		Date/Time:	

Special Lab Instructions/Conditions:

R-6881
R-6892

Laboratory Section:

Received By:

Date/Time

Title:

Date/Time

Sample Disposition:

Disposed By:

Date/Time

Disposal Method:

Date/Time

1/20/95 3:55:48 PM

A-6001-500 (11/94)

Westinghouse Hanford Company

Chain of Custody / Sample Analysis Request

COPY

C-O-C #: 08790

SAF #: 94-402
Date: 12/13/94

Project Designation: 304 CONCRETION FACILITY

Sampling Location: C

Company Contact: HENDRIX, MICHELLE Phone: (509) 372-0550
Customer Contact: WRIGHT, J.L. Phone: (509)Laboratory: 222-S
Protocol: RCRA

Custody Form Initiator: RZ STEFFLER

Sample Id	Analysis	Analysis Parameters	Sub Analysis	Matrix	Preservative	Sample Date / Time	Container Size/Type
B002G-2	Rad Screen (Lab specific)	R 6890		SOLIDS	None	1-31-95 10445	20 mL P
B002G-7	Rad Screen (Lab specific)	R 6891		SOLIDS	None	1-31-95 1145	20 mL P
~~B~~	~~Rad Screen (Lab specific)~~	~~1-31-95 R25~~		~~SOLIDS~~	~~None~~	~~1-31-95 10445~~	~~20 mL P~~
B002G-2	VOA (SW-846 8240)		ethyl acetate, methyl ethyl ketone, (2-butanone)	SOLIDS	Cool to 4 Deg. C.	1-31-95 10445	250 mL aGs
B002G-7	VOA (SW-846 8240)		ethyl acetate, methyl ethyl ketone, (2-butanone)	SOLIDS	Cool to 4 Deg. C.	1-31-95 1145	250 mL aGs
~~B~~	~~VOA (SW-846 8240)~~	~~R25~~	~~ethyl acetate, methyl ethyl ketone, (2-butanone)~~	~~SOLIDS~~	~~Cool to 4 Deg. C.~~	~~1-31-95 10445~~	~~250 mL aGs~~
B002G-2	VOA (SW-846 8260)			SOLIDS	Cool to 4°C	1-31-95 10445	250 mL aGs
B002G-7	VOA (SW-846 8260)			SOLIDS	Cool to 4°C	1-31-95 1145	250 mL aGs
~~B~~	~~VOA (SW-846 8260)~~	~~R25~~	~~ethyl acetate, methyl ethyl ketone, (2-butanone)~~	~~SOLIDS~~	~~Cool to 4°C~~	~~1-31-95 10445~~	~~250 mL aGs~~

4
23

WHC-SD-WM-DP-096, REV. 0

Relinquished By	<i>RZ Steffler</i>	Received By	<i>KB Hulac</i>	Date/Time	1-31-95 1430
Relinquished By	<i>KB Hulac</i>	Received By	<i>W. Legiers</i>	Date/Time	1-31-95 1430
Relinquished By		Received By		Date/Time	
Relinquished By		Received By		Date/Time	
Relinquished By		Received By		Date/Time	

Special Lab Instructions/Conditions:

Laboratory Section:

Received By:

Date/Time

Title:

Date/Time

Sample Disposition:

Disposed By:

Date/Time

Disposal Method:

Date/Time

1/3/95 3:52:13 PM

A-600 (11/94)

Westinghouse Hanford Company

Chain of Custody / Sample Analysis Request

COPY

C-O-C #: 08800

SAF #: 94-402
Date: 12/13/94

Custody Form Initiator: RZ STEFFLER

Project Designation: 304 CONCRETION FACILITY

Sampling Location: C

Company Contact: HENDRIX, MICHELLE Phone: (509) 372-0550

Customer Contact: WRIGHT, J.L. Phone: (509)

Laboratory: 222-S

Protocol: RCRA

Sample Id	Analysis	Analysis Parameters	Sub Analysis	Matrix	Preservative	Sample Date / Time	Container Size/Type
B0D269	Rad Screen (Lab specific)	/	/	SOLIDS	None	2-1-95 1100	20 P
B0D269	VOA (SW-846 8240)	/	ethyl acetate, methyl ethyl ketone, (2-butanone)	SOLIDS	Cool to 4 Deg. C.	1100	250 aGs
B0D269	VOA (SW-846 8260)	/	/	SOLIDS	Cool to 4°C	1100	250 aGs

R6899

453

Relinquished By	<i>R. Z. Steffler</i>	Received By	<i>IE [Signature]</i>	Date/Time	2/1/95 1400
Relinquished By	<i>[Signature]</i>	Received By	<i>[Signature]</i>	Date/Time	2-1-95 1450
Relinquished By		Received By		Date/Time	
Relinquished By		Received By		Date/Time	
Relinquished By		Received By		Date/Time	

Special Lab Instructions/Conditions:

WHC-SD-WM-DP-096, REV. 0

Laboratory Section:	Received By:	Date/Time	Title:	Date/Time
Sample Disposition:	Disposed By:	Date/Time	Disposal Method:	Date/Time

Chain of Custody / Sample Analysis Request

COPY

C-O-C #: 08814

SAF #: 94-402
Date: 12/13/94

Project Designation: 304 CONCRETION FACILITY

Sampling Location: C

Company Contact: HENDRIX, MICHELLE Phone: (509) 372-0550

Customer Contact: WRIGHT, J.L. Phone: (509)

Laboratory: 222-S

Protocol: RCRA

Custody Form Initiator: RZ STEFFLER

Sample Id	Analysis	Analysis Parameters	Sub Analysis	Matrix	Preservative	Sample Date / Time	Container Size/Type
B002H9	Rad Screen (Lab specific)	R6905		SOLIDS	None	2-2-95 1000	20 mL P
B002J8	Rad Screen (Lab specific)	R6906		SOLIDS	None	2-2-95 1215	20 mL P
~~B~~	~~Rad Screen (Lab specific)~~	~~2-2-95~~		~~SOLIDS~~	~~None~~	~~1~~	~~20 mL P~~
B002H9	VOA (SW-846 8240)		/ ethyl acetate, methyl ethyl ketone, (2-butanone)	SOLIDS	Cool to 4 Deg. C.	2-2-95 1000	250 mL aGs
B002J8	VOA (SW-846 8240)		/ ethyl acetate, methyl ethyl ketone, (2-butanone)	SOLIDS	Cool to 4 Deg. C.	2-2-95 1215	250 mL aGs
~~B~~	~~VOA (SW-846 8240)~~	~~R23~~ ~~2-2-95~~	~~/ ethyl acetate, methyl ethyl ketone, (2-butanone)~~	~~SOLIDS~~	~~Cool to 4 Deg. C.~~	~~1~~	~~250 mL aGs~~
B002H9	VOA (SW-846 8260)		/	SOLIDS	Cool to 4°C	2-2-95 1000	250 mL aGs
B002J8	VOA (SW-846 8260)		/	SOLIDS	Cool to 4°C	2-2-95 1215	250 mL aGs
~~B~~	~~VOA (SW-846 8260)~~	~~R23~~ ~~2-2-95~~	~~/~~	~~SOLIDS~~	~~Cool to 4°C~~	~~1~~	~~250 mL aGs~~

454

Relinquished By <u>R.Z. Steffler</u>	Received By <u>N. J. Jorgensen</u>	Date/Time: <u>2-2-95 1540</u>
Relinquished By _____	Received By _____	Date/Time: _____
Relinquished By _____	Received By _____	Date/Time: _____
Relinquished By _____	Received By _____	Date/Time: _____
Relinquished By _____	Received By _____	Date/Time: _____

Special Lab Instructions/Conditions:

WHC-SD-WM-DP-096, REV. 0

Laboratory Section:	Received By:	Date/Time:	Title:	Date/Time:
Sample Disposition:	Disposed By:	Date/Time:	Disposal Method:	Date/Time:

REQUEST FOR SPECIAL ANALYSIS (RSA)					RSA No. 2240		
1. Sample Origin <u>04 Concretion Facility</u>		2. Date Submitted <u>2-2-95</u>		4. Requester Name <u>Janet Wright</u>		6. Charge Code/Work Package <u>K345R</u>	
		3. Submitted By <u>RZ Steffler</u>		5. Requester Phone/MSIN <u>376-1532</u>		7. Date Required <u>ASAP</u>	
8. Customer ID	Collected		9. Laboratory ID	12. Number of Samples <u>2</u>	13. Volume of Samples <u>250 ml</u> <u>20 ml</u>	14. Protocols ☐ None ☒ RCRA ☐ NQA-1 ☐ Other ☐ CERCLA	
	Date	Time					
<u>BOD2H9</u>	<u>2-2-95</u>	<u>1000</u>	<u>R-6905</u>				
<u>BOD2J8</u>	<u>2-2-95</u>	<u>1215</u>	<u>R-6906</u>				
				15. Sample Type ☒ Solid ☐ Soil ☐ Slurry ☐ Gas ☐ Water ☐ Waste ☐ Solution ☐ Sludge ☐ Oil ☐ Other (specify) <u>Concrete</u>			
				16. Storage Requirements ☐ None ☒ Specify <u>Maintain 4° C.</u>			
				17. Process Knowledge/Known Listed Wastes ☒ Unknown ☐ Known (Please attach list) ☐ Previously submitted for this Project			
10. Determination		11. Expected Range		18. Survey Dose Rate <u>[Signature]</u> <u>40.5 mR/hr</u> HPT Signature			
<u>VOA</u>		<u>Unknown</u>					
<u>Total Activity</u>				19. Disposition of Waste ☐ Return to Client/Location ☒ Dispose per 222-S Procedures ☐ Other			
				20. Additional Information <u>Please fax data to</u> <u>Janet Wright</u> <u>Blank R6904</u>			
21. Chain of Custody ☐ No ☒ Yes Number: <u>8814</u>				22. Assigned Custodial Group (select one) ☐ PCL ☒ POSU ☐ ENV ☐ Process			
23. Sample Received By: <u>[Signature]</u> Date: <u>2-2-95</u> Time: <u>1520</u>				24. Laboratory Manager (if required) <u>458</u> Date:			

REQUEST FOR SPECIAL ANALYSIS (RSA)					RSA No. N/A				
1. Sample Origin 304 Concretion Facility		2. Date Submitted		4. Requester Name JL Wright		6. Charge Code/Work Package K345R			
3. Submitted By RZ Steffler		5. Requester Phone/MSIN 376-1532		7. Date Required ASAP					
8. Customer ID	Collected		9. Laboratory ID	12. Number of Samples 5	13. Volume of Samples 20ml	14. Protocols ☒ None ☐ RCRA ☐ NQA-1 ☐ Other ☐ CERCLA			
	Date	Time							
BOD2B0	1-23-95	0850	N- 4560						
BOD2K9	1-23-95	0855	N- 4561 (A+B)						
BOD2B1	1-23-95	1020	N- 4562						
BOD2B2	1-23-95	1045	N- 4563						
BOD2B3	1-23-95	1115	N- 4564						
				15. Sample Type ☒ Solid ☐ Soil ☐ Slurry ☐ Gas ☐ Water ☐ Waste ☐ Solution ☐ Sludge ☐ Oil ☐ Other (specify) _____					
				16. Storage Requirements ☒ None WHC-SD-WM-DP-096, REV. 0 ☐ Specify _____					
				17. Process Knowledge/Known Listed Wastes ☒ Unknown ☐ Known (Please attach list) ☐ Previously submitted for this Project					
10. Determination Total Activity		11. Expected Range < D.		18. Survey Dose Rate 1-23-95		19. Disposition of Waste ☐ Return to Client/Location ☒ Dispose per 222-S Procedures ☐ Other _____			
BOD2K9 requires an additional VOA analysis (exp 4502)				HPT Signature 					
				20. Additional Information Please fax total activity results to 373-7076 Blank N 4606					
21. Chain of Custody ☐ No ☒ Yes Number: 006209				22. Assigned Custodial Group (select one) ☐ PCL ☐ PDSU ☒ ENV ☐ Process					
23. Sample Received By: Xander Cobb Date: 01-23-95 Time: 1330				24. Laboratory Manager (if required) 459 Date: _____					

TABLE II : TARE WEIGHTS

**CONCRETE SAMPLES FOR VOLATILE ORGANICS ANALYSIS
BY LA-523-435 PROCEDURE**

VIAL NUMBER	SAMPLE IDENTIFICATION	TARE WEIGHT (g)			SAMPLE WEIGHT	H2O WEIGHT	SMPL WT 5mL H2O	DATE ANALYZED	ANALYST INITIAL
		EMPTY VIAL	VIAL+SAMPLE	VIAL+SMPL+H2O					
1	N4561	24.93	44.67	79.52	19.74	34.85	2.83	1/30/95	JOC
2	N4561-DUP	24.79	45.34	79.46	20.55	34.12	3.01	1/30/95	JOC
3	N4561-MS	24.81	45.11	79.1	20.30	33.99	2.99	1/31/95	JOC
4	N4561-MSD	24.71	45.53	79.68	20.82	34.15	3.05	1/31/95	JOC
5	E9691	24.86	45.13	79.36	20.27	34.23	2.96	1/31/95	JOC
6	E9691-DUP	24.81	45.11	79.89	20.30	34.78	2.92	1/31/95	JOC
7	R6881	24.74	44.74	79.57	20.00	34.83	2.87	1/31/95	JOC
8	R6881-DUP	24.85	44.64	79.5	19.79	34.86	2.84	1/31/95	JOC
9	R6892	24.70	44.31	78.92	19.61	34.61	2.83	1/31/95	JOC
10	R6892-DUP	24.69	45.14	79.63	20.45	34.49	2.96	1/31/95	JOC
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TABLE II : TARE WEIGHTS

CONCRETE SAMPLES FOR VOLATILE ORGANICS ANALYSIS
BY LA-523-435 PROCEDURE

VIAL NUMBER	SAMPLE IDENTIFICATION	TARE WEIGHT (g)			SAMPLE WEIGHT	H2O WEIGHT	SMPL WT 5mL H2O	DATE ANALYZED	ANALYST INITIAL
		EMPTY VIAL	VIAL+SAMPLE	VIAL+SMPL+H2O					
1	R6890	24.78	44.11	79.14	19.33	35.03	2.76	2/13/95	JOC
2	R6890-DUP	24.75	45.02	79.29	20.27	34.27	2.96	2/13/95	JOC
3	R6891	24.70	44.55	79.22	19.85	34.67	2.86	2/13/95	JOC
4	R6891-MS	24.68	44.57	79.02	19.89	34.45	2.89	2/13/95	JOC
5	R6891-MSD	24.76	44.88	79.98	20.12	35.10	2.87	2/13/95	JOC
6	R6899	24.97	45.31	79.68	20.34	34.37	2.96	2/13/95	JOC
7	R6899-RR	24.85	44.26	78.41	19.41	34.15	2.84	2/13/95	JOC
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TABLE II : TARE WEIGHTS

CONCRETE SAMPLES FOR VOLATILE ORGANICS ANALYSIS
BY LA-523-435 PROCEDURE

VIAL NUMBER	SAMPLE IDENTIFICATION	EMPTY VIAL	TARE WEIGHT (g)		SAMPLE WEIGHT	H2O WEIGHT	SMPL WT 5mL H2O	DATE ANALYZED	ANALYST INITIAL
			VIAL+SAMPLE	VIAL+SMPL+H2O					
1	R6905	24.78	45.35	79.25	20.57	33.9	3.03	1/14/95	JOC
2	R6906	24.80	44.74	79.34	19.94	34.6	2.88	1/14/95	JOC
3	R6906-MS	24.91	45.30	79.72	20.39	34.42	2.96	1/14/95	JOC
4	R6906-MSD	24.75	45.32	79.40	20.57	34.08	3.02	1/14/95	JOC
5	R6905-DUP	24.90	44.60	79.09	19.70	34.49	2.86	1/14/95	JOC
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