258-058-11-01

1996 ANNUAL POST-CLOSURE GROUNDWATER MONITORING REPORT FEDERAL PAPER BOARD COMPANY, INC. WILMINGTON, NORTH CAROLINA

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1.0 INTRODUCTION

This annual report summarizes the results of the post-closure groundwater monitoring program conducted at the Federal Paper Board Company facility in Wilmington, North Carolina, during 1996. Groundwater samples were collected and analyzed during February and August of 1996. The results of the fifth semiannual sampling event (first of 1996) were previously submitted to the North Carolina Department of Environment, Health, and Natural Resources, prepared for Federal Paper Board Company by Radian International and submitted on April 10, 1996. The results of the sixth semiannual sampling event (second of 1996) are incorporated in this annual report.

The fifth semiannual monitoring episode included the analysis of groundwater samples collected from monitoring wells MW-6, MW-7, MW-9, and MW-12. The sixth semiannual monitoring episode included the analysis of water samples collected from monitoring wells MW-10, MW-23, and MW-24 in addition to the four wells sampled semiannually. All sampling and analytical methods follow procedures described in the Revised Post-Closure Plan (Radian, June 1993). Analytical results were validated for accuracy and precision according to industry-accepted protocols. A discussion of the data quality evaluation results, a summary of the qualified data, and copies of the complete laboratory reports are included in Appendix A.

2.0 GROUNDWATER QUALITY

Figure 1 illustrates the locations of all on-site monitoring wells, including monitoring wells that are sampled semiannually for the post-closure groundwater monitoring program.

Figure 2 illustrates a plan view of the extent of total volatile organic compounds (VOCs) detected in groundwater. Data from the 1996 sampling events indicate a groundwater plume extending to the west and southwest of the former tank farm. Field measurements recorded during the fifth and sixth semiannual sampling events are provided in Tables 1 and 2, respectively.

Analytical data from groundwater samples obtained from the lower aquifer system reveal no evidence of contamination. As shown in Figure 3, the vertical extent of VOCs is limited to a depth of approximately 15 feet by the presence of a confining layer.

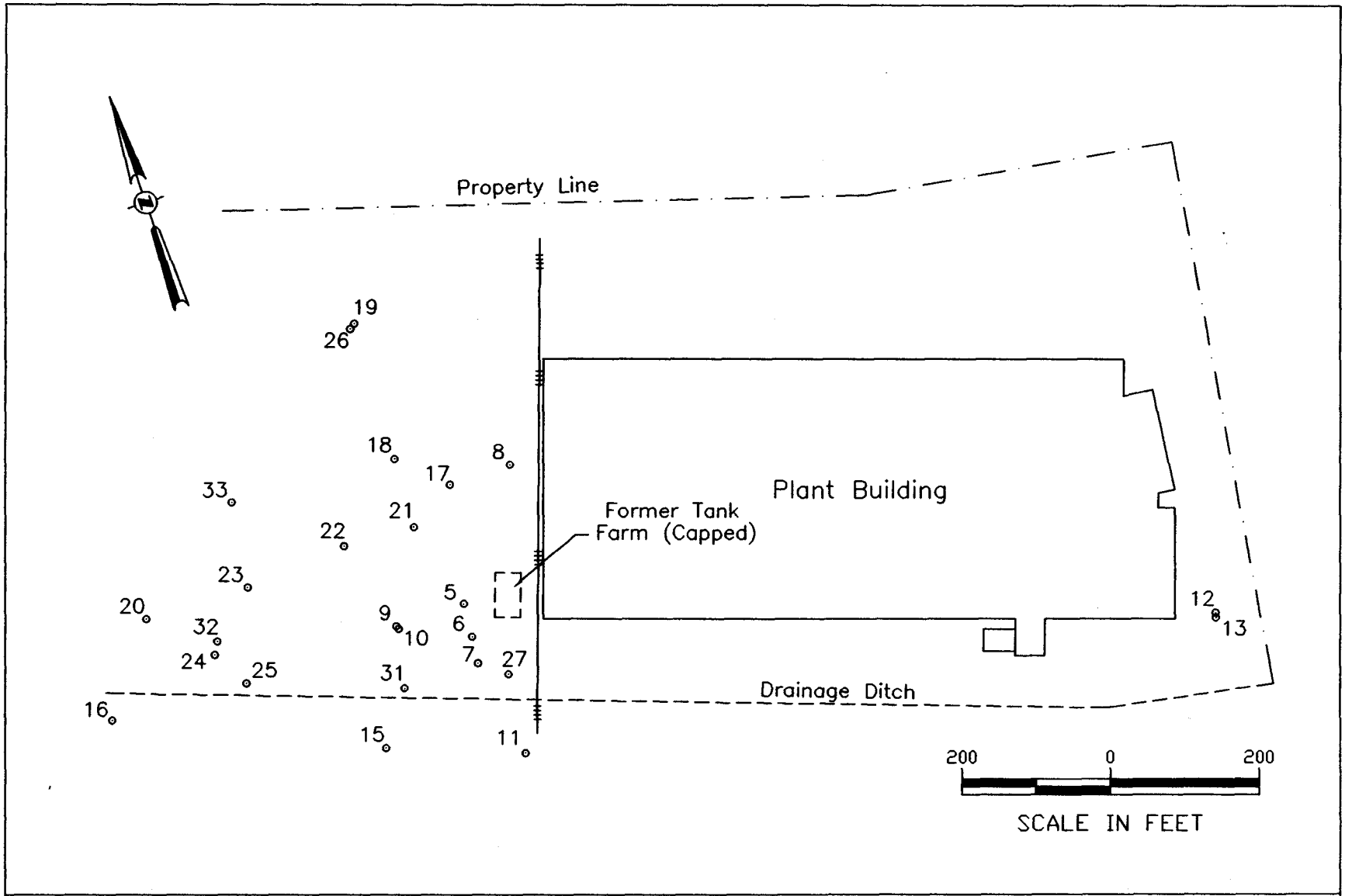

Figure 1. Monitoring Well Locations
Federal Paper Board Company, Wilmington, North Carolina

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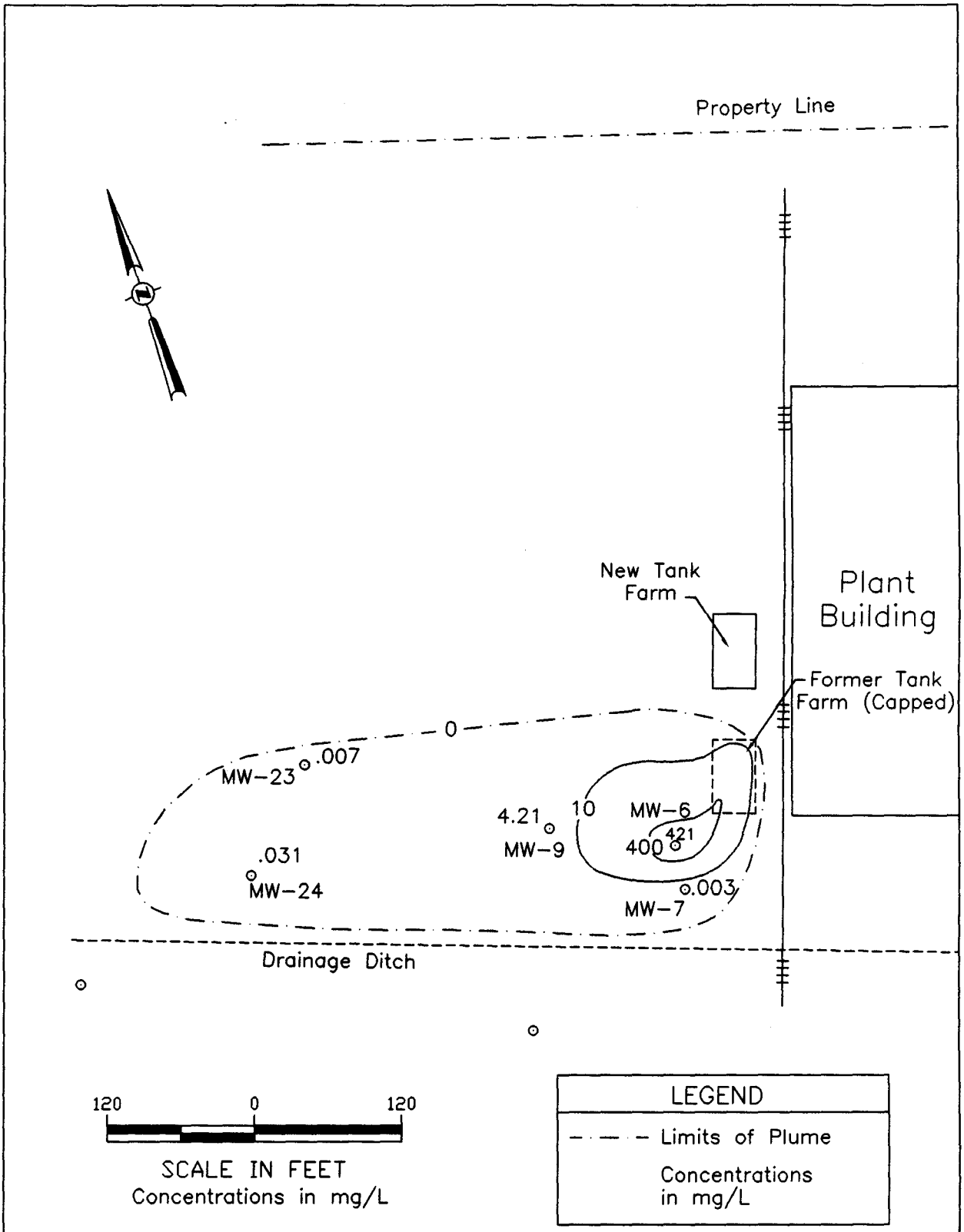

Figure 2. Lateral Distribution of Total VOCs in Groundwater, August 1996, Federal Paper Board Co., Wilmington, NC

AC-1275

TABLE 1. FIELD MEASUREMENTS, FIFTH SEMIANNUAL SAMPLING FEDERAL PAPER BOARD COMPANY, WILMINGTON, NC FEBRUARY 1996

Monitoring Well #	Bailed Volume (gals)	pH (pH units)	Specific Conductance (umhos/cm)	Temperature (degrees C)	Time
MW-6	2.0	4.6	1400	14.0	15:52
	4.0	4.7	1380	14.5	15:57
	6.5	4.8	1420	14.5	16:02
	Sampled at 16:05 on February 13, 1996, by PTL				
MW-7	2.0	6.3	110	12.7	15:22
	4.0	6.2	110	13.4	15:28
	6.0	6.3	120	13.0	15:35
	Sampled at 15:40 on February 13, 1996, by PTL				
MW-9	2.5	6.2	340	15.2	14:40
	5.0	6.4	475	15.7	14:48
	7.5	6.4	510	15.5	14:54
	Sampled at 15:05 on February 13, 1996, by PTL				
MW-12	2.5	5.3	170	15.0	13:45
	5.0	5.4	165	15.0	13:52
	7.5	5.7	180	15.0	14:08
	Sampled at 14:15 on February 13, 1996, by PTL				

TABLE 2. FIELD MEASUREMENTS, SIXTH SEMIANNUAL SAMPLING FEDERAL PAPER BOARD COMPANY, WILMINGTON, NC AUGUST 1996

Monitoring Well #	Bailed Volume (gals)	pH (pH units)	Specific Conductance (umhos/cm)	Temperature (degrees C)	Time
MW-6	2.1	5.7	950	22.0	11:50
	4.2	6.2	900	20.0	12:00
	6.3	6.4	900	19.0	12:05
	Sampled at 12:10 on August 28, 1996, by JR/SH				
MW-7	2.1	7.0	170	23.0	10:15
	4.2	7.5	290	21.5	10:25
	6.3	7.5	290	21.0	10:32
	Sampled at 10:35 on August 28, 1996, by JR/SH				
MW-9	2.6	6.8	600	22.0	11:00
	5.3	6.8	610	24.0	11:10
	7.9	6.9	615	22.0	11:20
	Sampled at 11:30 on August 28, 1996, by JR/SH				
MW-10	23.8	8.7	170	27.0	15:20
	29.0[1]	8.2	220	26.0	16:10
	Sampled at 16:11 on August 27, 1996, by JR/SH				
MW-12	2.6	5.8	225	25.0	14:17
	5.3	6.1	225	24.0	14:25
	7.9	6.2	235	23.0	14:33
	Sampled at 14:35 on August 27, 1996, by JR/SH				
MW-23	1.6	6.5	280	24.0	15:35
	3.2	6.6	320	23.0	15:50
	4.8	6.5	330	23.0	16:00
	Sampled at 16:05 on August 27, 1996, by JR/SH				
MW-24	2.4	7.4	450	20.0	09:00
	4.8	7.4	450	19.0	09:15
	7.1	7.4	445	20.0	09:20
	Sampled at 09:25 on August 28, 1996, by JR/SH				

[1] Well went dry after purging 29.0 gallons.

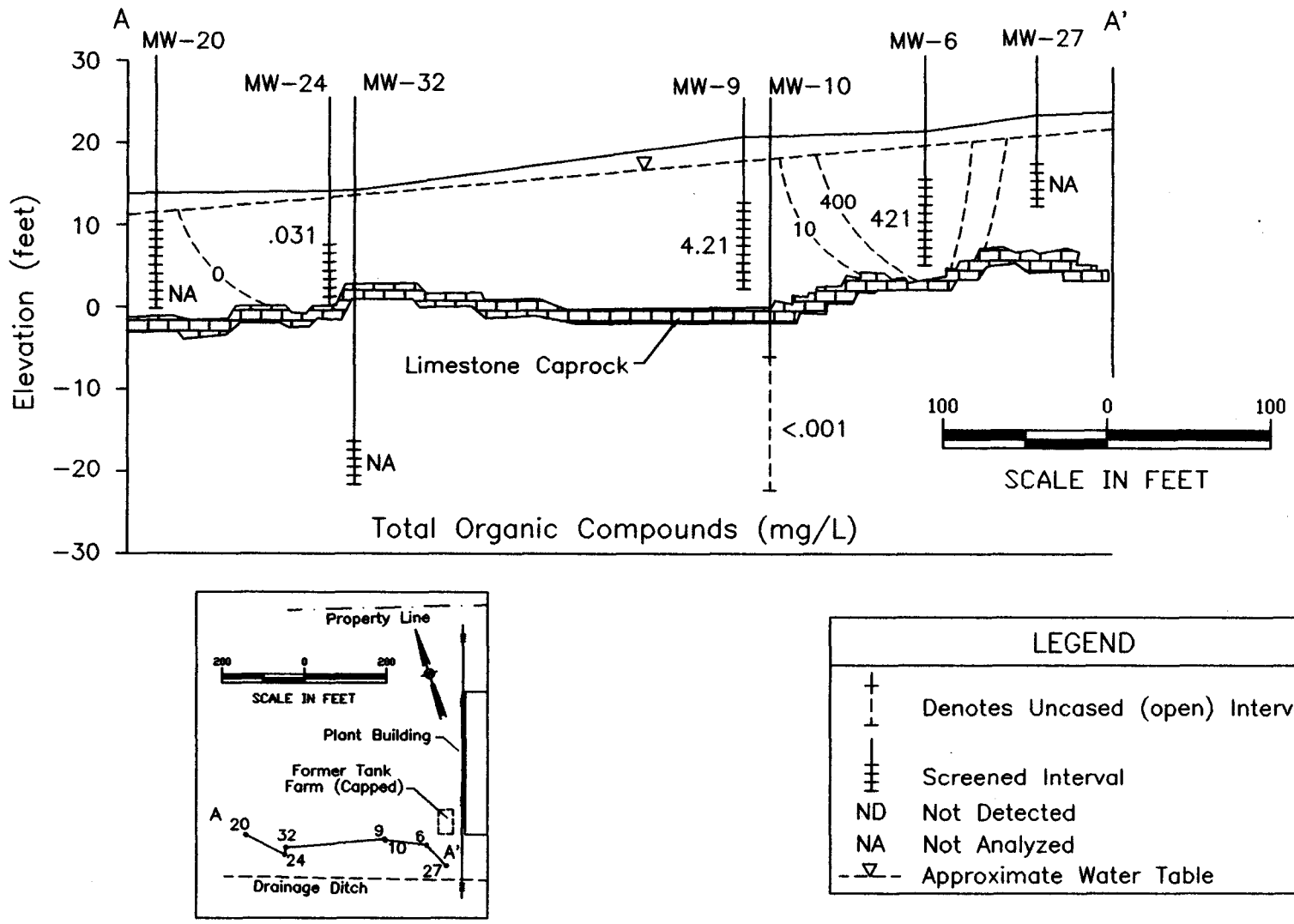

Figure 3. Distribution of Total VOCs Along Cross Section A–A'
August 1996, Federal Paper Board Company, Inc., Wilmington, NC

AC-1276

3.0 GROUNDWATER FLOW

Tables 3 and 4 provide the static water-level measurements for both sampling events of 1996. Figure 4 is a groundwater-level contour map of the upper aquifer system based on data collected during August of 1996. As illustrated in the figure, groundwater flow direction at the site is toward the west-southwest which is consistent with previous measurements. Figure 5 provides a groundwater-level contour plot of the measurements collected from wells installed in the lower aquifer.

Groundwater velocity at the site was calculated using values of hydraulic conductivity, hydraulic gradient, and porosity obtained during assessment activities in 1993. An average seepage velocity of 0.8 feet/day was obtained using a value of 10 feet/day for hydraulic conductivity, 0.013 for hydraulic gradient, and 17% for effective porosity. This represents an average velocity for groundwater flow and does not take into account retention characteristics of the substrate which would retard the movement of contaminants. Therefore, this velocity value should be considered a maximum estimate for contaminant migration. Based on an evaluation of analytical results and groundwater flow direction, the present monitoring well system is capable of monitoring groundwater at the site.

TABLE 3. STATIC-WATER LEVEL MEASUREMENTS
FEDERAL PAPER BOARD COMPANY, WILMINGTON, NC
FEBRUARY 13, 1996

Monitoring Well	Top of Casing Elevation (feet above msl)	Depth to Water (feet)	Water Level Elevation (feet above msl)
MW-5	25.95	7.58	18.37
MW-6	25.12	6.68	18.44
MW-7	25.69	7.01	18.68
MW-8	25.70	6.54	19.16
MW-9	22.15	5.06	17.09
MW-10	23.06	7.22	15.84
MW-11	24.80	4.17	20.63
MW-12	29.24	6.00	23.24
MW-13	29.47	6.54	22.93
MW-15	22.34	5.53	16.81
MW-16	16.58	6.74	9.84
MW-17	22.26	4.03	18.23
MW-18	21.54	4.52	17.02
MW-19	20.98	5.32	15.66
MW-20	14.92	3.95	10.97
MW-21	22.20	4.46	17.74
MW-22	20.74	4.57	16.17
MW-23	18.30	3.09	15.21
MW-24	16.30	1.60	14.70
MW-25	17.81	5.33	12.48
MW-26	20.56	5.79	14.77
MW-27	22.85	3.34	19.51
MW-31	22.91	6.24	16.67
MW-32	17.28	5.70	11.58
MW-33	17.32	2.79	14.53

TABLE 4. STATIC-WATER LEVEL MEASUREMENTS
FEDERAL PAPER BOARD COMPANY, WILMINGTON, NC
AUGUST 27, 1996

Monitoring Well	Top of Casing Elevation (feet above msl)	Depth to Water (feet)	Water Level Elevation (feet above msl)
MW-5	25.95	6.67	19.28
MW-6	25.12	5.86	19.26
MW-7	25.69	6.20	19.49
MW-8	25.70	4.91	20.79
MW-9	22.15	4.30	17.85
MW-10	23.06	7.31	15.75
MW-11	24.80	3.40	21.40
MW-12	29.24	4.50	24.74
MW-13	29.47	5.42	24.05
MW-15	22.34	5.01	17.33
MW-16	16.58	6.33	10.25
MW-17	22.26	2.74	19.52
MW-18	21.54	3.52	18.02
MW-19	20.98	4.40	16.58
MW-20	14.92	3.90	11.02
MW-21	22.20	2.40	19.80
MW-22	20.74	3.82	16.92
MW-23	18.30	2.45	15.85
MW-24	16.30	1.30	15.00
MW-25	17.81	4.95	12.86
MW-26	20.56	5.56	15.00
MW-27	22.85	3.51	19.34
MW-31	22.91	5.94	16.97
MW-32	17.28	6.53	10.75
MW-33	17.32	2.28	15.04

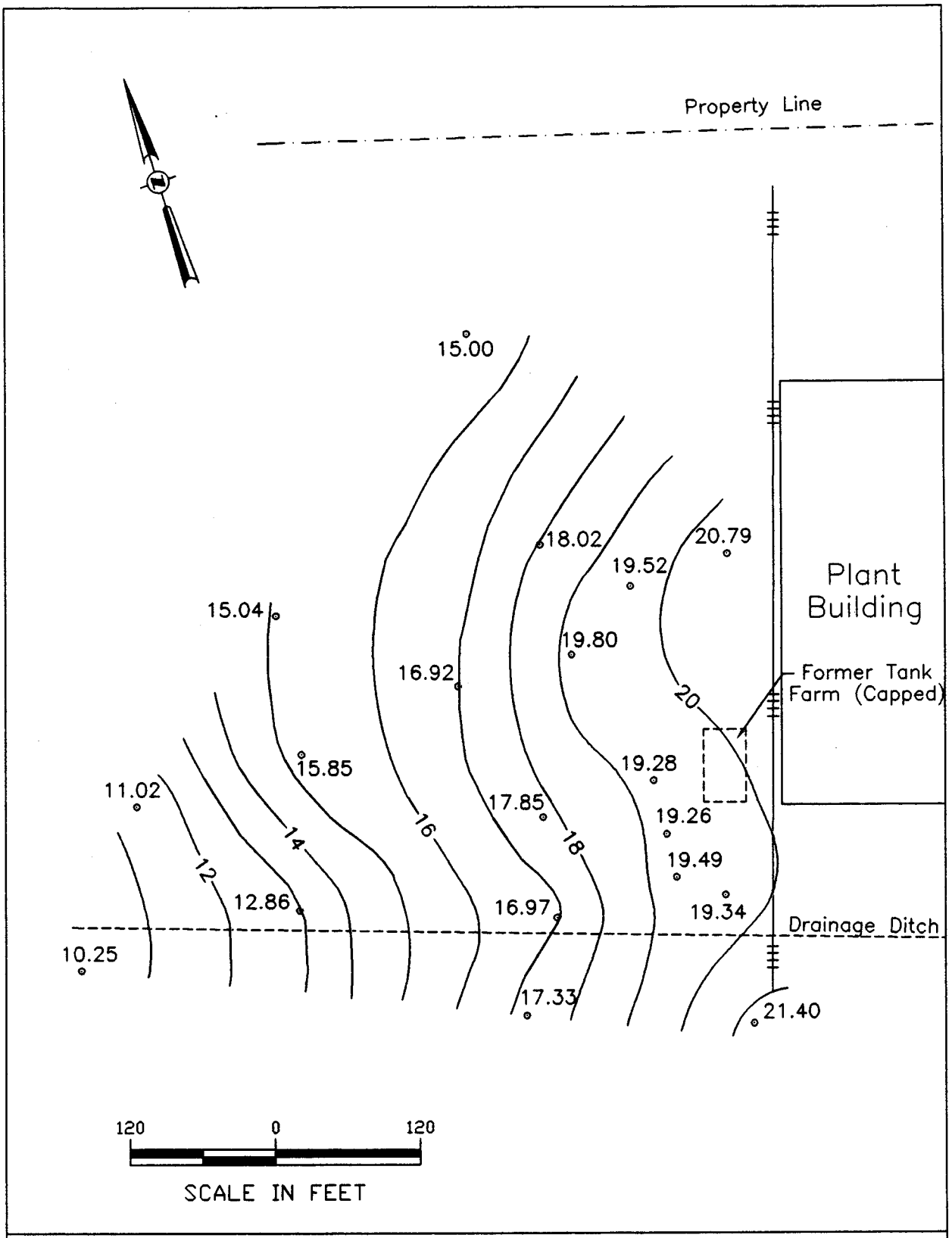

Figure 4. Groundwater Elevation Contour Map for Upper Aquifer (8/27/96) Federal Paper Board Co., Wilmington, NC

AC-1278

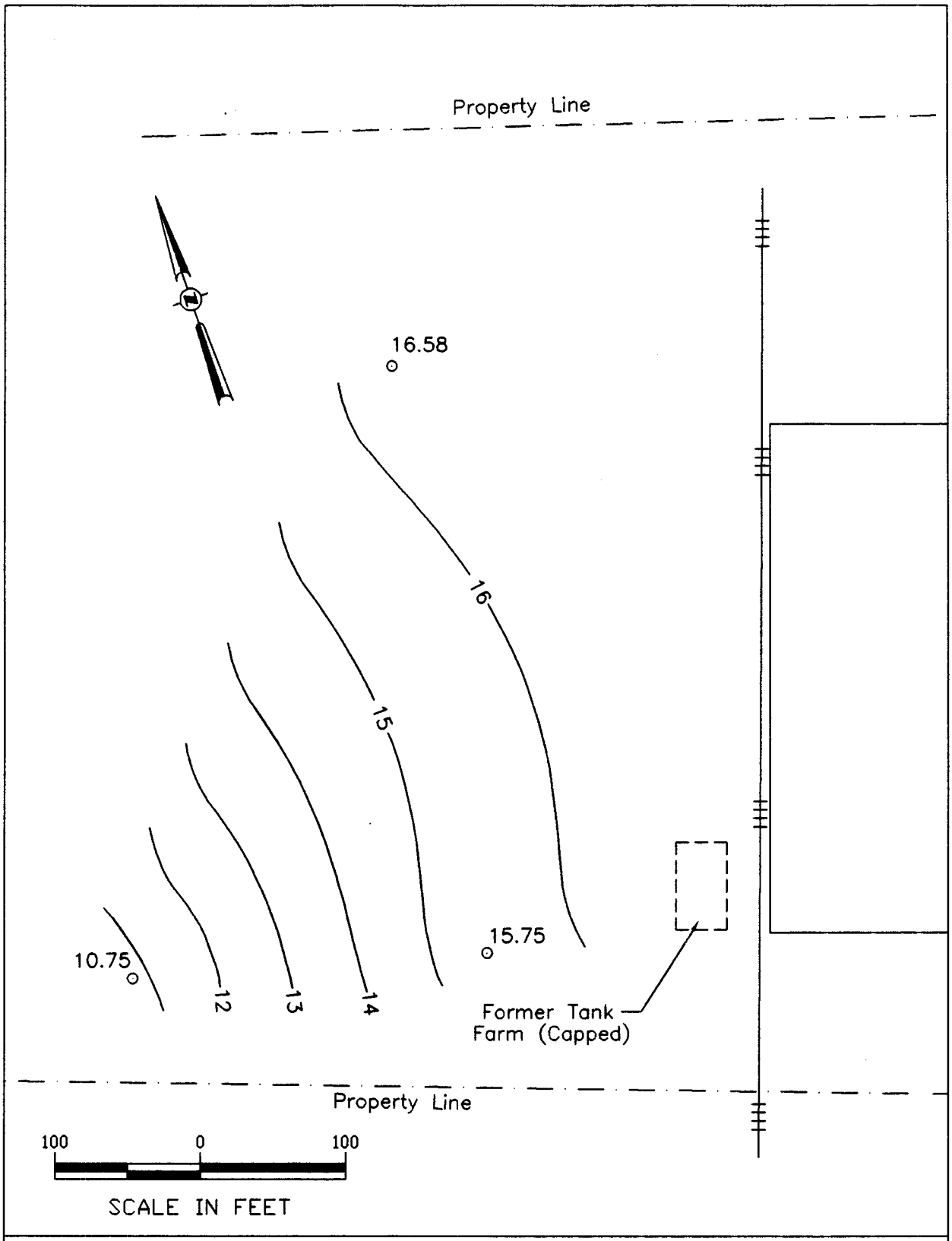

Figure 5. Groundwater Contour Map for Deep Wells (8/27/96)
Federal Paper Board Company, Wilmington, NC

AC-1277

Seven water samples (MW-6, MW-7, MW-9, MW-10, MW-12, MW-23, and MW-24) were collected by Radian International at the Federal Paper Board facility in Wilmington, NC on August 27-28, 1996 and submitted to Radian Analytical Services (RAS) in Austin, Texas for organic and inorganic analyses. The samples were submitted to the laboratory for the analysis of volatile organics (SW-846 8260), semi-volatile organics (SW-846 8270A), total chromium (SW-846 6010A), and total arsenic (SW-846 7060A). In addition, trip and field blanks were shipped with the samples to the laboratory for the analysis of volatile organic compounds (VOCs). The analytical results from the August 1996 sampling episode were reported by RAS under analytical report numbers 9608967 through 9608970.

Accuracy was determined from the review of holding times, spike recoveries, and blank contamination. Precision was based on the evaluation of laboratory duplicate results.

With the exception of samples MW-6, MW-9, and TB-1, samples were received by the laboratory in good condition on August 29, 1996. The temperature of samples MW-6, MW-9, and TB-1 was greater than the laboratory specification limits of $4 \pm 2°C$. Positive and non-detect volatile and semi-volatile organic results were qualified as estimated (J/UJ). All samples were prepared and analyzed within holding times.

Surrogate spike recoveries fell within laboratory specification limits during the volatile organic analysis (VOAs) of the field samples. However, surrogate spike recoveries exceeded quality control (QC) limits during the semivolatile organic analysis (SVOA) of samples MW-7, MW-9, and FB-1. The recovery for the surrogate compound 2-fluorophenol was less than QC limits during the analysis of samples MW-7 (57%) and MW-9 (58%). The recovery (128%) for one of three base/neutral compounds (terphenyl) was greater than QC limits during the analysis of FB-1. Qualification of the data was not required as only one of three base/neutral or acid compounds exceeded the laboratory specification limits.

The results of the Lab Control Sample (LCS) and LCS duplicate (LCSD) analyses were reviewed for accuracy and precision. Project QC requirements for precision and recovery

were met during the analysis of volatile organic compounds, arsenic, and chromium. Laboratory specification limits in both the LCS and LCSD were not acceptable during the SVOA. In addition, technical QC limits of 60-140% were not met during the SVOA. Positive results were qualified as estimated (J) whenever the RPD exceeded QC limits or recovery exceeded (greater or less than) QC limits in both the LCS and LCSD. Non-detect results were qualified as unusable (R) when the recovery of both the LCS and LCSD were less than the technical QC limits of 60%.

Acceptable accuracy and precision were obtained during the SVOA and chromium matrix spike (MS) and MS duplicate (MSD) analyses. The recovery (126%) for arsenic was slightly greater than the upper QC limit of 125% during the MSD analysis of sample MW-6. Qualification of the data is not warranted for this minor exceedance. High recoveries were obtained during the VOA MS/MSD analysis of a batch sample. Qualification of volatile organic sample results is not required because the sample selected for the MS/MSD was not collected at FPB and, therefore, the matrix interference present in the batch sample may not be indicative of the conditions present at the site.

Methylene chloride, common laboratory contaminant, was detected in field blank FB-1. Carbon disulfide was detected in both the laboratory and trip blanks. No other organic contaminants were detected in the blanks. Positive sample results have been qualified as non-detect whenever sample concentrations for methylene chloride and carbon disulfide were not significantly greater (ten times for common contaminants, five times for all others) than that detected in the blanks. The detection limit for these analytes has been elevated to the amount present in the samples and flagged with an "U". None of the other sample results required qualification due to organic blank contamination.

Inorganic contamination was not detected in either the arsenic or chromium preparation blank. However, arsenic and chromium were detected in the inorganic initial and continuing calibration blanks. Arsenic and chromium sample results not significantly greater (five times) than that detected in the blanks have been qualified as non-detect. The detection

limit for these two elements was elevated to the amount present in the samples and flagged with an "U".

The semivolatile organic compounds 3-methylphenol and 4-methylphenol co-eluted during the analysis of samples MW-6 and MW-9. The results for this compound were qualified as estimated (J) in samples MW-6 and MW-9 as a result.

Multiple sample analyses were performed by the laboratory because of elevated levels of contaminants. When sample concentrations exceeded the calibration range, the results from the reanalysis which are within the calibration range are considered more accurate. Extraneous data has been R-flagged.

Definition of Validation Flags

US EPA-Defined Data Qualifiers:

U	Not detected above associated level.
J	Associated value is an estimated quantity.
UJ	Analyte is not detected and the associated quantitation limit is estimated.
N	Tentatively identified (Organics only).
R	Data is unusable.

RESULTS SUMMARY

Work Order # 9608967

Method Volatile Organics SW8240A

Test Code 826SWAT1

Project Sample ID:	FB-1		MW-10		MW-10		MW-12	
Lab ID:	9608967-08A		9608967-02A		9608967-02B		9608967-01A	
File ID:	F0904624		F0903624		F0904620		F0903623	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:								
Date Analyzed:	09/05/96 03:18:00		09/04/96 02:05:00		09/05/96 01:26:00		09/04/96 01:36:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acetone	ND	0.489	R ~~ND~~	~~0.489~~	ND	0.489	R ~~3.33~~	~~0.489~~
Acrolein	ND	0.707	ND	0.707	ND	0.707	ND	0.707
Acrylonitrile	ND	0.712	ND	0.712	ND	0.712	ND	0.712
Benzene	ND	0.0378	0.161	0.0378	0.150	0.0378	ND	0.0378
Bromodichloromethane	ND	0.0393	ND	0.0393	ND	0.0393	ND	0.0393
Bromoform	ND	0.174	ND	0.174	ND	0.174	ND	0.174
Bromomethane	ND	0.0632	ND	0.0632	ND	0.0632	ND	0.0632
2-Butanone (MEK)	ND	0.260	ND	0.260	ND	0.260	ND	0.260
Carbon disulfide	ND	0.0485	13.1 R	0.0485	ND, 0.411 J/U	~~0.0485~~	18.6 R	0.0485
Carbon tetrachloride	ND	0.0474	ND	0.0474	ND	0.0474	ND	0.0474
Chlorobenzene	ND	0.0258	ND	0.0258	ND	0.0258	ND	0.0258
Chloroethane	ND	0.0741	ND	0.0741	ND	0.0741	ND	0.0741
2-Chloroethyl vinyl ether	ND	0.162	ND	0.162	ND	0.162	ND	0.162
Chloroform	ND	0.0409	ND	0.0409	ND	0.0409	ND	0.0409
Chloromethane	ND	0.0454	ND	0.0454	ND	0.0454	ND	0.0454
Dibromochloromethane	ND	0.141	ND	0.141	ND	0.141	ND	0.141
Dibromomethane	ND	0.0621	ND	0.0621	ND	0.0621	ND	0.0621
trans-1,4-Dichloro-2-butene	ND	0.389	ND	0.389	ND	0.389	ND	0.389
Dichlorodifluoromethane	ND	0.0651	ND	0.0651	ND	0.0651	ND	0.0651
1,1-Dichloroethane	ND	0.0919	ND	0.0919	ND	0.0919	0.368	~~0.0919~~

ND Not detected
UJ Not detected and the detection limit is estimated.
J Estimated value.
U. Not present above the associated level.
R Unusable data.

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

RESULTS SUMMARY (Cont'd)

Method Volatile Organics SW8240A

Test Code 826SWAT1

Project Sample ID:	FB-1		MW-10		MW-10		MW-12	
Lab ID:	9608967-08A		9608967-02A		9608967-02B		9608967-01A	
File ID:	F0904624		F0903624		F0904620		F0903623	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:								
Date Analyzed:	09/05/96 03:18:00		09/04/96 02:05:00		09/05/96 01:26:00		09/04/96 01:36:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2-Dichloroethane	ND	0.105	R ~~ND~~	~~0.105~~	ND	0.105	R ~~ND~~	~~0.105~~
1,1-Dichloroethene	ND	0.0802	~~ND~~	~~0.0802~~	ND	0.0802	~~ND~~	~~0.0802~~
trans-1,2-Dichloroethene	ND	0.0641	~~ND~~	~~0.0641~~	ND	0.0641	~~ND~~	~~0.0641~~
1,2-Dichloropropane	ND	0.0541	~~ND~~	~~0.0541~~	ND	0.0541	~~ND~~	~~0.0541~~
cis-1,3-Dichloropropene	ND	0.0538	~~ND~~	~~0.0538~~	ND	0.0538	~~ND~~	~~0.0538~~
trans-1,3-Dichloropropene	ND	0.0667	~~ND~~	~~0.0667~~	ND	0.0667	~~ND~~	~~0.0667~~
Ethyl methacrylate	ND	0.121	~~ND~~	~~0.121~~	ND	0.121	~~ND~~	~~0.121~~
Ethylbenzene	ND	0.0649	~~ND~~	~~0.0649~~	ND	0.0649	~~ND~~	~~0.0649~~
2-Hexanone	ND	0.208	~~ND~~	~~0.208~~	ND	0.208	~~ND~~	~~0.208~~
Iodomethane	ND	0.0652	~~ND~~	~~0.0652~~	ND	0.0652	~~ND~~	~~0.0652~~
4-Methyl-2-pentanone (MIBK)	ND	0.0809	~~ND~~	~~0.0809~~	ND	0.0809	~~ND~~	~~0.0809~~
Methylene chloride	0.411	0.177	~~ND~~	~~0.177~~	ND	0.177	~~ND~~	~~0.177~~
Styrene	ND	0.0406	~~ND~~	~~0.0406~~	ND	0.0406	~~ND~~	~~0.0406~~
1,1,2,2-Tetrachloroethane	ND	0.0412	~~ND~~	~~0.0412~~	ND	0.0412	~~ND~~	~~0.0412~~
Tetrachloroethene	ND	0.0487	~~ND~~	~~0.0487~~	ND	0.0487	~~ND~~	~~0.0487~~
Toluene	ND	0.0492	0.407	~~0.0492~~	0.410	0.0492	~~ND~~	~~0.0492~~
1,1,1-Trichloroethane	ND	0.0993	~~ND~~	~~0.0993~~	ND	0.0993	~~ND~~	~~0.0993~~
1,1,2-Trichloroethane	ND	0.119	~~ND~~	~~0.119~~	ND	0.119	~~ND~~	~~0.119~~
Trichloroethene	ND	0.0854	~~ND~~	~~0.0854~~	ND	0.0854	~~ND~~	~~0.0854~~
Trichlorofluoromethane	ND	0.0640	~~ND~~	~~0.0640~~	ND	0.0640	~~ND~~	~~0.0640~~

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

RESULTS SUMMARY (Cont'd)

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	FB-1		MW-10		MW-10		MW-12	
Lab ID:	9608967-08A		9608967-02A		9608967-02B		9608967-01A	
File ID:	F0904624		F0903624		F0904620		F0903623	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:								
Date Analyzed:	09/05/96 03:18:00		09/04/96 02:05:00		09/05/96 01:26:00		09/04/96 01:36:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2,3-Trichloropropane	ND	0.101	R ~~ND~~	~~0.101~~	ND	0.101	R ~~ND~~	~~0.101~~
Vinyl acetate	ND	0.0612	ND	0.0612	ND	0.0612	ND	0.0612
Vinyl chloride	ND	0.0767	ND	0.0767	ND	0.0767	ND	0.0767
m&p-Xylene	ND	0.0688	ND	0.0688	ND	0.0688	ND	0.0688
o-Xylene	ND	0.0490	~~ND~~	~~0.0490~~	ND	0.0490	~~ND~~	~~0.0490~~

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
1,4-Bromofluorobenzene	101	100	102	100
1,2-Dichloroethane-d4	104	86	105	90
Toluene-d8	100	99	99	100

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

RESULTS SUMMARY (Cont'd)

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	MW-12		MW-23		MW-23		MW-24	
Lab ID:	9608967-01B		9608967-03A		9608967-03B		9608967-04A	
File ID:	F0904619		F0903625		F0904621		F0903626	
Date Collected:	08/27/96		08/27/96		08/27/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 00:57:00		09/04/96 02:34:00		09/05/96 01:54:00		09/04/96 03:03:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acetone	8.82	0.489	R ~~ND~~	~~0.489~~	ND	0.489	R ~~1.83~~	~~0.489~~
Acrolein	ND	0.707	~~ND~~	~~0.707~~	ND	0.707	~~ND~~	~~0.707~~
Acrylonitrile	ND	0.712	~~ND~~	~~0.712~~	ND	0.712	~~ND~~	~~0.712~~
Benzene	ND	0.0378	7.04	~~0.0378~~	6.83	0.0378	16.0	~~0.0378~~
Bromodichloromethane	ND	0.0393	~~ND~~	~~0.0393~~	ND	0.0393	~~ND~~	~~0.0393~~
Bromoform	ND	0.174	~~ND~~	~~0.174~~	ND	0.174	~~ND~~	~~0.174~~
Bromomethane	ND	0.0632	~~ND~~	~~0.0632~~	ND	0.0632	~~ND~~	~~0.0632~~
2-Butanone (MEK)	ND	0.260	~~ND~~	~~0.260~~	ND	0.260	~~ND~~	~~0.260~~
Carbon disulfide	ND, 0.454 ~~B~~ U	~~0.0485~~	15.5 R	~~0.0485~~	ND, 0.335 ~~B~~ U	~~0.0485~~	13.3 R	~~0.0485~~
Carbon tetrachloride	ND	0.0474	~~ND~~	~~0.0474~~	ND	0.0474	~~ND~~	~~0.0474~~
Chlorobenzene	ND	0.0258	~~ND~~	~~0.0258~~	ND	0.0258	13.3	~~0.0258~~
Chloroethane	ND	0.0741	~~ND~~	~~0.0741~~	ND	0.0741	~~ND~~	~~0.0741~~
2-Chloroethyl vinyl ether	ND	0.162	~~ND~~	~~0.162~~	ND	0.162	~~ND~~	~~0.162~~
Chloroform	ND	0.0409	~~ND~~	~~0.0409~~	ND	0.0409	~~ND~~	~~0.0409~~
Chloromethane	ND	0.0454	~~ND~~	~~0.0454~~	ND	0.0454	~~ND~~	~~0.0454~~
Dibromochloromethane	ND	0.141	~~ND~~	~~0.141~~	ND	0.141	~~ND~~	~~0.141~~
Dibromomethane	ND	0.0621	~~ND~~	~~0.0621~~	ND	0.0621	~~ND~~	~~0.0621~~
trans-1,4-Dichloro-2-butene	ND	0.389	~~ND~~	~~0.389~~	ND	0.389	~~ND~~	~~0.389~~
Dichlorodifluoromethane	ND	0.0651	~~ND~~	~~0.0651~~	ND	0.0651	~~ND~~	~~0.0651~~
1,1-Dichloroethane	0.393	0.0919	~~ND~~	~~0.0919~~	ND	0.0919	0.278	~~0.0919~~

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

RESULTS SUMMARY (Cont'd)

Method Volatile Organics SW8240A

Test Code 826SWAT1

Project Sample ID:	MW-12		MW-23		MW-23		MW-24	
Lab ID:	9608967-01B		9608967-03A		9608967-03B		9608967-04A	
File ID:	F0904619		F0903625		F0904621		F0903626	
Date Collected:	08/27/96		08/27/96		08/27/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 00:57:00		09/04/96 02:34:00		09/05/96 01:54:00		09/04/96 03:03:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2-Dichloroethane	ND	0.105	R ~~ND~~	~~0.105~~	ND	0.105	R ~~ND~~	~~0.105~~
1,1-Dichloroethene	ND	0.0802	~~ND~~	~~0.0802~~	ND	0.0802	~~ND~~	~~0.0802~~
trans-1,2-Dichloroethene	ND	0.0641	~~ND~~	~~0.0641~~	ND	0.0641	~~ND~~	~~0.0641~~
1,2-Dichloropropane	ND	0.0541	~~ND~~	~~0.0541~~	ND	0.0541	~~ND~~	~~0.0541~~
cis-1,3-Dichloropropene	ND	0.0538	~~ND~~	~~0.0538~~	ND	0.0538	~~ND~~	~~0.0538~~
trans-1,3-Dichloropropene	ND	0.0667	~~ND~~	~~0.0667~~	ND	0.0667	~~ND~~	~~0.0667~~
Ethyl methacrylate	ND	0.121	~~ND~~	~~0.121~~	ND	0.121	~~ND~~	~~0.121~~
Ethylbenzene	ND	0.0649	< ~~DL~~	~~0.0649~~	ND	0.0649	< ~~DL~~	~~0.0649~~
2-Hexanone	ND	0.208	~~ND~~	~~0.208~~	ND	0.208	~~ND~~	~~0.208~~
Iodomethane	ND	0.0652	~~ND~~	~~0.0652~~	ND	0.0652	~~ND~~	~~0.0652~~
4-Methyl-2-pentanone (MIBK)	ND	0.0809	~~ND~~	~~0.0809~~	ND	0.0809	~~ND~~	~~0.0809~~
Methylene chloride	ND	0.177	~~ND~~	~~0.177~~	ND	0.177	~~ND~~	~~0.177~~
Styrene	ND	0.0406	~~ND~~	~~0.0406~~	ND	0.0406	~~ND~~	~~0.0406~~
1,1,2,2-Tetrachloroethane	ND	0.0412	~~ND~~	~~0.0412~~	ND	0.0412	~~ND~~	~~0.0412~~
Tetrachloroethene	ND	0.0487	~~ND~~	~~0.0487~~	ND	0.0487	~~ND~~	~~0.0487~~
Toluene	ND	0.0492	~~ND~~	~~0.0492~~	ND	0.0492	0.109	~~0.0492~~
1,1,1-Trichloroethane	ND	0.0993	~~ND~~	~~0.0993~~	ND	0.0993	~~ND~~	~~0.0993~~
1,1,2-Trichloroethane	ND	0.119	~~ND~~	~~0.119~~	ND	0.119	~~ND~~	~~0.119~~
Trichloroethene	ND	0.0854	~~ND~~	~~0.0854~~	ND	0.0854	~~ND~~	~~0.0854~~
Trichlorofluoromethane	ND	0.0640	~~ND~~	~~0.0640~~	ND	0.0640	~~ND~~	~~0.0640~~

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

RESULTS SUMMARY (Cont'd)

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	MW-12		MW-23		MW-23		MW-24	
Lab ID:	9608967-01B		9608967-03A		9608967-03B		9608967-04A	
File ID:	F0904619		F0903625		F0904621		F0903626	
Date Collected:	08/27/96		08/27/96		08/27/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 00:57:00		09/04/96 02:34:00		09/05/96 01:54:00		09/04/96 03:03:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2,3-Trichloropropane	ND	0.101	R ~~ND~~	~~0.101~~	ND	0.101	R ~~ND~~	~~0.101~~
Vinyl acetate	ND	0.0612	~~ND~~	~~0.0612~~	ND	0.0612	~~ND~~	~~0.0612~~
Vinyl chloride	ND	0.0767	~~ND~~	~~0.0767~~	ND	0.0767	~~ND~~	~~0.0767~~
m&p-Xylene	ND	0.0688	~~ND~~	~~0.0688~~	ND	0.0688	~~ND~~	~~0.0688~~
o-Xylene	ND	0.0490	~~ND~~	~~0.0490~~	ND	0.0490	~~ND~~	~~0.0490~~

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
1,4-Bromofluorobenzene	101	100	102	100
1,2-Dichloroethane-d4	101	88	105	87
Toluene-d8	99	101	100	99

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

Method Volatile Organics SW8240A

Test Code 826SWAT1

Project Sample ID:	MW-24		MW-6		MW-7		MW-9	
Lab ID:	9608967-04B		9608967-07A		9608967-05A		9608967-06A	
File ID:	F0904622		F0904642		F0904623		F0904626	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 02:22:00		09/05/96 14:22:00		09/05/96 02:50:00		09/05/96 04:16:00	
Dilution Factor:	1		10000		1		20	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acetone	1.92	0.489	118000 J	4890	2.22	0.489	R ~~1400 ER~~	~~9.78~~
Acrolein	ND	0.707	ND UJ	7070	ND	0.707	ND UJ	14.1
Acrylonitrile	ND	0.712	ND	7120	ND	0.712	ND UJ	14.2
Benzene	15.8	0.0378	ND	378	0.464	0.0378	113 J	0.756
Bromodichloromethane	ND	0.0393	ND	393	ND	0.0393	ND UJ	0.786
Bromoform	ND	0.174	ND	1740	ND	0.174	ND	3.48
Bromomethane	ND	0.0632	ND	632	ND	0.0632	ND	1.26
2-Butanone (MEK)	ND	0.260	267000 J	2600	ND	0.260	ND	5.20
Carbon disulfide	ND, 0.269 ~~B~~ u	~~0.0485~~	ND UJ	485	ND, 0.265 ~~B~~ u	~~0.0485~~	ND	0.970
Carbon tetrachloride	ND	0.0474	ND	474	ND	0.0474	ND	0.948
Chlorobenzene	13.2	0.0258	ND	258	ND	0.0258	ND	0.516
Chloroethane	ND	0.0741	ND	741	ND	0.0741	ND	1.48
2-Chloroethyl vinyl ether	ND	0.162	ND	1620	ND	0.162	ND	3.24
Chloroform	ND	0.0409	ND	409	ND	0.0409	ND	0.818
Chloromethane	ND	0.0454	ND	454	ND	0.0454	ND	0.908
Dibromochloromethane	ND	0.141	ND	1410	ND	0.141	ND	2.82
Dibromomethane	ND	0.0621	ND	621	ND	0.0621	ND	1.24
trans-1,4-Dichloro-2-butene	ND	0.389	ND	3890	ND	0.389	ND	7.78
Dichlorodifluoromethane	ND	0.0651	ND	651	ND	0.0651	ND	1.30
1,1-Dichloroethane	0.312	0.0919	ND	919	0.269	0.0919	ND	1.84

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

Method Volatile Organics SW8240A

Test Code 826SWAT1

Project Sample ID:	MW-24		MW-6		MW-7		MW-9	
Lab ID:	9608967-04B		9608967-07A		9608967-05A		9608967-06A	
File ID:	F0904622		F0904642		F0904623		F0904626	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 02:22:00		09/05/96 14:22:00		09/05/96 02:50:00		09/05/96 04:16:00	
Dilution Factor:	1		10000		1		20	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2-Dichloroethane	ND	0.105	ND UJ	1050	ND	0.105	ND UJ	2.10
1,1-Dichloroethene	ND	0.0802	ND	802	ND	0.0802	ND	1.60
trans-1,2-Dichloroethene	ND	0.0641	ND	641	ND	0.0641	ND	1.28
1,2-Dichloropropane	ND	0.0541	ND	541	ND	0.0541	ND	1.08
cis-1,3-Dichloropropene	ND	0.0538	ND	538	ND	0.0538	ND	1.08
trans-1,3-Dichloropropene	ND	0.0667	ND	667	ND	0.0667	ND	1.33
Ethyl methacrylate	ND	0.121	ND	1210	ND	0.121	ND	2.42
Ethylbenzene	ND	0.0649	ND	649	ND	0.0649	26.6 J	1.30
2-Hexanone	ND	0.208	ND	2080	ND	0.208	ND UJ	4.16
Iodomethane	ND	0.0652	ND	652	ND	0.0652	ND	1.30
4-Methyl-2-pentanone (MIBK)	ND	0.0809	ND	809	ND	0.0809	ND	1.62
Methylene chloride	ND	0.177	ND, 4780 UJ	~~1770~~	ND	0.177	ND ~~< DL~~	3.54 UJ
Styrene	ND	0.0406	ND UJ	406	ND	0.0406	ND UJ	0.812
1,1,2,2-Tetrachloroethane	ND	0.0412	ND	412	ND	0.0412	ND	0.824
Tetrachloroethene	ND	0.0487	ND	487	ND	0.0487	ND	0.974
Toluene	0.108	0.0492	36000 J	492	ND	0.0492	R ~~2870 ER~~	~~0.984~~
1,1,1-Trichloroethane	ND	0.0993	ND UJ	993	ND	0.0993	ND UJ	1.99
1,1,2-Trichloroethane	ND	0.119	ND	1190	ND	0.119	ND	2.38
Trichloroethene	ND	0.0854	ND	854	ND	0.0854	ND	1.71
Trichlorofluoromethane	ND	0.0640	ND	640	ND	0.0640	ND	1.28

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

RESULTS SUMMARY (Cont'd)

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	MW-24		MW-6		MW-7		MW-9	
Lab ID:	9608967-04B		9608967-07A		9608967-05A		9608967-06A	
File ID:	F0904622		F0904642		F0904623		F0904626	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 02:22:00		09/05/96 14:22:00		09/05/96 02:50:00		09/05/96 04:16:00	
Dilution Factor:	1		10000		1		20	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2,3-Trichloropropane	ND	0.101	ND UJ	1010	ND	0.101	ND UJ	2.02
Vinyl acetate	ND	0.0612	ND	612	ND	0.0612	ND	1.22
Vinyl chloride	ND	0.0767	ND	767	ND	0.0767	ND	1.53
m&p-Xylene	ND	0.0688	ND	688	ND	0.0688	22.4 J	1.38
o-Xylene	ND	0.0490	ND	490	ND	0.0490	ND UJ	0.980

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
1,4-Bromofluorobenzene	100	101	100	100
1,2-Dichloroethane-d4	98	106	104	104
Toluene-d8	100	99	100	99

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

Method Volatile Organics SW8240A

Test Code 826SWAT1

Project Sample ID:	MW-9		TB-1					
Lab ID:	9608967-06B		9608967-09A					
File ID:	F0904641		F0904625					
Date Collected:	08/28/96		08/28/96					
Date Prepared:								
Date Analyzed:	09/05/96 13:54:00		09/05/96 03:47:00					
Dilution Factor:	100		1					
Matrix:	Water		Water					
Units:	ug/L		ug/L					
Report as:	received		received					
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acetone	962 J	48.9	ND UJ	0.489				
Acrolein	R ND	70.7	ND	0.707				
Acrylonitrile	ND	71.2	ND	0.712				
Benzene	82.3	3.78	ND	0.0378				
Bromodichloromethane	ND	3.93	ND	0.0393				
Bromoform	ND	17.4	ND	0.174				
Bromomethane	ND	6.32	ND	0.0632				
2-Butanone (MEK)	1390	26.0	ND	0.260				
Carbon disulfide	ND	4.85	0.199 ~~B~~ J	0.0485				
Carbon tetrachloride	ND	4.74	ND UJ	0.0474				
Chlorobenzene	ND	2.58	ND	0.0258				
Chloroethane	ND	7.41	ND	0.0741				
2-Chloroethyl vinyl ether	ND	16.2	ND	0.162				
Chloroform	ND	4.09	ND	0.0409				
Chloromethane	ND	4.54	ND	0.0454				
Dibromochloromethane	ND	14.1	ND	0.141				
Dibromomethane	ND	6.21	ND	0.0621				
trans-1,4-Dichloro-2-butene	ND	38.9	ND	0.389				
Dichlorodifluoromethane	ND	6.51	ND	0.0651				
1,1-Dichloroethane	ND	9.19	ND	0.0919				

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

RESULTS SUMMARY (Cont'd)

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	MW-9		TB-1					
Lab ID:	9608967-06B		9608967-09A					
File ID:	F0904641		F0904625					
Date Collected:	08/28/96		08/28/96					
Date Prepared:								
Date Analyzed:	09/05/96 13:54:00		09/05/96 03:47:00					
Dilution Factor:	100		1					
Matrix:	Water		Water					
Units:	ug/L		ug/L					
Report as:	received		received					
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2-Dichloroethane	R ~~ND~~	~~10.5~~	ND UJ	0.105				
1,1-Dichloroethene	ND	8.02	ND	0.0802				
trans-1,2-Dichloroethene	ND	6.41	ND	0.0641				
1,2-Dichloropropane	ND	5.41	ND	0.0541				
cis-1,3-Dichloropropene	ND	5.38	ND	0.0538				
trans-1,3-Dichloropropene	ND	6.67	ND	0.0667				
Ethyl methacrylate	ND	12.1	ND	0.121				
Ethylbenzene	19.3	6.49	ND	0.0649				
2-Hexanone	ND	20.8	ND	0.208				
Iodomethane	ND	6.52	ND	0.0652				
4-Methyl-2-pentanone (MIBK)	ND	8.09	ND	0.0809				
Methylene chloride	ND	17.7	ND	0.177				
Styrene	ND	4.06	ND	0.0406				
1,1,2,2-Tetrachloroethane	ND	4.12	ND	0.0412				
Tetrachloroethene	~~ND~~	~~4.87~~	ND	0.0487				
Toluene	3090 J	4.92	ND	0.0492				
1,1,1-Trichloroethane	R ~~ND~~	~~9.93~~	ND	0.0993				
1,1,2-Trichloroethane	ND	11.9	ND	0.119				
Trichloroethene	ND	8.54	ND	0.0854				
Trichlorofluoromethane	~~ND~~	~~6.40~~	ND	0.0640				

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

RESULTS SUMMARY (Cont'd)

Method Volatile Organics SW8240A

Test Code 826SWAT1

Project Sample ID:	MW-9		TB-1					
Lab ID:	9608967-06B		9608967-09A					
File ID:	F0904641		F0904625					
Date Collected:	08/28/96		08/28/96					
Date Prepared:								
Date Analyzed:	09/05/96 13:54:00		09/05/96 03:47:00					
Dilution Factor:	100		1					
Matrix:	Water		Water					
Units:	ug/L		ug/L					
Report as:	received		received					
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2,3-Trichloropropane	R ~~ND~~	~~10.1~~	ND UJ	0.101				
Vinyl acetate	~~ND~~	~~6.12~~	ND	0.0612				
Vinyl chloride	~~ND~~	~~7.67~~	ND	0.0767				
m&p-Xylene	15.9	6.88	ND	0.0688				
o-Xylene	~~ND~~	~~4.90~~	ND	0.0490				

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
1,4-Bromofluorobenzene	101	101		
1,2-Dichloroethane-d4	107	105		
Toluene-d8	100	98		

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		P8198		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10 1		09/05/96 15:30 1		09/05/96 14:50 1		09/10/96 17:22 2	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acenaphthene	ND	1.26	ND	1.23	ND	1.21	ND	0.606
Acenaphthylene	ND	1.28	ND	1.25	ND	1.22	ND	0.494
Acetophenone	ND	0.656	ND	0.637	ND	0.625	ND	0.542
4-Aminobiphenyl	ND	1.67	ND	1.62	ND	1.59	ND	0.489
Aniline	R ~~ND~~	~~1.76~~	R ~~ND~~	~~1.71~~	R ~~ND~~	~~1.68~~	R ~~ND~~	~~0.686~~
Anthracene	ND	0.815	ND	0.791	ND	0.777	ND	0.284
Benz(a)anthracene	ND	0.519	ND	0.504	ND	0.494	ND	2.64
Benz(a)pyrene	ND	1.09	ND	1.06	ND	1.04	ND	0.375
Benzidine	R ~~ND X~~	~~3.89~~	R ~~ND X~~	~~3.78~~	R ~~ND X~~	~~2.71~~	R ~~ND X~~	~~1.76~~
Benzo(b)fluoranthene	ND	1.07	ND	1.04	ND	1.02	ND	0.525
Benzo(g,h,i)perylene	ND	0.931	ND	0.905	ND	0.888	ND	0.509
Benzo(k)fluoranthene	ND	0.675	ND	0.655	ND	0.643	ND	0.726
Benzoic acid	ND	2.75	ND	2.67	ND	2.62	R ~~ND~~	~~5.69~~
Benzyl alcohol	ND	0.734	ND	0.713	ND	0.700	ND	0.656
4-Bromophenylphenyl ether	ND	0.737	ND	0.716	ND	0.703	ND	0.453
Butylbenzylphthalate	ND	0.873	ND	0.848	ND	0.832	ND	0.744
4-Chloro-3-methylphenol	ND	0.657	ND	0.638	ND	0.626	ND	0.410
p-Chloroaniline	ND	1.36	ND	1.32	ND	1.30	ND	0.508
bis(2-Chloroethoxy)methane	ND	0.677	ND	0.658	ND	0.646	ND	0.502
bis(2-Chloroethyl)ether	ND	0.453	ND	0.440	ND	0.432	ND	0.697

ND Not detected
J Estimated value.
UJ Not detected and the detection limit is estimated.
R Unusable data.

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		P8198		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10 (1)		09/05/96 15:30 (1)		09/05/96 14:50 (1)		09/10/96 17:22 (2)	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
bis(2-Chloroisopropyl)ether	ND	1.30	ND	1.27	ND	1.24	ND	0.608
1-Chloronaphthalene	ND		ND		ND		ND	
2-Chloronaphthalene	ND	2.15	ND	2.09	ND	2.05	ND	0.684
2-Chlorophenol	ND	0.543	ND	0.528	ND	0.518	ND	0.662
4-Chlorophenylphenyl ether	ND	1.24	ND	1.20	ND	1.18	ND	0.224
Chrysene	ND	0.623	ND	0.605	ND	0.593	ND	0.732
Di-n-butylphthalate	ND	0.931	ND	0.905	ND	0.888	ND	0.262
Di-n-octylphthalate	ND	1.81	ND	1.76	ND	1.73	ND	0.731
Dibenz(a,h)anthracene	ND	0.726	ND	0.706	ND	0.693	ND	0.413
Dibenz(a,j)acridine	ND		ND		ND		ND	
Dibenzofuran	ND	1.12	ND	1.09	ND	1.07	ND	0.575
1,2-Dichlorobenzene	ND	1.46	ND	1.42	ND	1.39	ND	0.658
1,3-Dichlorobenzene	ND	1.57	ND	1.52	ND	1.50	ND	0.623
1,4-Dichlorobenzene	ND	1.57	ND	1.52	ND	1.50	ND	0.713
3,3'-Dichlorobenzidine	ND	0.858	ND	0.833	ND	0.818	ND	0.660
2,4-Dichlorophenol	ND	0.884	ND	0.859	ND	0.843	ND	0.511
2,6-Dichlorophenol	ND	0.813	ND	0.790	ND	0.775	ND	0.666
Diethylphthalate	ND	0.879	ND	0.854	ND	0.838	ND	0.625
p-Dimethylaminoazobenzene	ND	1.41	ND	1.37	ND	1.35	ND	0.810
7,12-Dimethylbenz(a)anthracene	ND	1.09	ND	1.06	ND	1.04	ND	0.747

Method Semivolatiles by SW8270B

Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		P8198		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10 1		09/05/96 15:30 1		09/05/96 14:50 1		09/10/96 17:22 2	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Dimethylphenethylamine	ND	6.25	ND	6.08	ND	5.96	ND	9.03
2,4-Dimethylphenol	ND	1.26	ND	1.23	ND	1.21	ND	1.10
Dimethylphthalate	ND	0.823	ND	0.799	ND	0.784	ND	0.565
4,6-Dinitro-2-methylphenol	ND	0.823	ND	0.799	ND	0.784	ND	1.12
2,4-Dinitrophenol	ND	0.682	ND	0.663	ND	0.650	ND	2.40
2,4-Dinitrotoluene	ND	0.954	ND	0.927	ND	0.909	ND	0.660
2,6-Dinitrotoluene	ND	0.588	ND	0.571	ND	0.561	ND	0.469
Diphenylamine/N-NitrosoDPA	ND	1.26	ND	1.23	ND	1.21	ND	0.530
1,2-Diphenylhydrazine	ND		ND		ND		ND	
Ethyl methanesulfonate	ND	0.497	ND	0.483	ND	0.474	ND	0.746
bis(2-Ethylhexyl)phthalate	ND	1.15	102	1.11	ND	1.09	ND	0.722
Fluoranthene	ND	0.732	ND	0.711	ND	0.698	ND	0.417
Fluorene	ND	0.768	ND	0.746	ND	0.732	ND	0.410
Hexachlorobenzene	ND	0.699	ND	0.679	ND	0.666	ND	0.329
Hexachlorobutadiene	ND	4.11	ND	3.99	ND	3.92	ND	0.735
Hexachlorocyclopentadiene	R ~~ND~~	~~2.89~~	R ~~ND~~	~~2.81~~	R ~~ND~~	~~2.76~~	ND	4.09
Hexachloroethane	ND	3.73	ND	3.62	ND	3.55	ND	0.953
Indeno(1,2,3-cd)pyrene	ND	0.800	ND	0.777	ND	0.763	ND	0.448
Isophorone	ND	0.637	ND	0.619	ND	0.607	ND	0.362
Methyl methanesulfonate	ND	1.58	ND	1.53	ND	1.50	ND	1.06

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		P8198		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10 1		09/05/96 15:30 1		09/05/96 14:50 1		09/10/96 17:22 2	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
3-Methylcholanthrene	ND	4.44	ND	4.31	ND	4.23	ND	0.313
2-Methylnaphthalene	ND	3.45	ND	3.35	ND	3.29	ND	0.695
4-Methylphenol/3-Methylphenol	ND	0.550	ND	0.534	ND	0.524	ND	0.485
2-Methylphenol	ND	0.676	ND	0.657	ND	0.645	ND	0.636
N-Nitroso-di-n-butylamine	ND	0.971	ND	0.943	ND	0.925	ND	0.647
N-Nitroso-di-n-propylamine	ND	0.666	ND	0.647	ND	0.635	ND	0.577
N-Nitrosodimethylamine	ND	1.53	ND	1.49	ND	1.46	R ~~ND~~	~~0.639~~
N-Nitrosopiperidine	ND	0.951	ND	0.924	ND	0.907	ND	0.476
Naphthalene	ND	2.98	ND	2.90	ND	2.84	ND	0.502
1-Naphthylamine	ND	2.98	ND	2.90	ND	2.84	ND	1.18
2-Naphthylamine	ND	2.09	ND	2.03	ND	1.99	ND	1.05
2-Nitroaniline	ND	0.456	ND	0.443	ND	0.435	ND	0.508
3-Nitroaniline	ND	1.02	ND	0.990	ND	0.972	ND	0.676
4-Nitroaniline	ND	0.896	ND	0.870	ND	0.854	ND	0.507
Nitrobenzene	ND	0.980	ND	0.952	ND	0.935	ND	0.491
2-Nitrophenol	ND	1.13	ND	1.10	ND	1.07	ND	0.398
4-Nitrophenol	ND	0.824	ND	0.800	ND	0.785	R ~~ND~~	~~1.55~~
Pentachlorobenzene	ND	0.844	ND	0.820	ND	0.805	ND	0.418
Pentachloronitrobenzene	ND	1.25	ND	1.22	ND	1.20	ND	1.37
Pentachlorophenol	ND	1.13	ND	1.10	ND	1.07	ND	1.20

Method Semivolatiles by SW8270B

Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		P8198		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10 1		09/05/96 15:30 1		09/05/96 14:50 1		09/10/96 17:22 2	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Phenacetin	ND	0.781	ND	0.759	ND	0.745	ND	0.414
Phenanthrene	ND	0.870	ND	0.845	ND	0.829	ND	0.288
Phenol	ND	0.670	ND	0.650	ND	0.638	R ~~ND~~	~~0.508~~
2-Picoline	ND	2.67	ND	2.59	ND	2.54	ND	1.68
Pronamide	ND	0.667	ND	0.648	ND	0.636	ND	0.658
Pyrene	ND	0.449	ND	0.436	ND	0.428	ND	0.745
Pyridine	ND	1.45	ND	1.41	ND	1.38	ND	0.846
1,2,4,5-Tetrachlorobenzene	ND	3.04	ND	2.95	ND	2.90	ND	0.632
2,3,4,6-Tetrachlorophenol	ND	0.512	ND	0.497	ND	0.488	ND	0.408
1,2,4-Trichlorobenzene	ND	3.20	ND	3.10	ND	3.05	ND	0.458
2,4,5-Trichlorophenol	ND	0.751	ND	0.730	ND	0.716	ND	0.506
2,4,6-Trichlorophenol	ND	1.99	ND	1.93	ND	1.90	ND	0.408

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		~~P8198~~		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10 1		09/05/96 15:30 1		09/05/96 14:50 1		09/10/96 17:22 2	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
2-Fluorobiphenyl	98	81	82	78
2-Fluorophenol	97	88	89	64
Nitrobenzene-d5	107	94	98	84
Phenol-d5	113	100	103	43
Terphenyl-d14	128 Q	105	112	113
2,4,6-Tribromophenol	112	92	103	86

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02 (2)		09/11/96 13:41 (3)		09/10/96 20:01 (2)		09/10/96 18:42 (2)	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acenaphthene	ND	0.626	R ~~ND R~~	~~3.07~~	ND UJ	0.606	ND UJ	0.606
Acenaphthylene	ND	0.511	ND R	2.47	ND UJ	0.494	ND	0.494
Acetophenone	ND	0.560	3.49 R	2.71	4.26 J	0.542	ND	0.542
4-Aminobiphenyl	ND	0.505	ND R	2.44	ND UJ	0.489	ND	0.489
Aniline	R ~~ND~~	~~0.709~~	ND R	3.43	R ~~ND~~	~~0.686~~	R ~~ND~~	~~0.686~~
Anthracene	ND	0.294	ND R	1.42	ND UJ	0.284	ND UJ	0.284
Benz(a)anthracene	ND	2.73	ND R	13.2	ND	2.64	ND	2.64
Benz(a)pyrene	ND	0.387	ND R	1.87	ND	0.375	ND	0.375
Benzidine	R ~~ND Y~~	~~1.82~~	ND RZ	8.82	R ~~ND Y~~	~~1.76~~	R ~~ND Y~~	~~1.76~~
Benzo(b)fluoranthene	ND	0.542	ND R	2.62	ND UJ	0.525	ND UJ	0.525
Benzo(g,h,i)perylene	ND	0.527	ND R	2.55	ND	0.509	ND	0.509
Benzo(k)fluoranthene	ND	0.751	ND R	3.63	ND	0.726	ND	0.726
Benzoic acid	R ~~ND~~	~~5.88~~	178 R	28.4	219 EXX J	5.69	R ~~ND~~	~~5.69~~
Benzyl alcohol	ND	0.678	ND R	3.28	2.14 J	0.656	ND UJ	0.656
4-Bromophenylphenyl ether	ND	0.468	ND R	2.26	ND UJ	0.453	ND	0.453
Butylbenzylphthalate	ND	0.770	ND R	3.72	ND	0.744	ND	0.744
4-Chloro-3-methylphenol	ND	0.424	ND R	2.05	ND	0.410	ND	0.410
p-Chloroaniline	ND	0.526	ND R	2.54	ND	0.508	ND	0.508
bis(2-Chloroethoxy)methane	ND	0.519	ND R	2.51	ND	0.502	ND	0.502
bis(2-Chloroethyl)ether	ND	0.721	~~ND R~~	~~3.49~~	ND	0.697	ND	0.697

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02 2		09/11/96 13:41 3		09/10/96 20:01 2		09/10/96 18:42 2	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
bis(2-Chloroisopropyl)ether	ND	0.628	R ~~ND R~~	~~3.01~~	ND UJ	0.608	ND UJ	0.608
1-Chloronaphthalene	ND		ND R		ND		ND	
2-Chloronaphthalene	ND	0.707	ND R	3.42	ND	0.684	ND	0.684
2-Chlorophenol	ND	0.685	ND R	3.31	ND	0.662	ND	0.662
4-Chlorophenylphenyl ether	ND	0.231	ND R	1.12	ND	0.224	ND	0.224
Chrysene	ND	0.757	ND R	3.66	ND	0.732	ND	0.732
Di-n-butylphthalate	ND	0.271	ND R	1.31	ND	0.262	ND	0.262
Di-n-octylphthalate	ND	0.756	ND R	3.66	ND	0.731	ND	0.731
Dibenz(a,h)anthracene	ND	0.427	ND R	2.07	ND	0.413	ND	0.413
Dibenz(a,j)acridine	ND		ND R		ND		ND	
Dibenzofuran	ND	0.595	ND R	2.88	ND	0.575	ND	0.575
1,2-Dichlorobenzene	ND	0.680	ND R	3.29	ND	0.658	ND	0.658
1,3-Dichlorobenzene	ND	0.644	ND R	3.11	ND	0.623	ND	0.623
1,4-Dichlorobenzene	ND	0.738	ND R	3.57	ND	0.713	ND	0.713
3,3'-Dichlorobenzidine	ND	0.683	ND R	3.30	ND	0.660	ND	0.660
2,4-Dichlorophenol	ND	0.529	ND R	2.56	ND	0.511	ND	0.511
2,6-Dichlorophenol	ND	0.689	ND R	3.33	ND	0.666	ND	0.666
Diethylphthalate	< DL	0.646	ND R	3.12	< DL	0.625	ND	0.625
p-Dimethylaminoazobenzene	ND	0.838	ND R	4.05	ND	0.810	ND	0.810
7,12-Dimethylbenz(a)anthracene	ND	0.773	ND R	~~3.74~~	ND	0.747	ND	0.747

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02 2		09/11/96 13:41 3		09/10/96 20:01 2		09/10/96 18:42 2	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Dimethylphenethylamine	ND	9.34	R ~~ND R~~	~~45.1~~	ND UJ	9.03	ND UJ	9.03
2,4-Dimethylphenol	ND	1.14	~~ND R~~	~~5.52~~	ND	1.10	ND	1.10
Dimethylphthalate	ND	0.584	~~ND R~~	~~2.83~~	ND	0.565	ND	0.565
4,6-Dinitro-2-methylphenol	ND	1.16	~~ND R~~	~~5.61~~	ND	1.12	ND	1.12
2,4-Dinitrophenol	ND	2.48	~~ND R~~	~~12.0~~	ND	2.40	ND	2.40
2,4-Dinitrotoluene	ND	0.683	~~ND R~~	~~3.30~~	ND	0.660	ND	0.660
2,6-Dinitrotoluene	ND	0.485	~~ND R~~	~~2.34~~	ND	0.469	ND	0.469
Diphenylamine/N-NitrosoDPA	ND	0.548	~~ND R~~	~~2.65~~	ND	0.530	ND	0.530
1,2-Diphenylhydrazine	ND		~~ND R~~		ND		ND	
Ethyl methanesulfonate	ND	0.772	~~ND R~~	~~3.73~~	ND	0.746	ND	0.746
bis(2-Ethylhexyl)phthalate	ND	0.746	~~ND R~~	~~3.61~~	1.02 J	0.722	ND	0.722
Fluoranthene	ND	0.431	~~ND R~~	~~2.08~~	ND UJ	0.417	ND	0.417
Fluorene	ND	0.424	~~ND R~~	~~2.05~~	ND	0.410	ND	0.410
Hexachlorobenzene	ND	0.340	~~ND R~~	~~1.65~~	ND	0.329	ND	0.329
Hexachlorobutadiene	ND	0.760	~~ND R~~	~~3.67~~	ND	0.735	ND	0.735
Hexachlorocyclopentadiene	ND	4.23	~~ND R~~	~~20.5~~	ND	4.09	ND	4.09
Hexachloroethane	ND	0.985	~~ND R~~	~~4.76~~	ND	0.953	ND	0.953
Indeno(1,2,3-cd)pyrene	ND	0.463	~~ND R~~	~~2.24~~	ND	0.448	ND	0.448
Isophorone	ND	0.375	~~ND R~~	~~1.81~~	0.569 J	0.362	ND	0.362
Methyl methanesulfonate	ND	1.09	~~ND R~~	~~5.28~~	ND UJ	1.06	ND	1.06

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02 (2)		09/11/96 13:41 (3)		09/10/96 20:01 (2)		09/10/96 18:42 (2)	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
3-Methylcholanthrene	ND	0.324	R ~~ND R~~	~~1.57~~	ND UJ	0.313	ND UJ	0.313
2-Methylnaphthalene	ND	0.719	R ~~ND R~~	~~3.48~~	ND UJ	0.695	ND	0.695
4-Methylphenol/3-Methylphenol	ND	0.501	R ~~96.8 PR~~	~~2.42~~	110 ~~P~~ J	0.485	ND	0.485
2-Methylphenol	ND	0.658	285	3.18	R ~~931 ER J~~	~~0.636~~	ND	0.636
N-Nitroso-di-n-butylamine	ND	0.669	R ~~ND R~~	~~3.24~~	ND UJ	0.647	ND	0.647
N-Nitroso-di-n-propylamine	ND	0.597	~~ND R~~	~~2.89~~	ND UJ	0.577	ND	0.577
N-Nitrosodimethylamine	R ~~ND~~	~~0.660~~	~~ND R~~	~~3.19~~	R ~~ND~~	~~0.639~~	R ~~ND~~	~~0.639~~
N-Nitrosopiperidine	ND	0.493	~~ND R~~	~~2.38~~	ND UJ	0.476	ND UJ	0.476
Naphthalene	ND	0.519	~~ND R~~	~~2.51~~	0.797 J	0.502	ND	0.502
1-Naphthylamine	ND	1.22	~~ND R~~	~~5.90~~	ND UJ	1.18	ND	1.18
2-Naphthylamine	ND	1.08	~~ND R~~	~~5.24~~	ND	1.05	ND	1.05
2-Nitroaniline	ND	0.525	~~ND R~~	~~2.54~~	ND	0.508	ND	0.508
3-Nitroaniline	ND	0.700	~~ND R~~	~~3.38~~	ND	0.676	ND	0.676
4-Nitroaniline	ND	0.524	~~ND R~~	~~2.53~~	ND	0.507	ND	0.507
Nitrobenzene	ND	0.507	~~ND R~~	~~2.45~~	ND	0.491	ND	0.491
2-Nitrophenol	ND	0.412	~~ND R~~	~~1.99~~	ND	0.398	ND	0.398
4-Nitrophenol	R ~~ND~~	~~1.60~~	~~ND R~~	~~7.74~~	R ~~ND~~	~~1.55~~	R ~~ND~~	~~1.55~~
Pentachlorobenzene	ND	0.432	~~ND R~~	~~2.09~~	ND UJ	0.418	ND UJ	0.418
Pentachloronitrobenzene	ND	1.41	~~ND R~~	~~6.84~~	ND	1.37	ND	1.37
Pentachlorophenol	ND	1.24	~~ND R~~	~~5.99~~	ND	1.20	ND	1.20

Method Semivolatiles by SW8270B

Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02 1		09/11/96 13:41 3		09/10/96 20:01 2		09/10/96 18:42 2	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Phenacetin	ND	0.428	R ~~ND R~~	~~2.07~~	ND UJ	0.414	ND UJ	0.414
Phenanthrene	ND	0.298	ND R	1.44	ND "	0.288	ND "	0.288
Phenol	R ~~ND~~	~~0.526~~	2.84 R	2.54	* 2.67 J	0.508	R ~~ND~~	~~0.508~~
2-Picoline	ND	1.74	ND R	8.40	immiscible 10:8 ND UJ	1.68	ND UJ	1.68
Pronamide	ND	0.680	ND R	3.29	ND	0.658	ND	0.658
Pyrene	ND	0.771	ND R	3.73	ND	0.745	ND	0.745
Pyridine	ND	0.875	ND R	4.23	ND	0.846	ND	0.846
1,2,4,5-Tetrachlorobenzene	ND	0.654	ND R	3.16	ND	0.632	ND	0.632
2,3,4,6-Tetrachlorophenol	ND	0.422	ND R	2.04	ND	0.408	ND	0.408
1,2,4-Trichlorobenzene	ND	0.473	ND R	2.29	ND	0.458	ND	0.458
2,4,5-Trichlorophenol	ND	0.523	ND R	2.53	ND	0.506	ND	0.506
2,4,6-Trichlorophenol	ND	0.422	ND R	2.04	ND	0.408	ND	0.408

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02 2		09/11/96 13:41 3		09/10/96 20:01 2		09/10/96 18:42 2	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
2-Fluorobiphenyl	75	68	75	82
2-Fluorophenol	73	62	71	57 Q
Nitrobenzene-d5	87	73	87	84
Phenol-d5	46	40	47	36
Terphenyl-d14	111	90	101	121
2,4,6-Tribromophenol	82	72	77	91

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-9							
Lab ID:	9608968-06A							
File ID:	Q9922							
Date Collected:	08/28/96							
Date Prepared:	09/03/96 15:00:00							
Date Analyzed:	09/10/96 19:21 5							
Dilution Factor:	1							
Matrix:	Water							
Units:	ug/L							
Report as:	received							
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acenaphthene	ND UJ	0.606						
Acenaphthylene	ND	0.494						
Acetophenone	ND	0.542						
4-Aminobiphenyl	ND	0.489						
Aniline	R ~~ND~~	~~0.686~~						
Anthracene	ND UJ	0.284						
Benz(a)anthracene	ND	2.64						
Benz(a)pyrene	ND	0.375						
Benzidine	R ~~ND Y~~	~~1.76~~						
Benzo(b)fluoranthene	ND UJ	0.525						
Benzo(g,h,i)perylene	ND	0.509						
Benzo(k)fluoranthene	ND	0.726						
Benzoic acid	R ~~ND~~	~~5.69~~						
Benzyl alcohol	5.73 J	0.656						
4-Bromophenylphenyl ether	ND UJ	0.453						
Butylbenzylphthalate	ND	0.744						
4-Chloro-3-methylphenol	ND	0.410						
p-Chloroaniline	ND	0.508						
bis(2-Chloroethoxy)methane	ND	0.502						
bis(2-Chloroethyl)ether	ND	0.697						

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-9							
Lab ID:	9608968-06A							
File ID:	Q9922							
Date Collected:	08/28/96							
Date Prepared:	09/03/96 15:00:00							
Date Analyzed:	09/10/96 19:21 2							
Dilution Factor:	1							
Matrix:	Water							
Units:	ug/L							
Report as:	received							
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
bis(2-Chloroisopropyl)ether	ND UJ	0.608						
1-Chloronaphthalene	ND							
2-Chloronaphthalene	ND	0.684						
2-Chlorophenol	ND	0.662						
4-Chlorophenylphenyl ether	ND	0.224						
Chrysene	ND	0.732						
Di-n-butylphthalate	ND	0.262						
Di-n-octylphthalate	ND	0.731						
Dibenz(a,h)anthracene	ND	0.413						
Dibenz(a,j)acridine	ND							
Dibenzofuran	ND	0.575						
1,2-Dichlorobenzene	ND	0.658						
1,3-Dichlorobenzene	ND	0.623						
1,4-Dichlorobenzene	ND	0.713						
3,3'-Dichlorobenzidine	ND	0.660						
2,4-Dichlorophenol	ND	0.511						
2,6-Dichlorophenol	ND	0.666						
Diethylphthalate	ND	0.625						
p-Dimethylaminoazobenzene	ND	0.810						
7,12-Dimethylbenz(a)anthracene	ND	0.747						

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-9							
Lab ID:	9608968-06A							
File ID:	Q9922							
Date Collected:	08/28/96							
Date Prepared:	09/03/96 15:00:00							
Date Analyzed:	09/10/96 19:21 2							
Dilution Factor:	1							
Matrix:	Water							
Units:	ug/L							
Report as:	received							
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Dimethylphenethylamine	ND UJ	9.03						
2,4-Dimethylphenol	ND	1.10						
Dimethylphthalate	ND	0.565						
4,6-Dinitro-2-methylphenol	ND	1.12						
2,4-Dinitrophenol	ND	2.40						
2,4-Dinitrotoluene	ND	0.660						
2,6-Dinitrotoluene	ND	0.469						
Diphenylamine/N-NitrosoDPA	ND	0.530						
1,2-Diphenylhydrazine	ND							
Ethyl methanesulfonate	ND	0.746						
bis(2-Ethylhexyl)phthalate	ND	0.722						
Fluoranthene	ND	0.417						
Fluorene	ND	0.410						
Hexachlorobenzene	ND	0.329						
Hexachlorobutadiene	ND	0.735						
Hexachlorocyclopentadiene	ND	4.09						
Hexachloroethane	ND	0.953						
Indeno(1,2,3-cd)pyrene	ND	0.448						
Isophorone	ND	0.362						
Methyl methanesulfonate	ND	1.06						

Method Semivolatiles by SW8270B

Test Code 827SWA1T

Project Sample ID:	MW-9								
Lab ID:	9608968-06A								
File ID:	Q9922								
Date Collected:	08/28/96								
Date Prepared:	09/03/96 15:00:00								
Date Analyzed:	09/10/96 19:21 (2)								
Dilution Factor:	1								
Matrix:	Water								
Units:	ug/L								
Report as:	received								
Column:									
Analyte	Conc.		DL	Conc.	DL	Conc.	DL	Conc.	DL
3-Methylcholanthrene	ND	UJ	0.313						
2-Methylnaphthalene	ND	"	0.695						
4-Methylphenol/3-Methylphenol	40.5	J	0.485						
2-Methylphenol	51.8	J	0.636						
N-Nitroso-di-n-butylamine	ND	UJ	0.647						
N-Nitroso-di-n-propylamine	ND	↓	0.577						
N-Nitrosodimethylamine	R ~~ND~~		~~0.639~~						
N-Nitrosopiperidine	ND	UJ	0.476						
Naphthalene	0.859	J	0.502						
1-Naphthylamine	ND	UJ	1.18						
2-Naphthylamine	ND		1.05						
2-Nitroaniline	ND		0.508						
3-Nitroaniline	ND		0.676						
4-Nitroaniline	ND		0.507						
Nitrobenzene	ND		0.491						
2-Nitrophenol	ND	↓	0.398						
4-Nitrophenol	R ~~ND~~		~~1.55~~						
Pentachlorobenzene	ND	UJ	0.418						
Pentachloronitrobenzene	ND	↓	1.37						
Pentachlorophenol	ND		1.20						

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-9							
Lab ID:	9608968-06A							
File ID:	Q9922							
Date Collected:	08/28/96							
Date Prepared:	09/03/96 15:00:00							
Date Analyzed:	09/10/96 19:21 2							
Dilution Factor:	1							
Matrix:	Water							
Units:	ug/L							
Report as:	received							
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Phenacetin	ND UJ	0.414						
Phenanthrene	ND UJ	0.288						
Phenol	R ~~ND~~	~~0.508~~						
2-Picoline	ND UJ	1.68						
Pronamide	ND	0.658						
Pyrene	ND	0.745						
Pyridine	ND	0.846						
1,2,4,5-Tetrachlorobenzene	ND	0.632						
2,3,4,6-Tetrachlorophenol	ND	0.408						
1,2,4-Trichlorobenzene	ND	0.458						
2,4,5-Trichlorophenol	ND	0.506						
2,4,6-Trichlorophenol	ND	0.408						

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-9							
Lab ID:	9608968-06A							
File ID:	Q9922							
Date Collected:	08/28/96							
Date Prepared:	09/03/96 15:00:00							
Date Analyzed:	09/10/96 19:21 (2)							
Dilution Factor:	1							
Matrix:	Water							
Units:	ug/L							
Report as:	received							
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
2-Fluorobiphenyl	68			
2-Fluorophenol	58 Q			
Nitrobenzene-d5	73			
Phenol-d5	38			
Terphenyl-d14	110			
2,4,6-Tribromophenol	83			

RESULTS SUMMARY

Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608969-08A		9608969-02A		9608969-01A		9608969-03A	
File ID:	J61E0909-28		J61E0909-18		J61E0909-17		J61E0909-19	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	09/05/96		09/05/96		09/05/96		09/05/96	
Date Analyzed:	09/09/96		09/09/96		09/09/96		09/09/96	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	mg/L		mg/L		mg/L		mg/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Chromium	< DL	0.000810	0.00450	0.000810	0.00506	0.000810	ND	0.000810

<DL Detected at a concentration less than the DL.

DL Detection limit.

ND Not detected.

U Not present at a concentration greater than the associated level; blank contamination.

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

RESULTS SUMMARY (Cont'd)

Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Project Sample ID:	MW-24		MW-6		MW-7		MW-9	
Lab ID:	9608969-04A		9608969-07A		9608969-05A		9608969-06A	
File ID:	J61E0909-20		J61E0909-24		J61E0909-21		J61E0909-22	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/05/96		09/05/96		09/05/96		09/05/96	
Date Analyzed:	09/09/96		09/09/96		09/09/96		09/09/96	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	mg/L		mg/L		mg/L		mg/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Chromium	ND	0.000810	0.00859	0.000810	ND, 0.00140 u	~~0.000810~~	ND	0.000810

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

RESULTS SUMMARY

Method Arsenic by SW7060A
Test Code ASGSWA00

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608970-08A		9608970-02A		9608970-01A		9608970-03A	
File ID:	Z4090910-28		Z4090910-30		Z4090910-29		Z4090910-31	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	09/05/96		09/05/96		09/05/96		09/05/96	
Date Analyzed:	09/09/96 13:02:00		09/09/96 13:13:00		09/09/96 13:08:00		09/09/96 13:19:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	mg/L		mg/L		mg/L		mg/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Arsenic	ND	0.00392	ND	0.00392	ND ~~< DL~~	0.00392 U	0.0258	0.00392

ND Not detected
U Not present at a concentration greater than the associated level.

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

RESULTS SUMMARY (Cont'd)

Method Arsenic by SW7060A

Test Code ASGSWA00

Project Sample ID:	MW-24		MW-6		MW-7		MW-9	
Lab ID:	9608970-04A		9608970-07A		9608970-05A		9608970-06A	
File ID:	Z4090910-32		Z4090910-42		Z4090910-33		Z4090910-34	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/05/96		09/05/96		09/05/96		09/05/96	
Date Analyzed:	09/09/96 13:25:00		09/09/96 14:37:00		09/09/96 13:31:00		09/09/96 13:36:00	
Dilution Factor:	1		4		1		1	
Matrix:	Water		Water		Water		Water	
Units:	mg/L		mg/L		mg/L		mg/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Arsenic	0.0138	0.00392	0.149	0.0157	0.00989	0.00392	0.0111	0.00392

Sample results, validated in accordance with National Functional Guidelines for Organic and Inorganic Data Review (U.S. EPA, February 1994), have been qualified by Radian International LLC based on the criteria of the data review process.

09/10/96 16:23:57

RADIAN ANALYTICAL SERVICES
FPAS REPORT
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Work Order # 9608967

Client FEDERAL PAPERBOARD
Facility WILMINGTON
Client Code FEDERAL PPBD

Certified By [illegible] DMV
Date 3/11/94

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09/10/96 16:23:57

WORK ORDER SUMMARY

Report RADIAN CORPORATION
To 3200 E. CHAPEL HILL RD.
RTP, NC 27709
Attention Jim Narkunas

Client Code FEDERAL PPBD
Client FEDERAL PAPERBOARD
Facility WILMINGTON
Work ID Wilmington Semiannua

Work Order # 9608967
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RCN 258-058-11-05

Prepared Radian Analytical Services
By 14046 Summit Dr., Bldg. B
P. O. Box 201088
Austin, TX 78720-1088

CSC JALINDSEY

Case # NA
SDG # NA
RAS # 60126AJAL

New York ELAP ID #: 10915

Project Sample ID/ Description	Lab Sample ID	Test Code(s)	Method Desciption
MW-12	01A	826SWAT1	Volatile Organics by GC/MS
		DISPWA00	Sample Disposal Charge
	01B	SPAREB00	Spare Sample
	01C	SPAREB00	Spare Sample
MW-10	02A	826SWAT1	Volatile Organics by GC/MS
		DISPWA00	Sample Disposal Charge
	02B	SPAREB00	Spare Sample
	02C	SPAREB00	Spare Sample
MW-23	03A	826SWAT1	Volatile Organics by GC/MS
		DISPWA00	Sample Disposal Charge
	03B	SPAREB00	Spare Sample
	03C	SPAREB00	Spare Sample
MW-24	04A	826SWAT1	Volatile Organics by GC/MS
		DISPWA00	Sample Disposal Charge
	04B	SPAREB00	Spare Sample
	04C	SPAREB00	Spare Sample
MW-7	05A	826SWAT1	Volatile Organics by GC/MS
		DISPWA00	Sample Disposal Charge
	05B	SPAREB00	Spare Sample
	05C	SPAREB00	Spare Sample
MW-9	06A	826SWAT1	Volatile Organics by GC/MS
		DISPWA00	Sample Disposal Charge
	06B	SPAREB00	Spare Sample

WORK ORDER SUMMARY (Cont'd)

Report RADIAN CORPORATION
To 3200 E. CHAPEL HILL RD.
RTP, NC 27709
Attention Jim Narkunas

Client Code FEDERAL PPBD
Client FEDERAL PAPERBOARD
Facility WILMINGTON
Work ID Wilmington Semiannua

Work Order # 9608967
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RCN 258-058-11-05

Prepared Radian Analytical Services
By 14046 Summit Dr., Bldg. B
P. O. Box 201088
Austin, TX 78720-1088

CSC JALINDSEY

Case # NA
SDG # NA
RAS # 60126AJAL

New York ELAP ID #: 10915

Project Sample ID/ Description	Lab Sample ID	Test Code(s)	Method Desciption
MW-9	06C	SPAREB00	Spare Sample
MW-6	07A	826SWAT1	Volatile Organics by GC/MS
		DISPWA00	Sample Disposal Charge
	07B	SPAREB00	Spare Sample
	07C	SPAREB00	Spare Sample
FB-1	08A	826SWAT1	Volatile Organics by GC/MS
		DISPWA00	Sample Disposal Charge
	08B	SPAREB00	Spare Sample
	08C	SPAREB00	Spare Sample
TB-1	09A	826SWAT1	Volatile Organics by GC/MS
		DISPWA00	Sample Disposal Charge
	09B	SPAREB00	Spare Sample

FLAG DEFINITIONS

Flag	Definition
< DL	Result less than stated Detection Limit and greater than or equal to zero.
NA	Analyte concentration not available for this analysis.
NC	RPD and/or % Recovery not calculated. See Narrative for explanation.
ND	Not detected. No instrument response for analyte or result less than zero.
NR	Not reported. Result greater than or equal to stated Detection Limit and less than specified Reporting Limit.
NS	Analyte not spiked.
B	Analyte detected in method blank at concentration greater than the Reporting Limit (and greater than zero).
C	Confirming data obtained using second GC column or GCMS.
E	Analyte concentration exceeded calibration range.
F	Interference or coelution suspected. See Narrative for explanation.
H	Presence of analyte previously confirmed by historical data.
I	Analyte identification suspect. See Narrative for explanation.
J	Result is less than stated Detection Limit but greater than or equal to specified Reporting Limit.
K	Peak did not meet method identification criteria. Analyte not detected on other GC column.
M	Result modified from previous Report. See Narrative for explanation.
P	Analyte not confirmed. Results from primary and secondary GC columns differ by greater than a factor of 3.
Q	QC result does not meet tolerance in Protocol Specification.
R	Result reported elsewhere.
S	Analyte concentration obtained using Method of Standard Additions (MSA).
T	Second column confirmational analysis not performed.
X	See Narrative for explanation.
Y	See Narrative for explanation.
Z	See Narrative for explanation.

ANALYTICAL PROTOCOL SUMMARY

Work Order # 9608967

Client FEDERAL PAPERBOARD

Facility WILMINGTON

Client Code FEDERAL PPBD

Method Volatile Organics by GC/MS

Specification # 826S

Project Sample ID/Description	Lab Sample ID	Test Code(s)	Extraction/Digestion Batch #	Analysis Batch #
FB-1	9608967-08A	826SWAT1	NA	MSMSDA60904162601
MW-10	9608967-02A	826SWAT1	NA	MSMSDA60903165501
MW-10	9608967-02B	826SWAT1	NA	MSMSDA60904162601
MW-12	9608967-01A	826SWAT1	NA	MSMSDA60903165501
MW-12	9608967-01B	826SWAT1	NA	MSMSDA60904162601
MW-23	9608967-03A	826SWAT1	NA	MSMSDA60903165501
MW-23	9608967-03B	826SWAT1	NA	MSMSDA60904162601
MW-24	9608967-04A	826SWAT1	NA	MSMSDA60903165501
MW-24	9608967-04B	826SWAT1	NA	MSMSDA60904162601
MW-6	9608967-07A	826SWAT1	NA	MSMSDA60904162601
MW-7	9608967-05A	826SWAT1	NA	MSMSDA60904162601
MW-9	9608967-06A	826SWAT1	NA	MSMSDA60904162601
MW-9	9608967-06B	826SWAT1	NA	MSMSDA60904162601
TB-1	9608967-09A	826SWAT1	NA	MSMSDA60904162601

RESULTS SUMMARY

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	FB-1		MW-10		MW-10		MW-12	
Lab ID:	9608967-08A		9608967-02A		9608967-02B		9608967-01A	
File ID:	F0904624		F0903624		F0904620		F0903623	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:								
Date Analyzed:	09/05/96 03:18:00		09/04/96 02:05:00		09/05/96 01:26:00		09/04/96 01:36:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acetone	ND	0.489	ND	0.489	ND	0.489	3.33	0.489
Acrolein	ND	0.707	ND	0.707	ND	0.707	ND	0.707
Acrylonitrile	ND	0.712	ND	0.712	ND	0.712	ND	0.712
Benzene	ND	0.0378	0.161	0.0378	0.150	0.0378	ND	0.0378
Bromodichloromethane	ND	0.0393	ND	0.0393	ND	0.0393	ND	0.0393
Bromoform	ND	0.174	ND	0.174	ND	0.174	ND	0.174
Bromomethane	ND	0.0632	ND	0.0632	ND	0.0632	ND	0.0632
2-Butanone (MEK)	ND	0.260	ND	0.260	ND	0.260	ND	0.260
Carbon disulfide	ND	0.0485	13.1 R	0.0485	0.411 B	0.0485	18.6 R	0.0485
Carbon tetrachloride	ND	0.0474	ND	0.0474	ND	0.0474	ND	0.0474
Chlorobenzene	ND	0.0258	ND	0.0258	ND	0.0258	ND	0.0258
Chloroethane	ND	0.0741	ND	0.0741	ND	0.0741	ND	0.0741
2-Chloroethyl vinyl ether	ND	0.162	ND	0.162	ND	0.162	ND	0.162
Chloroform	ND	0.0409	ND	0.0409	ND	0.0409	ND	0.0409
Chloromethane	ND	0.0454	ND	0.0454	ND	0.0454	ND	0.0454
Dibromochloromethane	ND	0.141	ND	0.141	ND	0.141	ND	0.141
Dibromomethane	ND	0.0621	ND	0.0621	ND	0.0621	ND	0.0621
trans-1,4-Dichloro-2-butene	ND	0.389	ND	0.389	ND	0.389	ND	0.389
Dichlorodifluoromethane	ND	0.0651	ND	0.0651	ND	0.0651	ND	0.0651
1,1-Dichloroethane	ND	0.0919	ND	0.0919	ND	0.0919	0.363	0.0919

RESULTS SUMMARY (Cont'd)

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	FB-1		MW-10		MW-10		MW-12	
Lab ID:	9608967-08A		9608967-02A		9608967-02B		9608967-01A	
File ID:	F0904624		F0903624		F0904620		F0903623	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:								
Date Analyzed:	09/05/96 03:18:00		09/04/96 02:05:00		09/05/96 01:26:00		09/04/96 01:36:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2-Dichloroethane	ND	0.105	ND	0.105	ND	0.105	ND	0.105
1,1-Dichloroethene	ND	0.0802	ND	0.0802	ND	0.0802	ND	0.0802
trans-1,2-Dichloroethene	ND	0.0641	ND	0.0641	ND	0.0641	ND	0.0641
1,2-Dichloropropane	ND	0.0541	ND	0.0541	ND	0.0541	ND	0.0541
cis-1,3-Dichloropropene	ND	0.0538	ND	0.0538	ND	0.0538	ND	0.0538
trans-1,3-Dichloropropene	ND	0.0667	ND	0.0667	ND	0.0667	ND	0.0667
Ethyl methacrylate	ND	0.121	ND	0.121	ND	0.121	ND	0.121
Ethylbenzene	ND	0.0649	ND	0.0649	ND	0.0649	ND	0.0649
2-Hexanone	ND	0.208	ND	0.208	ND	0.208	ND	0.208
Iodomethane	ND	0.0652	ND	0.0652	ND	0.0652	ND	0.0652
4-Methyl-2-pentanone(MIBK)	ND	0.0809	ND	0.0809	ND	0.0809	ND	0.0809
Methylene chloride	0.411	0.177	ND	0.177	ND	0.177	ND	0.177
Styrene	ND	0.0406	ND	0.0406	ND	0.0406	ND	0.0406
1,1,2,2-Tetrachloroethane	ND	0.0412	ND	0.0412	ND	0.0412	ND	0.0412
Tetrachloroethene	ND	0.0487	ND	0.0487	ND	0.0487	ND	0.0487
Toluene	ND	0.0492	0.407	0.0492	0.410	0.0492	ND	0.0492
1,1,1-Trichloroethane	ND	0.0993	ND	0.0993	ND	0.0993	ND	0.0993
1,1,2-Trichloroethane	ND	0.119	ND	0.119	ND	0.119	ND	0.119
Trichloroethene	ND	0.0854	ND	0.0854	ND	0.0854	ND	0.0854
Trichlorofluoromethane	ND	0.0640	ND	0.0640	ND	0.0640	ND	0.0640

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	FB-1		MW-10		MW-10		MW-12	
Lab ID:	9608967-08A		9608967-02A		9608967-02B		9608967-01A	
File ID:	F0904624		F0903624		F0904620		F0903623	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:								
Date Analyzed:	09/05/96 03:18:00		09/04/96 02:05:00		09/05/96 01:26:00		09/04/96 01:36:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2,3-Trichloropropane	ND	0.101	ND	0.101	ND	0.101	ND	0.101
Vinyl acetate	ND	0.0612	ND	0.0612	ND	0.0612	ND	0.0612
Vinyl chloride	ND	0.0767	ND	0.0767	ND	0.0767	ND	0.0767
m&p-Xylene	ND	0.0688	ND	0.0688	ND	0.0688	ND	0.0688
o-Xylene	ND	0.0490	ND	0.0490	ND	0.0490	ND	0.0490

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
1,4-Bromofluorobenzene	101	100	102	100
1,2-Dichloroethane-d4	104	86	105	90
Toluene-d8	100	99	99	100

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	MW-12		MW-23		MW-23		MW-24	
Lab ID:	9608967-01B		9608967-03A		9608967-03B		9608967-04A	
File ID:	F0904619		F0903625		F0904621		F0903626	
Date Collected:	08/27/96		08/27/96		08/27/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 00:57:00		09/04/96 02:34:00		09/05/96 01:54:00		09/04/96 03:03:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acetone	8.82	0.489	ND	0.489	ND	0.489	1.83	0.489
Acrolein	ND	0.707	ND	0.707	ND	0.707	ND	0.707
Acrylonitrile	ND	0.712	ND	0.712	ND	0.712	ND	0.712
Benzene	ND	0.0378	7.04	0.0378	6.83	0.0378	16.0	0.0378
Bromodichloromethane	ND	0.0393	ND	0.0393	ND	0.0393	ND	0.0393
Bromoform	ND	0.174	ND	0.174	ND	0.174	ND	0.174
Bromomethane	ND	0.0632	ND	0.0632	ND	0.0632	ND	0.0632
2-Butanone(MEK)	ND	0.260	ND	0.260	ND	0.260	ND	0.260
Carbon disulfide	0.454 B	0.0485	15.5 R	0.0485	0.335 B	0.0485	13.3 R	0.0485
Carbon tetrachloride	ND	0.0474	ND	0.0474	ND	0.0474	ND	0.0474
Chlorobenzene	ND	0.0258	ND	0.0258	ND	0.0258	13.3	0.0258
Chloroethane	ND	0.0741	ND	0.0741	ND	0.0741	ND	0.0741
2-Chloroethyl vinyl ether	ND	0.162	ND	0.162	ND	0.162	ND	0.162
Chloroform	ND	0.0409	ND	0.0409	ND	0.0409	ND	0.0409
Chloromethane	ND	0.0454	ND	0.0454	ND	0.0454	ND	0.0454
Dibromochloromethane	ND	0.141	ND	0.141	ND	0.141	ND	0.141
Dibromomethane	ND	0.0621	ND	0.0621	ND	0.0621	ND	0.0621
trans-1,4-Dichloro-2-butene	ND	0.389	ND	0.389	ND	0.389	ND	0.389
Dichlorodifluoromethane	ND	0.0651	ND	0.0651	ND	0.0651	ND	0.0651
1,1-Dichloroethane	0.393	0.0919	ND	0.0919	ND	0.0919	0.278	0.0919

RESULTS SUMMARY (Cont'd)

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	MW-12		MW-23		MW-23		MW-24	
Lab ID:	9608967-01B		9608967-03A		9608967-03B		9608967-04A	
File ID:	F0904619		F0903625		F0904621		F0903626	
Date Collected:	08/27/96		08/27/96		08/27/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 00:57:00		09/04/96 02:34:00		09/05/96 01:54:00		09/04/96 03:03:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2-Dichloroethane	ND	0.105	ND	0.105	ND	0.105	ND	0.105
1,1-Dichloroethene	ND	0.0802	ND	0.0802	ND	0.0802	ND	0.0802
trans-1,2-Dichloroethene	ND	0.0641	ND	0.0641	ND	0.0641	ND	0.0641
1,2-Dichloropropane	ND	0.0541	ND	0.0541	ND	0.0541	ND	0.0541
cis-1,3-Dichloropropene	ND	0.0538	ND	0.0538	ND	0.0538	ND	0.0538
trans-1,3-Dichloropropene	ND	0.0667	ND	0.0667	ND	0.0667	ND	0.0667
Ethyl methacrylate	ND	0.121	ND	0.121	ND	0.121	ND	0.121
Ethylbenzene	ND	0.0649	< DL	0.0649	ND	0.0649	< DL	0.0649
2-Hexanone	ND	0.208	ND	0.208	ND	0.208	ND	0.208
Iodomethane	ND	0.0652	ND	0.0652	ND	0.0652	ND	0.0652
4-Methyl-2-pentanone (MIBK)	ND	0.0809	ND	0.0809	ND	0.0809	ND	0.0809
Methylene chloride	ND	0.177	ND	0.177	ND	0.177	ND	0.177
Styrene	ND	0.0406	ND	0.0406	ND	0.0406	ND	0.0406
1,1,2,2-Tetrachloroethane	ND	0.0412	ND	0.0412	ND	0.0412	ND	0.0412
Tetrachloroethene	ND	0.0487	ND	0.0487	ND	0.0487	ND	0.0487
Toluene	ND	0.0492	ND	0.0492	ND	0.0492	0.109	0.0492
1,1,1-Trichloroethane	ND	0.0993	ND	0.0993	ND	0.0993	ND	0.0993
1,1,2-Trichloroethane	ND	0.119	ND	0.119	ND	0.119	ND	0.119
Trichloroethene	ND	0.0854	ND	0.0854	ND	0.0854	ND	0.0854
Trichlorofluoromethane	ND	0.0640	ND	0.0640	ND	0.0640	ND	0.0640

Method Volatile Organics SW8240A

Test Code 826SWAT1

Project Sample ID:	MW-12		MW-23		MW-23		MW-24	
Lab ID:	9608967-01B		9608967-03A		9608967-03B		9608967-04A	
File ID:	F0904619		F0903625		F0904621		F0903626	
Date Collected:	08/27/96		08/27/96		08/27/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 00:57:00		09/04/96 02:34:00		09/05/96 01:54:00		09/04/96 03:03:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2,3-Trichloropropane	ND	0.101	ND	0.101	ND	0.101	ND	0.101
Vinyl acetate	ND	0.0612	ND	0.0612	ND	0.0612	ND	0.0612
Vinyl chloride	ND	0.0767	ND	0.0767	ND	0.0767	ND	0.0767
m&p-Xylene	ND	0.0688	ND	0.0688	ND	0.0688	ND	0.0688
o-Xylene	ND	0.0490	ND	0.0490	ND	0.0490	ND	0.0490

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
1,4-Bromofluorobenzene	101	100	102	100
1,2-Dichloroethane-d4	101	88	105	87
Toluene-d8	99	101	100	99

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	MW-24		MW-6		MW-7		MW-9	
Lab ID:	9608967-04B		9608967-07A		9608967-05A		9608967-06A	
File ID:	F0904622		F0904642		F0904623		F0904626	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 02:22:00		09/05/96 14:22:00		09/05/96 02:50:00		09/05/96 04:16:00	
Dilution Factor:	1		10000		1		20	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acetone	1.92	0.489	118000	4890	2.22	0.489	1400 ER	9.78
Acrolein	ND	0.707	ND	7070	ND	0.707	ND	14.1
Acrylonitrile	ND	0.712	ND	7120	ND	0.712	ND	14.2
Benzene	15.8	0.0378	ND	378	0.464	0.0378	113	0.756
Bromodichloromethane	ND	0.0393	ND	393	ND	0.0393	ND	0.786
Bromoform	ND	0.174	ND	1740	ND	0.174	ND	3.48
Bromomethane	ND	0.0632	ND	632	ND	0.0632	ND	1.26
2-Butanone (MEK)	ND	0.260	267000	2600	ND	0.260	ND	5.20
Carbon disulfide	0.269 B	0.0485	ND	485	0.265 B	0.0485	ND	0.970
Carbon tetrachloride	ND	0.0474	ND	474	ND	0.0474	ND	0.948
Chlorobenzene	13.2	0.0258	ND	258	ND	0.0258	ND	0.516
Chloroethane	ND	0.0741	ND	741	ND	0.0741	ND	1.48
2-Chloroethyl vinyl ether	ND	0.162	ND	1620	ND	0.162	ND	3.24
Chloroform	ND	0.0409	ND	409	ND	0.0409	ND	0.818
Chloromethane	ND	0.0454	ND	454	ND	0.0454	ND	0.908
Dibromochloromethane	ND	0.141	ND	1410	ND	0.141	ND	2.82
Dibromomethane	ND	0.0621	ND	621	ND	0.0621	ND	1.24
trans-1,4-Dichloro-2-butene	ND	0.389	ND	3890	ND	0.389	ND	7.78
Dichlorodifluoromethane	ND	0.0651	ND	651	ND	0.0651	ND	1.30
1,1-Dichloroethane	0.312	0.0919	ND	919	0.269	0.0919	ND	1.84

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	MW-24		MW-6		MW-7		MW-9	
Lab ID:	9608967-04B		9608967-07A		9608967-05A		9608967-06A	
File ID:	F0904622		F0904642		F0904623		F0904626	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 02:22:00		09/05/96 14:22:00		09/05/96 02:50:00		09/05/96 04:16:00	
Dilution Factor:	1		10000		1		20	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2-Dichloroethane	ND	0.105	ND	1050	ND	0.105	ND	2.10
1,1-Dichloroethene	ND	0.0802	ND	802	ND	0.0802	ND	1.60
trans-1,2-Dichloroethene	ND	0.0641	ND	641	ND	0.0641	ND	1.28
1,2-Dichloropropane	ND	0.0541	ND	541	ND	0.0541	ND	1.08
cis-1,3-Dichloropropene	ND	0.0538	ND	538	ND	0.0538	ND	1.08
trans-1,3-Dichloropropene	ND	0.0667	ND	667	ND	0.0667	ND	1.33
Ethyl methacrylate	ND	0.121	ND	1210	ND	0.121	ND	2.42
Ethylbenzene	ND	0.0649	ND	649	ND	0.0649	26.6	1.30
2-Hexanone	ND	0.208	ND	2080	ND	0.208	ND	4.16
Iodomethane	ND	0.0652	ND	652	ND	0.0652	ND	1.30
4-Methyl-2-pentanone(MIBK)	ND	0.0809	ND	809	ND	0.0809	ND	1.62
Methylene chloride	ND	0.177	4780	1770	ND	0.177	< DL	3.54
Styrene	ND	0.0406	ND	406	ND	0.0406	ND	0.812
1,1,2,2-Tetrachloroethane	ND	0.0412	ND	412	ND	0.0412	ND	0.824
Tetrachloroethene	ND	0.0487	ND	487	ND	0.0487	ND	0.974
Toluene	0.108	0.0492	36000	492	ND	0.0492	3870 ER	0.984
1,1,1-Trichloroethane	ND	0.0993	ND	993	ND	0.0993	ND	1.99
1,1,2-Trichloroethane	ND	0.119	ND	1190	ND	0.119	ND	2.38
Trichloroethene	ND	0.0854	ND	854	ND	0.0854	ND	1.71
Trichlorofluoromethane	ND	0.0640	ND	640	ND	0.0640	ND	1.28

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	MW-24		MW-6		MW-7		MW-9	
Lab ID:	9608967-04B		9608967-07A		9608967-05A		9608967-06A	
File ID:	F0904622		F0904642		F0904623		F0904626	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:								
Date Analyzed:	09/05/96 02:22:00		09/05/96 14:22:00		09/05/96 02:50:00		09/05/96 04:16:00	
Dilution Factor:	1		10000		1		20	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2,3-Trichloropropane	ND	0.101	ND	1010	ND	0.101	ND	2.02
Vinyl acetate	ND	0.0612	ND	612	ND	0.0612	ND	1.22
Vinyl chloride	ND	0.0767	ND	767	ND	0.0767	ND	1.53
m&p-Xylene	ND	0.0688	ND	688	ND	0.0688	22.4	1.38
o-Xylene	ND	0.0490	ND	490	ND	0.0490	ND	0.980

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
1,4-Bromofluorobenzene	100	101	100	100
1,2-Dichloroethane-d4	98	106	104	104
Toluene-d8	100	99	100	99

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	MW-9		TB-1					
Lab ID:	9608967-06B		9608967-09A					
File ID:	F0904641		F0904625					
Date Collected:	08/28/96		08/28/96					
Date Prepared:								
Date Analyzed:	09/05/96 13:54:00		09/05/96 03:47:00					
Dilution Factor:	100		1					
Matrix:	Water		Water					
Units:	ug/L		ug/L					
Report as:	received		received					
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acetone	962	48.9	ND	0.489				
Acrolein	ND	70.7	ND	0.707				
Acrylonitrile	ND	71.2	ND	0.712				
Benzene	82.3	3.78	ND	0.0378				
Bromodichloromethane	ND	3.93	ND	0.0393				
Bromoform	ND	17.4	ND	0.174				
Bromomethane	ND	6.32	ND	0.0632				
2-Butanone(MEK)	1390	26.0	ND	0.260				
Carbon disulfide	ND	4.85	0.199 B	0.0485				
Carbon tetrachloride	ND	4.74	ND	0.0474				
Chlorobenzene	ND	2.58	ND	0.0258				
Chloroethane	ND	7.41	ND	0.0741				
2-Chloroethyl vinyl ether	ND	16.2	ND	0.162				
Chloroform	ND	4.09	ND	0.0409				
Chloromethane	ND	4.54	ND	0.0454				
Dibromochloromethane	ND	14.1	ND	0.141				
Dibromomethane	ND	6.21	ND	0.0621				
trans-1,4-Dichloro-2-butene	ND	38.9	ND	0.389				
Dichlorodifluoromethane	ND	6.51	ND	0.0651				
1,1-Dichloroethane	ND	9.19	ND	0.0919				

Method Volatile Organics SW8240A
Test Code 826SWAT1

Project Sample ID:	MW-9		TB-1					
Lab ID:	9608967-06B		9608967-09A					
File ID:	F0904641		F0904625					
Date Collected:	08/28/96		08/28/96					
Date Prepared:								
Date Analyzed:	09/05/96 13:54:00		09/05/96 03:47:00					
Dilution Factor:	100		1					
Matrix:	Water		Water					
Units:	ug/L		ug/L					
Report as:	received		received					
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2-Dichloroethane	ND	10.5	ND	0.105				
1,1-Dichloroethene	ND	8.02	ND	0.0802				
trans-1,2-Dichloroethene	ND	6.41	ND	0.0641				
1,2-Dichloropropane	ND	5.41	ND	0.0541				
cis-1,3-Dichloropropene	ND	5.38	ND	0.0538				
trans-1,3-Dichloropropene	ND	6.67	ND	0.0667				
Ethyl methacrylate	ND	12.1	ND	0.121				
Ethylbenzene	19.3	6.49	ND	0.0649				
2-Hexanone	ND	20.8	ND	0.208				
Iodomethane	ND	6.52	ND	0.0652				
4-Methyl-2-pentanone (MIBK)	ND	8.09	ND	0.0809				
Methylene chloride	ND	17.7	ND	0.177				
Styrene	ND	4.06	ND	0.0406				
1,1,2,2-Tetrachloroethane	ND	4.12	ND	0.0412				
Tetrachloroethene	ND	4.87	ND	0.0487				
Toluene	3090	4.92	ND	0.0492				
1,1,1-Trichloroethane	ND	9.93	ND	0.0993				
1,1,2-Trichloroethane	ND	11.9	ND	0.119				
Trichloroethene	ND	8.54	ND	0.0854				
Trichlorofluoromethane	ND	6.40	ND	0.0640				

Method Volatile Organics SW8240A

Test Code 826SWAT1

Project Sample ID:	MW-9		TB-1					
Lab ID:	9608967-06B		9608967-09A					
File ID:	F0904641		F0904625					
Date Collected:	08/28/96		08/28/96					
Date Prepared:								
Date Analyzed:	09/05/96 13:54:00		09/05/96 03:47:00					
Dilution Factor:	100		1					
Matrix:	Water		Water					
Units:	ug/L		ug/L					
Report as:	received		received					
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
1,2,3-Trichloropropane	ND	10.1	ND	0.101				
Vinyl acetate	ND	6.12	ND	0.0612				
Vinyl chloride	ND	7.67	ND	0.0767				
m&p-Xylene	15.9	6.88	ND	0.0688				
o-Xylene	ND	4.90	ND	0.0490				

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
1,4-Bromofluorobenzene	101	101		
1,2-Dichloroethane-d4	107	105		
Toluene-d8	100	98		

ANALYSIS BATCH SUMMARY

Analysis Batch # MSMSDA60903165501

Work Order # 9608967

Method Volatile Organics by GC/MS
Test Code 826SWA00
Initial Calibration # MSDA960901000000
Calibration Date 09/01/96

Analysis Start Date/Time 09/03/96 16:55:00
Analysis Stop Date/Time 09/04/96 03:03:00

Instrument MSDA
Analyst TLS
Reviewer APS

Sequence/Analysis Time		Project Sample ID	Lab Sample ID	Sample Type	Analysis File #
1	09/03/96 16:55:00		BFB	GC/MS tune files	F0903605
2	09/03/96 16:55:00		VSTDC17	Continuing Calibration Verification	F0903605
3	09/03/96 17:27:00		LCS965324	Lab Control Sample	F0903606
4	09/03/96 17:56:00		LCS965325	Lab Control Sample	F0903607
5	09/03/96 18:25:00		BLK963104	Blank, Method	F0903608
6	09/03/96 18:54:00		LCSD965326	Lab Control Sample Duplicate	F0903609
7	09/03/96 19:22:00		9608886-01A	Sample	F0903610
8	09/03/96 19:51:00		9608886-05A	Matrix Spike	F0903611
9	09/03/96 20:20:00		9608886-06A	Matrix Spike Duplicate	F0903612
10	09/03/96 20:49:00		9608800-04A	Sample	F0903613
11	09/03/96 21:18:00		9608800-05A	Sample	F0903614
12	09/03/96 21:46:00		9608886-02A	Sample	F0903615
13	09/03/96 22:15:00		9608886-03A	Sample	F0903616
14	09/03/96 22:44:00		9608886-04A	Sample	F0903617
15	09/03/96 23:13:00		9608982-03A	Sample	F0903618
16	09/03/96 23:41:00		9608800-01A	Sample	F0903619
17	09/04/96 00:10:00		9608800-02A	Sample	F0903620
18	09/04/96 00:39:00		9608800-03A	Sample	F0903621
19	09/04/96 01:08:00		9608800-06A	Sample	F0903622
20	09/04/96 01:36:00	MW-12	9608967-01A	Sample	F0903623
21	09/04/96 02:05:00	MW-10	9608967-02A	Sample	F0903624
22	09/04/96 02:34:00	MW-23	9608967-03A	Sample	F0903625
23	09/04/96 03:03:00	MW-24	9608967-04A	Sample	F0903626

RESULTS

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Project Sample ID MW-12
Lab Sample ID 9608967-01A
File # F0903623
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/04/96 01:36:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	3.33	0.489	0.489
Acrolein	107-02-8	ND	0.707	0.707
Acrylonitrile	107-13-1	ND	0.712	0.712
Benzene	71-43-2	ND	0.0378	0.0378
Bromodichloromethane	75-27-4	ND	0.0393	0.0393
Bromoform	75-25-2	ND	0.174	0.174
Bromomethane	74-83-9	ND	0.0632	0.0632
2-Butanone(MEK)	78-93-3	ND	0.260	0.260
Carbon disulfide	75-15-0	18.6 R	0.0485	0.0485
Carbon tetrachloride	56-23-5	ND	0.0474	0.0474
Chlorobenzene	108-90-7	ND	0.0258	0.0258
Chloroethane	75-00-3	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	110-75-8	ND	0.162	0.162
Chloroform	67-66-3	ND	0.0409	0.0409
Chloromethane	74-87-3	ND	0.0454	0.0454
Dibromochloromethane	124-48-1	ND	0.141	0.141
Dibromomethane	74-95-3	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.389	0.389
Dichlorodifluoromethane	75-71-8	ND	0.0651	0.0651
1,1-Dichloroethane	75-34-3	0.363	0.0919	0.0919
1,2-Dichloroethane	107-06-2	ND	0.105	0.105
1,1-Dichloroethene	75-35-4	ND	0.0802	0.0802
trans-1,2-Dichloroethene	156-60-5	ND	0.0641	0.0641
1,2-Dichloropropane	78-87-5	ND	0.0541	0.0541
cis-1,3-Dichloropropene	10061-01-5	ND	0.0538	0.0538

R E S U L T S (Cont'd)

Work Order # 9608967

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Project Sample ID MW-12 | Date Collected 08/27/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-01A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0903623 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/04/96 01:36:00 | Reviewer APS

Test Code 826SWAT1

Analyte	CAS #	Aliquot Mass/Volume 15.0 (mL) Extract/Digestate Volume 15.0 (mL) Dilution Factor 1 Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	0.0667	0.0667
Ethyl methacrylate	97-63-2	ND	0.121	0.121
Ethylbenzene	100-41-4	ND	0.0649	0.0649
2-Hexanone	591-78-6	ND	0.208	0.208
Iodomethane	74-88-4	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	0.0809	0.0809
Methylene chloride	75-09-2	ND	0.177	0.177
Styrene	100-42-5	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.0412	0.0412
Tetrachloroethene	127-18-4	ND	0.0487	0.0487
Toluene	108-88-3	ND	0.0492	0.0492
1,1,1-Trichloroethane	71-55-6	ND	0.0993	0.0993
1,1,2-Trichloroethane	79-00-5	ND	0.119	0.119
Trichloroethene	79-01-6	ND	0.0854	0.0854
Trichlorofluoromethane	75-69-4	ND	0.0640	0.0640
1,2,3-Trichloropropane	96-18-4	ND	0.101	0.101
Vinyl acetate	108-05-4	ND	0.0612	0.0612
Vinyl chloride	75-01-4	ND	0.0767	0.0767
m&p-Xylene	NO_CAS	ND	0.0688	0.0688
o-Xylene	95-47-6	ND	0.0490	0.0490

R E S U L T S (Cont'd)

Work Order # 9608967

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Project Sample ID MW-12
Lab Sample ID 9608967-01A
File # F0903623
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/04/96 01:36:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	16.7	16.7	100	77	117
1,2-Dichloroethane-d4	17070-07-0	16.7	15.1	90	61	143
Toluene-d8	2037-26-5	16.7	16.7	100	87	113

RESULTS

Extraction Batch # _____
Analysis Batch # MSMSDA60903165501

Project Sample ID MW-10
Lab Sample ID 9608967-02A
File # F0903624
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/04/96 02:05:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	ND	0.489	0.489
Acrolein	107-02-8	ND	0.707	0.707
Acrylonitrile	107-13-1	ND	0.712	0.712
Benzene	71-43-2	0.161	0.0378	0.0378
Bromodichloromethane	75-27-4	ND	0.0393	0.0393
Bromoform	75-25-2	ND	0.174	0.174
Bromomethane	74-83-9	ND	0.0632	0.0632
2-Butanone(MEK)	78-93-3	ND	0.260	0.260
Carbon disulfide	75-15-0	13.1 R	0.0485	0.0485
Carbon tetrachloride	56-23-5	ND	0.0474	0.0474
Chlorobenzene	108-90-7	ND	0.0258	0.0258
Chloroethane	75-00-3	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	110-75-8	ND	0.162	0.162
Chloroform	67-66-3	ND	0.0409	0.0409
Chloromethane	74-87-3	ND	0.0454	0.0454
Dibromochloromethane	124-48-1	ND	0.141	0.141
Dibromomethane	74-95-3	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.389	0.389
Dichlorodifluoromethane	75-71-8	ND	0.0651	0.0651
1,1-Dichloroethane	75-34-3	ND	0.0919	0.0919
1,2-Dichloroethane	107-06-2	ND	0.105	0.105
1,1-Dichloroethene	75-35-4	ND	0.0802	0.0802
trans-1,2-Dichloroethene	156-60-5	ND	0.0641	0.0641
1,2-Dichloropropane	78-87-5	ND	0.0541	0.0541
cis-1,3-Dichloropropene	10061-01-5	ND	0.0538	0.0538

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Project Sample ID MW-10 | Date Collected 08/27/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-02A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0903624 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/04/96 02:05:00 | Reviewer APS

Test Code 826SWAT1

Analyte	CAS #	Aliquot Mass/Volume 15.0 (mL) Extract/Digestate Volume 15.0 (mL) Dilution Factor 1 — Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	0.0667	0.0667
Ethyl methacrylate	97-63-2	ND	0.121	0.121
Ethylbenzene	100-41-4	ND	0.0649	0.0649
2-Hexanone	591-78-6	ND	0.208	0.208
Iodomethane	74-88-4	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	0.0809	0.0809
Methylene chloride	75-09-2	ND	0.177	0.177
Styrene	100-42-5	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.0412	0.0412
Tetrachloroethene	127-18-4	ND	0.0487	0.0487
Toluene	108-88-3	0.407	0.0492	0.0492
1,1,1-Trichloroethane	71-55-6	ND	0.0993	0.0993
1,1,2-Trichloroethane	79-00-5	ND	0.119	0.119
Trichloroethene	79-01-6	ND	0.0854	0.0854
Trichlorofluoromethane	75-69-4	ND	0.0640	0.0640
1,2,3-Trichloropropane	96-18-4	ND	0.101	0.101
Vinyl acetate	108-05-4	ND	0.0612	0.0612
Vinyl chloride	75-01-4	ND	0.0767	0.0767
m&p-Xylene	NO_CAS	ND	0.0688	0.0688
o-Xylene	95-47-6	ND	0.0490	0.0490

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Project Sample ID MW-10 | Date Collected 08/27/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-02A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0903624 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/04/96 02:05:00 | Reviewer APS

Test Code 826SWAT1

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	16.7	16.7	100	77	117
1,2-Dichloroethane-d4	17070-07-0	16.7	14.4	86	61	143
Toluene-d8	2037-26-5	16.7	16.6	99	87	113

RESULTS

Extraction Batch # _____
Analysis Batch # MSMSDA60903165501

Project Sample ID MW-23
Lab Sample ID 9608967-03A
File # F0903625
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/04/96 02:34:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	ND	0.489	0.489
Acrolein	107-02-8	ND	0.707	0.707
Acrylonitrile	107-13-1	ND	0.712	0.712
Benzene	71-43-2	7.04	0.0378	0.0378
Bromodichloromethane	75-27-4	ND	0.0393	0.0393
Bromoform	75-25-2	ND	0.174	0.174
Bromomethane	74-83-9	ND	0.0632	0.0632
2-Butanone(MEK)	78-93-3	ND	0.260	0.260
Carbon disulfide	75-15-0	15.5 R	0.0485	0.0485
Carbon tetrachloride	56-23-5	ND	0.0474	0.0474
Chlorobenzene	108-90-7	ND	0.0258	0.0258
Chloroethane	75-00-3	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	110-75-8	ND	0.162	0.162
Chloroform	67-66-3	ND	0.0409	0.0409
Chloromethane	74-87-3	ND	0.0454	0.0454
Dibromochloromethane	124-48-1	ND	0.141	0.141
Dibromomethane	74-95-3	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.389	0.389
Dichlorodifluoromethane	75-71-8	ND	0.0651	0.0651
1,1-Dichloroethane	75-34-3	ND	0.0919	0.0919
1,2-Dichloroethane	107-06-2	ND	0.105	0.105
1,1-Dichloroethene	75-35-4	ND	0.0802	0.0802
trans-1,2-Dichloroethene	156-60-5	ND	0.0641	0.0641
1,2-Dichloropropane	78-87-5	ND	0.0541	0.0541
cis-1,3-Dichloropropene	10061-01-5	ND	0.0538	0.0538

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Project Sample ID MW-23 | Date Collected 08/27/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-03A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0903625 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/04/96 02:34:00 | Reviewer APS

Test Code 826SWAT1

Analyte	CAS #	Aliquot Mass/Volume 15.0 (mL) Extract/Digestate Volume 15.0 (mL) Dilution Factor 1 Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	0.0667	0.0667
Ethyl methacrylate	97-63-2	ND	0.121	0.121
Ethylbenzene	100-41-4	< DL	0.0649	0.0649
2-Hexanone	591-78-6	ND	0.208	0.208
Iodomethane	74-88-4	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	0.0809	0.0809
Methylene chloride	75-09-2	ND	0.177	0.177
Styrene	100-42-5	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.0412	0.0412
Tetrachloroethene	127-18-4	ND	0.0487	0.0487
Toluene	108-88-3	ND	0.0492	0.0492
1,1,1-Trichloroethane	71-55-6	ND	0.0993	0.0993
1,1,2-Trichloroethane	79-00-5	ND	0.119	0.119
Trichloroethene	79-01-6	ND	0.0854	0.0854
Trichlorofluoromethane	75-69-4	ND	0.0640	0.0640
1,2,3-Trichloropropane	96-18-4	ND	0.101	0.101
Vinyl acetate	108-05-4	ND	0.0612	0.0612
Vinyl chloride	75-01-4	ND	0.0767	0.0767
m&p-Xylene	NO_CAS	ND	0.0688	0.0688
o-Xylene	95-47-6	ND	0.0490	0.0490

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Project Sample ID MW-23
Lab Sample ID 9608967-03A
File # F0903625
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/04/96 02:34:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	16.7	16.7	100	77	117
1,2-Dichloroethane-d4	17070-07-0	16.7	14.7	88	61	143
Toluene-d8	2037-26-5	16.7	16.9	101	87	113

RESULTS

Extraction Batch # _____
Analysis Batch # MSMSDA60903165501

Project Sample ID MW-24
Lab Sample ID 9608967-04A
File # F0903626
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/04/96 03:03:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	1.83	0.489	0.489
Acrolein	107-02-8	ND	0.707	0.707
Acrylonitrile	107-13-1	ND	0.712	0.712
Benzene	71-43-2	16.0	0.0378	0.0378
Bromodichloromethane	75-27-4	ND	0.0393	0.0393
Bromoform	75-25-2	ND	0.174	0.174
Bromomethane	74-83-9	ND	0.0632	0.0632
2-Butanone (MEK)	78-93-3	ND	0.260	0.260
Carbon disulfide	75-15-0	13.3 R	0.0485	0.0485
Carbon tetrachloride	56-23-5	ND	0.0474	0.0474
Chlorobenzene	108-90-7	13.3	0.0258	0.0258
Chloroethane	75-00-3	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	110-75-8	ND	0.162	0.162
Chloroform	67-66-3	ND	0.0409	0.0409
Chloromethane	74-87-3	ND	0.0454	0.0454
Dibromochloromethane	124-48-1	ND	0.141	0.141
Dibromomethane	74-95-3	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.389	0.389
Dichlorodifluoromethane	75-71-8	ND	0.0651	0.0651
1,1-Dichloroethane	75-34-3	0.278	0.0919	0.0919
1,2-Dichloroethane	107-06-2	ND	0.105	0.105
1,1-Dichloroethene	75-35-4	ND	0.0802	0.0802
trans-1,2-Dichloroethene	156-60-5	ND	0.0641	0.0641
1,2-Dichloropropane	78-87-5	ND	0.0541	0.0541
cis-1,3-Dichloropropene	10061-01-5	ND	0.0538	0.0538

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Project Sample ID MW-24 | Date Collected 08/28/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-04A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0903626 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/04/96 03:03:00 | Reviewer APS

Test Code 826SWAT1

Analyte	CAS #	Aliquot Mass/Volume 15.0 (mL) Extract/Digestate Volume 15.0 (mL) Dilution Factor 1 Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	0.0667	0.0667
Ethyl methacrylate	97-63-2	ND	0.121	0.121
Ethylbenzene	100-41-4	< DL	0.0649	0.0649
2-Hexanone	591-78-6	ND	0.208	0.208
Iodomethane	74-88-4	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	0.0809	0.0809
Methylene chloride	75-09-2	ND	0.177	0.177
Styrene	100-42-5	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.0412	0.0412
Tetrachloroethene	127-18-4	ND	0.0487	0.0487
Toluene	108-88-3	0.109	0.0492	0.0492
1,1,1-Trichloroethane	71-55-6	ND	0.0993	0.0993
1,1,2-Trichloroethane	79-00-5	ND	0.119	0.119
Trichloroethene	79-01-6	ND	0.0854	0.0854
Trichlorofluoromethane	75-69-4	ND	0.0640	0.0640
1,2,3-Trichloropropane	96-18-4	ND	0.101	0.101
Vinyl acetate	108-05-4	ND	0.0612	0.0612
Vinyl chloride	75-01-4	ND	0.0767	0.0767
m&p-Xylene	NO_CAS	ND	0.0688	0.0688
o-Xylene	95-47-6	ND	0.0490	0.0490

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Project Sample ID MW-24 | Date Collected 08/28/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-04A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0903626 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/04/96 03:03:00 | Reviewer APS

Test Code 826SWAT1

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	16.7	16.7	100	77	117
1,2-Dichloroethane-d4	17070-07-0	16.7	14.6	87	61	143
Toluene-d8	2037-26-5	16.7	16.6	99	87	113

LABORATORY BLANK INFORMATION

Extraction Batch # _____
Analysis Batch # MSMSDA60903165501

Lab Sample ID BLK963104
File # F0903608
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Prepared _____
Date Analyzed 09/03/96 18:25:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	ND	0.489	0.489
Acrolein	ND	0.707	0.707
Acrylonitrile	ND	0.712	0.712
Benzene	ND	0.0378	0.0378
Bromodichloromethane	ND	0.0393	0.0393
Bromoform	ND	0.174	0.174
Bromomethane	ND	0.0632	0.0632
2-Butanone (MEK)	ND	0.260	0.260
Carbon disulfide	ND	0.0485	0.0485
Carbon tetrachloride	ND	0.0474	0.0474
Chlorobenzene	ND	0.0258	0.0258
Chloroethane	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	ND	0.162	0.162
Chloroform	ND	0.0409	0.0409
Chloromethane	ND	0.0454	0.0454
Dibromochloromethane	ND	0.141	0.141
Dibromomethane	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	ND	0.389	0.389
Dichlorodifluoromethane	ND	0.0651	0.0651
1,1-Dichloroethane	ND	0.0919	0.0919
1,2-Dichloroethane	ND	0.105	0.105
1,1-Dichloroethene	ND	0.0802	0.0802
trans-1,2-Dichloroethene	ND	0.0641	0.0641
1,2-Dichloropropane	ND	0.0541	0.0541
cis-1,3-Dichloropropene	ND	0.0538	0.0538

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # _____
Analysis Batch # MSMSDA60903165501

Lab Sample ID BLK963104 | Date Prepared _____ | Instrument MSDA | Reporting Subset ___ | Matrix W
File # F0903608 | Date Analyzed 09/03/96 18:25:00 | Column _____ | Spikes Subset ___
Method Volatile Organics SW8240A | Analyst TLS | Specs Subset ___
Test Code 826SWAT1 | Reviewer APS

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	ND	0.0667	0.0667
Ethyl methacrylate	ND	0.121	0.121
Ethylbenzene	ND	0.0649	0.0649
2-Hexanone	ND	0.208	0.208
Iodomethane	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	ND	0.0809	0.0809
Methylene chloride	ND	0.177	0.177
Styrene	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	ND	0.0412	0.0412
Tetrachloroethene	ND	0.0487	0.0487
Toluene	ND	0.0492	0.0492
1,1,1-Trichloroethane	ND	0.0993	0.0993
1,1,2-Trichloroethane	ND	0.119	0.119
Trichloroethene	ND	0.0854	0.0854
Trichlorofluoromethane	ND	0.0640	0.0640
1,2,3-Trichloropropane	ND	0.101	0.101
Vinyl acetate	ND	0.0612	0.0612
Vinyl chloride	ND	0.0767	0.0767
m&p-Xylene	ND	0.0688	0.0688
o-Xylene	ND	0.0490	0.0490

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # _____
Analysis Batch # MSMSDA60903165501

Lab Sample ID BLK963104
File # F0903608
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Prepared _____
Date Analyzed 09/03/96 18:25:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W

Surrogate(s)	Spiked Conc. ug/L	Measured Conc. ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	16.7	16.7	100	84	114
1,2-Dichloroethane-d4	16.7	15.2	91	63	137
Toluene-d8	16.7	16.7	100	90	110

09/10/96 16:23:57

LABORATORY CONTROL SAMPLE

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Work Order # 9608967

Method Volatile Organics SW8240A
Test Code 826SWAT1
Date Prepared _____
Date Analyzed 09/03/96 18:54:00
Instrument MSDA
Column _____
Analyst TLS
Reviewer APS
Reporting Subset ___ ___
Spikes Subset ___ ___
Specs Subset ___ ___
Matrix W
Report As received
% Moisture _____
Aliquot Mass or Vol 15.0 (mL)
Extract Mass or Vol 15.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
LCS	5 uL	1,2-DCA-d4	5 uL
		Toluene-d8	5 uL
		1,4-BFB	5 uL

LCS Lab Sample ID LCS965325
File ID F0903607

LCS Duplicate Lab Sample ID LCSD965326
File ID F0903609

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
Acetone	33.3	28.1	84	33.3	30.7	92	3	127	9.1	49
Acrolein	167	148	88	167	145	87			1.1	
Acrylonitrile	33.3	29.3	88	33.3	29.0	87			1.1	
Benzene	6.67	7.39	111	6.67	7.67	115	74	132	3.5	14
Bromodichloromethane	6.67	6.97	105	6.67	7.23	108	64	132	2.8	22
Bromoform	6.67	6.08	91	6.67	6.16	92	41	135	1.1	12
Bromomethane	6.67	5.05	76	6.67	5.31	80	46	152	5.1	18
2-Butanone (MEK)	33.3	32.8	98	33.3	33.1	99	0.1	160	1.0	37
Carbon disulfide	6.67	6.49	97	6.67	6.74	101	29	223	4.0	23
Carbon tetrachloride	6.67	7.65	115	6.67	8.13	122	53	167	5.9	21
Chlorobenzene	6.67	7.25	109	6.67	7.55	113	73	119	3.6	13
Chloroethane	6.67	5.18	78	6.67	5.46	82	50	154	5.0	22
2-Chloroethyl vinyl ether	6.67	7.00	105	6.67	7.33	110			4.6	
Chloroform	6.67	7.28	109	6.67	7.55	113	64	130	3.6	16
Chloromethane	6.67	4.20	63	6.67	4.44	67	39	135	6.2	25
Dibromochloromethane	6.67	6.65	100	6.67	6.86	103	60	122	3.0	15
Dibromomethane	6.67	6.96	104	6.67	7.02	105			0.96	
Dichlorodifluoromethane	6.67	3.78	57	6.67	3.91	59	5	157	3.4	27
1,1-Dichloroethane	6.67	6.98	105	6.67	7.08	106	65	131	0.95	19
1,2-Dichloroethane	6.67	6.78	102	6.67	6.96	104	68	138	1.9	12

LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Work Order # 9608967

Method Volatile Organics SW8240A
Test Code 826SWAT1
Date Prepared _____
Date Analyzed 09/03/96 18:54:00
Instrument MSDA
Column _____
Analyst TLS
Reviewer APS
Reporting Subset ___ ___
Spikes Subset ___ ___
Specs Subset ___ ___
Matrix W
Report As received
% Moisture _____
Aliquot Mass or Vol 15.0 (mL)
Extract Mass or Vol 15.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
LCS	5 uL	1,2-DCA-d4	5 uL
		Toluene-d8	5 uL
		1,4-BFB	5 uL

Analyte	LCS Lab Sample ID LCS965325 File ID F0903607			LCS Duplicate Lab Sample ID LCSD965326 File ID F0903609			Recovery Spec. Limits		RPD	
	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Low %	High %	Result %	Spec. Limit %
1,1-Dichloroethene	6.67	7.48	112	6.67	7.87	118	51	133	5.2	23
trans-1,2-Dichloroethene	6.67	6.86	103	6.67	7.05	106	58	144	2.9	21
1,2-Dichloropropane	6.67	7.06	106	6.67	7.31	110	77	119	3.7	14
cis-1,3-Dichloropropene	6.67	7.09	106	6.67	7.13	107	75	131	0.94	12
trans-1,3-Dichloropropene	6.67	6.95	104	6.67	7.08	106	64	132	1.9	13
Ethylbenzene	6.67	7.08	106	6.67	7.48	112	72	130	5.5	17
2-Hexanone	33.3	32.4	97	33.3	34.0	102	58	140	5.0	24
4-Methyl-2-pentanone(MIBK)	33.3	32.3	97	33.3	33.2	100	58	142	3.0	16
Methylene chloride	6.67	6.86	103	6.67	6.97	104	49	151	0.97	23
Styrene	6.67	7.09	106	6.67	7.45	112	73	131	5.5	13
1,1,2,2-Tetrachloroethane	6.67	6.67	100	6.67	6.77	102	60	134	2.0	12
Tetrachloroethene	6.67	7.38	111	6.67	7.85	118	62	124	6.1	18
Toluene	6.67	7.34	110	6.67	7.71	116	81	121	5.3	14
1,1,1-Trichloroethane	6.67	6.98	105	6.67	7.29	109	58	144	3.7	21
1,1,2-Trichloroethane	6.67	7.08	106	6.67	7.23	108	68	122	1.9	13
Trichloroethene	6.67	7.34	110	6.67	7.65	115	73	117	4.4	13
Trichlorofluoromethane	6.67	5.41	81	6.67	5.71	86	50	142	6.0	25
Vinyl acetate	6.67	6.20	93	6.67	6.15	92	35	199	1.1	19
Vinyl chloride	6.67	4.71	71	6.67	4.90	74	27	161	4.1	20
m&p-Xylene	13.3	14.8	111	13.3	15.4	115	74	128	3.5	15

LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Work Order # 9608967

Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Prepared _____
Date Analyzed 09/03/96 18:54:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___ ___
Spikes Subset ___ ___
Specs Subset ___ ___

Matrix W
Report As received
% Moisture _____
Aliquot Mass or Vol 15.0 (mL)
Extract Mass or Vol 15.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
LCS	5 uL	1,2-DCA-d4	5 uL
		Toluene-d8	5 uL
		1,4-BFB	5 uL

LCS Lab Sample ID LCS965325 File ID F0903607

LCS Duplicate Lab Sample ID LCSD965326 File ID F0903609

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
o-Xylene	6.67	7.20	108	6.67	7.61	114	79	125	5.4	16

Surrogate(s)										
1,4-Bromofluorobenzene	16.7	16.6	100	16.7	16.7	100	84	114		
1,2-Dichloroethane-d4	16.7	15.2	91	16.7	15.1	90	63	137		
Toluene-d8	16.7	16.7	100	16.7	16.7	100	90	110		

09/10/96 16:23:57

MATRIX SPIKE(S)

Extraction Batch # _____

Analysis Batch # MSMSDA60903165501

Work Order # 9608967

Project Sample ID _____
Method Volatile Organics SW8260A
Test Code 826SWAMS

Date Collected 08/23/96
Date Received 08/24/96
Date Prepared _____
Date Analyzed 09/03/96 20:20:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___ ___
Spikes Subset ___ ___
Specs Subset ___ ___

Matrix W
Report As received
% Moisture _____

Spike Sol'n #	Vol. Added		Sample	Spiked Sample	Spiked Sample Dup	Recovery Specification Limits	RPD
Matrix Spike	5	uL	Lab Sample ID	Lab Sample ID	Lab Sample ID		
			9608886-01A	9608886-05A MS	9608886-06A MSD		
			File # F0903610	File # F0903611	File # F0903612		
Surrogate Sol'n	Vol. Added		Aliquot Mass/Vol	Aliquot Mass/Vol	Aliquot Mass/Vol		
1,2-DCA-d4	5	uL	15.0 (mL)	15.0 (mL)	15.0 (mL)		
Toluene-d8	5	uL	Extract Mass/Vol	Extract Mass/Vol	Extract Mass/Vol		
1,4-BFB	5	uL	15.0 (mL)	15.0 (mL)	15.0 (mL)		
			Dil Fact. 1	Dil Fact. 1	Dil Fact. 1		

Analyte	Spike Sol'n Conc. ug/L	Measured Conc. ug/L	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Low %	High %	Result %	Specification Limit %
Benzene	16700	ND	16.7	18.9	113	16.7	19.2	115	74	132	1.8	14
Chlorobenzene	16700	ND	16.7	19.1	114	16.7	19.6	117	73	119	2.6	13
1,1-Dichloroethene	16700	ND	16.7	21.3	128	16.7	18.7	112	51	133	13	23
Toluene	16700	ND	16.7	19.5	116	16.7	19.6	118	81	121	1.7	14
Trichloroethene	16700	ND	16.7	19.5	117	16.7	19.7	118 Q	73	117	0.85	13

Surrogate(s)											
1,4-Bromofluorobenzene	16700	16.8	16.7	16.8	101	16.7	17.1	102	77	117	
1,2-Dichloroethane-d4	16700	18.4	16.7	18.7	112	16.7	15.9	95	61	143	
Toluene-d8	16700	16.9	16.7	16.7	100	16.7	16.5	99	87	113	

09/10/96 16:23:57

ANALYSIS BATCH SUMMARY

Analysis Batch # MSMSDA60904162601

Work Order # 9608967

Method Volatile Organics by GC/MS
Test Code 826SWA00
Initial Calibration # MSDA960901000000
Calibration Date 09/01/96

Analysis Start Date/Time 09/04/96 16:26:00
Analysis Stop Date/Time 09/05/96 16:03:00

Instrument MSDA
Analyst TLS
Reviewer APS

Sequence/Analysis Time		Project Sample ID	Lab Sample ID	Sample Type	Analysis File #
1	09/04/96 16:26:00		BFB	GC/MS tune files	F0904602
2	09/04/96 16:26:00		VSTDC17	Continuing Calibration Verification	F0904602
3	09/04/96 17:16:00		9608800-01B	Sample	F0904603
4	09/04/96 17:46:00		9608800-02B	Sample	F0904604
5	09/04/96 18:16:00		9608800-03B	Sample	F0904605
6	09/04/96 19:40:00		9608800-06B	Sample	F0904608
7	09/04/96 20:09:00		9608933-01A	Sample	F0904609
8	09/04/96 20:40:00		LCS965327	Lab Control Sample	F0904610
9	09/04/96 23:05:00		9608800-06C	Sample	F0904615
10	09/04/96 23:33:00		LCS965328	Lab Control Sample	F0904616
11	09/05/96 00:01:00		BLK963105	Blank, Method	F0904617
12	09/05/96 00:29:00		LCSD965329	Lab Control Sample Duplicate	F0904618
13	09/05/96 00:57:00	MW-12	9608967-01B	Sample	F0904619
14	09/05/96 01:26:00	MW-10	9608967-02B	Sample	F0904620
15	09/05/96 01:54:00	MW-23	9608967-03B	Sample	F0904621
16	09/05/96 02:22:00	MW-24	9608967-04B	Sample	F0904622
17	09/05/96 02:50:00	MW-7	9608967-05A	Sample	F0904623
18	09/05/96 03:18:00	FB-1	9608967-08A	Sample	F0904624
19	09/05/96 03:47:00	TB-1	9608967-09A	Sample	F0904625
20	09/05/96 04:16:00	MW-9	9608967-06A	Sample	F0904626
21	09/05/96 05:41:00		9608484-01A	Blank, Refrigerator	F0904629
22	09/05/96 06:09:00		9608484-02A	Blank, Refrigerator	F0904630
23	09/05/96 06:37:00		9608484-03A	Blank, Refrigerator	F0904631
24	09/05/96 07:05:00		9608484-04A	Blank, Refrigerator	F0904632
25	09/05/96 09:59:00		BFB	GC/MS tune files	F0904634
26	09/05/96 09:59:00		VSTDC17	Continuing Calibration Verification	F0904634
27	09/05/96 11:01:00		9608982-01A	Sample	F0904635
28	09/05/96 11:29:00		9608982-02A	Sample	F0904636
29	09/05/96 11:59:00		9608982-01B	Sample	F0904637
30	09/05/96 12:28:00		9608982-04A	Matrix Spike	F0904638

ANALYSIS BATCH SUMMARY (cont'd)

Analysis Batch # MSMSDA60904162601

Work Order # 9608967

Method Volatile Organics by GC/MS
Test Code 826SWA00
Initial Calibration # MSDA960901000000
Calibration Date 09/01/96

Analysis Start Date/Time 09/04/96 16:26:00
Analysis Stop Date/Time 09/05/96 16:03:00

Instrument MSDA
Analyst TLS
Reviewer APS

Sequence/Analysis Time		Project Sample ID	Lab Sample ID	Sample Type	Analysis File #
31	09/05/96 12:56:00		9608982-05A	Matrix Spike Duplicate	F0904639
32	09/05/96 13:24:00		9608982-02B	Sample	F0904640
33	09/05/96 13:54:00	MW-9	9608967-06B	Sample	F0904641
34	09/05/96 14:22:00	MW-6	9608967-07A	Sample	F0904642
35	09/05/96 15:34:00		BFB	GC/MS tune files	F0904643
36	09/05/96 15:34:00		VSTDC17	Continuing Calibration Verification	F0904643
37	09/05/96 16:03:00		LCSD965330	Lab Control Sample Duplicate	F0904644

RESULTS

Extraction Batch # _____
Analysis Batch # MSMSDA60904162601

Project Sample ID MW-12
Lab Sample ID 9608967-01B
File # F0904619
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 00:57:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	8.82	0.489	0.489
Acrolein	107-02-8	ND	0.707	0.707
Acrylonitrile	107-13-1	ND	0.712	0.712
Benzene	71-43-2	ND	0.0378	0.0378
Bromodichloromethane	75-27-4	ND	0.0393	0.0393
Bromoform	75-25-2	ND	0.174	0.174
Bromomethane	74-83-9	ND	0.0632	0.0632
2-Butanone(MEK)	78-93-3	ND	0.260	0.260
Carbon disulfide	75-15-0	0.454 B	0.0485	0.0485
Carbon tetrachloride	56-23-5	ND	0.0474	0.0474
Chlorobenzene	108-90-7	ND	0.0258	0.0258
Chloroethane	75-00-3	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	110-75-8	ND	0.162	0.162
Chloroform	67-66-3	ND	0.0409	0.0409
Chloromethane	74-87-3	ND	0.0454	0.0454
Dibromochloromethane	124-48-1	ND	0.141	0.141
Dibromomethane	74-95-3	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.389	0.389
Dichlorodifluoromethane	75-71-8	ND	0.0651	0.0651
1,1-Dichloroethane	75-34-3	0.393	0.0919	0.0919
1,2-Dichloroethane	107-06-2	ND	0.105	0.105
1,1-Dichloroethene	75-35-4	ND	0.0802	0.0802
trans-1,2-Dichloroethene	156-60-5	ND	0.0641	0.0641
1,2-Dichloropropane	78-87-5	ND	0.0541	0.0541
cis-1,3-Dichloropropene	10061-01-5	ND	0.0538	0.0538

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-12 | Date Collected 08/27/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-01B | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904619 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 00:57:00 | Reviewer APS

Test Code 826SWAT1

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	0.0667	0.0667
Ethyl methacrylate	97-63-2	ND	0.121	0.121
Ethylbenzene	100-41-4	ND	0.0649	0.0649
2-Hexanone	591-78-6	ND	0.208	0.208
Iodomethane	74-88-4	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	0.0809	0.0809
Methylene chloride	75-09-2	ND	0.177	0.177
Styrene	100-42-5	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.0412	0.0412
Tetrachloroethene	127-18-4	ND	0.0487	0.0487
Toluene	108-88-3	ND	0.0492	0.0492
1,1,1-Trichloroethane	71-55-6	ND	0.0993	0.0993
1,1,2-Trichloroethane	79-00-5	ND	0.119	0.119
Trichloroethene	79-01-6	ND	0.0854	0.0854
Trichlorofluoromethane	75-69-4	ND	0.0640	0.0640
1,2,3-Trichloropropane	96-18-4	ND	0.101	0.101
Vinyl acetate	108-05-4	ND	0.0612	0.0612
Vinyl chloride	75-01-4	ND	0.0767	0.0767
m&p-Xylene	NO_CAS	ND	0.0688	0.0688
o-Xylene	95-47-6	ND	0.0490	0.0490

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-12 | Date Collected 08/27/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-01B | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904619 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 00:57:00 | Reviewer APS

Test Code 826SWAT1

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	16.7	16.8	101	77	117
1,2-Dichloroethane-d4	17070-07-0	16.7	16.9	101	61	143
Toluene-d8	2037-26-5	16.7	16.5	99	87	113

RESULTS

Extraction Batch # _____
Analysis Batch # MSMSDA60904162601

Project Sample ID MW-10
Lab Sample ID 9608967-02B
File # F0904620
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 01:26:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	ND	0.489	0.489
Acrolein	107-02-8	ND	0.707	0.707
Acrylonitrile	107-13-1	ND	0.712	0.712
Benzene	71-43-2	0.150	0.0378	0.0378
Bromodichloromethane	75-27-4	ND	0.0393	0.0393
Bromoform	75-25-2	ND	0.174	0.174
Bromomethane	74-83-9	ND	0.0632	0.0632
2-Butanone(MEK)	78-93-3	ND	0.260	0.260
Carbon disulfide	75-15-0	0.411 B	0.0485	0.0485
Carbon tetrachloride	56-23-5	ND	0.0474	0.0474
Chlorobenzene	108-90-7	ND	0.0258	0.0258
Chloroethane	75-00-3	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	110-75-8	ND	0.162	0.162
Chloroform	67-66-3	ND	0.0409	0.0409
Chloromethane	74-87-3	ND	0.0454	0.0454
Dibromochloromethane	124-48-1	ND	0.141	0.141
Dibromomethane	74-95-3	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.389	0.389
Dichlorodifluoromethane	75-71-8	ND	0.0651	0.0651
1,1-Dichloroethane	75-34-3	ND	0.0919	0.0919
1,2-Dichloroethane	107-06-2	ND	0.105	0.105
1,1-Dichloroethene	75-35-4	ND	0.0802	0.0802
trans-1,2-Dichloroethene	156-60-5	ND	0.0641	0.0641
1,2-Dichloropropane	78-87-5	ND	0.0541	0.0541
cis-1,3-Dichloropropene	10061-01-5	ND	0.0538	0.0538

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-10 | Date Collected 08/27/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-02B | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904620 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 01:26:00 | Reviewer APS

Test Code 826SWAT1

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	0.0667	0.0667
Ethyl methacrylate	97-63-2	ND	0.121	0.121
Ethylbenzene	100-41-4	ND	0.0649	0.0649
2-Hexanone	591-78-6	ND	0.208	0.208
Iodomethane	74-88-4	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	0.0809	0.0809
Methylene chloride	75-09-2	ND	0.177	0.177
Styrene	100-42-5	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.0412	0.0412
Tetrachloroethene	127-18-4	ND	0.0487	0.0487
Toluene	108-88-3	0.410	0.0492	0.0492
1,1,1-Trichloroethane	71-55-6	ND	0.0993	0.0993
1,1,2-Trichloroethane	79-00-5	ND	0.119	0.119
Trichloroethene	79-01-6	ND	0.0854	0.0854
Trichlorofluoromethane	75-69-4	ND	0.0640	0.0640
1,2,3-Trichloropropane	96-18-4	ND	0.101	0.101
Vinyl acetate	108-05-4	ND	0.0612	0.0612
Vinyl chloride	75-01-4	ND	0.0767	0.0767
m&p-Xylene	NO_CAS	ND	0.0688	0.0688
o-Xylene	95-47-6	ND	0.0490	0.0490

R E S U L T S (Cont'd)

Work Order # 9608967

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-10
Lab Sample ID 9608967-02B
File # F0904620
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 01:26:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	16.7	17.1	102	77	117
1,2-Dichloroethane-d4	17070-07-0	16.7	17.5	105	61	143
Toluene-d8	2037-26-5	16.7	16.5	99	87	113

RESULTS

Extraction Batch # _____
Analysis Batch # MSMSDA60904162601

Project Sample ID MW-23
Lab Sample ID 9608967-03B
File # F0904621
~~Method~~ ~~Volatile Organics SW8240A~~
Test Code 826SWAT1

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 01:54:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	ND	0.489	0.489
Acrolein	107-02-8	ND	0.707	0.707
Acrylonitrile	107-13-1	ND	0.712	0.712
Benzene	71-43-2	6.83	0.0378	0.0378
Bromodichloromethane	75-27-4	ND	0.0393	0.0393
Bromoform	75-25-2	ND	0.174	0.174
Bromomethane	74-83-9	ND	0.0632	0.0632
2-Butanone (MEK)	78-93-3	ND	0.260	0.260
Carbon disulfide	75-15-0	0.335 B	0.0485	0.0485
Carbon tetrachloride	56-23-5	ND	0.0474	0.0474
Chlorobenzene	108-90-7	ND	0.0258	0.0258
Chloroethane	75-00-3	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	110-75-8	ND	0.162	0.162
Chloroform	67-66-3	ND	0.0409	0.0409
Chloromethane	74-87-3	ND	0.0454	0.0454
Dibromochloromethane	124-48-1	ND	0.141	0.141
Dibromomethane	74-95-3	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.389	0.389
Dichlorodifluoromethane	75-71-8	ND	0.0651	0.0651
1,1-Dichloroethane	75-34-3	ND	0.0919	0.0919
1,2-Dichloroethane	107-06-2	ND	0.105	0.105
1,1-Dichloroethene	75-35-4	ND	0.0802	0.0802
trans-1,2-Dichloroethene	156-60-5	ND	0.0641	0.0641
1,2-Dichloropropane	78-87-5	ND	0.0541	0.0541
cis-1,3-Dichloropropene	10061-01-5	ND	0.0538	0.0538

R E S U L T S (Cont'd)

Work Order # 9608967

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-23 | Date Collected 08/27/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-03B | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904621 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 01:54:00 | Reviewer APS

Test Code 826SWAT1

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	0.0667	0.0667
Ethyl methacrylate	97-63-2	ND	0.121	0.121
Ethylbenzene	100-41-4	ND	0.0649	0.0649
2-Hexanone	591-78-6	ND	0.208	0.208
Iodomethane	74-88-4	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	0.0809	0.0809
Methylene chloride	75-09-2	ND	0.177	0.177
Styrene	100-42-5	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.0412	0.0412
Tetrachloroethene	127-18-4	ND	0.0487	0.0487
Toluene	108-88-3	ND	0.0492	0.0492
1,1,1-Trichloroethane	71-55-6	ND	0.0993	0.0993
1,1,2-Trichloroethane	79-00-5	ND	0.119	0.119
Trichloroethene	79-01-6	ND	0.0854	0.0854
Trichlorofluoromethane	75-69-4	ND	0.0640	0.0640
1,2,3-Trichloropropane	96-18-4	ND	0.101	0.101
Vinyl acetate	108-05-4	ND	0.0612	0.0612
Vinyl chloride	75-01-4	ND	0.0767	0.0767
m&p-Xylene	NO_CAS	ND	0.0688	0.0688
o-Xylene	95-47-6	ND	0.0490	0.0490

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-23 | Date Collected 08/27/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-03B | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904621 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 01:54:00 | Reviewer APS

Test Code 826SWAT1

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	16.7	17.0	102	77	117
1,2-Dichloroethane-d4	17070-07-0	16.7	17.5	105	61	143
Toluene-d8	2037-26-5	16.7	16.6	100	87	113

RESULTS

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-24
Lab Sample ID 9608967-04B
File # F0904622
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 02:22:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	1.92	0.489	0.489
Acrolein	107-02-8	ND	0.707	0.707
Acrylonitrile	107-13-1	ND	0.712	0.712
Benzene	71-43-2	15.8	0.0378	0.0378
Bromodichloromethane	75-27-4	ND	0.0393	0.0393
Bromoform	75-25-2	ND	0.174	0.174
Bromomethane	74-83-9	ND	0.0632	0.0632
2-Butanone (MEK)	78-93-3	ND	0.260	0.260
Carbon disulfide	75-15-0	0.269 B	0.0485	0.0485
Carbon tetrachloride	56-23-5	ND	0.0474	0.0474
Chlorobenzene	108-90-7	13.2	0.0258	0.0258
Chloroethane	75-00-3	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	110-75-8	ND	0.162	0.162
Chloroform	67-66-3	ND	0.0409	0.0409
Chloromethane	74-87-3	ND	0.0454	0.0454
Dibromochloromethane	124-48-1	ND	0.141	0.141
Dibromomethane	74-95-3	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.389	0.389
Dichlorodifluoromethane	75-71-8	ND	0.0651	0.0651
1,1-Dichloroethane	75-34-3	0.312	0.0919	0.0919
1,2-Dichloroethane	107-06-2	ND	0.105	0.105
1,1-Dichloroethene	75-35-4	ND	0.0802	0.0802
trans-1,2-Dichloroethene	156-60-5	ND	0.0641	0.0641
1,2-Dichloropropane	78-87-5	ND	0.0541	0.0541
cis-1,3-Dichloropropene	10061-01-5	ND	0.0538	0.0538

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-24 | Date Collected 08/28/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-04B | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904622 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 02:22:00 | Reviewer APS

Test Code 826SWAT1

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	0.0667	0.0667
Ethyl methacrylate	97-63-2	ND	0.121	0.121
Ethylbenzene	100-41-4	ND	0.0649	0.0649
2-Hexanone	591-78-6	ND	0.208	0.208
Iodomethane	74-88-4	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	0.0809	0.0809
Methylene chloride	75-09-2	ND	0.177	0.177
Styrene	100-42-5	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.0412	0.0412
Tetrachloroethene	127-18-4	ND	0.0487	0.0487
Toluene	108-88-3	0.108	0.0492	0.0492
1,1,1-Trichloroethane	71-55-6	ND	0.0993	0.0993
1,1,2-Trichloroethane	79-00-5	ND	0.119	0.119
Trichloroethene	79-01-6	ND	0.0854	0.0854
Trichlorofluoromethane	75-69-4	ND	0.0640	0.0640
1,2,3-Trichloropropane	96-18-4	ND	0.101	0.101
Vinyl acetate	108-05-4	ND	0.0612	0.0612
Vinyl chloride	75-01-4	ND	0.0767	0.0767
m&p-Xylene	NO_CAS	ND	0.0688	0.0688
o-Xylene	95-47-6	ND	0.0490	0.0490

R E S U L T S (Cont'd)

Work Order # 9608967

Extraction Batch #

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-24
Lab Sample ID 9608967-04B
File # F0904622
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared
Date Analyzed 09/05/96 02:22:00

Instrument MSDA
Column
Analyst TLS
Reviewer APS

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	16.7	16.7	100	77	117
1,2-Dichloroethane-d4	17070-07-0	16.7	16.3	98	61	143
Toluene-d8	2037-26-5	16.7	16.7	100	87	113

RESULTS

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-7 | Date Collected 08/28/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-05A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904623 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 02:50:00 | Reviewer APS

Test Code 826SWAT1

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	2.22	0.489	0.489
Acrolein	107-02-8	ND	0.707	0.707
Acrylonitrile	107-13-1	ND	0.712	0.712
Benzene	71-43-2	0.464	0.0378	0.0378
Bromodichloromethane	75-27-4	ND	0.0393	0.0393
Bromoform	75-25-2	ND	0.174	0.174
Bromomethane	74-83-9	ND	0.0632	0.0632
2-Butanone (MEK)	78-93-3	ND	0.260	0.260
Carbon disulfide	75-15-0	0.265 B	0.0485	0.0485
Carbon tetrachloride	56-23-5	ND	0.0474	0.0474
Chlorobenzene	108-90-7	ND	0.0258	0.0258
Chloroethane	75-00-3	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	110-75-8	ND	0.162	0.162
Chloroform	67-66-3	ND	0.0409	0.0409
Chloromethane	74-87-3	ND	0.0454	0.0454
Dibromochloromethane	124-48-1	ND	0.141	0.141
Dibromomethane	74-95-3	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.389	0.389
Dichlorodifluoromethane	75-71-8	ND	0.0651	0.0651
1,1-Dichloroethane	75-34-3	0.269	0.0919	0.0919
1,2-Dichloroethane	107-06-2	ND	0.105	0.105
1,1-Dichloroethene	75-35-4	ND	0.0802	0.0802
trans-1,2-Dichloroethene	156-60-5	ND	0.0641	0.0641
1,2-Dichloropropane	78-87-5	ND	0.0541	0.0541
cis-1,3-Dichloropropene	10061-01-5	ND	0.0538	0.0538

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-7
Lab Sample ID 9608967-05A
File # F0904623
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 02:50:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	0.0667	0.0667
Ethyl methacrylate	97-63-2	ND	0.121	0.121
Ethylbenzene	100-41-4	ND	0.0649	0.0649
2-Hexanone	591-78-6	ND	0.208	0.208
Iodomethane	74-88-4	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	0.0809	0.0809
Methylene chloride	75-09-2	ND	0.177	0.177
Styrene	100-42-5	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.0412	0.0412
Tetrachloroethene	127-18-4	ND	0.0487	0.0487
Toluene	108-88-3	ND	0.0492	0.0492
1,1,1-Trichloroethane	71-55-6	ND	0.0993	0.0993
1,1,2-Trichloroethane	79-00-5	ND	0.119	0.119
Trichloroethene	79-01-6	ND	0.0854	0.0854
Trichlorofluoromethane	75-69-4	ND	0.0640	0.0640
1,2,3-Trichloropropane	96-18-4	ND	0.101	0.101
Vinyl acetate	108-05-4	ND	0.0612	0.0612
Vinyl chloride	75-01-4	ND	0.0767	0.0767
m&p-Xylene	NO_CAS	ND	0.0688	0.0688
o-Xylene	95-47-6	ND	0.0490	0.0490

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-7 | Date Collected 08/28/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-05A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904623 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 02:50:00 | Reviewer APS

Test Code 826SWAT1

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	16.7	16.8	100	77	117
1,2-Dichloroethane-d4	17070-07-0	16.7	17.4	104	61	143
Toluene-d8	2037-26-5	16.7	16.7	100	87	113

RESULTS

Extraction Batch # _____
Analysis Batch # MSMSDA60904162601

Project Sample ID FB-1
Lab Sample ID 9608967-08A
File # F0904624
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 03:18:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	ND	0.489	0.489
Acrolein	107-02-8	ND	0.707	0.707
Acrylonitrile	107-13-1	ND	0.712	0.712
Benzene	71-43-2	ND	0.0378	0.0378
Bromodichloromethane	75-27-4	ND	0.0393	0.0393
Bromoform	75-25-2	ND	0.174	0.174
Bromomethane	74-83-9	ND	0.0632	0.0632
2-Butanone(MEK)	78-93-3	ND	0.260	0.260
Carbon disulfide	75-15-0	ND	0.0485	0.0485
Carbon tetrachloride	56-23-5	ND	0.0474	0.0474
Chlorobenzene	108-90-7	ND	0.0258	0.0258
Chloroethane	75-00-3	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	110-75-8	ND	0.162	0.162
Chloroform	67-66-3	ND	0.0409	0.0409
Chloromethane	74-87-3	ND	0.0454	0.0454
Dibromochloromethane	124-48-1	ND	0.141	0.141
Dibromomethane	74-95-3	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.389	0.389
Dichlorodifluoromethane	75-71-8	ND	0.0651	0.0651
1,1-Dichloroethane	75-34-3	ND	0.0919	0.0919
1,2-Dichloroethane	107-06-2	ND	0.105	0.105
1,1-Dichloroethene	75-35-4	ND	0.0802	0.0802
trans-1,2-Dichloroethene	156-60-5	ND	0.0641	0.0641
1,2-Dichloropropane	78-87-5	ND	0.0541	0.0541
cis-1,3-Dichloropropene	10061-01-5	ND	0.0538	0.0538

R E S U L T S (Cont'd)

Work Order # 9608967

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID FB-1
Lab Sample ID 9608967-08A
File # F0904624
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 03:18:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	0.0667	0.0667
Ethyl methacrylate	97-63-2	ND	0.121	0.121
Ethylbenzene	100-41-4	ND	0.0649	0.0649
2-Hexanone	591-78-6	ND	0.208	0.208
Iodomethane	74-88-4	ND	0.0652	0.0652
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	0.0809	0.0809
Methylene chloride	75-09-2	0.411	0.177	0.177
Styrene	100-42-5	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.0412	0.0412
Tetrachloroethene	127-18-4	ND	0.0487	0.0487
Toluene	108-88-3	ND	0.0492	0.0492
1,1,1-Trichloroethane	71-55-6	ND	0.0993	0.0993
1,1,2-Trichloroethane	79-00-5	ND	0.119	0.119
Trichloroethene	79-01-6	ND	0.0854	0.0854
Trichlorofluoromethane	75-69-4	ND	0.0640	0.0640
1,2,3-Trichloropropane	96-18-4	ND	0.101	0.101
Vinyl acetate	108-05-4	ND	0.0612	0.0612
Vinyl chloride	75-01-4	ND	0.0767	0.0767
m&p-Xylene	NO_CAS	ND	0.0688	0.0688
o-Xylene	95-47-6	ND	0.0490	0.0490

R E S U L T S (Cont'd)

Work Order # 9608967

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Extraction Batch #

Analysis Batch # MSMSDA60904162601

Project Sample ID FB-1
Lab Sample ID 9608967-08A
File # F0904624
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared
Date Analyzed 09/05/96 03:18:00

Instrument MSDA
Column
Analyst TLS
Reviewer APS

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	16.7	16.9	101	77	117
1,2-Dichloroethane-d4	17070-07-0	16.7	17.4	104	61	143
Toluene-d8	2037-26-5	16.7	16.7	100	87	113

RESULTS

Extraction Batch # _____
Analysis Batch # MSMSDA60904162601

Project Sample ID TB-1
Lab Sample ID 9608967-09A
File # F0904625
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 03:47:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	ND	0.489	0.489
Acrolein	107-02-8	ND	0.707	0.707
Acrylonitrile	107-13-1	ND	0.712	0.712
Benzene	71-43-2	ND	0.0378	0.0378
Bromodichloromethane	75-27-4	ND	0.0393	0.0393
Bromoform	75-25-2	ND	0.174	0.174
Bromomethane	74-83-9	ND	0.0632	0.0632
2-Butanone (MEK)	78-93-3	ND	0.260	0.260
Carbon disulfide	75-15-0	0.199 B	0.0485	0.0485
Carbon tetrachloride	56-23-5	ND	0.0474	0.0474
Chlorobenzene	108-90-7	ND	0.0258	0.0258
Chloroethane	75-00-3	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	110-75-8	ND	0.162	0.162
Chloroform	67-66-3	ND	0.0409	0.0409
Chloromethane	74-87-3	ND	0.0454	0.0454
Dibromochloromethane	124-48-1	ND	0.141	0.141
Dibromomethane	74-95-3	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.389	0.389
Dichlorodifluoromethane	75-71-8	ND	0.0651	0.0651
1,1-Dichloroethane	75-34-3	ND	0.0919	0.0919
1,2-Dichloroethane	107-06-2	ND	0.105	0.105
1,1-Dichloroethene	75-35-4	ND	0.0802	0.0802
trans-1,2-Dichloroethene	156-60-5	ND	0.0641	0.0641
1,2-Dichloropropane	78-87-5	ND	0.0541	0.0541
cis-1,3-Dichloropropene	10061-01-5	ND	0.0538	0.0538

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID TB-1
Lab Sample ID 9608967-09A
File # F0904625
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 03:47:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	0.0667	0.0667
Ethyl methacrylate	97-63-2	ND	0.121	0.121
Ethylbenzene	100-41-4	ND	0.0649	0.0649
2-Hexanone	591-78-6	ND	0.208	0.208
Iodomethane	74-88-4	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	0.0809	0.0809
Methylene chloride	75-09-2	ND	0.177	0.177
Styrene	100-42-5	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.0412	0.0412
Tetrachloroethene	127-18-4	ND	0.0487	0.0487
Toluene	108-88-3	ND	0.0492	0.0492
1,1,1-Trichloroethane	71-55-6	ND	0.0993	0.0993
1,1,2-Trichloroethane	79-00-5	ND	0.119	0.119
Trichloroethene	79-01-6	ND	0.0854	0.0854
Trichlorofluoromethane	75-69-4	ND	0.0640	0.0640
1,2,3-Trichloropropane	96-18-4	ND	0.101	0.101
Vinyl acetate	108-05-4	ND	0.0612	0.0612
Vinyl chloride	75-01-4	ND	0.0767	0.0767
m&p-Xylene	NO_CAS	ND	0.0688	0.0688
o-Xylene	95-47-6	ND	0.0490	0.0490

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID TB-1 | Date Collected 08/28/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-09A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904625 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 03:47:00 | Reviewer APS

Test Code 826SWAT1

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	16.7	16.9	101	77	117
1,2-Dichloroethane-d4	17070-07-0	16.7	17.6	105	61	143
Toluene-d8	2037-26-5	16.7	16.4	98	87	113

RESULTS

Extraction Batch # _____
Analysis Batch # MSMSDA60904162601

Project Sample ID MW-9
Lab Sample ID 9608967-06A
File # F0904626
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 04:16:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 20

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	1400 ER	9.78	9.78
Acrolein	107-02-8	ND	14.1	14.1
Acrylonitrile	107-13-1	ND	14.2	14.2
Benzene	71-43-2	113	0.756	0.756
Bromodichloromethane	75-27-4	ND	0.786	0.786
Bromoform	75-25-2	ND	3.48	3.48
Bromomethane	74-83-9	ND	1.26	1.26
2-Butanone (MEK)	78-93-3	ND	5.20	5.20
Carbon disulfide	75-15-0	ND	0.970	0.970
Carbon tetrachloride	56-23-5	ND	0.948	0.948
Chlorobenzene	108-90-7	ND	0.516	0.516
Chloroethane	75-00-3	ND	1.48	1.48
2-Chloroethyl vinyl ether	110-75-8	ND	3.24	3.24
Chloroform	67-66-3	ND	0.818	0.818
Chloromethane	74-87-3	ND	0.908	0.908
Dibromochloromethane	124-48-1	ND	2.82	2.82
Dibromomethane	74-95-3	ND	1.24	1.24
trans-1,4-Dichloro-2-butene	110-57-6	ND	7.78	7.78
Dichlorodifluoromethane	75-71-8	ND	1.30	1.30
1,1-Dichloroethane	75-34-3	ND	1.84	1.84
1,2-Dichloroethane	107-06-2	ND	2.10	2.10
1,1-Dichloroethene	75-35-4	ND	1.60	1.60
trans-1,2-Dichloroethene	156-60-5	ND	1.28	1.28
1,2-Dichloropropane	78-87-5	ND	1.08	1.08
cis-1,3-Dichloropropene	10061-01-5	ND	1.08	1.08

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-9 | Date Collected 08/28/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-06A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904626 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 04:16:00 | Reviewer APS

Test Code 826SWAT1

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 20

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	1.33	1.33
Ethyl methacrylate	97-63-2	ND	2.42	2.42
Ethylbenzene	100-41-4	26.6	1.30	1.30
2-Hexanone	591-78-6	ND	4.16	4.16
Iodomethane	74-88-4	ND	1.30	1.30
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	1.62	1.62
Methylene chloride	75-09-2	< DL	3.54	3.54
Styrene	100-42-5	ND	0.812	0.812
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.824	0.824
Tetrachloroethene	127-18-4	ND	0.974	0.974
Toluene	108-88-3	3870 ER	0.984	0.984
1,1,1-Trichloroethane	71-55-6	ND	1.99	1.99
1,1,2-Trichloroethane	79-00-5	ND	2.38	2.38
Trichloroethene	79-01-6	ND	1.71	1.71
Trichlorofluoromethane	75-69-4	ND	1.28	1.28
1,2,3-Trichloropropane	96-18-4	ND	2.02	2.02
Vinyl acetate	108-05-4	ND	1.22	1.22
Vinyl chloride	75-01-4	ND	1.53	1.53
m&p-Xylene	NO_CAS	22.4	1.38	1.38
o-Xylene	95-47-6	ND	0.980	0.980

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-9 | Date Collected 08/28/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-06A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904626 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 04:16:00 | Reviewer APS

Test Code 826SWAT1

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	334	335	100	77	117
1,2-Dichloroethane-d4	17070-07-0	334	347	104	61	143
Toluene-d8	2037-26-5	334	330	99	87	113

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-9 | Date Collected 08/28/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-06B | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904641 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 13:54:00 | Reviewer APS

Test Code 826SWAT1

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	1670	1680	101	77	117
1,2-Dichloroethane-d4	17070-07-0	1670	1780	107	61	143
Toluene-d8	2037-26-5	1670	1670	100	87	113

RESULTS

Extraction Batch # _____
Analysis Batch # MSMSDA60904162601

Project Sample ID MW-6
Lab Sample ID 9608967-07A
File # F0904642
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 14:22:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 10000

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	67-64-1	118000	4890	4890
Acrolein	107-02-8	ND	7070	7070
Acrylonitrile	107-13-1	ND	7120	7120
Benzene	71-43-2	ND	378	378
Bromodichloromethane	75-27-4	ND	393	393
Bromoform	75-25-2	ND	1740	1740
Bromomethane	74-83-9	ND	632	632
2-Butanone(MEK)	78-93-3	267000	2600	2600
Carbon disulfide	75-15-0	ND	485	485
Carbon tetrachloride	56-23-5	ND	474	474
Chlorobenzene	108-90-7	ND	258	258
Chloroethane	75-00-3	ND	741	741
2-Chloroethyl vinyl ether	110-75-8	ND	1620	1620
Chloroform	67-66-3	ND	409	409
Chloromethane	74-87-3	ND	454	454
Dibromochloromethane	124-48-1	ND	1410	1410
Dibromomethane	74-95-3	ND	621	621
trans-1,4-Dichloro-2-butene	110-57-6	ND	3890	3890
Dichlorodifluoromethane	75-71-8	ND	651	651
1,1-Dichloroethane	75-34-3	ND	919	919
1,2-Dichloroethane	107-06-2	ND	1050	1050
1,1-Dichloroethene	75-35-4	ND	802	802
trans-1,2-Dichloroethene	156-60-5	ND	641	641
1,2-Dichloropropane	78-87-5	ND	541	541
cis-1,3-Dichloropropene	10061-01-5	ND	538	538

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-6 | Date Collected 08/28/96 | Instrument MSDA | Reporting Subset ___ | Matrix W

Lab Sample ID 9608967-07A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # F0904642 | Date Prepared _____ | Analyst TLS | Specs Subset ___ | % Moisture _____

Method Volatile Organics SW8240A | Date Analyzed 09/05/96 14:22:00 | Reviewer APS

Test Code 826SWAT1

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 10000

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	10061-02-6	ND	667	667
Ethyl methacrylate	97-63-2	ND	1210	1210
Ethylbenzene	100-41-4	ND	649	649
2-Hexanone	591-78-6	ND	2080	2080
Iodomethane	74-88-4	ND	652	652
4-Methyl-2-pentanone(MIBK)	108-10-1	ND	809	809
Methylene chloride	75-09-2	4780	1770	1770
Styrene	100-42-5	ND	406	406
1,1,2,2-Tetrachloroethane	79-34-5	ND	412	412
Tetrachloroethene	127-18-4	ND	487	487
Toluene	108-88-3	36000	492	492
1,1,1-Trichloroethane	71-55-6	ND	993	993
1,1,2-Trichloroethane	79-00-5	ND	1190	1190
Trichloroethene	79-01-6	ND	854	854
Trichlorofluoromethane	75-69-4	ND	640	640
1,2,3-Trichloropropane	96-18-4	ND	1010	1010
Vinyl acetate	108-05-4	ND	612	612
Vinyl chloride	75-01-4	ND	767	767
m&p-Xylene	NO_CAS	ND	688	688
o-Xylene	95-47-6	ND	490	490

R E S U L T S (Cont'd)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Project Sample ID MW-6
Lab Sample ID 9608967-07A
File # F0904642
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared _____
Date Analyzed 09/05/96 14:22:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received
% Moisture _____

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	460-00-4	167000	169000	101	77	117
1,2-Dichloroethane-d4	17070-07-0	167000	177000	106	61	143
Toluene-d8	2037-26-5	167000	165000	99	87	113

LABORATORY BLANK INFORMATION

Extraction Batch # _____
Analysis Batch # MSMSDA60904162601

Lab Sample ID BLK963105
File # F0904617
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Prepared _____
Date Analyzed 09/05/96 00:01:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acetone	ND	0.489	0.489
Acrolein	ND	0.707	0.707
Acrylonitrile	ND	0.712	0.712
Benzene	ND	0.0378	0.0378
Bromodichloromethane	ND	0.0393	0.0393
Bromoform	ND	0.174	0.174
Bromomethane	ND	0.0632	0.0632
2-Butanone(MEK)	ND	0.260	0.260
Carbon disulfide	0.328	0.0485	0.0485
Carbon tetrachloride	ND	0.0474	0.0474
Chlorobenzene	ND	0.0258	0.0258
Chloroethane	ND	0.0741	0.0741
2-Chloroethyl vinyl ether	ND	0.162	0.162
Chloroform	ND	0.0409	0.0409
Chloromethane	ND	0.0454	0.0454
Dibromochloromethane	ND	0.141	0.141
Dibromomethane	ND	0.0621	0.0621
trans-1,4-Dichloro-2-butene	ND	0.389	0.389
Dichlorodifluoromethane	ND	0.0651	0.0651
1,1-Dichloroethane	ND	0.0919	0.0919
1,2-Dichloroethane	ND	0.105	0.105
1,1-Dichloroethene	ND	0.0802	0.0802
trans-1,2-Dichloroethene	ND	0.0641	0.0641
1,2-Dichloropropane	ND	0.0541	0.0541
cis-1,3-Dichloropropene	ND	0.0538	0.0538

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # _____
Analysis Batch # MSMSDA60904162601

Lab Sample ID BLK963105
File # F0904617
Method Volatile Organics SW8240A
Test Code 826SWAT1

Date Prepared _____
Date Analyzed 09/05/96 00:01:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W

Aliquot Mass/Volume 15.0 (mL)
Extract/Digestate Volume 15.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
trans-1,3-Dichloropropene	ND	0.0667	0.0667
Ethyl methacrylate	ND	0.121	0.121
Ethylbenzene	ND	0.0649	0.0649
2-Hexanone	ND	0.208	0.208
Iodomethane	ND	0.0652	0.0652
4-Methyl-2-pentanone(MIBK)	ND	0.0809	0.0809
Methylene chloride	ND	0.177	0.177
Styrene	ND	0.0406	0.0406
1,1,2,2-Tetrachloroethane	ND	0.0412	0.0412
Tetrachloroethene	ND	0.0487	0.0487
Toluene	ND	0.0492	0.0492
1,1,1-Trichloroethane	ND	0.0993	0.0993
1,1,2-Trichloroethane	ND	0.119	0.119
Trichloroethene	ND	0.0854	0.0854
Trichlorofluoromethane	ND	0.0640	0.0640
1,2,3-Trichloropropane	ND	0.101	0.101
Vinyl acetate	ND	0.0612	0.0612
Vinyl chloride	ND	0.0767	0.0767
m&p-Xylene	ND	0.0688	0.0688
o-Xylene	ND	0.0490	0.0490

LABORATORY BLANK INFORMATION (cont'd)

Work Order # 9608967

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Lab Sample ID BLK963105 | Date Prepared _____ | Instrument MSDA | Reporting Subset ___ | Matrix W

File # F0904617 | Date Analyzed 09/05/96 00:01:00 | Column _____ | Spikes Subset ___

Method Volatile Organics SW8240A | Analyst TLS | Specs Subset ___

Test Code 826SWAT1 | Reviewer APS

Surrogate(s)	Spiked Conc. ug/L	Measured Conc. ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
1,4-Bromofluorobenzene	16.7	16.9	101	84	114
1,2-Dichloroethane-d4	16.7	16.8	101	63	137
Toluene-d8	16.7	16.7	100	90	110

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LABORATORY CONTROL SAMPLE

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Work Order # 9608967

Method Volatile Organics SW8240A
Test Code 826SWAT1
Date Prepared _____
Date Analyzed 09/05/96 00:29:00
Instrument MSDA
Column _____
Analyst TLS
Reviewer APS
Reporting Subset ___ ___
Spikes Subset ___ ___
Specs Subset ___ ___
Matrix W
Report As received
% Moisture _____
Aliquot Mass or Vol 15.0 (mL)
Extract Mass or Vol 15.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
LCS	5 uL	1,2-DCA-d4	5 uL
		Toluene-d8	5 uL
		1,4-BFB	5 uL

LCS Lab Sample ID LCS965328 File ID F0904616

LCS Duplicate Lab Sample ID LCSD965329 File ID F0904618

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
Acetone	33.3	28.2	85	33.3	29.9	90	3	127	5.7	49
Acrolein	167	135	81	167	121	73			10	
Acrylonitrile	33.3	35.7	107	33.3	33.8	102			4.8	
Benzene	6.67	7.59	114	6.67	7.55	113	74	132	0.88	14
Bromodichloromethane	6.67	7.08	106	6.67	7.03	105	64	132	0.95	22
Bromoform	6.67	5.36	80	6.67	5.50	82	41	135	2.5	12
Bromomethane	6.67	6.06	91	6.67	5.60	84	46	152	8.0	18
2-Butanone (MEK)	33.3	39.7	119	33.3	38.5	116	0.1	160	2.6	37
Carbon disulfide	6.67	8.03	120	6.67	7.37	110	29	223	8.7	23
Carbon tetrachloride	6.67	7.36	110	6.67	7.25	109	53	167	0.91	21
Chlorobenzene	6.67	7.40	111	6.67	7.34	110	73	119	0.90	13
Chloroethane	6.67	6.07	91	6.67	5.56	83	50	154	9.2	22
2-Chloroethyl vinyl ether	6.67	7.22	108	6.67	7.64	114			5.4	
Chloroform	6.67	7.52	113	6.67	7.83	117	64	130	3.5	16
Chloromethane	6.67	4.86	73	6.67	4.60	69	39	135	5.6	25
Dibromochloromethane	6.67	6.48	97	6.67	6.46	97	60	122	0	15
Dibromomethane	6.67	7.52	113	6.67	7.17	107			5.4	
Dichlorodifluoromethane	6.67	4.52	68	6.67	4.18	63	5	157	7.6	27
1,1-Dichloroethane	6.67	8.22	123	6.67	7.62	114	65	131	7.6	19
1,2-Dichloroethane	6.67	8.13	122	6.67	7.57	114	68	138	6.8	12

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LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Work Order # 9608967

Method Volatile Organics SW8240A
Test Code 826SWAT1
Date Prepared _____
Date Analyzed 09/05/96 00:29:00
Instrument MSDA
Column _____
Analyst TLS
Reviewer APS
Reporting Subset ___ ___
Spikes Subset ___ ___
Specs Subset ___ ___
Matrix W
Report As received
% Moisture _____
Aliquot Mass or Vol 15.0 (mL)
Extract Mass or Vol 15.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
LCS	5 uL	1,2-DCA-d4	5 uL
		Toluene-d8	5 uL
		1,4-BFB	5 uL

LCS Lab Sample ID LCS965328, File ID F0904616

LCS Duplicate Lab Sample ID LCSD965329, File ID F0904618

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
1,1-Dichloroethene	6.67	8.91	134 Q	6.67	8.18	123	51	133	8.6	23
trans-1,2-Dichloroethene	6.67	8.18	123	6.67	7.72	116	58	144	5.9	21
1,2-Dichloropropane	6.67	7.49	112	6.67	7.23	108	77	119	3.6	14
cis-1,3-Dichloropropene	6.67	7.08	106	6.67	7.07	106	75	131	0	12
trans-1,3-Dichloropropene	6.67	6.93	104	6.67	6.93	104	64	132	0	13
Ethylbenzene	6.67	7.29	109	6.67	7.33	110	72	130	0.91	17
2-Hexanone	33.3	33.8	101	33.3	34.3	103	58	140	2.0	24
4-Methyl-2-pentanone(MIBK)	33.3	34.7	104	33.3	35.2	106	58	142	1.9	16
Methylene chloride	6.67	8.11	122	6.67	7.48	112	49	151	8.6	23
Styrene	6.67	7.22	108	6.67	7.22	108	73	131	0	13
1,1,2,2-Tetrachloroethane	6.67	7.03	105	6.67	7.18	108	60	134	2.8	12
Tetrachloroethene	6.67	7.65	115	6.67	7.60	114	62	124	0.87	18
Toluene	6.67	7.45	112	6.67	7.49	112	81	121	0	14
1,1,1-Trichloroethane	6.67	8.25	124	6.67	7.68	115	58	144	7.5	21
1,1,2-Trichloroethane	6.67	7.52	113	6.67	7.51	113	68	122	0	13
Trichloroethene	6.67	7.54	113	6.67	7.55	113	73	117	0	13
Trichlorofluoromethane	6.67	6.61	99	6.67	6.05	91	50	142	8.4	25
Vinyl acetate	6.67	7.67	115	6.67	7.28	109	35	199	5.4	19
Vinyl chloride	6.67	5.54	83	6.67	4.99	75	27	161	10	20
m&p-Xylene	13.3	14.9	112	13.3	15.0	113	74	128	0.89	15

LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Method Volatile Organics SW8240A
Test Code 826SWAT1
Date Prepared _____
Date Analyzed 09/05/96 00:29:00
Instrument MSDA
Column _____
Analyst TLS
Reviewer APS
Reporting Subset ___ ___
Spikes Subset ___ ___
Specs Subset ___ ___
Matrix W
Report As received
% Moisture _____
Aliquot Mass or Vol 15.0 (mL)
Extract Mass or Vol 15.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
LCS	5 uL	1,2-DCA-d4	5 uL
		Toluene-d8	5 uL
		1,4-BFB	5 uL

Analyte	LCS Lab Sample ID LCS965328 File ID F0904616			LCS Duplicate Lab Sample ID LCSD965329 File ID F0904618			Recovery Spec. Limits		RPD	
	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Low %	High %	Result %	Spec. Limit %
o-Xylene	6.67	7.29	109	6.67	7.30	109	79	125	0	16

Surrogate(s)									
1,4-Bromofluorobenzene	16.7	16.7	100	16.7	16.9	101	84	114	
1,2-Dichloroethane-d4	16.7	17.3	104	16.7	16.2	97	63	137	
Toluene-d8	16.7	16.7	100	16.7	16.5	99	90	110	

09/10/96 16:23:57

MATRIX SPIKE(S)

Extraction Batch # _____

Analysis Batch # MSMSDA60904162601

Work Order # 9608967

Project Sample ID _____
Method Volatile Organics SW8260A
Test Code 826SWAMS

Date Collected 08/29/96
Date Received 08/30/96
Date Prepared _____
Date Analyzed 09/05/96 12:56:00

Instrument MSDA
Column _____
Analyst TLS
Reviewer APS

Reporting Subset ___ ___
Spikes Subset ___ ___
Specs Subset ___ ___

Matrix W
Report As received
% Moisture _____

Spike Sol'n #	Vol. Added
Matrix Spike	5 uL
Surrogate Sol'n	**Vol. Added**
1,2-DCA-d4	5 uL
Toluene-d8	5 uL
1,4-BFB	5 uL

Sample	Spiked Sample	Spiked Sample Dup
Lab Sample ID	Lab Sample ID	Lab Sample ID
9608982-01B	9608982-04A MS	9608982-05A MSD
File # F0904637	File # F0904638	File # F0904639
Aliquot Mass/Vol	Aliquot Mass/Vol	Aliquot Mass/Vol
15.0 (mL)	15.0 (mL)	15.0 (mL)
Extract Mass/Vol	Extract Mass/Vol	Extract Mass/Vol
15.0 (mL)	15.0 (mL)	15.0 (mL)
Dil Fact. 1	Dil Fact. 1	Dil Fact. 1

Analyte	Spike Sol'n Conc. ug/L	Measured Conc. ug/L	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Recovery Specification Limits Low %	High %	RPD Result %	Specification Limit %
Benzene	16700	ND	16.7	19.7	118	16.7	19.4	116	74	132	1.7	14
Chlorobenzene	16700	ND	16.7	19.9	119	16.7	19.5	117	73	119	1.7	13
1,1-Dichloroethene	16700	ND	16.7	21.3	127	16.7	21.1	126	51	133	0.79	23
Toluene	16700	ND	16.7	20.2	121	16.7	19.9	119	81	121	1.7	14
Trichloroethene	16700	0.116	16.7	20.8	124 Q	16.7	20.6	123 Q	73	117	0.81	13

Surrogate(s)											
1,4-Bromofluorobenzene	16700	17.0	16.7	16.9	101	16.7	17.2	103	77	117	
1,2-Dichloroethane-d4	16700	17.7	16.7	17.5	105	16.7	18.0	108	61	143	
Toluene-d8	16700	16.8	16.7	16.5	99	16.7	16.8	100	87	113	

Method Volatile Organics by GC/MS Specification# _____

Lab Sample ID File ID	Project Sample ID/Description	Analyte	Flag	Comment/Narrative	Corrective Action
9608967-01A F0903623	MW-12	Carbon disulfide	R	The results indicate the possible presence of instrument carryover. The sample was reanalyzed to verify these results.	
9608967-02A F0903624	MW-10	Carbon disulfide	R	The results indicate the possible presence of instrument carryover. The sample was reanalyzed to verify these results.	
9608967-03A F0903625	MW-23	Carbon disulfide	R	The results indicate the possible presence of instrument carryover. The sample was reanalyzed to verify these results.	
9608967-04A F0903626	MW-24	Carbon disulfide	R	The results indicate the possible presence of instrument carryover. The sample was reanalyzed to verify these results.	

QUALITY CONTROL EXCEPTION REPORT **REPORT COPY 9608967**
LEVEL 2 - SAMPLE CONTROL

QCER # 960829-05 **Revised:**

Analyst: PB Instrument: _____ Date Analyzed: 08/29/96
Batch #: _____ Matrix: WATER Status: C
Prot Spec: _____ Analysis File #: _____

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608967-07A	FEDERAL_PPBD	JAL	MW-6
9608968-04A	FEDERAL_PPBD	JAL	MW-24
9608969-06A	FEDERAL_PPBD	JAL	MW-9
9608970-05A	FEDERAL_PPBD	JAL	MW-7

PROBLEM IDENTIFICATION:

- Sample pH _
- Sample Temperature X
- Bubbles/Headspace in VOA Vials _
- Sample Broken _
- Insufficient Sample Size _
- Holding Time Exceeded Upon Receipt _
- Other (Describe) _

CORRECTIVE ACTION TAKEN:

- Resample _
- Log for Analysis X
- Log Using Alternate Split _
- Use spare split _
- Adjust Preservation _
- Level 3 QCER to Follow _
- Other (Describe) _

Comments: The following sample id's were received at temperatures above 6 C: MW-6, MW-9, TB-1 (all splits); MW-7 (metals and SVOC only); MW-24 (SVOC only)
Logged for analysis per JAL.

Distribution: CSC, Lab, Report

QUALITY CONTROL EXCEPTION REPORT **REPORT COPY 9608967**
LEVEL 2 - ANALYTICAL

QCER # 960904-13 **Revised: 09/06/96**

Analyst: THERESA SHAW Instrument: MSDA Date Analyzed: 09/04/96
Batch #: MSMSDA60904162600 Matrix: AQUEOUS Status: C
Prot Spec: 826SWA Analysis File #: F0904616

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608982			
9608800			
9608967	FEDERAL PPBD	JAL	

SAMPLE PREPARATION:

PROBLEM IDENTIFICATION
Sample Went Dry _
Loss of ____ % of Sample _
Emulsion Formed _
Blank Contamination _
Instrument _
Hold Time _
MS/MSD Not Available _
Instrument _
Other (Describe) _

CORRECTIVE ACTION TAKEN
Reprepare Sample _
Sample Sent for Analysis _
Resample _
Other (Describe) _

Comments:

SAMPLE ANALYSIS:

PROBLEM IDENTIFICATION
Surrogate Recovery _
MS/MSD Recovery _
LCS/LCSD Recovery X
MS/MSD Precision _
LCS/LCSD Precision _
Standard _
Blank Contamination _
Instrument _
Hold Time _
No MS/MSD Available for Batch _
Sample pH _
Dil. Due to Hi-Level Non-Target Analytes _
Serial Dilution _
Analytical Spike _
Internal Standard _
Other (Describe) _

PROBABLE CAUSE
Matrix Effect _
Instrument _
Spiking Error _
Contamination _
Coelution _
Unknown X
Other(Describe) _

CORRECTIVE ACTION TAKEN
Reprepare Sample _
Reanalyze Sample _
Reanalyze LCS/LCSD _
Recalibrate Instrument _
Analyze Out of Hold Time _
Prepare New Standard _
Flag Data X
Resample _
Analyze by MSA _
Perform Analytical Spike _
No Action Required _
Level 3 QCER to Follow _
Other (Describe) _

Comments: 1,1-Dichloroethene exceeded the specified tolerance of 133% at 134% on the LCS for this batch. 11DCE met both accuracy and precision tolerances on the LCSD. 11DCE was not detected in any samples analyzed in this batch.

Distribution: CSC, Lab, Report

QUALITY CONTROL EXCEPTION REPORT **REPORT COPY 9608967**
LEVEL 2 - ANALYTICAL

QCER # 960904-15 **Revised:**

Analyst: THERESA SHAW Instrument: MSDA Date Analyzed: 09/04/96
Batch #: MSMSDA60904162600 Matrix: AQUEOUS Status: C
Prot Spec: 826SWA Analysis File #: F0904616

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608982			
9608967	FEDERAL PPBD	JAL	

SAMPLE PREPARATION:

PROBLEM IDENTIFICATION
- Sample Went Dry _
- Loss of ____ % of Sample _
- Emulsion Formed _
- Blank Contamination _
- Instrument _
- Hold Time _
- MS/MSD Not Available _
- Instrument _
- Other (Describe) _

CORRECTIVE ACTION TAKEN
- Reprepare Sample _
- Sample Sent for Analysis _
- Resample _
- Other (Describe) _

Comments:

SAMPLE ANALYSIS:

PROBLEM IDENTIFICATION
- Surrogate Recovery _
- MS/MSD Recovery _
- LCS/LCSD Recovery _
- MS/MSD Precision _
- LCS/LCSD Precision _
- Standard _
- Blank Contamination _
- Instrument _
- Hold Time _
- No MS/MSD Available for Batch _
- Sample pH _
- Dil. Due to Hi-Level Non-Target Analytes _
- Serial Dilution _
- Analytical Spike _
- Internal Standard _
- Other (Describe) X
  Calcheck recovery

PROBABLE CAUSE
- Matrix Effect _
- Instrument _
- Spiking Error _
- Contamination _
- Coelution _
- Unknown X
- Other(Describe) _

CORRECTIVE ACTION TAKEN
- Reprepare Sample _
- Reanalyze Sample _
- Reanalyze LCS/LCSD _
- Recalibrate Instrument _
- Analyze Out of Hold Time _
- Prepare New Standard _
- Flag Data X
- Resample _
- Analyze by MSA _
- Perform Analytical Spike _
- No Action Required _
- Level 3 QCER to Follow _
- Other (Describe) _

Comments: 1,1-Dichloroethene exceeded the specified tolerance of 120% at 134% on the middle-of-day Calcheck. 11DCE was not detected in any samples analyzed in this batch.

Distribution: CSC, Lab, Report

09/18/96 11:07:56
Previously Reported on 09/16/96.

RADIAN ANALYTICAL SERVICES
FPAS REPORT
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Work Order # 9608968

Client FEDERAL PAPERBOARD
Facility WILMINGTON
Client Code FEDERAL PPBD

Certified By [signature]
Date 9-18-96

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09/18/96 11:07:56

WORK ORDER SUMMARY

Report RADIAN CORPORATION
To 3200 E. CHAPEL HILL RD.
RTP, NC 27709
Attention Jim Narkunas

Client Code FEDERAL PPBD
Client FEDERAL PAPERBOARD
Facility WILMINGTON
Work ID Wilmington Semiannua

Work Order # 9608968
Page 1
RCN 258-058-11-05

Prepared Radian Analytical Services
By 14046 Summit Dr., Bldg. B
P. O. Box 201088
Austin, TX 78720-1088

CSC JALINDSEY

Case # NA
SDG # NA
RAS # 60126AJAL

New York ELAP ID #: 10915

Project Sample ID/ Description	Lab Sample ID	Test Code(s)	Method Desciption
MW-12	01A	352SWA00	Liquid/Liq Extract SW846
		827SWA1T	Semivolatiles by GC/MS
		CK1SWA00	Primary KD conc. SW846
	01B	SPAREB00	Spare Sample
MW-10	02A	352SWA00	Liquid/Liq Extract SW846
		827SWA1T	Semivolatiles by GC/MS
		CK1SWA00	Primary KD conc. SW846
MW-10	02B	SPAREB00	Spare Sample
MW-23	03A	351SWA00	SepFunnel Extraction SW846
		827SWA1T	Semivolatiles by GC/MS
		CK1SWA00	Primary KD conc. SW846
MW-23	03B	SPAREB00	Spare Sample
MW-24	04A	351SWA00	SepFunnel Extraction SW846
		827SWA1T	Semivolatiles by GC/MS
		CK1SWA00	Primary KD conc. SW846
	04B	SPAREB00	Spare Sample
MW-7	05A	351SWA00	SepFunnel Extraction SW846
		827SWA1T	Semivolatiles by GC/MS
		CK1SWA00	Primary KD conc. SW846
	05B	SPAREB00	Spare Sample
MW-9	06A	351SWA00	SepFunnel Extraction SW846
		827SWA1T	Semivolatiles by GC/MS
		CK1SWA00	Primary KD conc. SW846

WORK ORDER SUMMARY (Cont'd)

Report RADIAN CORPORATION
To 3200 E. CHAPEL HILL RD.
RTP, NC 27709
Attention Jim Narkunas

Client Code FEDERAL PPBD
Client FEDERAL PAPERBOARD
Facility WILMINGTON
Work ID Wilmington Semiannua

Work Order # 9608968

RCN 258-058-11-05

Prepared By Radian Analytical Services
14046 Summit Dr., Bldg. B
P. O. Box 201088
Austin, TX 78720-1088

CSC JALINDSEY

Case # NA
SDG # NA
RAS # 60126AJAL

New York ELAP ID #: 10915

Project Sample ID/ Description	Lab Sample ID	Test Code(s)	Method Desciption
MW-9	06B	SPAREB00	Spare Sample
MW-6	07A	351SWA00	SepFunnel Extraction SW846
		827SWA1T	Semivolatiles by GC/MS
		CK1SWA00	Primary KD conc. SW846
	07B	SPAREB00	Spare Sample
FB-1	08A	352SWA00	Liquid/Liq Extract SW846
		827SWA1T	Semivolatiles by GC/MS
		CK1SWA00	Primary KD conc. SW846
	08B	SPAREB00	Spare Sample

WORK ORDER COMMENTS

The X flag indicates that benzidine did not meet the specified tolerances for LCS/LCSD965809. Benzidine is subject to erratic behavior and may not be recovered according to Method 8270B.

The Y flag indicates that benzidine did not meet the specified tolerances for LCS/LCSD965831. Benzidine is subject to erratic behavior and may not be recovered according to Method 8270B.

No MS/MSD was available for analytical batch MSMSD260910090501.

The Z flag indicates that benzidine did not meet the specified tolerances for LCS/LCSD965831. Benzidine is subject to erratic behavior and may not be recovered according to Method 8270B.

No MS/MSD was available for analytical batch MSMSD260911084202.

FLAG DEFINITIONS

Flag	Definition
< DL	Result less than stated Detection Limit and greater than or equal to zero.
NA	Analyte concentration not available for this analysis.
NC	RPD and/or % Recovery not calculated. See Narrative for explanation.
ND	Not detected. No instrument response for analyte or result less than zero.
NR	Not reported. Result greater than or equal to stated Detection Limit and less than specified Reporting Limit.
NS	Analyte not spiked.
B	Analyte detected in method blank at concentration greater than the Reporting Limit (and greater than zero).
C	Confirming data obtained using second GC column or GCMS.
E	Analyte concentration exceeded calibration range.
F	Interference or coelution suspected. See Narrative for explanation.
H	Presence of analyte previously confirmed by historical data.
I	Analyte identification suspect. See Narrative for explanation.
J	Result is less than stated Detection Limit but greater than or equal to specified Reporting Limit.
K	Peak did not meet method identification criteria. Analyte not detected on other GC column.
M	Result modified from previous Report. See Narrative for explanation.
P	Analyte not confirmed. Results from primary and secondary GC columns differ by greater than a factor of 3.
Q	QC result does not meet tolerance in Protocol Specification.
R	Result reported elsewhere.
S	Analyte concentration obtained using Method of Standard Additions (MSA).
T	Second column confirmational analysis not performed.
X	See Narrative for explanation.
Y	See Narrative for explanation.
Z	See Narrative for explanation.

ANALYTICAL PROTOCOL SUMMARY

Client FEDERAL PAPERBOARD
Facility WILMINGTON
Client Code FEDERAL PPBD
Method Semivolatiles by GC/MS

Specification # 827S

Project Sample ID/Description	Lab Sample ID	Test Code(s)	Extraction/Digestion Batch #	Analysis Batch #
FB-1	9608968-08A	827SWA1T	3520960830170000	MSMSD160905080401
MW-10	9608968-02A	827SWA1T	3520960830170000	MSMSD160905080401
MW-12	9608968-01A	827SWA1T	3520960830170000	MSMSD160905080401
MW-23	9608968-03A	827SWA1T	3510960903150000	MSMSD260910090501
MW-24	9608968-04A	827SWA1T	3510960903150000	MSMSD260910090501
MW-6	9608968-07A	827SWA1T	3510960903150000	MSMSD260910090501
MW-6	9608968-07A	827SWA1T	3510960903150000	MSMSD260911084202
MW-7	9608968-05A	827SWA1T	3510960903150000	MSMSD260910090501
MW-9	9608968-06A	827SWA1T	3510960903150000	MSMSD260910090501

RESULTS SUMMARY

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		P8198		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10		09/05/96 15:30		09/05/96 14:50		09/10/96 17:22	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acenaphthene	ND	1.26	ND	1.23	ND	1.21	ND	0.606
Acenaphthylene	ND	1.28	ND	1.25	ND	1.22	ND	0.494
Acetophenone	ND	0.656	ND	0.637	ND	0.625	ND	0.542
4-Aminobiphenyl	ND	1.67	ND	1.62	ND	1.59	ND	0.489
Aniline	ND	1.76	ND	1.71	ND	1.68	ND	0.686
Anthracene	ND	0.815	ND	0.791	ND	0.777	ND	0.284
Benz(a)anthracene	ND	0.519	ND	0.504	ND	0.494	ND	2.64
Benz(a)pyrene	ND	1.09	ND	1.06	ND	1.04	ND	0.375
Benzidine	ND X	3.89	ND X	3.78	ND X	3.71	ND Y	1.76
Benzo(b)fluoranthene	ND	1.07	ND	1.04	ND	1.02	ND	0.525
Benzo(g,h,i)perylene	ND	0.931	ND	0.905	ND	0.888	ND	0.509
Benzo(k)fluoranthene	ND	0.675	ND	0.655	ND	0.643	ND	0.726
Benzoic acid	ND	2.75	ND	2.67	ND	2.62	ND	5.69
Benzyl alcohol	ND	0.734	ND	0.713	ND	0.700	ND	0.656
4-Bromophenylphenyl ether	ND	0.737	ND	0.716	ND	0.703	ND	0.453
Butylbenzylphthalate	ND	0.873	ND	0.848	ND	0.832	ND	0.744
4-Chloro-3-methylphenol	ND	0.657	ND	0.638	ND	0.626	ND	0.410
p-Chloroaniline	ND	1.36	ND	1.32	ND	1.30	ND	0.508
bis(2-Chloroethoxy)methane	ND	0.677	ND	0.658	ND	0.646	ND	0.502
bis(2-Chloroethyl)ether	ND	0.453	ND	0.440	ND	0.432	ND	0.697

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		P8198		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10		09/05/96 15:30		09/05/96 14:50		09/10/96 17:22	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
bis(2-Chloroisopropyl)ether	ND	1.30	ND	1.27	ND	1.24	ND	0.608
1-Chloronaphthalene	ND		ND		ND		ND	
2-Chloronaphthalene	ND	2.15	ND	2.09	ND	2.05	ND	0.684
2-Chlorophenol	ND	0.543	ND	0.528	ND	0.518	ND	0.662
4-Chlorophenylphenyl ether	ND	1.24	ND	1.20	ND	1.18	ND	0.224
Chrysene	ND	0.623	ND	0.605	ND	0.593	ND	0.732
Di-n-butylphthalate	ND	0.931	ND	0.905	ND	0.888	ND	0.262
Di-n-octylphthalate	ND	1.81	ND	1.76	ND	1.73	ND	0.731
Dibenz(a,h)anthracene	ND	0.726	ND	0.706	ND	0.693	ND	0.413
Dibenz(a,j)acridine	ND		ND		ND		ND	
Dibenzofuran	ND	1.12	ND	1.09	ND	1.07	ND	0.575
1,2-Dichlorobenzene	ND	1.46	ND	1.42	ND	1.39	ND	0.658
1,3-Dichlorobenzene	ND	1.57	ND	1.52	ND	1.50	ND	0.623
1,4-Dichlorobenzene	ND	1.57	ND	1.52	ND	1.50	ND	0.713
3,3'-Dichlorobenzidine	ND	0.858	ND	0.833	ND	0.818	ND	0.660
2,4-Dichlorophenol	ND	0.884	ND	0.859	ND	0.843	ND	0.511
2,6-Dichlorophenol	ND	0.813	ND	0.790	ND	0.775	ND	0.666
Diethylphthalate	ND	0.879	ND	0.854	ND	0.838	ND	0.625
p-Dimethylaminoazobenzene	ND	1.41	ND	1.37	ND	1.35	ND	0.810
7,12-Dimethylbenz(a)anthracene	ND	1.09	ND	1.06	ND	1.04	ND	0.747

RESULTS SUMMARY (Cont'd)

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		P8198		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10		09/05/96 15:30		09/05/96 14:50		09/10/96 17:22	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Dimethylphenethylamine	ND	6.25	ND	6.08	ND	5.96	ND	9.03
2,4-Dimethylphenol	ND	1.26	ND	1.23	ND	1.21	ND	1.10
Dimethylphthalate	ND	0.823	ND	0.799	ND	0.784	ND	0.565
4,6-Dinitro-2-methylphenol	ND	0.823	ND	0.799	ND	0.784	ND	1.12
2,4-Dinitrophenol	ND	0.682	ND	0.663	ND	0.650	ND	2.40
2,4-Dinitrotoluene	ND	0.954	ND	0.927	ND	0.909	ND	0.660
2,6-Dinitrotoluene	ND	0.588	ND	0.571	ND	0.561	ND	0.469
Diphenylamine/N-NitrosoDPA	ND	1.26	ND	1.23	ND	1.21	ND	0.530
1,2-Diphenylhydrazine	ND		ND		ND		ND	
Ethyl methanesulfonate	ND	0.497	ND	0.483	ND	0.474	ND	0.746
bis(2-Ethylhexyl)phthalate	ND	1.15	102	1.11	ND	1.09	ND	0.722
Fluoranthene	ND	0.732	ND	0.711	ND	0.698	ND	0.417
Fluorene	ND	0.768	ND	0.746	ND	0.732	ND	0.410
Hexachlorobenzene	ND	0.699	ND	0.679	ND	0.666	ND	0.329
Hexachlorobutadiene	ND	4.11	ND	3.99	ND	3.92	ND	0.735
Hexachlorocyclopentadiene	ND	2.89	ND	2.81	ND	2.76	ND	4.09
Hexachloroethane	ND	3.73	ND	3.62	ND	3.55	ND	0.953
Indeno(1,2,3-cd)pyrene	ND	0.800	ND	0.777	ND	0.763	ND	0.448
Isophorone	ND	0.637	ND	0.619	ND	0.607	ND	0.362
Methyl methanesulfonate	ND	1.58	ND	1.53	ND	1.50	ND	1.06

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		P8198		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10		09/05/96 15:30		09/05/96 14:50		09/10/96 17:22	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
3-Methylcholanthrene	ND	4.44	ND	4.31	ND	4.23	ND	0.313
2-Methylnaphthalene	ND	3.45	ND	3.35	ND	3.29	ND	0.695
4-Methylphenol/3-Methylphenol	ND	0.550	ND	0.534	ND	0.524	ND	0.485
2-Methylphenol	ND	0.676	ND	0.657	ND	0.645	ND	0.636
N-Nitroso-di-n-butylamine	ND	0.971	ND	0.943	ND	0.925	ND	0.647
N-Nitroso-di-n-propylamine	ND	0.666	ND	0.647	ND	0.635	ND	0.577
N-Nitrosodimethylamine	ND	1.53	ND	1.49	ND	1.46	ND	0.639
N-Nitrosopiperidine	ND	0.951	ND	0.924	ND	0.907	ND	0.476
Naphthalene	ND	2.98	ND	2.90	ND	2.84	ND	0.502
1-Naphthylamine	ND	2.98	ND	2.90	ND	2.84	ND	1.18
2-Naphthylamine	ND	2.09	ND	2.03	ND	1.99	ND	1.05
2-Nitroaniline	ND	0.456	ND	0.443	ND	0.435	ND	0.508
3-Nitroaniline	ND	1.02	ND	0.990	ND	0.972	ND	0.676
4-Nitroaniline	ND	0.896	ND	0.870	ND	0.854	ND	0.507
Nitrobenzene	ND	0.980	ND	0.952	ND	0.935	ND	0.491
2-Nitrophenol	ND	1.13	ND	1.10	ND	1.07	ND	0.398
4-Nitrophenol	ND	0.824	ND	0.800	ND	0.785	ND	1.55
Pentachlorobenzene	ND	0.844	ND	0.820	ND	0.805	ND	0.418
Pentachloronitrobenzene	ND	1.25	ND	1.22	ND	1.20	ND	1.37
Pentachlorophenol	ND	1.13	ND	1.10	ND	1.07	ND	1.20

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		P8198		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10		09/05/96 15:30		09/05/96 14:50		09/10/96 17:22	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Phenacetin	ND	0.781	ND	0.759	ND	0.745	ND	0.414
Phenanthrene	ND	0.870	ND	0.845	ND	0.829	ND	0.288
Phenol	ND	0.670	ND	0.650	ND	0.638	ND	0.508
2-Picoline	ND	2.67	ND	2.59	ND	2.54	ND	1.68
Pronamide	ND	0.667	ND	0.648	ND	0.636	ND	0.658
Pyrene	ND	0.449	ND	0.436	ND	0.428	ND	0.745
Pyridine	ND	1.45	ND	1.41	ND	1.38	ND	0.846
1,2,4,5-Tetrachlorobenzene	ND	3.04	ND	2.95	ND	2.90	ND	0.632
2,3,4,6-Tetrachlorophenol	ND	0.512	ND	0.497	ND	0.488	ND	0.408
1,2,4-Trichlorobenzene	ND	3.20	ND	3.10	ND	3.05	ND	0.458
2,4,5-Trichlorophenol	ND	0.751	ND	0.730	ND	0.716	ND	0.506
2,4,6-Trichlorophenol	ND	1.99	ND	1.93	ND	1.90	ND	0.408

Method Semivolatiles by SW8270B

Test Code 827SWA1T

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608968-08A		9608968-02A		9608968-01A		9608968-03A	
File ID:	P8199		P8198		P8197		Q9919	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	08/30/96 17:00:00		08/30/96 17:00:00		08/30/96 17:00:00		09/03/96 15:00:00	
Date Analyzed:	09/05/96 16:10		09/05/96 15:30		09/05/96 14:50		09/10/96 17:22	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
2-Fluorobiphenyl	98	81	82	78
2-Fluorophenol	97	88	89	64
Nitrobenzene-d5	107	94	98	84
Phenol-d5	113	100	103	43
Terphenyl-d14	128 Q	105	112	113
2,4,6-Tribromophenol	112	92	103	86

Method Semivolatiles by SW8270B

Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02		09/11/96 13:41		09/10/96 20:01		09/10/96 18:42	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acenaphthene	ND	0.626	ND R	3.03	ND	0.606	ND	0.606
Acenaphthylene	ND	0.511	ND R	2.47	ND	0.494	ND	0.494
Acetophenone	ND	0.560	3.49 R	2.71	4.26	0.542	ND	0.542
4-Aminobiphenyl	ND	0.505	ND R	2.44	ND	0.489	ND	0.489
Aniline	ND	0.709	ND R	3.43	ND	0.686	ND	0.686
Anthracene	ND	0.294	ND R	1.42	ND	0.284	ND	0.284
Benz(a)anthracene	ND	2.73	ND R	13.2	ND	2.64	ND	2.64
Benz(a)pyrene	ND	0.387	ND R	1.87	ND	0.375	ND	0.375
Benzidine	ND Y	1.82	ND RZ	8.82	ND Y	1.76	ND Y	1.76
Benzo(b)fluoranthene	ND	0.542	ND R	2.62	ND	0.525	ND	0.525
Benzo(g,h,i)perylene	ND	0.527	ND R	2.55	ND	0.509	ND	0.509
Benzo(k)fluoranthene	ND	0.751	ND R	3.63	ND	0.726	ND	0.726
Benzoic acid	ND	5.88	178 R	28.4	219 EXX	5.69	ND	5.69
Benzyl alcohol	ND	0.678	ND R	3.28	2.14	0.656	ND	0.656
4-Bromophenylphenyl ether	ND	0.468	ND R	2.26	ND	0.453	ND	0.453
Butylbenzylphthalate	ND	0.770	ND R	3.72	ND	0.744	ND	0.744
4-Chloro-3-methylphenol	ND	0.424	ND R	2.05	ND	0.410	ND	0.410
p-Chloroaniline	ND	0.526	ND R	2.54	ND	0.508	ND	0.508
bis(2-Chloroethoxy)methane	ND	0.519	ND R	2.51	ND	0.502	ND	0.502
bis(2-Chloroethyl)ether	ND	0.721	ND R	3.49	ND	0.697	ND	0.697

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02		09/11/96 13:41		09/10/96 20:01		09/10/96 18:42	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
bis(2-Chloroisopropyl)ether	ND	0.628	ND R	3.04	ND	0.608	ND	0.608
1-Chloronaphthalene	ND		ND R		ND		ND	
2-Chloronaphthalene	ND	0.707	ND R	3.42	ND	0.684	ND	0.684
2-Chlorophenol	ND	0.685	ND R	3.31	ND	0.662	ND	0.662
4-Chlorophenylphenyl ether	ND	0.231	ND R	1.12	ND	0.224	ND	0.224
Chrysene	ND	0.757	ND R	3.66	ND	0.732	ND	0.732
Di-n-butylphthalate	ND	0.271	ND R	1.31	ND	0.262	ND	0.262
Di-n-octylphthalate	ND	0.756	ND R	3.66	ND	0.731	ND	0.731
Dibenz(a,h)anthracene	ND	0.427	ND R	2.07	ND	0.413	ND	0.413
Dibenz(a,j)acridine	ND		ND R		ND		ND	
Dibenzofuran	ND	0.595	ND R	2.88	ND	0.575	ND	0.575
1,2-Dichlorobenzene	ND	0.680	ND R	3.29	ND	0.658	ND	0.658
1,3-Dichlorobenzene	ND	0.644	ND R	3.11	ND	0.623	ND	0.623
1,4-Dichlorobenzene	ND	0.738	ND R	3.57	ND	0.713	ND	0.713
3,3'-Dichlorobenzidine	ND	0.683	ND R	3.30	ND	0.660	ND	0.660
2,4-Dichlorophenol	ND	0.529	ND R	2.56	ND	0.511	ND	0.511
2,6-Dichlorophenol	ND	0.689	ND R	3.33	ND	0.666	ND	0.666
Diethylphthalate	< DL	0.646	ND R	3.12	< DL	0.625	ND	0.625
p-Dimethylaminoazobenzene	ND	0.838	ND R	4.05	ND	0.810	ND	0.810
7,12-Dimethylbenz(a)anthracene	ND	0.773	ND R	3.74	ND	0.747	ND	0.747

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02		09/11/96 13:41		09/10/96 20:01		09/10/96 18:42	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Dimethylphenethylamine	ND	9.34	ND R	45.1	ND	9.03	ND	9.03
2,4-Dimethylphenol	ND	1.14	ND R	5.52	ND	1.10	ND	1.10
Dimethylphthalate	ND	0.584	ND R	2.83	ND	0.565	ND	0.565
4,6-Dinitro-2-methylphenol	ND	1.16	ND R	5.61	ND	1.12	ND	1.12
2,4-Dinitrophenol	ND	2.48	ND R	12.0	ND	2.40	ND	2.40
2,4-Dinitrotoluene	ND	0.683	ND R	3.30	ND	0.660	ND	0.660
2,6-Dinitrotoluene	ND	0.485	ND R	2.34	ND	0.469	ND	0.469
Diphenylamine/N-NitrosoDPA	ND	0.548	ND R	2.65	ND	0.530	ND	0.530
1,2-Diphenylhydrazine	ND		ND R		ND		ND	
Ethyl methanesulfonate	ND	0.772	ND R	3.73	ND	0.746	ND	0.746
bis(2-Ethylhexyl)phthalate	ND	0.746	ND R	3.61	1.02	0.722	ND	0.722
Fluoranthene	ND	0.431	ND R	2.08	ND	0.417	ND	0.417
Fluorene	ND	0.424	ND R	2.05	ND	0.410	ND	0.410
Hexachlorobenzene	ND	0.340	ND R	1.65	ND	0.329	ND	0.329
Hexachlorobutadiene	ND	0.760	ND R	3.67	ND	0.735	ND	0.735
Hexachlorocyclopentadiene	ND	4.23	ND R	20.5	ND	4.09	ND	4.09
Hexachloroethane	ND	0.985	ND R	4.76	ND	0.953	ND	0.953
Indeno(1,2,3-cd)pyrene	ND	0.463	ND R	2.24	ND	0.448	ND	0.448
Isophorone	ND	0.375	ND R	1.81	0.569	0.362	ND	0.362
Methyl methanesulfonate	ND	1.09	ND R	5.28	ND	1.06	ND	1.06

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02		09/11/96 13:41		09/10/96 20:01		09/10/96 18:42	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
3-Methylcholanthrene	ND	0.324	ND R	1.57	ND	0.313	ND	0.313
2-Methylnaphthalene	ND	0.719	ND R	3.48	ND	0.695	ND	0.695
4-Methylphenol/3-Methylphenol	ND	0.501	96.8 FR	2.42	110 F	0.485	ND	0.485
2-Methylphenol	ND	0.658	285	3.18	331 ER	0.636	ND	0.636
N-Nitroso-di-n-butylamine	ND	0.669	ND R	3.24	ND	0.647	ND	0.647
N-Nitroso-di-n-propylamine	ND	0.597	ND R	2.89	ND	0.577	ND	0.577
N-Nitrosodimethylamine	ND	0.660	ND R	3.19	ND	0.639	ND	0.639
N-Nitrosopiperidine	ND	0.493	ND R	2.38	ND	0.476	ND	0.476
Naphthalene	ND	0.519	ND R	2.51	0.797	0.502	ND	0.502
1-Naphthylamine	ND	1.22	ND R	5.90	ND	1.18	ND	1.18
2-Naphthylamine	ND	1.08	ND R	5.24	ND	1.05	ND	1.05
2-Nitroaniline	ND	0.525	ND R	2.54	ND	0.508	ND	0.508
3-Nitroaniline	ND	0.700	ND R	3.38	ND	0.676	ND	0.676
4-Nitroaniline	ND	0.524	ND R	2.53	ND	0.507	ND	0.507
Nitrobenzene	ND	0.507	ND R	2.45	ND	0.491	ND	0.491
2-Nitrophenol	ND	0.412	ND R	1.99	ND	0.398	ND	0.398
4-Nitrophenol	ND	1.60	ND R	7.74	ND	1.55	ND	1.55
Pentachlorobenzene	ND	0.432	ND R	2.09	ND	0.418	ND	0.418
Pentachloronitrobenzene	ND	1.41	ND R	6.84	ND	1.37	ND	1.37
Pentachlorophenol	ND	1.24	ND R	5.99	ND	1.20	ND	1.20

Method Semivolatiles by SW8270B

Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02		09/11/96 13:41		09/10/96 20:01		09/10/96 18:42	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Phenacetin	ND	0.428	ND R	2.07	ND	0.414	ND	0.414
Phenanthrene	ND	0.298	ND R	1.44	ND	0.288	ND	0.288
Phenol	ND	0.526	2.84 R	2.54	2.67	0.508	ND	0.508
2-Picoline	ND	1.74	ND R	8.40	ND	1.68	ND	1.68
Pronamide	ND	0.680	ND R	3.29	ND	0.658	ND	0.658
Pyrene	ND	0.771	ND R	3.73	ND	0.745	ND	0.745
Pyridine	ND	0.875	ND R	4.23	ND	0.846	ND	0.846
1,2,4,5-Tetrachlorobenzene	ND	0.654	ND R	3.16	ND	0.632	ND	0.632
2,3,4,6-Tetrachlorophenol	ND	0.422	ND R	2.04	ND	0.408	ND	0.408
1,2,4-Trichlorobenzene	ND	0.473	ND R	2.29	ND	0.458	ND	0.458
2,4,5-Trichlorophenol	ND	0.523	ND R	2.53	ND	0.506	ND	0.506
2,4,6-Trichlorophenol	ND	0.422	ND R	2.04	ND	0.408	ND	0.408

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-24		MW-6		MW-6		MW-7	
Lab ID:	9608968-04A		9608968-07A		9608968-07A		9608968-05A	
File ID:	Q9920		Q9933		Q9923		Q9921	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00		09/03/96 15:00:00	
Date Analyzed:	09/10/96 18:02		09/11/96 13:41		09/10/96 20:01		09/10/96 18:42	
Dilution Factor:	1		5		1		1	
Matrix:	Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
2-Fluorobiphenyl	75	68	75	82
2-Fluorophenol	73	62	71	57 Q
Nitrobenzene-d5	87	73	87	84
Phenol-d5	46	40	47	36
Terphenyl-d14	111	90	101	121
2,4,6-Tribromophenol	82	72	77	91

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-9							
Lab ID:	9608968-06A							
File ID:	Q9922							
Date Collected:	08/28/96							
Date Prepared:	09/03/96 15:00:00							
Date Analyzed:	09/10/96 19:21							
Dilution Factor:	1							
Matrix:	Water							
Units:	ug/L							
Report as:	received							
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Acenaphthene	ND	0.606						
Acenaphthylene	ND	0.494						
Acetophenone	ND	0.542						
4-Aminobiphenyl	ND	0.489						
Aniline	ND	0.686						
Anthracene	ND	0.284						
Benz(a)anthracene	ND	2.64						
Benz(a)pyrene	ND	0.375						
Benzidine	ND Y	1.76						
Benzo(b)fluoranthene	ND	0.525						
Benzo(g,h,i)perylene	ND	0.509						
Benzo(k)fluoranthene	ND	0.726						
Benzoic acid	ND	5.69						
Benzyl alcohol	5.73	0.656						
4-Bromophenylphenyl ether	ND	0.453						
Butylbenzylphthalate	ND	0.744						
4-Chloro-3-methylphenol	ND	0.410						
p-Chloroaniline	ND	0.508						
bis(2-Chloroethoxy)methane	ND	0.502						
bis(2-Chloroethyl)ether	ND	0.697						

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-9							
Lab ID:	9608968-06A							
File ID:	Q9922							
Date Collected:	08/28/96							
Date Prepared:	09/03/96 15:00:00							
Date Analyzed:	09/10/96 19:21							
Dilution Factor:	1							
Matrix:	Water							
Units:	ug/L							
Report as:	received							
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
bis(2-Chloroisopropyl)ether	ND	0.608						
1-Chloronaphthalene	ND							
2-Chloronaphthalene	ND	0.684						
2-Chlorophenol	ND	0.662						
4-Chlorophenylphenyl ether	ND	0.224						
Chrysene	ND	0.732						
Di-n-butylphthalate	ND	0.262						
Di-n-octylphthalate	ND	0.731						
Dibenz(a,h)anthracene	ND	0.413						
Dibenz(a,j)acridine	ND							
Dibenzofuran	ND	0.575						
1,2-Dichlorobenzene	ND	0.658						
1,3-Dichlorobenzene	ND	0.623						
1,4-Dichlorobenzene	ND	0.713						
3,3'-Dichlorobenzidine	ND	0.660						
2,4-Dichlorophenol	ND	0.511						
2,6-Dichlorophenol	ND	0.666						
Diethylphthalate	ND	0.625						
p-Dimethylaminoazobenzene	ND	0.810						
7,12-Dimethylbenz(a)anthracene	ND	0.747						

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-9							
Lab ID:	9608968-06A							
File ID:	Q9922							
Date Collected:	08/28/96							
Date Prepared:	09/03/96 15:00:00							
Date Analyzed:	09/10/96 19:21							
Dilution Factor:	1							
Matrix:	Water							
Units:	ug/L							
Report as:	received							
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Dimethylphenethylamine	ND	9.03						
2,4-Dimethylphenol	ND	1.10						
Dimethylphthalate	ND	0.565						
4,6-Dinitro-2-methylphenol	ND	1.12						
2,4-Dinitrophenol	ND	2.40						
2,4-Dinitrotoluene	ND	0.660						
2,6-Dinitrotoluene	ND	0.469						
Diphenylamine/N-NitrosoDPA	ND	0.530						
1,2-Diphenylhydrazine	ND							
Ethyl methanesulfonate	ND	0.746						
bis(2-Ethylhexyl)phthalate	ND	0.722						
Fluoranthene	ND	0.417						
Fluorene	ND	0.410						
Hexachlorobenzene	ND	0.329						
Hexachlorobutadiene	ND	0.735						
Hexachlorocyclopentadiene	ND	4.09						
Hexachloroethane	ND	0.953						
Indeno(1,2,3-cd)pyrene	ND	0.448						
Isophorone	ND	0.362						
Methyl methanesulfonate	ND	1.06						

Method Semivolatiles by SW8270B

Test Code 827SWA1T

Project Sample ID:	MW-9							
Lab ID:	9608968-06A							
File ID:	Q9922							
Date Collected:	08/28/96							
Date Prepared:	09/03/96 15:00:00							
Date Analyzed:	09/10/96 19:21							
Dilution Factor:	1							
Matrix:	Water							
Units:	ug/L							
Report as:	received							
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
3-Methylcholanthrene	ND	0.313						
2-Methylnaphthalene	ND	0.695						
4-Methylphenol/3-Methylphenol	40.5 F	0.485						
2-Methylphenol	51.8	0.636						
N-Nitroso-di-n-butylamine	ND	0.647						
N-Nitroso-di-n-propylamine	ND	0.577						
N-Nitrosodimethylamine	ND	0.639						
N-Nitrosopiperidine	ND	0.476						
Naphthalene	0.859	0.502						
1-Naphthylamine	ND	1.18						
2-Naphthylamine	ND	1.05						
2-Nitroaniline	ND	0.508						
3-Nitroaniline	ND	0.676						
4-Nitroaniline	ND	0.507						
Nitrobenzene	ND	0.491						
2-Nitrophenol	ND	0.398						
4-Nitrophenol	ND	1.55						
Pentachlorobenzene	ND	0.418						
Pentachloronitrobenzene	ND	1.37						
Pentachlorophenol	ND	1.20						

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-9							
Lab ID:	9608968-06A							
File ID:	Q9922							
Date Collected:	08/28/96							
Date Prepared:	09/03/96 15:00:00							
Date Analyzed:	09/10/96 19:21							
Dilution Factor:	1							
Matrix:	Water							
Units:	ug/L							
Report as:	received							
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Phenacetin	ND	0.414						
Phenanthrene	ND	0.288						
Phenol	ND	0.508						
2-Picoline	ND	1.68						
Pronamide	ND	0.658						
Pyrene	ND	0.745						
Pyridine	ND	0.846						
1,2,4,5-Tetrachlorobenzene	ND	0.632						
2,3,4,6-Tetrachlorophenol	ND	0.408						
1,2,4-Trichlorobenzene	ND	0.458						
2,4,5-Trichlorophenol	ND	0.506						
2,4,6-Trichlorophenol	ND	0.408						

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Project Sample ID:	MW-9							
Lab ID:	9608968-06A							
File ID:	Q9922							
Date Collected:	08/28/96							
Date Prepared:	09/03/96 15:00:00							
Date Analyzed:	09/10/96 19:21							
Dilution Factor:	1							
Matrix:	Water							
Units:	ug/L							
Report as:	received							
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL

Surrogate(s)	Recovery %	Recovery %	Recovery %	Recovery %
2-Fluorobiphenyl	68			
2-Fluorophenol	58 Q			
Nitrobenzene-d5	73			
Phenol-d5	38			
Terphenyl-d14	110			
2,4,6-Tribromophenol	83			

09/18/96 11:07:56

ANALYSIS BATCH SUMMARY

Analysis Batch # MSMSD160905080401

Work Order # 9608968

Method Semivolatiles by GC/MS
Test Code 827SWALA
Initial Calibration # MSD1960826105700
Calibration Date 08/26/96

Analysis Start Date/Time 09/05/96 08:04:00
Analysis Stop Date/Time 09/05/96 22:54:00

Instrument MSD1
Analyst MCL
Reviewer SDL

Sequence/Analysis Time		Project Sample ID	Lab Sample ID	Sample Type	Analysis File #
1	09/05/96 08:04		TUNE	GC/MS tune files	P8186
2	09/05/96 08:25		SSTD050	Continuing Calibration Verification	P8187
3	09/05/96 09:07		LCS965809	Lab Control Sample	P8188
4	09/05/96 09:48		LCSD965809	Lab Control Sample Duplicate	P8189
5	09/05/96 10:28		BLK963326	Blank, Method	P8190
6	09/05/96 11:08		9608934-01A	Sample	P8191
7	09/05/96 11:49		9608934-02A	Matrix Spike	P8192
8	09/05/96 12:29		9608934-03A	Matrix Spike Duplicate	P8193
9	09/05/96 13:09		9608953-01A	Sample	P8194
10	09/05/96 13:50		TUNE	GC/MS tune files	P8195
11	09/05/96 14:09		SSTD050	Continuing Calibration Verification	P8196
12	09/05/96 14:50	MW-12	9608968-01A	Sample	P8197
13	09/05/96 15:30	MW-10	9608968-02A	Sample	P8198
14	09/05/96 16:10	FB-1	9608968-08A	Sample	P8199
15	09/05/96 16:51		9608929-01A	Sample	P8200
16	09/05/96 17:31		9608929-02A	Sample	P8201
17	09/05/96 18:11		9608929-03A	Sample	P8202
18	09/05/96 18:52		9608929-04A	Sample	P8203
19	09/05/96 19:32		9608929-05A	Sample	P8204
20	09/05/96 20:12		9608934-04A	Sample	P8205
21	09/05/96 20:53		9608934-05A	Sample	P8206
22	09/05/96 21:33		9608934-06A	Sample	P8207
23	09/05/96 22:14		9608934-07A	Sample	P8208
24	09/05/96 22:54		DCS965810	Detectability Check Sample	P8209

RESULTS

Extraction Batch # 3520960830170000
Analysis Batch # MSMSD160905080401

Project Sample ID MW-12
Lab Sample ID 9608968-01A
File # P8197
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 14:50

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1070 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	83-32-9	ND	1.21	1.21
Acenaphthylene	208-96-8	ND	1.22	1.22
Acetophenone	98-86-2	ND	0.625	0.625
4-Aminobiphenyl	92-67-1	ND	1.59	1.59
Aniline	62-53-3	ND	1.68	1.68
Anthracene	120-12-7	ND	0.777	0.777
Benz(a)anthracene	56-55-3	ND	0.494	0.494
Benz(a)pyrene	50-32-8	ND	1.04	1.04
Benzidine	92-87-5	ND X	3.71	3.71
Benzo(b)fluoranthene	205-99-2	ND	1.02	1.02
Benzo(g,h,i)perylene	191-24-2	ND	0.888	0.888
Benzo(k)fluoranthene	207-08-9	ND	0.643	0.643
Benzoic acid	65-85-0	ND	2.62	2.62
Benzyl alcohol	100-51-6	ND	0.700	0.700
4-Bromophenylphenyl ether	101-55-3	ND	0.703	0.703
Butylbenzylphthalate	85-68-7	ND	0.832	0.832
4-Chloro-3-methylphenol	59-50-7	ND	0.626	0.626
p-Chloroaniline	106-47-8	ND	1.30	1.30
bis(2-Chloroethoxy)methane	111-91-1	ND	0.646	0.646
bis(2-Chloroethyl)ether	111-44-4	ND	0.432	0.432
bis(2-Chloroisopropyl)ether	108-60-1	ND	1.24	1.24
1-Chloronaphthalene	90-13-1	ND		
2-Chloronaphthalene	91-58-7	ND	2.05	2.05
2-Chlorophenol	95-57-8	ND	0.518	0.518
4-Chlorophenylphenyl ether	7005-72-3	ND	1.18	1.18

R E S U L T S (Cont'd)

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Project Sample ID MW-12 | Date Collected 08/27/96 | Instrument MSD1 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-01A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # P8197 | Date Prepared 08/30/96 17:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/05/96 14:50 | Reviewer SDL

Test Code 827SWA1T

Analyte	CAS #	Aliquot Mass/Volume 1070 (mL) Extract/Digestate Volume 1.0 (mL) Dilution Factor 1 Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	218-01-9	ND	0.593	0.593
Di-n-butylphthalate	84-74-2	ND	0.888	0.888
Di-n-octylphthalate	117-84-0	ND	1.73	1.73
Dibenz(a,h)anthracene	53-70-3	ND	0.693	0.693
Dibenz(a,j)acridine	224-42-0	ND		
Dibenzofuran	132-64-9	ND	1.07	1.07
1,2-Dichlorobenzene	95-50-1	ND	1.39	1.39
1,3-Dichlorobenzene	541-73-1	ND	1.50	1.50
1,4-Dichlorobenzene	106-46-7	ND	1.50	1.50
3,3'-Dichlorobenzidine	91-94-1	ND	0.818	0.818
2,4-Dichlorophenol	120-83-2	ND	0.843	0.843
2,6-Dichlorophenol	87-65-0	ND	0.775	0.775
Diethylphthalate	84-66-2	ND	0.838	0.838
p-Dimethylaminoazobenzene	60-11-7	ND	1.35	1.35
7,12-Dimethylbenz(a)anthracene	57-97-6	ND	1.04	1.04
Dimethylphenethylamine	122-09-8	ND	5.96	5.96
2,4-Dimethylphenol	105-67-9	ND	1.21	1.21
Dimethylphthalate	131-11-3	ND	0.784	0.784
4,6-Dinitro-2-methylphenol	534-52-1	ND	0.784	0.784
2,4-Dinitrophenol	51-28-5	ND	0.650	0.650
2,4-Dinitrotoluene	121-14-2	ND	0.909	0.909
2,6-Dinitrotoluene	606-20-2	ND	0.561	0.561
Diphenylamine/N-NitrosoDPA	122-39-4	ND	1.21	1.21
1,2-Diphenylhydrazine	122-66-7	ND		
Ethyl methanesulfonate	62-50-0	ND	0.474	0.474

R E S U L T S (Cont'd)

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Project Sample ID MW-12 | Date Collected 08/27/96 | Instrument MSD1 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-01A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # P8197 | Date Prepared 08/30/96 17:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/05/96 14:50 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1070 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	117-81-7	ND	1.09	1.09
Fluoranthene	206-44-0	ND	0.698	0.698
Fluorene	86-73-7	ND	0.732	0.732
Hexachlorobenzene	118-74-1	ND	0.666	0.666
Hexachlorobutadiene	87-68-3	ND	3.92	3.92
Hexachlorocyclopentadiene	77-47-4	ND	2.76	2.76
Hexachloroethane	67-72-1	ND	3.55	3.55
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.763	0.763
Isophorone	78-59-1	ND	0.607	0.607
Methyl methanesulfonate	66-27-3	ND	1.50	1.50
3-Methylcholanthrene	56-49-5	ND	4.23	4.23
2-Methylnaphthalene	91-57-6	ND	3.29	3.29
4-Methylphenol/3-Methylphenol	NO_CAS	ND	0.524	0.524
2-Methylphenol	95-48-7	ND	0.645	0.645
N-Nitroso-di-n-butylamine	924-16-3	ND	0.925	0.925
N-Nitroso-di-n-propylamine	621-64-7	ND	0.635	0.635
N-Nitrosodimethylamine	62-75-9	ND	1.46	1.46
N-Nitrosopiperidine	100-75-4	ND	0.907	0.907
Naphthalene	91-20-3	ND	2.84	2.84
1-Naphthylamine	134-32-7	ND	2.84	2.84
2-Naphthylamine	91-59-8	ND	1.99	1.99
2-Nitroaniline	88-74-4	ND	0.435	0.435
3-Nitroaniline	99-09-2	ND	0.972	0.972
4-Nitroaniline	100-01-6	ND	0.854	0.854
Nitrobenzene	98-95-3	ND	0.935	0.935

R E S U L T S (Cont'd)

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Project Sample ID MW-12
Lab Sample ID 9608968-01A
File # P8197
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 14:50

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1070 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	88-75-5	ND	1.07	1.07
4-Nitrophenol	100-02-7	ND	0.785	0.785
Pentachlorobenzene	608-93-5	ND	0.805	0.805
Pentachloronitrobenzene	82-68-8	ND	1.20	1.20
Pentachlorophenol	87-86-5	ND	1.07	1.07
Phenacetin	62-44-2	ND	0.745	0.745
Phenanthrene	85-01-8	ND	0.829	0.829
Phenol	108-95-2	ND	0.638	0.638
2-Picoline	109-06-8	ND	2.54	2.54
Pronamide	23950-58-5	ND	0.636	0.636
Pyrene	129-00-0	ND	0.428	0.428
Pyridine	110-86-1	ND	1.38	1.38
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	2.90	2.90
2,3,4,6-Tetrachlorophenol	58-90-2	ND	0.488	0.488
1,2,4-Trichlorobenzene	120-82-1	ND	3.05	3.05
2,4,5-Trichlorophenol	95-95-4	ND	0.716	0.716
2,4,6-Trichlorophenol	88-06-2	ND	1.90	1.90

R E S U L T S (Cont'd)

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Project Sample ID MW-12 | Date Collected 08/27/96 | Instrument MSD1 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-01A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # P8197 | Date Prepared 08/30/96 17:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/05/96 14:50 | Reviewer SDL

Test Code 827SWA1T

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	321-60-8	93.5	76.6	82	43	116
2-Fluorophenol	367-12-4	187	166	89	60	124
Nitrobenzene-d5	4165-60-0	93.5	91.7	98	45	114
Phenol-d5	4165-62-2	187	193	103	28	122
Terphenyl-d14	1718-51-0	93.5	104	112	66	122
2,4,6-Tribromophenol	118-79-6	187	193	103	26	123

RESULTS

Extraction Batch # 3520960830170000
Analysis Batch # MSMSD160905080401

Project Sample ID MW-10
Lab Sample ID 9608968-02A
File # P8198
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 15:30

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1050 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	83-32-9	ND	1.23	1.23
Acenaphthylene	208-96-8	ND	1.25	1.25
Acetophenone	98-86-2	ND	0.637	0.637
4-Aminobiphenyl	92-67-1	ND	1.62	1.62
Aniline	62-53-3	ND	1.71	1.71
Anthracene	120-12-7	ND	0.791	0.791
Benz(a)anthracene	56-55-3	ND	0.504	0.504
Benz(a)pyrene	50-32-8	ND	1.06	1.06
Benzidine	92-87-5	ND X	3.78	3.78
Benzo(b)fluoranthene	205-99-2	ND	1.04	1.04
Benzo(g,h,i)perylene	191-24-2	ND	0.905	0.905
Benzo(k)fluoranthene	207-08-9	ND	0.655	0.655
Benzoic acid	65-85-0	ND	2.67	2.67
Benzyl alcohol	100-51-6	ND	0.713	0.713
4-Bromophenylphenyl ether	101-55-3	ND	0.716	0.716
Butylbenzylphthalate	85-68-7	ND	0.848	0.848
4-Chloro-3-methylphenol	59-50-7	ND	0.638	0.638
p-Chloroaniline	106-47-8	ND	1.32	1.32
bis(2-Chloroethoxy)methane	111-91-1	ND	0.658	0.658
bis(2-Chloroethyl)ether	111-44-4	ND	0.440	0.440
bis(2-Chloroisopropyl)ether	108-60-1	ND	1.27	1.27
1-Chloronaphthalene	90-13-1	ND		
2-Chloronaphthalene	91-58-7	ND	2.09	2.09
2-Chlorophenol	95-57-8	ND	0.528	0.528
4-Chlorophenylphenyl ether	7005-72-3	ND	1.20	1.20

R E S U L T S (Cont'd)

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Project Sample ID MW-10 | Date Collected 08/27/96 | Instrument MSD1 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-02A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # P8198 | Date Prepared 08/30/96 17:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/05/96 15:30 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1050 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	218-01-9	ND	0.605	0.605
Di-n-butylphthalate	84-74-2	ND	0.905	0.905
Di-n-octylphthalate	117-84-0	ND	1.76	1.76
Dibenz(a,h)anthracene	53-70-3	ND	0.706	0.706
Dibenz(a,j)acridine	224-42-0	ND		
Dibenzofuran	132-64-9	ND	1.09	1.09
1,2-Dichlorobenzene	95-50-1	ND	1.42	1.42
1,3-Dichlorobenzene	541-73-1	ND	1.52	1.52
1,4-Dichlorobenzene	106-46-7	ND	1.52	1.52
3,3'-Dichlorobenzidine	91-94-1	ND	0.833	0.833
2,4-Dichlorophenol	120-83-2	ND	0.859	0.859
2,6-Dichlorophenol	87-65-0	ND	0.790	0.790
Diethylphthalate	84-66-2	ND	0.854	0.854
p-Dimethylaminoazobenzene	60-11-7	ND	1.37	1.37
7,12-Dimethylbenz(a)anthracene	57-97-6	ND	1.06	1.06
Dimethylphenethylamine	122-09-8	ND	6.08	6.08
2,4-Dimethylphenol	105-67-9	ND	1.23	1.23
Dimethylphthalate	131-11-3	ND	0.799	0.799
4,6-Dinitro-2-methylphenol	534-52-1	ND	0.799	0.799
2,4-Dinitrophenol	51-28-5	ND	0.663	0.663
2,4-Dinitrotoluene	121-14-2	ND	0.927	0.927
2,6-Dinitrotoluene	606-20-2	ND	0.571	0.571
Diphenylamine/N-NitrosoDPA	122-39-4	ND	1.23	1.23
1,2-Diphenylhydrazine	122-66-7	ND		
Ethyl methanesulfonate	62-50-0	ND	0.483	0.483

R E S U L T S (Cont'd)

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Project Sample ID MW-10
Lab Sample ID 9608968-02A
File # P8198
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 15:30

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1050 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	117-81-7	102	1.11	1.11
Fluoranthene	206-44-0	ND	0.711	0.711
Fluorene	86-73-7	ND	0.746	0.746
Hexachlorobenzene	118-74-1	ND	0.679	0.679
Hexachlorobutadiene	87-68-3	ND	3.99	3.99
Hexachlorocyclopentadiene	77-47-4	ND	2.81	2.81
Hexachloroethane	67-72-1	ND	3.62	3.62
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.777	0.777
Isophorone	78-59-1	ND	0.619	0.619
Methyl methanesulfonate	66-27-3	ND	1.53	1.53
3-Methylcholanthrene	56-49-5	ND	4.31	4.31
2-Methylnaphthalene	91-57-6	ND	3.35	3.35
4-Methylphenol/3-Methylphenol	NO_CAS	ND	0.534	0.534
2-Methylphenol	95-48-7	ND	0.657	0.657
N-Nitroso-di-n-butylamine	924-16-3	ND	0.943	0.943
N-Nitroso-di-n-propylamine	621-64-7	ND	0.647	0.647
N-Nitrosodimethylamine	62-75-9	ND	1.49	1.49
N-Nitrosopiperidine	100-75-4	ND	0.924	0.924
Naphthalene	91-20-3	ND	2.90	2.90
1-Naphthylamine	134-32-7	ND	2.90	2.90
2-Naphthylamine	91-59-8	ND	2.03	2.03
2-Nitroaniline	88-74-4	ND	0.443	0.443
3-Nitroaniline	99-09-2	ND	0.990	0.990
4-Nitroaniline	100-01-6	ND	0.870	0.870
Nitrobenzene	98-95-3	ND	0.952	0.952

R E S U L T S (Cont'd)

Work Order # 9608968

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Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Project Sample ID MW-10 | Date Collected 08/27/96 | Instrument MSD1 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-02A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # P8198 | Date Prepared 08/30/96 17:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/05/96 15:30 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1050 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	88-75-5	ND	1.10	1.10
4-Nitrophenol	100-02-7	ND	0.800	0.800
Pentachlorobenzene	608-93-5	ND	0.820	0.820
Pentachloronitrobenzene	82-68-8	ND	1.22	1.22
Pentachlorophenol	87-86-5	ND	1.10	1.10
Phenacetin	62-44-2	ND	0.759	0.759
Phenanthrene	85-01-8	ND	0.845	0.845
Phenol	108-95-2	ND	0.650	0.650
2-Picoline	109-06-8	ND	2.59	2.59
Pronamide	23950-58-5	ND	0.648	0.648
Pyrene	129-00-0	ND	0.436	0.436
Pyridine	110-86-1	ND	1.41	1.41
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	2.95	2.95
2,3,4,6-Tetrachlorophenol	58-90-2	ND	0.497	0.497
1,2,4-Trichlorobenzene	120-82-1	ND	3.10	3.10
2,4,5-Trichlorophenol	95-95-4	ND	0.730	0.730
2,4,6-Trichlorophenol	88-06-2	ND	1.93	1.93

R E S U L T S (Cont'd)

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Project Sample ID MW-10
Lab Sample ID 9608968-02A
File # P8198
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 15:30

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	321-60-8	95.2	77.2	81	43	116
2-Fluorophenol	367-12-4	190	167	88	60	124
Nitrobenzene-d5	4165-60-0	95.2	89.9	94	45	114
Phenol-d5	4165-62-2	190	191	100	28	122
Terphenyl-d14	1718-51-0	95.2	99.8	105	66	122
2,4,6-Tribromophenol	118-79-6	190	174	92	26	123

RESULTS

Extraction Batch # 3520960830170000
Analysis Batch # MSMSD160905080401

Project Sample ID FB-1
Lab Sample ID 9608968-08A
File # P8199
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 16:10

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1020 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	83-32-9	ND	1.26	1.26
Acenaphthylene	208-96-8	ND	1.28	1.28
Acetophenone	98-86-2	ND	0.656	0.656
4-Aminobiphenyl	92-67-1	ND	1.67	1.67
Aniline	62-53-3	ND	1.76	1.76
Anthracene	120-12-7	ND	0.815	0.815
Benz(a)anthracene	56-55-3	ND	0.519	0.519
Benz(a)pyrene	50-32-8	ND	1.09	1.09
Benzidine	92-87-5	ND X	3.89	3.89
Benzo(b)fluoranthene	205-99-2	ND	1.07	1.07
Benzo(g,h,i)perylene	191-24-2	ND	0.931	0.931
Benzo(k)fluoranthene	207-08-9	ND	0.675	0.675
Benzoic acid	65-85-0	ND	2.75	2.75
Benzyl alcohol	100-51-6	ND	0.734	0.734
4-Bromophenylphenyl ether	101-55-3	ND	0.737	0.737
Butylbenzylphthalate	85-68-7	ND	0.873	0.873
4-Chloro-3-methylphenol	59-50-7	ND	0.657	0.657
p-Chloroaniline	106-47-8	ND	1.36	1.36
bis(2-Chloroethoxy)methane	111-91-1	ND	0.677	0.677
bis(2-Chloroethyl)ether	111-44-4	ND	0.453	0.453
bis(2-Chloroisopropyl)ether	108-60-1	ND	1.30	1.30
1-Chloronaphthalene	90-13-1	ND		
2-Chloronaphthalene	91-58-7	ND	2.15	2.15
2-Chlorophenol	95-57-8	ND	0.543	0.543
4-Chlorophenylphenyl ether	7005-72-3	ND	1.24	1.24

R E S U L T S (Cont'd)

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Project Sample ID FB-1
Lab Sample ID 9608968-08A
File # P8199
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 16:10

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1020 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	218-01-9	ND	0.623	0.623
Di-n-butylphthalate	84-74-2	ND	0.931	0.931
Di-n-octylphthalate	117-84-0	ND	1.81	1.81
Dibenz(a,h)anthracene	53-70-3	ND	0.726	0.726
Dibenz(a,j)acridine	224-42-0	ND		
Dibenzofuran	132-64-9	ND	1.12	1.12
1,2-Dichlorobenzene	95-50-1	ND	1.46	1.46
1,3-Dichlorobenzene	541-73-1	ND	1.57	1.57
1,4-Dichlorobenzene	106-46-7	ND	1.57	1.57
3,3'-Dichlorobenzidine	91-94-1	ND	0.858	0.858
2,4-Dichlorophenol	120-83-2	ND	0.884	0.884
2,6-Dichlorophenol	87-65-0	ND	0.813	0.813
Diethylphthalate	84-66-2	ND	0.879	0.879
p-Dimethylaminoazobenzene	60-11-7	ND	1.41	1.41
7,12-Dimethylbenz(a)anthracene	57-97-6	ND	1.09	1.09
Dimethylphenethylamine	122-09-8	ND	6.25	6.25
2,4-Dimethylphenol	105-67-9	ND	1.26	1.26
Dimethylphthalate	131-11-3	ND	0.823	0.823
4,6-Dinitro-2-methylphenol	534-52-1	ND	0.823	0.823
2,4-Dinitrophenol	51-28-5	ND	0.682	0.682
2,4-Dinitrotoluene	121-14-2	ND	0.954	0.954
2,6-Dinitrotoluene	606-20-2	ND	0.588	0.588
Diphenylamine/N-NitrosoDPA	122-39-4	ND	1.26	1.26
1,2-Diphenylhydrazine	122-66-7	ND		
Ethyl methanesulfonate	62-50-0	ND	0.497	0.497

R E S U L T S (Cont'd)

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Project Sample ID FB-1 | Date Collected 08/28/96 | Instrument MSD1 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-08A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # P8199 | Date Prepared 08/30/96 17:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/05/96 16:10 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1020 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	117-81-7	ND	1.15	1.15
Fluoranthene	206-44-0	ND	0.732	0.732
Fluorene	86-73-7	ND	0.768	0.768
Hexachlorobenzene	118-74-1	ND	0.699	0.699
Hexachlorobutadiene	87-68-3	ND	4.11	4.11
Hexachlorocyclopentadiene	77-47-4	ND	2.89	2.89
Hexachloroethane	67-72-1	ND	3.73	3.73
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.800	0.800
Isophorone	78-59-1	ND	0.637	0.637
Methyl methanesulfonate	66-27-3	ND	1.58	1.58
3-Methylcholanthrene	56-49-5	ND	4.44	4.44
2-Methylnaphthalene	91-57-6	ND	3.45	3.45
4-Methylphenol/3-Methylphenol	NO_CAS	ND	0.550	0.550
2-Methylphenol	95-48-7	ND	0.676	0.676
N-Nitroso-di-n-butylamine	924-16-3	ND	0.971	0.971
N-Nitroso-di-n-propylamine	621-64-7	ND	0.666	0.666
N-Nitrosodimethylamine	62-75-9	ND	1.53	1.53
N-Nitrosopiperidine	100-75-4	ND	0.951	0.951
Naphthalene	91-20-3	ND	2.98	2.98
1-Naphthylamine	134-32-7	ND	2.98	2.98
2-Naphthylamine	91-59-8	ND	2.09	2.09
2-Nitroaniline	88-74-4	ND	0.456	0.456
3-Nitroaniline	99-09-2	ND	1.02	1.02
4-Nitroaniline	100-01-6	ND	0.896	0.896
Nitrobenzene	98-95-3	ND	0.980	0.980

R E S U L T S (Cont'd)

Extraction Batch # 3520960830170000
Analysis Batch # MSMSD160905080401

Project Sample ID FB-1
Lab Sample ID 9608968-08A
File # P8199
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 16:10

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1020 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	88-75-5	ND	1.13	1.13
4-Nitrophenol	100-02-7	ND	0.824	0.824
Pentachlorobenzene	608-93-5	ND	0.844	0.844
Pentachloronitrobenzene	82-68-8	ND	1.25	1.25
Pentachlorophenol	87-86-5	ND	1.13	1.13
Phenacetin	62-44-2	ND	0.781	0.781
Phenanthrene	85-01-8	ND	0.870	0.870
Phenol	108-95-2	ND	0.670	0.670
2-Picoline	109-06-8	ND	2.67	2.67
Pronamide	23950-58-5	ND	0.667	0.667
Pyrene	129-00-0	ND	0.449	0.449
Pyridine	110-86-1	ND	1.45	1.45
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	3.04	3.04
2,3,4,6-Tetrachlorophenol	58-90-2	ND	0.512	0.512
1,2,4-Trichlorobenzene	120-82-1	ND	3.20	3.20
2,4,5-Trichlorophenol	95-95-4	ND	0.751	0.751
2,4,6-Trichlorophenol	88-06-2	ND	1.99	1.99

R E S U L T S (Cont'd)

Work Order # 9608968

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Project Sample ID FB-1
Lab Sample ID 9608968-08A
File # P8199
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 16:10

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	321-60-8	98.0	96.1	98	43	116
2-Fluorophenol	367-12-4	196	190	97	60	124
Nitrobenzene-d5	4165-60-0	98.0	105	107	45	114
Phenol-d5	4165-62-2	196	222	113	28	122
Terphenyl-d14	1718-51-0	98.0	125	128 Q	66	122
2,4,6-Tribromophenol	118-79-6	196	219	112	26	123

LABORATORY BLANK INFORMATION

Extraction Batch # 3520960830170000
Analysis Batch # MSMSD160905080401

Lab Sample ID BLK963326
File # P8190
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 10:28

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	ND	1.29	1.29
Acenaphthylene	ND	1.31	1.31
Acetophenone	ND	0.669	0.669
4-Aminobiphenyl	ND	1.70	1.70
Aniline	ND	1.80	1.80
Anthracene	ND	0.831	0.831
Benz(a)anthracene	ND	0.529	0.529
Benz(a)pyrene	ND	1.11	1.11
Benzidine	ND	3.97	3.97
Benzo(b)fluoranthene	ND	1.09	1.09
Benzo(g,h,i)perylene	ND	0.950	0.950
Benzo(k)fluoranthene	ND	0.688	0.688
Benzoic acid	ND	2.80	2.80
Benzyl alcohol	ND	0.749	0.749
4-Bromophenylphenyl ether	ND	0.752	0.752
Butylbenzylphthalate	ND	0.890	0.890
4-Chloro-3-methylphenol	ND	0.670	0.670
p-Chloroaniline	ND	1.39	1.39
bis(2-Chloroethoxy)methane	ND	0.691	0.691
bis(2-Chloroethyl)ether	ND	0.462	0.462
bis(2-Chloroisopropyl)ether	ND	1.33	1.33
1-Chloronaphthalene	ND	10.0	10.0
2-Chloronaphthalene	ND	2.19	2.19
2-Chlorophenol	ND	0.554	0.554
4-Chlorophenylphenyl ether	ND	1.26	1.26

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # 3520960830170000
Analysis Batch # MSMSD160905080401

Lab Sample ID BLK963326
File # P8190
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 10:28

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	ND	0.635	0.635
Di-n-butylphthalate	ND	0.950	0.950
Di-n-octylphthalate	ND	1.85	1.85
Dibenz(a,h)anthracene	ND	0.741	0.741
Dibenz(a,j)acridine	ND	10.0	10.0
Dibenzofuran	ND	1.14	1.14
1,2-Dichlorobenzene	ND	1.49	1.49
1,3-Dichlorobenzene	ND	1.60	1.60
1,4-Dichlorobenzene	ND	1.60	1.60
3,3'-Dichlorobenzidine	ND	0.875	0.875
2,4-Dichlorophenol	ND	0.902	0.902
2,6-Dichlorophenol	ND	0.829	0.829
Diethylphthalate	ND	0.897	0.897
p-Dimethylaminoazobenzene	ND	1.44	1.44
7,12-Dimethylbenz(a)anthracene	ND	1.11	1.11
Dimethylphenethylamine	ND	6.38	6.38
2,4-Dimethylphenol	ND	1.29	1.29
Dimethylphthalate	ND	0.839	0.839
4,6-Dinitro-2-methylphenol	ND	0.839	0.839
2,4-Dinitrophenol	ND	0.696	0.696
2,4-Dinitrotoluene	ND	0.973	0.973
2,6-Dinitrotoluene	ND	0.600	0.600
Diphenylamine/N-NitrosoDPA	ND	1.29	1.29
1,2-Diphenylhydrazine	ND	100	100
Ethyl methanesulfonate	ND	0.507	0.507

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # 3520960830170000
Analysis Batch # MSMSD160905080401

Lab Sample ID BLK963326
File # P8190
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 10:28

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	ND	1.17	1.17
Fluoranthene	ND	0.747	0.747
Fluorene	ND	0.783	0.783
Hexachlorobenzene	ND	0.713	0.713
Hexachlorobutadiene	ND	4.19	4.19
Hexachlorocyclopentadiene	ND	2.95	2.95
Hexachloroethane	ND	3.80	3.80
Indeno(1,2,3-cd)pyrene	ND	0.816	0.816
Isophorone	ND	0.650	0.650
Methyl methanesulfonate	ND	1.61	1.61
3-Methylcholanthrene	ND	4.53	4.53
2-Methylnaphthalene	ND	3.52	3.52
4-Methylphenol/3-Methylphenol	ND	0.561	0.561
2-Methylphenol	ND	0.690	0.690
N-Nitroso-di-n-butylamine	ND	0.990	0.990
N-Nitroso-di-n-propylamine	ND	0.679	0.679
N-Nitrosodimethylamine	ND	1.56	1.56
N-Nitrosopiperidine	ND	0.970	0.970
Naphthalene	ND	3.04	3.04
1-Naphthylamine	ND	3.04	3.04
2-Naphthylamine	ND	2.13	2.13
2-Nitroaniline	ND	0.465	0.465
3-Nitroaniline	ND	1.04	1.04
4-Nitroaniline	ND	0.914	0.914
Nitrobenzene	ND	1.00	1.00

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # 3520960830170000
Analysis Batch # MSMSD160905080401

Lab Sample ID BLK963326
File # P8190
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 10:28

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	ND	1.15	1.15
4-Nitrophenol	ND	0.840	0.840
Pentachlorobenzene	ND	0.861	0.861
Pentachloronitrobenzene	ND	1.28	1.28
Pentachlorophenol	ND	1.15	1.15
Phenacetin	ND	0.797	0.797
Phenanthrene	ND	0.887	0.887
Phenol	ND	0.683	0.683
2-Picoline	ND	2.72	2.72
Pronamide	ND	0.680	0.680
Pyrene	ND	0.458	0.458
Pyridine	ND	1.48	1.48
1,2,4,5-Tetrachlorobenzene	ND	3.10	3.10
2,3,4,6-Tetrachlorophenol	ND	0.522	0.522
1,2,4-Trichlorobenzene	ND	3.26	3.26
2,4,5-Trichlorophenol	ND	0.766	0.766
2,4,6-Trichlorophenol	ND	2.03	2.03

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # 3520960830170000
Analysis Batch # MSMSD160905080401

Lab Sample ID BLK963326
File # P8190
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 10:28

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Surrogate(s)	Spiked Conc. ug/L	Measured Conc. ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	100	88.5	88	43	116
2-Fluorophenol	200	204	102	60	124
Nitrobenzene-d5	100	106	106	45	114
Phenol-d5	200	237	119	28	122
Terphenyl-d14	100	112	112	66	122
2,4,6-Tribromophenol	200	196	98	26	123

09/18/96 11:07:56

LABORATORY CONTROL SAMPLE

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Work Order # 9608968

Method Semivolatiles by SW8270B
Test Code 827SWA1T
Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 09:48
Instrument MSD1
Column
Analyst MCL
Reviewer SDL
Reporting Subset
Spikes Subset
Specs Subset
Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AQ	100 uL
SP-1-729-C	250 uL		

LCS Lab Sample ID LCS965809 File ID P8188

LCS Duplicate Lab Sample ID LCSD965809 File ID P8189

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
Acenaphthene	100	95.7	96	100	91.2	91	76	133	5.4	21
Acenaphthylene	100	90.0	90	100	88.2	88	74	134	2.2	21
Aniline	100	42.7	43	100	37.1	37	22	113	15	32
Anthracene	100	91.2	91	100	89.2	89	68	128	2.2	21
Benz(a)anthracene	100	98.2	98	100	93.5	93	82	132	5.2	21
Benz(a)pyrene	100	90.4	90	100	87.4	87	77	141	3.4	19
Benzidine	100	ND	NC	100	ND	NC	0.1	75	NC	263
Benzo(b)fluoranthene	100	93.1	93	100	102	102	73	135	9.2	28
Benzo(g,h,i)perylene	100	93.0	93	100	92.8	93	74	144	0	20
Benzo(k)fluoranthene	100	96.7	97	100	107	107	64	148	9.8	26
Benzoic acid	100	170	170	100	173	173	0.1	230	1.8	140
Benzyl alcohol	100	92.8	93	100	87.2	87	66	138	6.7	19
4-Bromophenylphenyl ether	100	90.8	91	100	91.9	92	69	127	1.1	18
Butylbenzylphthalate	100	104	104	100	106	106	69	150	1.9	25
4-Chloro-3-methylphenol	100	106	106	100	103	103	64	141	2.9	19
p-Chloroaniline	100	65.2	65	100	59.7	60	50	134	8.0	26
bis(2-Chloroethoxy)methane	100	94.2	94	100	91.6	92	75	137	2.2	21
bis(2-Chloroethyl)ether	100	94.7	95	100	85.1	85	76	124	11	21
bis(2-Chloroisopropyl)ether	100	92.9	93	100	84.4	84	68	128	10	23
2-Chloronaphthalene	100	95.8	96	100	88.6	89	72	118	7.6	16

LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 09:48

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AQ	100 uL
SP-1-729-C	250 uL		

LCS Lab Sample ID LCS965809 File ID P8188

LCS Duplicate Lab Sample ID LCSD965809 File ID P8189

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
2-Chlorophenol	100	103	103	100	97.1	97	81	117	6.0	17
4-Chlorophenylphenyl ether	100	93.0	93	100	88.6	89	79	133	4.4	18
Chrysene	100	109	109	100	109	109	85	133	0	21
Di-n-butylphthalate	100	93.1	93	100	91.6	92	68	135	1.1	21
Di-n-octylphthalate	100	95.3	95	100	94.8	95	54	146	0	22
Dibenz(a,h)anthracene	100	93.8	94	100	89.2	89	73	145	5.5	20
Dibenzofuran	100	94.6	95	100	87.1	87	82	130	8.8	16
1,2-Dichlorobenzene	100	93.2	93	100	83.7	84	73	121	10	22
1,3-Dichlorobenzene	100	92.4	92	100	84.0	84	70	120	9.1	27
1,4-Dichlorobenzene	100	91.8	92	100	84.6	85	70	120	7.9	24
3,3'-Dichlorobenzidine	100	76.5	77	100	73.1	73	49	140	5.3	33
2,4-Dichlorophenol	100	104	104	100	99.4	99	60	135	4.9	19
Diethylphthalate	100	94.6	95	100	89.6	90	83	123	5.4	15
2,4-Dimethylphenol	100	76.9	77	100	71.8	72	32	119	6.7	33
Dimethylphthalate	100	96.9	97	100	92.1	92	84	130	5.3	21
4,6-Dinitro-2-methylphenol	100	126	126	100	120	120	53	163	4.9	18
2,4-Dinitrophenol	100	129	129	100	115	115	24	191	12	23
2,4-Dinitrotoluene	100	103	103	100	93.9	94	72	139	9.1	20
2,6-Dinitrotoluene	100	95.6	96	100	87.4	87	76	140	9.8	18
Diphenylamine/N-NitrosoDPA	100	67.6	68	100	69.1	69	47	117	1.5	21

LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Work Order # 9608968

Method Semivolatiles by SW8270B
Test Code 827SWA1T
Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 09:48
Instrument MSD1
Column
Analyst MCL
Reviewer SDL
Reporting Subset
Spikes Subset
Specs Subset
Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AQ	100 uL
SP-1-729-C	250 uL		

LCS Lab Sample ID LCS965809 File ID P8188

LCS Duplicate Lab Sample ID LCSD965809 File ID P8189

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
bis(2-Ethylhexyl)phthalate	100	102	102	100	102	102	74	144	0	22
Fluoranthene	100	94.9	95	100	90.3	90	77	129	5.4	19
Fluorene	100	94.2	94	100	89.7	90	79	121	4.4	17
Hexachlorobenzene	100	90.1	90	100	90.2	90	66	126	0	19
Hexachlorobutadiene	100	83.7	84	100	82.4	82	51	147	2.4	20
Hexachlorocyclopentadiene	100	59.2	59	100	51.0	51	0.1	148	14	49
Hexachloroethane	100	92.6	93	100	83.8	84	62	127	10	28
Indeno(1,2,3-cd)pyrene	100	92.3	92	100	92.2	92	75	141	0	19
Isophorone	100	92.1	92	100	89.7	90	81	133	2.2	18
2-Methylnaphthalene	100	86.3	86	100	81.9	82	63	134	4.8	21
4-Methylphenol/3-Methylphenol	100	103	103	100	95.0	95	62	126	8.1	17
2-Methylphenol	100	108	108	100	98.6	99	72	126	8.7	19
N-Nitroso-di-n-propylamine	100	86.0	86	100	79.3	79	68	128	8.5	21
N-Nitrosodimethylamine	100	89.1	89	100	82.7	83	27	155	7.0	24
Naphthalene	100	91.1	91	100	87.0	87	70	133	4.5	17
2-Nitroaniline	100	94.8	95	100	87.7	88	69	140	7.6	24
3-Nitroaniline	100	88.5	88	100	78.0	78	69	133	12	22
4-Nitroaniline	100	73.2	73	100	63.6	64	59	137	13	19
Nitrobenzene	100	94.5	95	100	87.2	87	74	142	8.8	22
2-Nitrophenol	100	110	110	100	104	104	67	149	5.6	19

LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 08/30/96 17:00:
Date Analyzed 09/05/96 09:48

Instrument MSD1
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AQ	100 uL
SP-1-729-C	250 uL		

Analyte	LCS Lab Sample ID LCS965809 File ID P8188			LCS Duplicate Lab Sample ID LCSD965809 File ID P8189			Recovery Spec. Limits		RPD	
	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Low %	High %	Result %	Spec. Limit %
4-Nitrophenol	100	96.6	97	100	90.2	90	56	131	7.5	20
Pentachlorophenol	100	109	109	100	97.0	97	47	143	12	18
Phenanthrene	100	94.6	95	100	94.8	95	74	132	0	17
Phenol	100	105	105	100	99.7	100	70	123	4.9	18
Pyrene	100	104	104	100	101	101	74	148	2.9	21
1,2,4-Trichlorobenzene	100	88.9	89	100	84.8	85	71	129	4.6	16
2,4,5-Trichlorophenol	100	113	113	100	106	106	80	132	6.4	15
2,4,6-Trichlorophenol	100	107	107	100	98.7	99	76	128	7.8	15

Surrogate(s)									
2-Fluorobiphenyl	100	90.4	90	100	85.1	85	43	116	
2-Fluorophenol	200	205	102	200	184	92	60	124	
Nitrobenzene-d5	100	104	104	100	99.6	100	45	114	
Phenol-d5	200	236	118	200	221	111	28	122	
Terphenyl-d14	100	124	124 Q	100	120	120	66	122	
2,4,6-Tribromophenol	200	213	106	200	183	92	26	123	

09/18/96 11:07:56

MATRIX SPIKE(S)

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Work Order # 9608968

Project Sample ID _____

Method Semivolatiles by SW8270B

Test Code 827SWAMS

Date Collected 08/28/96

Date Received 08/29/96

Date Prepared 08/30/96 17:00:

Date Analyzed 09/05/96 12:29

Instrument MSD1

Column _____

Analyst MCL

Reviewer SDL

Reporting Subset ___ ___

Spikes Subset ___ ___

Specs Subset ___ ___

Matrix W

Report As received

% Moisture _____

Spike Sol'n #	Vol. Added
SP-1-711-H	100 uL
SP-1-712-F	100 uL
Surrogate Sol'n	**Vol. Added**
SP-1-694-AQ	100 uL

Sample	Spiked Sample	Spiked Sample Dup
Lab Sample ID	Lab Sample ID	Lab Sample ID
9608934-01A	9608934-02A MS	9608934-03A MSD
File # P8191	File # P8192	File # P8193
Aliquot Mass/Vol	Aliquot Mass/Vol	Aliquot Mass/Vol
985 (mL)	970 (mL)	985 (mL)
Extract Mass/Vol	Extract Mass/Vol	Extract Mass/Vol
1.0 (mL)	1.0 (mL)	1.0 (mL)
Dil Fact. 1	Dil Fact. 1	Dil Fact. 1

Analyte	Spike Sol'n Conc. ug/mL	Measured Conc. ug/L	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Recovery Specification Limits Low %	High %	RPD Result %	Specification Limit %
Acenaphthene	1000	ND	103	97.4	94	102	93.8	92	65	109	2.2	16
4-Chloro-3-methylphenol	2000	ND	206	185	90	203	184	90	59	129	0	20
2-Chlorophenol	2000	ND	206	176	86	203	181	89	62	118	3.4	22
1,4-Dichlorobenzene	1000	ND	103	86.9	84	102	88.7	87	55	119	3.5	23
2,4-Dinitrotoluene	1000	ND	103	98.0	95	102	92.4	91	61	123	4.3	17
N-Nitroso-di-n-propylamine	1000	ND	103	74.5	72	102	71.9	71	56	118	1.4	17
4-Nitrophenol	2000	ND	206	159	77	203	158	78	26	132	1.3	21
Pentachlorophenol	2000	ND	206	196	95	203	196	97	22	124	2.1	26
Phenol	2000	ND	206	166	80	203	167	82	63	129	2.5	18
Pyrene	1000	ND	103	107	104	102	107	105	65	115	0.96	17
1,2,4-Trichlorobenzene	1000	ND	103	93.7	91	102	90.2	89	65	121	2.2	19

MATRIX SPIKE(S) (Cont'd)

Extraction Batch # 3520960830170000

Analysis Batch # MSMSD160905080401

Work Order # 9608968

Project Sample ID

Method Semivolatiles by SW8270B

Test Code 827SWAMS

Date Collected 08/28/96

Date Received 08/29/96

Date Prepared 08/30/96 17:00:

Date Analyzed 09/05/96 12:29

Instrument MSD1

Column

Analyst MCL

Reviewer SDL

Reporting Subset

Spikes Subset

Specs Subset

Matrix W

Report As received

% Moisture

Spike Sol'n #	Vol. Added	Sample Lab Sample ID	Spiked Sample Lab Sample ID	Spiked Sample Dup Lab Sample ID	Recovery Specification Limits	RPD
SP-1-711-H	100 uL	9608934-01A	9608934-02A MS	9608934-03A MSD		
SP-1-712-F	100 uL	File # P8191	File # P8192	File # P8193		
		Aliquot Mass/Vol 985 (mL)	Aliquot Mass/Vol 970 (mL)	Aliquot Mass/Vol 985 (mL)		
Surrogate Sol'n	Vol. Added	Extract Mass/Vol 1.0 (mL)	Extract Mass/Vol 1.0 (mL)	Extract Mass/Vol 1.0 (mL)		
SP-1-694-AQ	100 uL	Dil Fact. 1	Dil Fact. 1	Dil Fact. 1		

Analyte	Spike Sol'n Conc. ug/mL	Measured Conc. ug/L	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Low %	High %	Result %	Specification Limit %
Surrogate(s)												
2-Fluorobiphenyl	1000	78.8	103	70.8	69	102	67.5	66	43	116		
2-Fluorophenol	2000	166	206	171	83	203	182	90	60	124		
Nitrobenzene-d5	1000	92.1	103	99.1	96	102	98.5	97	45	114		
Phenol-d5	2000	190	206	206	100	203	207	102	28	122		
Terphenyl-d14	1000	112	103	123	119	102	117	115	66	122		
2,4,6-Tribromophenol	2000	173	206	195	95	203	191	94	26	123		

ANALYSIS BATCH SUMMARY

Analysis Batch # MSMSD260910090501

Work Order # 9608968

Method Semivolatiles by GC/MS
Test Code 827SWA1T
Initial Calibration # MSD2960907100100
Calibration Date 09/07/96

Analysis Start Date/Time 09/10/96 09:05:00
Analysis Stop Date/Time 09/10/96 20:41:00

Instrument MSD2
Analyst MCL
Reviewer SDL

Sequence/Analysis Time		Project Sample ID	Lab Sample ID	Sample Type	Analysis File #
1	09/10/96 09:05		TUNE	GC/MS tune files	Q9906
2	09/10/96 09:26		SSTD050	Continuing Calibration Verification	Q9907
3	09/10/96 10:06		LCS965831	Lab Control Sample	Q9908
4	09/10/96 10:46		LCSD965831	Lab Control Sample Duplicate	Q9909
8	09/10/96 13:24		BLK963336	Blank, Method	Q9913
11	09/10/96 15:23		9609002-01A	Sample	Q9916
12	09/10/96 16:03		9609002-02A	Sample	Q9917
13	09/10/96 16:43		9609002-03A	Sample	Q9918
14	09/10/96 17:22	MW-23	9608968-03A	Sample	Q9919
15	09/10/96 18:02	MW-24	9608968-04A	Sample	Q9920
16	09/10/96 18:42	MW-7	9608968-05A	Sample	Q9921
17	09/10/96 19:21	MW-9	9608968-06A	Sample	Q9922
18	09/10/96 20:01	MW-6	9608968-07A	Sample	Q9923
19	09/10/96 20:41		DCS965832	Detectability Check Sample	Q9924

RESULTS

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260910090501

Project Sample ID MW-23
Lab Sample ID 9608968-03A
File # Q9919
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 17:22

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	83-32-9	ND	0.606	0.606
Acenaphthylene	208-96-8	ND	0.494	0.494
Acetophenone	98-86-2	ND	0.542	0.542
4-Aminobiphenyl	92-67-1	ND	0.489	0.489
Aniline	62-53-3	ND	0.686	0.686
Anthracene	120-12-7	ND	0.284	0.284
Benz(a)anthracene	56-55-3	ND	2.64	2.64
Benz(a)pyrene	50-32-8	ND	0.375	0.375
Benzidine	92-87-5	ND Y	1.76	1.76
Benzo(b)fluoranthene	205-99-2	ND	0.525	0.525
Benzo(g,h,i)perylene	191-24-2	ND	0.509	0.509
Benzo(k)fluoranthene	207-08-9	ND	0.726	0.726
Benzoic acid	65-85-0	ND	5.69	5.69
Benzyl alcohol	100-51-6	ND	0.656	0.656
4'Bromophenylphenyl ether	101-55-3	ND	0.453	0.453
Butylbenzylphthalate	85-68-7	ND	0.744	0.744
4-Chloro-3-methylphenol	59-50-7	ND	0.410	0.410
p-Chloroaniline	106-47-8	ND	0.508	0.508
bis(2-Chloroethoxy)methane	111-91-1	ND	0.502	0.502
bis(2-Chloroethyl)ether	111-44-4	ND	0.697	0.697
bis(2-Chloroisopropyl)ether	108-60-1	ND	0.608	0.608
1-Chloronaphthalene	90-13-1	ND		
2-Chloronaphthalene	91-58-7	ND	0.684	0.684
2-Chlorophenol	95-57-8	ND	0.662	0.662
4-Chlorophenylphenyl ether	7005-72-3	ND	0.224	0.224

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-23 | Date Collected 08/27/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-03A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9919 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 17:22 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	218-01-9	ND	0.732	0.732
Di-n-butylphthalate	84-74-2	ND	0.262	0.262
Di-n-octylphthalate	117-84-0	ND	0.731	0.731
Dibenz(a,h)anthracene	53-70-3	ND	0.413	0.413
Dibenz(a,j)acridine	224-42-0	ND		
Dibenzofuran	132-64-9	ND	0.575	0.575
1,2-Dichlorobenzene	95-50-1	ND	0.658	0.658
1,3-Dichlorobenzene	541-73-1	ND	0.623	0.623
1,4-Dichlorobenzene	106-46-7	ND	0.713	0.713
3,3'-Dichlorobenzidine	91-94-1	ND	0.660	0.660
2,4-Dichlorophenol	120-83-2	ND	0.511	0.511
2,6-Dichlorophenol	87-65-0	ND	0.666	0.666
Diethylphthalate	84-66-2	ND	0.625	0.625
p-Dimethylaminoazobenzene	60-11-7	ND	0.810	0.810
7,12-Dimethylbenz(a)anthracene	57-97-6	ND	0.747	0.747
Dimethylphenethylamine	122-09-8	ND	9.03	9.03
2,4-Dimethylphenol	105-67-9	ND	1.10	1.10
Dimethylphthalate	131-11-3	ND	0.565	0.565
4,6-Dinitro-2-methylphenol	534-52-1	ND	1.12	1.12
2,4-Dinitrophenol	51-28-5	ND	2.40	2.40
2,4-Dinitrotoluene	121-14-2	ND	0.660	0.660
2,6-Dinitrotoluene	606-20-2	ND	0.469	0.469
Diphenylamine/N-NitrosoDPA	122-39-4	ND	0.530	0.530
1,2-Diphenylhydrazine	122-66-7	ND		
Ethyl methanesulfonate	62-50-0	ND	0.746	0.746

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-23
Lab Sample ID 9608968-03A
File # Q9919
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 17:22

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	117-81-7	ND	0.722	0.722
Fluoranthene	206-44-0	ND	0.417	0.417
Fluorene	86-73-7	ND	0.410	0.410
Hexachlorobenzene	118-74-1	ND	0.329	0.329
Hexachlorobutadiene	87-68-3	ND	0.735	0.735
Hexachlorocyclopentadiene	77-47-4	ND	4.09	4.09
Hexachloroethane	67-72-1	ND	0.953	0.953
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.448	0.448
Isophorone	78-59-1	ND	0.362	0.362
Methyl methanesulfonate	66-27-3	ND	1.06	1.06
3-Methylcholanthrene	56-49-5	ND	0.313	0.313
2-Methylnaphthalene	91-57-6	ND	0.695	0.695
4-Methylphenol/3-Methylphenol	NO_CAS	ND	0.485	0.485
2-Methylphenol	95-48-7	ND	0.636	0.636
N-Nitroso-di-n-butylamine	924-16-3	ND	0.647	0.647
N-Nitroso-di-n-propylamine	621-64-7	ND	0.577	0.577
N-Nitrosodimethylamine	62-75-9	ND	0.639	0.639
N-Nitrosopiperidine	100-75-4	ND	0.476	0.476
Naphthalene	91-20-3	ND	0.502	0.502
1-Naphthylamine	134-32-7	ND	1.18	1.18
2-Naphthylamine	91-59-8	ND	1.05	1.05
2-Nitroaniline	88-74-4	ND	0.508	0.508
3-Nitroaniline	99-09-2	ND	0.676	0.676
4-Nitroaniline	100-01-6	ND	0.507	0.507
Nitrobenzene	98-95-3	ND	0.491	0.491

R E S U L T S (Cont'd)

Work Order # 9608968

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-23
Lab Sample ID 9608968-03A
File # Q9919
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 17:22

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	88-75-5	ND	0.398	0.398
4-Nitrophenol	100-02-7	ND	1.55	1.55
Pentachlorobenzene	608-93-5	ND	0.418	0.418
Pentachloronitrobenzene	82-68-8	ND	1.37	1.37
Pentachlorophenol	87-86-5	ND	1.20	1.20
Phenacetin	62-44-2	ND	0.414	0.414
Phenanthrene	85-01-8	ND	0.288	0.288
Phenol	108-95-2	ND	0.508	0.508
2-Picoline	109-06-8	ND	1.68	1.68
Pronamide	23950-58-5	ND	0.658	0.658
Pyrene	129-00-0	ND	0.745	0.745
Pyridine	110-86-1	ND	0.846	0.846
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	0.632	0.632
2,3,4,6-Tetrachlorophenol	58-90-2	ND	0.408	0.408
1,2,4-Trichlorobenzene	120-82-1	ND	0.458	0.458
2,4,5-Trichlorophenol	95-95-4	ND	0.506	0.506
2,4,6-Trichlorophenol	88-06-2	ND	0.408	0.408

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-23
Lab Sample ID 9608968-03A
File # Q9919
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 17:22

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	321-60-8	94.3	73.3	78	43	116
2-Fluorophenol	367-12-4	189	121	64	60	124
Nitrobenzene-d5	4165-60-0	94.3	79.0	84	45	114
Phenol-d5	4165-62-2	189	80.8	43	28	122
Terphenyl-d14	1718-51-0	94.3	107	113	66	122
2,4,6-Tribromophenol	118-79-6	189	162	86	26	123

RESULTS

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260910090501

Project Sample ID MW-24
Lab Sample ID 9608968-04A
File # Q9920
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 18:02

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1025 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	83-32-9	ND	0.626	0.626
Acenaphthylene	208-96-8	ND	0.511	0.511
Acetophenone	98-86-2	ND	0.560	0.560
4-Aminobiphenyl	92-67-1	ND	0.505	0.505
Aniline	62-53-3	ND	0.709	0.709
Anthracene	120-12-7	ND	0.294	0.294
Benz(a)anthracene	56-55-3	ND	2.73	2.73
Benz(a)pyrene	50-32-8	ND	0.387	0.387
Benzidine	92-87-5	ND Y	1.82	1.82
Benzo(b)fluoranthene	205-99-2	ND	0.542	0.542
Benzo(g,h,i)perylene	191-24-2	ND	0.527	0.527
Benzo(k)fluoranthene	207-08-9	ND	0.751	0.751
Benzoic acid	65-85-0	ND	5.88	5.88
Benzyl alcohol	100-51-6	ND	0.678	0.678
4-Bromophenylphenyl ether	101-55-3	ND	0.468	0.468
Butylbenzylphthalate	85-68-7	ND	0.770	0.770
4-Chloro-3-methylphenol	59-50-7	ND	0.424	0.424
p-Chloroaniline	106-47-8	ND	0.526	0.526
bis(2-Chloroethoxy)methane	111-91-1	ND	0.519	0.519
bis(2-Chloroethyl)ether	111-44-4	ND	0.721	0.721
bis(2-Chloroisopropyl)ether	108-60-1	ND	0.628	0.628
1-Chloronaphthalene	90-13-1	ND		
2-Chloronaphthalene	91-58-7	ND	0.707	0.707
2-Chlorophenol	95-57-8	ND	0.685	0.685
4-Chlorophenylphenyl ether	7005-72-3	ND	0.231	0.231

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-24 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-04A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9920 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 18:02 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1025 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	218-01-9	ND	0.757	0.757
Di-n-butylphthalate	84-74-2	ND	0.271	0.271
Di-n-octylphthalate	117-84-0	ND	0.756	0.756
Dibenz(a,h)anthracene	53-70-3	ND	0.427	0.427
Dibenz(a,j)acridine	224-42-0	ND		
Dibenzofuran	132-64-9	ND	0.595	0.595
1,2-Dichlorobenzene	95-50-1	ND	0.680	0.680
1,3-Dichlorobenzene	541-73-1	ND	0.644	0.644
1,4-Dichlorobenzene	106-46-7	ND	0.738	0.738
3,3'-Dichlorobenzidine	91-94-1	ND	0.683	0.683
2,4-Dichlorophenol	120-83-2	ND	0.529	0.529
2,6-Dichlorophenol	87-65-0	ND	0.689	0.689
Diethylphthalate	84-66-2	< DL	0.646	0.646
p-Dimethylaminoazobenzene	60-11-7	ND	0.838	0.838
7,12-Dimethylbenz(a)anthracene	57-97-6	ND	0.773	0.773
Dimethylphenethylamine	122-09-8	ND	9.34	9.34
2,4-Dimethylphenol	105-67-9	ND	1.14	1.14
Dimethylphthalate	131-11-3	ND	0.584	0.584
4,6-Dinitro-2-methylphenol	534-52-1	ND	1.16	1.16
2,4-Dinitrophenol	51-28-5	ND	2.48	2.48
2,4-Dinitrotoluene	121-14-2	ND	0.683	0.683
2,6-Dinitrotoluene	606-20-2	ND	0.485	0.485
Diphenylamine/N-NitrosoDPA	122-39-4	ND	0.548	0.548
1,2-Diphenylhydrazine	122-66-7	ND		
Ethyl methanesulfonate	62-50-0	ND	0.772	0.772

R E S U L T S (Cont'd)

Work Order # 9608968

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-24 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-04A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9920 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 18:02 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1025 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	117-81-7	ND	0.746	0.746
Fluoranthene	206-44-0	ND	0.431	0.431
Fluorene	86-73-7	ND	0.424	0.424
Hexachlorobenzene	118-74-1	ND	0.340	0.340
Hexachlorobutadiene	87-68-3	ND	0.760	0.760
Hexachlorocyclopentadiene	77-47-4	ND	4.23	4.23
Hexachloroethane	67-72-1	ND	0.985	0.985
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.463	0.463
Isophorone	78-59-1	ND	0.375	0.375
Methyl methanesulfonate	66-27-3	ND	1.09	1.09
3-Methylcholanthrene	56-49-5	ND	0.324	0.324
2-Methylnaphthalene	91-57-6	ND	0.719	0.719
4-Methylphenol/3-Methylphenol	NO_CAS	ND	0.501	0.501
2-Methylphenol	95-48-7	ND	0.658	0.658
N-Nitroso-di-n-butylamine	924-16-3	ND	0.669	0.669
N-Nitroso-di-n-propylamine	621-64-7	ND	0.597	0.597
N-Nitrosodimethylamine	62-75-9	ND	0.660	0.660
N-Nitrosopiperidine	100-75-4	ND	0.493	0.493
Naphthalene	91-20-3	ND	0.519	0.519
1-Naphthylamine	134-32-7	ND	1.22	1.22
2-Naphthylamine	91-59-8	ND	1.08	1.08
2-Nitroaniline	88-74-4	ND	0.525	0.525
3-Nitroaniline	99-09-2	ND	0.700	0.700
4-Nitroaniline	100-01-6	ND	0.524	0.524
Nitrobenzene	98-95-3	ND	0.507	0.507

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-24
Lab Sample ID 9608968-04A
File # Q9920
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 18:02

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1025 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	88-75-5	ND	0.412	0.412
4-Nitrophenol	100-02-7	ND	1.60	1.60
Pentachlorobenzene	608-93-5	ND	0.432	0.432
Pentachloronitrobenzene	82-68-8	ND	1.41	1.41
Pentachlorophenol	87-86-5	ND	1.24	1.24
Phenacetin	62-44-2	ND	0.428	0.428
Phenanthrene	85-01-8	ND	0.298	0.298
Phenol	108-95-2	ND	0.526	0.526
2-Picoline	109-06-8	ND	1.74	1.74
Pronamide	23950-58-5	ND	0.680	0.680
Pyrene	129-00-0	ND	0.771	0.771
Pyridine	110-86-1	ND	0.875	0.875
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	0.654	0.654
2,3,4,6-Tetrachlorophenol	58-90-2	ND	0.422	0.422
1,2,4-Trichlorobenzene	120-82-1	ND	0.473	0.473
2,4,5-Trichlorophenol	95-95-4	ND	0.523	0.523
2,4,6-Trichlorophenol	88-06-2	ND	0.422	0.422

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-24 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-04A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9920 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____.

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 18:02 | Reviewer SDL

Test Code 827SWA1T

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	321-60-8	97.6	73.2	75	43	116
2-Fluorophenol	367-12-4	195	142	73	60	124
Nitrobenzene-d5	4165-60-0	97.6	84.9	87	45	114
Phenol-d5	4165-62-2	195	90.6	46	28	122
Terphenyl-d14	1718-51-0	97.6	108	111	66	122
2,4,6-Tribromophenol	118-79-6	195	161	82	26	123

RESULTS

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260910090501

Project Sample ID MW-7
Lab Sample ID 9608968-05A
File # Q9921
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 18:42

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	83-32-9	ND	0.606	0.606
Acenaphthylene	208-96-8	ND	0.494	0.494
Acetophenone	98-86-2	ND	0.542	0.542
4-Aminobiphenyl	92-67-1	ND	0.489	0.489
Aniline	62-53-3	ND	0.686	0.686
Anthracene	120-12-7	ND	0.284	0.284
Benz(a)anthracene	56-55-3	ND	2.64	2.64
Benz(a)pyrene	50-32-8	ND	0.375	0.375
Benzidine	92-87-5	ND Y	1.76	1.76
Benzo(b)fluoranthene	205-99-2	ND	0.525	0.525
Benzo(g,h,i)perylene	191-24-2	ND	0.509	0.509
Benzo(k)fluoranthene	207-08-9	ND	0.726	0.726
Benzoic acid	65-85-0	ND	5.69	5.69
Benzyl alcohol	100-51-6	ND	0.656	0.656
4-Bromophenylphenyl ether	101-55-3	ND	0.453	0.453
Butylbenzylphthalate	85-68-7	ND	0.744	0.744
4-Chloro-3-methylphenol	59-50-7	ND	0.410	0.410
p-Chloroaniline	106-47-8	ND	0.508	0.508
bis(2-Chloroethoxy)methane	111-91-1	ND	0.502	0.502
bis(2-Chloroethyl)ether	111-44-4	ND	0.697	0.697
bis(2-Chloroisopropyl)ether	108-60-1	ND	0.608	0.608
1-Chloronaphthalene	90-13-1	ND		
2-Chloronaphthalene	91-58-7	ND	0.684	0.684
2-Chlorophenol	95-57-8	ND	0.662	0.662
4-Chlorophenylphenyl ether	7005-72-3	ND	0.224	0.224

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-7 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-05A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9921 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 18:42 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	218-01-9	ND	0.732	0.732
Di-n-butylphthalate	84-74-2	ND	0.262	0.262
Di-n-octylphthalate	117-84-0	ND	0.731	0.731
Dibenz(a,h)anthracene	53-70-3	ND	0.413	0.413
Dibenz(a,j)acridine	224-42-0	ND		
Dibenzofuran	132-64-9	ND	0.575	0.575
1,2-Dichlorobenzene	95-50-1	ND	0.658	0.658
1,3-Dichlorobenzene	541-73-1	ND	0.623	0.623
1,4-Dichlorobenzene	106-46-7	ND	0.713	0.713
3,3'-Dichlorobenzidine	91-94-1	ND	0.660	0.660
2,4-Dichlorophenol	120-83-2	ND	0.511	0.511
2,6-Dichlorophenol	87-65-0	ND	0.666	0.666
Diethylphthalate	84-66-2	ND	0.625	0.625
p-Dimethylaminoazobenzene	60-11-7	ND	0.810	0.810
7,12-Dimethylbenz(a)anthracene	57-97-6	ND	0.747	0.747
Dimethylphenethylamine	122-09-8	ND	9.03	9.03
2,4-Dimethylphenol	105-67-9	ND	1.10	1.10
Dimethylphthalate	131-11-3	ND	0.565	0.565
4,6-Dinitro-2-methylphenol	534-52-1	ND	1.12	1.12
2,4-Dinitrophenol	51-28-5	ND	2.40	2.40
2,4-Dinitrotoluene	121-14-2	ND	0.660	0.660
2,6-Dinitrotoluene	606-20-2	ND	0.469	0.469
Diphenylamine/N-NitrosoDPA	122-39-4	ND	0.530	0.530
1,2-Diphenylhydrazine	122-66-7	ND		
Ethyl methanesulfonate	62-50-0	ND	0.746	0.746

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-7
Lab Sample ID 9608968-05A
File # Q9921
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 18:42

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	117-81-7	ND	0.722	0.722
Fluoranthene	206-44-0	ND	0.417	0.417
Fluorene	86-73-7	ND	0.410	0.410
Hexachlorobenzene	118-74-1	ND	0.329	0.329
Hexachlorobutadiene	87-68-3	ND	0.735	0.735
Hexachlorocyclopentadiene	77-47-4	ND	4.09	4.09
Hexachloroethane	67-72-1	ND	0.953	0.953
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.448	0.448
Isophorone	78-59-1	ND	0.362	0.362
Methyl methanesulfonate	66-27-3	ND	1.06	1.06
3-Methylcholanthrene	56-49-5	ND	0.313	0.313
2-Methylnaphthalene	91-57-6	ND	0.695	0.695
4-Methylphenol/3-Methylphenol	NO_CAS	ND	0.485	0.485
2-Methylphenol	95-48-7	ND	0.636	0.636
N-Nitroso-di-n-butylamine	924-16-3	ND	0.647	0.647
N-Nitroso-di-n-propylamine	621-64-7	ND	0.577	0.577
N-Nitrosodimethylamine	62-75-9	ND	0.639	0.639
N-Nitrosopiperidine	100-75-4	ND	0.476	0.476
Naphthalene	91-20-3	ND	0.502	0.502
1-Naphthylamine	134-32-7	ND	1.18	1.18
2-Naphthylamine	91-59-8	ND	1.05	1.05
2-Nitroaniline	88-74-4	ND	0.508	0.508
3-Nitroaniline	99-09-2	ND	0.676	0.676
4-Nitroaniline	100-01-6	ND	0.507	0.507
Nitrobenzene	98-95-3	ND	0.491	0.491

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-7 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-05A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9921 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 18:42 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	88-75-5	ND	0.398	0.398
4-Nitrophenol	100-02-7	ND	1.55	1.55
Pentachlorobenzene	608-93-5	ND	0.418	0.418
Pentachloronitrobenzene	82-68-8	ND	1.37	1.37
Pentachlorophenol	87-86-5	ND	1.20	1.20
Phenacetin	62-44-2	ND	0.414	0.414
Phenanthrene	85-01-8	ND	0.288	0.288
Phenol	108-95-2	ND	0.508	0.508
2-Picoline	109-06-8	ND	1.68	1.68
Pronamide	23950-58-5	ND	0.658	0.658
Pyrene	129-00-0	ND	0.745	0.745
Pyridine	110-86-1	ND	0.846	0.846
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	0.632	0.632
2,3,4,6-Tetrachlorophenol	58-90-2	ND	0.408	0.408
1,2,4-Trichlorobenzene	120-82-1	ND	0.458	0.458
2,4,5-Trichlorophenol	95-95-4	ND	0.506	0.506
2,4,6-Trichlorophenol	88-06-2	ND	0.408	0.408

R E S U L T S (Cont'd)

Work Order # 9608968

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-7
Lab Sample ID 9608968-05A
File # Q9921
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 18:42

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	321-60-8	94.3	77.1	82	43	116
2-Fluorophenol	367-12-4	189	108	57 Q	60	124
Nitrobenzene-d5	4165-60-0	94.3	79.0	84	45	114
Phenol-d5	4165-62-2	189	68.3	36	28	122
Terphenyl-d14	1718-51-0	94.3	114	121	66	122
2,4,6-Tribromophenol	118-79-6	189	172	91	26	123

RESULTS

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-9 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-06A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9922 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 19:21 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	83-32-9	ND	0.606	0.606
Acenaphthylene	208-96-8	ND	0.494	0.494
Acetophenone	98-86-2	ND	0.542	0.542
4-Aminobiphenyl	92-67-1	ND	0.489	0.489
Aniline	62-53-3	ND	0.686	0.686
Anthracene	120-12-7	ND	0.284	0.284
Benz(a)anthracene	56-55-3	ND	2.64	2.64
Benz(a)pyrene	50-32-8	ND	0.375	0.375
Benzidine	92-87-5	ND Y	1.76	1.76
Benzo(b)fluoranthene	205-99-2	ND	0.525	0.525
Benzo(g,h,i)perylene	191-24-2	ND	0.509	0.509
Benzo(k)fluoranthene	207-08-9	ND	0.726	0.726
Benzoic acid	65-85-0	ND	5.69	5.69
Benzyl alcohol	100-51-6	5.73	0.656	0.656
4-Bromophenylphenyl ether	101-55-3	ND	0.453	0.453
Butylbenzylphthalate	85-68-7	ND	0.744	0.744
4-Chloro-3-methylphenol	59-50-7	ND	0.410	0.410
p-Chloroaniline	106-47-8	ND	0.508	0.508
bis(2-Chloroethoxy)methane	111-91-1	ND	0.502	0.502
bis(2-Chloroethyl)ether	111-44-4	ND	0.697	0.697
bis(2-Chloroisopropyl)ether	108-60-1	ND	0.608	0.608
1-Chloronaphthalene	90-13-1	ND		
2-Chloronaphthalene	91-58-7	ND	0.684	0.684
2-Chlorophenol	95-57-8	ND	0.662	0.662
4-Chlorophenylphenyl ether	7005-72-3	ND	0.224	0.224

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-9 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-06A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9922 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 19:21 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	218-01-9	ND	0.732	0.732
Di-n-butylphthalate	84-74-2	ND	0.262	0.262
Di-n-octylphthalate	117-84-0	ND	0.731	0.731
Dibenz(a,h)anthracene	53-70-3	ND	0.413	0.413
Dibenz(a,j)acridine	224-42-0	ND		
Dibenzofuran	132-64-9	ND	0.575	0.575
1,2-Dichlorobenzene	95-50-1	ND	0.658	0.658
1,3-Dichlorobenzene	541-73-1	ND	0.623	0.623
1,4-Dichlorobenzene	106-46-7	ND	0.713	0.713
3,3'-Dichlorobenzidine	91-94-1	ND	0.660	0.660
2,4-Dichlorophenol	120-83-2	ND	0.511	0.511
2,6-Dichlorophenol	87-65-0	ND	0.666	0.666
Diethylphthalate	84-66-2	ND	0.625	0.625
p-Dimethylaminoazobenzene	60-11-7	ND	0.810	0.810
7,12-Dimethylbenz(a)anthracene	57-97-6	ND	0.747	0.747
Dimethylphenethylamine	122-09-8	ND	9.03	9.03
2,4-Dimethylphenol	105-67-9	ND	1.10	1.10
Dimethylphthalate	131-11-3	ND	0.565	0.565
4,6-Dinitro-2-methylphenol	534-52-1	ND	1.12	1.12
2,4-Dinitrophenol	51-28-5	ND	2.40	2.40
2,4-Dinitrotoluene	121-14-2	ND	0.660	0.660
2,6-Dinitrotoluene	606-20-2	ND	0.469	0.469
Diphenylamine/N-NitrosoDPA	122-39-4	ND	0.530	0.530
1,2-Diphenylhydrazine	122-66-7	ND		
Ethyl methanesulfonate	62-50-0	ND	0.746	0.746

R E S U L T S (Cont'd)

Work Order # 9608968

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Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-9 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-06A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9922 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 19:21 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	117-81-7	ND	0.722	0.722
Fluoranthene	206-44-0	ND	0.417	0.417
Fluorene	86-73-7	ND	0.410	0.410
Hexachlorobenzene	118-74-1	ND	0.329	0.329
Hexachlorobutadiene	87-68-3	ND	0.735	0.735
Hexachlorocyclopentadiene	77-47-4	ND	4.09	4.09
Hexachloroethane	67-72-1	ND	0.953	0.953
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.448	0.448
Isophorone	78-59-1	ND	0.362	0.362
Methyl methanesulfonate	66-27-3	ND	1.06	1.06
3-Methylcholanthrene	56-49-5	ND	0.313	0.313
2-Methylnaphthalene	91-57-6	ND	0.695	0.695
4-Methylphenol/3-Methylphenol	NO_CAS	40.5 F	0.485	0.485
2-Methylphenol	95-48-7	51.8	0.636	0.636
N-Nitroso-di-n-butylamine	924-16-3	ND	0.647	0.647
N-Nitroso-di-n-propylamine	621-64-7	ND	0.577	0.577
N-Nitrosodimethylamine	62-75-9	ND	0.639	0.639
N-Nitrosopiperidine	100-75-4	ND	0.476	0.476
Naphthalene	91-20-3	0.859	0.502	0.502
1-Naphthylamine	134-32-7	ND	1.18	1.18
2-Naphthylamine	91-59-8	ND	1.05	1.05
2-Nitroaniline	88-74-4	ND	0.508	0.508
3-Nitroaniline	99-09-2	ND	0.676	0.676
4-Nitroaniline	100-01-6	ND	0.507	0.507
Nitrobenzene	98-95-3	ND	0.491	0.491

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Work Order # 9608968

Project Sample ID MW-9
Lab Sample ID 9608968-06A
File # Q9922
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 19:21

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	88-75-5	ND	0.398	0.398
4-Nitrophenol	100-02-7	ND	1.55	1.55
Pentachlorobenzene	608-93-5	ND	0.418	0.418
Pentachloronitrobenzene	82-68-8	ND	1.37	1.37
Pentachlorophenol	87-86-5	ND	1.20	1.20
Phenacetin	62-44-2	ND	0.414	0.414
Phenanthrene	85-01-8	ND	0.288	0.288
Phenol	108-95-2	ND	0.508	0.508
2-Picoline	109-06-8	ND	1.68	1.68
Pronamide	23950-58-5	ND	0.658	0.658
Pyrene	129-00-0	ND	0.745	0.745
Pyridine	110-86-1	ND	0.846	0.846
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	0.632	0.632
2,3,4,6-Tetrachlorophenol	58-90-2	ND	0.408	0.408
1,2,4-Trichlorobenzene	120-82-1	ND	0.458	0.458
2,4,5-Trichlorophenol	95-95-4	ND	0.506	0.506
2,4,6-Trichlorophenol	88-06-2	ND	0.408	0.408

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-9 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-06A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9922 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 19:21 | Reviewer SDL

Test Code 827SWA1T

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	321-60-8	94.3	64.2	68	43	116
2-Fluorophenol	367-12-4	189	110	58 Q	60	124
Nitrobenzene-d5	4165-60-0	94.3	68.5	73	45	114
Phenol-d5	4165-62-2	189	71.7	38	28	122
Terphenyl-d14	1718-51-0	94.3	103	110	66	122
2,4,6-Tribromophenol	118-79-6	189	156	83	26	123

RESULTS

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260910090501

Work Order # 9608968

Project Sample ID MW-6
Lab Sample ID 9608968-07A
File # Q9923
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 20:01

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	83-32-9	ND	0.606	0.606
Acenaphthylene	208-96-8	ND	0.494	0.494
Acetophenone	98-86-2	4.26	0.542	0.542
4-Aminobiphenyl	92-67-1	ND	0.489	0.489
Aniline	62-53-3	ND	0.686	0.686
Anthracene	120-12-7	ND	0.284	0.284
Benz(a)anthracene	56-55-3	ND	2.64	2.64
Benz(a)pyrene	50-32-8	ND	0.375	0.375
Benzidine	92-87-5	ND Y	1.76	1.76
Benzo(b)fluoranthene	205-99-2	ND	0.525	0.525
Benzo(g,h,i)perylene	191-24-2	ND	0.509	0.509
Benzo(k)fluoranthene	207-08-9	ND	0.726	0.726
Benzoic acid	65-85-0	219 EXX	5.69	5.69
Benzyl alcohol	100-51-6	2.14	0.656	0.656
4-Bromophenylphenyl ether	101-55-3	ND	0.453	0.453
Butylbenzylphthalate	85-68-7	ND	0.744	0.744
4-Chloro-3-methylphenol	59-50-7	ND	0.410	0.410
p-Chloroaniline	106-47-8	ND	0.508	0.508
bis(2-Chloroethoxy)methane	111-91-1	ND	0.502	0.502
bis(2-Chloroethyl)ether	111-44-4	ND	0.697	0.697
bis(2-Chloroisopropyl)ether	108-60-1	ND	0.608	0.608
1-Chloronaphthalene	90-13-1	ND		
2-Chloronaphthalene	91-58-7	ND	0.684	0.684
2-Chlorophenol	95-57-8	ND	0.662	0.662
4-Chlorophenylphenyl ether	7005-72-3	ND	0.224	0.224

R E S U L T S (Cont'd)

Work Order # 9608968

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-6 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-07A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9923 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 20:01 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	218-01-9	ND	0.732	0.732
Di-n-butylphthalate	84-74-2	ND	0.262	0.262
Di-n-octylphthalate	117-84-0	ND	0.731	0.731
Dibenz(a,h)anthracene	53-70-3	ND	0.413	0.413
Dibenz(a,j)acridine	224-42-0	ND		
Dibenzofuran	132-64-9	ND	0.575	0.575
1,2-Dichlorobenzene	95-50-1	ND	0.658	0.658
1,3-Dichlorobenzene	541-73-1	ND	0.623	0.623
1,4-Dichlorobenzene	106-46-7	ND	0.713	0.713
3,3'-Dichlorobenzidine	91-94-1	ND	0.660	0.660
2,4-Dichlorophenol	120-83-2	ND	0.511	0.511
2,6-Dichlorophenol	87-65-0	ND	0.666	0.666
Diethylphthalate	84-66-2	< DL	0.625	0.625
p-Dimethylaminoazobenzene	60-11-7	ND	0.810	0.810
7,12-Dimethylbenz(a)anthracene	57-97-6	ND	0.747	0.747
Dimethylphenethylamine	122-09-8	ND	9.03	9.03
2,4-Dimethylphenol	105-67-9	ND	1.10	1.10
Dimethylphthalate	131-11-3	ND	0.565	0.565
4,6-Dinitro-2-methylphenol	534-52-1	ND	1.12	1.12
2,4-Dinitrophenol	51-28-5	ND	2.40	2.40
2,4-Dinitrotoluene	121-14-2	ND	0.660	0.660
2,6-Dinitrotoluene	606-20-2	ND	0.469	0.469
Diphenylamine/N-NitrosoDPA	122-39-4	ND	0.530	0.530
1,2-Diphenylhydrazine	122-66-7	ND		
Ethyl methanesulfonate	62-50-0	ND	0.746	0.746

R E S U L T S (Cont'd)

Work Order # 9608968

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Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-6
Lab Sample ID 9608968-07A
File # Q9923
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 20:01

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	117-81-7	1.02	0.722	0.722
Fluoranthene	206-44-0	ND	0.417	0.417
Fluorene	86-73-7	ND	0.410	0.410
Hexachlorobenzene	118-74-1	ND	0.329	0.329
Hexachlorobutadiene	87-68-3	ND	0.735	0.735
Hexachlorocyclopentadiene	77-47-4	ND	4.09	4.09
Hexachloroethane	67-72-1	ND	0.953	0.953
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.448	0.448
Isophorone	78-59-1	0.569	0.362	0.362
Methyl methanesulfonate	66-27-3	ND	1.06	1.06
3-Methylcholanthrene	56-49-5	ND	0.313	0.313
2-Methylnaphthalene	91-57-6	ND	0.695	0.695
4-Methylphenol/3-Methylphenol	NO_CAS	110 F	0.485	0.485
2-Methylphenol	95-48-7	331 ER	0.636	0.636
N-Nitroso-di-n-butylamine	924-16-3	ND	0.647	0.647
N-Nitroso-di-n-propylamine	621-64-7	ND	0.577	0.577
N-Nitrosodimethylamine	62-75-9	ND	0.639	0.639
N-Nitrosopiperidine	100-75-4	ND	0.476	0.476
Naphthalene	91-20-3	0.797	0.502	0.502
1-Naphthylamine	134-32-7	ND	1.18	1.18
2-Naphthylamine	91-59-8	ND	1.05	1.05
2-Nitroaniline	88-74-4	ND	0.508	0.508
3-Nitroaniline	99-09-2	ND	0.676	0.676
4-Nitroaniline	100-01-6	ND	0.507	0.507
Nitrobenzene	98-95-3	ND	0.491	0.491

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-6 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-07A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Q9923 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture _____

Method Semivolatiles by SW8270B | Date Analyzed 09/10/96 20:01 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	88-75-5	ND	0.398	0.398
4-Nitrophenol	100-02-7	ND	1.55	1.55
Pentachlorobenzene	608-93-5	ND	0.418	0.418
Pentachloronitrobenzene	82-68-8	ND	1.37	1.37
Pentachlorophenol	87-86-5	ND	1.20	1.20
Phenacetin	62-44-2	ND	0.414	0.414
Phenanthrene	85-01-8	ND	0.288	0.288
Phenol	108-95-2	2.67	0.508	0.508
2-Picoline	109-06-8	ND	1.68	1.68
Pronamide	23950-58-5	ND	0.658	0.658
Pyrene	129-00-0	ND	0.745	0.745
Pyridine	110-86-1	ND	0.846	0.846
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	0.632	0.632
2,3,4,6-Tetrachlorophenol	58-90-2	ND	0.408	0.408
1,2,4-Trichlorobenzene	120-82-1	ND	0.458	0.458
2,4,5-Trichlorophenol	95-95-4	ND	0.506	0.506
2,4,6-Trichlorophenol	88-06-2	ND	0.408	0.408

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Project Sample ID MW-6
Lab Sample ID 9608968-07A
File # Q9923
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 20:01

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	321-60-8	94.3	70.8	75	43	116
2-Fluorophenol	367-12-4	189	134	71	60	124
Nitrobenzene-d5	4165-60-0	94.3	82.5	87	45	114
Phenol-d5	4165-62-2	189	88.8	47	28	122
Terphenyl-d14	1718-51-0	94.3	95.2	101	66	122
2,4,6-Tribromophenol	118-79-6	189	146	77	26	123

LABORATORY BLANK INFORMATION

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260910090501

Lab Sample ID BLK963336 | Date Prepared 09/03/96 15:00: | Instrument MSD2 | Reporting Subset ___ | Matrix W
File # Q9913 | Date Analyzed 09/10/96 13:24 | Column _____ | Spikes Subset ___
Method Semivolatiles by SW8270B | Analyst MCL | Specs Subset ___
Test Code 827SWA1T | Reviewer SDL

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	ND	0.642	0.642
Acenaphthylene	ND	0.524	0.524
Acetophenone	ND	0.574	0.574
4-Aminobiphenyl	ND	0.518	0.518
Aniline	ND	0.727	0.727
Anthracene	ND	0.301	0.301
Benz(a)anthracene	ND	2.80	2.80
Benz(a)pyrene	ND	0.397	0.397
Benzidine	ND	1.87	1.87
Benzo(b)fluoranthene	ND	0.556	0.556
Benzo(g,h,i)perylene	ND	0.540	0.540
Benzo(k)fluoranthene	ND	0.770	0.770
Benzoic acid	ND	6.03	6.03
Benzyl alcohol	ND	0.695	0.695
4-Bromophenylphenyl ether	ND	0.480	0.480
Butylbenzylphthalate	ND	0.789	0.789
4-Chloro-3-methylphenol	ND	0.435	0.435
p-Chloroaniline	ND	0.539	0.539
bis(2-Chloroethoxy)methane	ND	0.532	0.532
bis(2-Chloroethyl)ether	ND	0.739	0.739
bis(2-Chloroisopropyl)ether	ND	0.644	0.644
1-Chloronaphthalene	ND		
2-Chloronaphthalene	ND	0.725	0.725
2-Chlorophenol	ND	0.702	0.702
4-Chlorophenylphenyl ether	ND	0.237	0.237

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260910090501

Lab Sample ID BLK963336
File # Q9913
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 13:24

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	ND	0.776	0.776
Di-n-butylphthalate	ND	0.278	0.278
Di-n-octylphthalate	ND	0.775	0.775
Dibenz(a,h)anthracene	ND	0.438	0.438
Dibenz(a,j)acridine	ND		
Dibenzofuran	ND	0.610	0.610
1,2-Dichlorobenzene	ND	0.697	0.697
1,3-Dichlorobenzene	ND	0.660	0.660
1,4-Dichlorobenzene	ND	0.756	0.756
3,3'-Dichlorobenzidine	ND	0.700	0.700
2,4-Dichlorophenol	ND	0.542	0.542
2,6-Dichlorophenol	ND	0.706	0.706
Diethylphthalate	ND	0.662	0.662
p-Dimethylaminoazobenzene	ND	0.859	0.859
7,12-Dimethylbenz(a)anthracene	ND	0.792	0.792
Dimethylphenethylamine	ND	9.57	9.57
2,4-Dimethylphenol	ND	1.17	1.17
Dimethylphthalate	ND	0.599	0.599
4,6-Dinitro-2-methylphenol	ND	1.19	1.19
2,4-Dinitrophenol	ND	2.54	2.54
2,4-Dinitrotoluene	ND	0.700	0.700
2,6-Dinitrotoluene	ND	0.497	0.497
Diphenylamine/N-NitrosoDPA	ND	0.562	0.562
1,2-Diphenylhydrazine	ND		
Ethyl methanesulfonate	ND	0.791	0.791

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260910090501

Lab Sample ID BLK963336
File # Q9913
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 13:24

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	ND	0.765	0.765
Fluoranthene	ND	0.442	0.442
Fluorene	ND	0.435	0.435
Hexachlorobenzene	ND	0.349	0.349
Hexachlorobutadiene	ND	0.779	0.779
Hexachlorocyclopentadiene	ND	4.34	4.34
Hexachloroethane	ND	1.01	1.01
Indeno(1,2,3-cd)pyrene	ND	0.475	0.475
Isophorone	ND	0.384	0.384
Methyl methanesulfonate	ND	1.12	1.12
3-Methylcholanthrene	ND	0.332	0.332
2-Methylnaphthalene	ND	0.737	0.737
4-Methylphenol/3-Methylphenol	ND	0.514	0.514
2-Methylphenol	ND	0.674	0.674
N-Nitroso-di-n-butylamine	ND	0.686	0.686
N-Nitroso-di-n-propylamine	ND	0.612	0.612
N-Nitrosodimethylamine	ND	0.677	0.677
N-Nitrosopiperidine	ND	0.505	0.505
Naphthalene	ND	0.532	0.532
1-Naphthylamine	ND	1.25	1.25
2-Naphthylamine	ND	1.11	1.11
2-Nitroaniline	ND	0.538	0.538
3-Nitroaniline	ND	0.717	0.717
4-Nitroaniline	ND	0.537	0.537
Nitrobenzene	ND	0.520	0.520

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260910090501

Lab Sample ID BLK963336
File # Q9913
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 13:24

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	ND	0.422	0.422
4-Nitrophenol	ND	1.64	1.64
Pentachlorobenzene	ND	0.443	0.443
Pentachloronitrobenzene	ND	1.45	1.45
Pentachlorophenol	ND	1.27	1.27
Phenacetin	ND	0.439	0.439
Phenanthrene	ND	0.305	0.305
Phenol	ND	0.539	0.539
2-Picoline	ND	1.78	1.78
Pronamide	ND	0.697	0.697
Pyrene	ND	0.790	0.790
Pyridine	ND	0.897	0.897
1,2,4,5-Tetrachlorobenzene	ND	0.670	0.670
2,3,4,6-Tetrachlorophenol	ND	0.433	0.433
1,2,4-Trichlorobenzene	ND	0.485	0.485
2,4,5-Trichlorophenol	ND	0.536	0.536
2,4,6-Trichlorophenol	ND	0.433	0.433

LABORATORY BLANK INFORMATION (cont'd)

Work Order # 9608968

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Lab Sample ID BLK963336 | Date Prepared 09/03/96 15:00: | Instrument MSD2 | Reporting Subset ___ | Matrix W

File # Q9913 | Date Analyzed 09/10/96 13:24 | Column ___ | Spikes Subset ___

Method Semivolatiles by SW8270B | Analyst MCL | Specs Subset ___

Test Code 827SWA1T | Reviewer SDL

Surrogate(s)	Spiked Conc. ug/L	Measured Conc. ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	100	71.2	71	43	116
2-Fluorophenol	200	137	69	60	124
Nitrobenzene-d5	100	85.9	86	45	114
Phenol-d5	200	90.7	45	28	122
Terphenyl-d14	100	112	112	66	122
2,4,6-Tribromophenol	200	161	80	26	123

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LABORATORY CONTROL SAMPLE

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Work Order # 9608968

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Method Semivolatiles by SW8270B
Test Code 827SWA1T
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 10:46
Instrument MSD2
Column
Analyst MCL
Reviewer SDL
Reporting Subset
Spikes Subset
Specs Subset
Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AR	100 uL
SP-1-729-C	250 uL		

LCS Lab Sample ID LCS965831 File ID Q9908

LCS Duplicate Lab Sample ID LCSD965831 File ID Q9909

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
Acenaphthene	100	91.3	91	100	83.4	83	76	133	9.2	21
Acenaphthylene	100	90.4	90	100	83.2	83	74	134	8.1	21
Aniline	100	40.1	40	100	27.3	27	22	113	39 Q	32
Anthracene	100	94.3	94	100	87.4	87	68	128	7.7	21
Benz(a)anthracene	100	93.3	93	100	87.8	88	82	132	5.5	21
Benz(a)pyrene	100	90.8	91	100	84.1	84	77	141	8.0	19
Benzidine	100	ND	NC	100	ND	NC	0.1	75	NC	263
Benzo(b)fluoranthene	100	82.1	82	100	79.4	79	73	135	3.7	28
Benzo(g,h,i)perylene	100	103	103	100	94.0	94	74	144	9.1	20
Benzo(k)fluoranthene	100	85.6	86	100	76.9	77	64	148	11	26
Benzoic acid	100	32.9	33	100	36.2	36	0.1	230	8.7	140
Benzyl alcohol	100	79.6	80	100	73.0	73	66	138	9.2	19
4-Bromophenylphenyl ether	100	95.2	95	100	88.0	88	69	127	7.6	18
Butylbenzylphthalate	100	99.6	100	100	95.4	95	69	150	5.1	25
4-Chloro-3-methylphenol	100	93.9	94	100	82.9	83	64	141	12	19
p-Chloroaniline	100	64.4	64	100	59.9	60	50	134	6.4	26
bis(2-Chloroethoxy)methane	100	95.5	95	100	84.0	84	75	137	13	21
bis(2-Chloroethyl)ether	100	96.7	97	100	79.0	79	76	124	20	21
bis(2-Chloroisopropyl)ether	100	75.5	76	100	65.0	65 Q	68	128	16	23
2-Chloronaphthalene	100	85.4	85	100	77.8	78	72	118	8.6	16

LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260910090501

Work Order # 9608968

Method Semivolatiles by SW8270B
Test Code 827SWA1T
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 10:46
Instrument MSD2
Column
Analyst MCL
Reviewer SDL
Reporting Subset
Spikes Subset
Specs Subset
Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AR	100 uL
SP-1-729-C	250 uL		

LCS Lab Sample ID LCS965831 File ID Q9908

LCS Duplicate Lab Sample ID LCSD965831 File ID Q9909

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
2-Chlorophenol	100	96.4	96	100	79.2	79 Q	81	117	19 Q	17
4-Chlorophenylphenyl ether	100	89.4	89	100	81.7	82	79	133	8.2	18
Chrysene	100	102	102	100	99.3	99	85	133	3.0	21
Di-n-butylphthalate	100	94.3	94	100	89.6	90	68	135	4.4	21
Di-n-octylphthalate	100	99.3	99	100	93.7	94	54	146	5.2	22
Dibenz(a,h)anthracene	100	102	102	100	92.7	93	73	145	9.2	20
Dibenzofuran	100	90.8	91	100	82.2	82	82	130	10	16
1,2-Dichlorobenzene	100	76.6	77	100	68.1	68 Q	73	121	12	22
1,3-Dichlorobenzene	100	77.9	78	100	68.3	68 Q	70	120	14	27
1,4-Dichlorobenzene	100	78.6	79	100	67.9	68 Q	70	120	15	24
3,3'-Dichlorobenzidine	100	71.7	72	100	64.7	65	49	140	10	33
2,4-Dichlorophenol	100	98.7	99	100	82.3	82	60	135	19	19
Diethylphthalate	100	89.0	89	100	81.9	82 Q	83	123	8.2	15
2,4-Dimethylphenol	100	79.0	79	100	64.2	64	32	119	21	33
Dimethylphthalate	100	92.9	93	100	86.7	87	84	130	6.7	21
4,6-Dinitro-2-methylphenol	100	115	115	100	104	104	53	163	10	18
2,4-Dinitrophenol	100	97.4	97	100	90.1	90	24	191	7.5	23
2,4-Dinitrotoluene	100	97.0	97	100	85.2	85	72	139	13	20
2,6-Dinitrotoluene	100	93.6	94	100	85.8	86	76	140	8.9	18
Diphenylamine/N-NitrosoDPA	100	79.9	80	100	75.0	75	47	117	6.4	21

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LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Work Order # 9608968

Method Semivolatiles by SW8270B
Test Code 827SWA1T
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 10:46
Instrument MSD2
Column
Analyst MCL
Reviewer SDL
Reporting Subset
Spikes Subset
Specs Subset
Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AR	100 uL
SP-1-729-C	250 uL		

LCS Lab Sample ID LCS965831 File ID Q9908

LCS Duplicate Lab Sample ID LCSD965831 File ID Q9909

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
bis(2-Ethylhexyl)phthalate	100	102	102	100	98.6	99	74	144	3.0	22
Fluoranthene	100	91.2	91	100	85.1	85	77	129	6.8	19
Fluorene	100	89.7	90	100	81.3	81	79	121	10	17
Hexachlorobenzene	100	87.6	88	100	81.4	81	66	126	8.3	19
Hexachlorobutadiene	100	75.1	75	100	64.9	65	51	147	14	20
Hexachlorocyclopentadiene	100	71.5	71	100	66.3	66	0.1	148	8.7	49
Hexachloroethane	100	69.0	69	100	60.1	60 Q	62	127	14	28
Indeno(1,2,3-cd)pyrene	100	99.9	100	100	90.7	91	75	141	9.4	19
Isophorone	100	88.2	88	100	79.9	80 Q	81	133	9.5	18
2-Methylnaphthalene	100	81.3	81	100	72.8	73	63	134	10	21
4-Methylphenol/3-Methylphenol	100	75.4	75	100	67.9	68	62	126	9.8	17
2-Methylphenol	100	90.1	90	100	78.0	78	72	126	14	19
N-Nitroso-di-n-propylamine	100	73.8	74	100	67.5	68	68	128	8.4	21
N-Nitrosodimethylamine	100	55.1	55	100	48.5	48	27	155	14	24
Naphthalene	100	85.2	85	100	75.7	76	70	133	11	17
2-Nitroaniline	100	87.8	88	100	80.7	81	69	140	8.3	24
3-Nitroaniline	100	69.8	70	100	66.0	66 Q	69	133	5.9	22
4-Nitroaniline	100	59.6	60	100	51.6	52 Q	59	137	14	19
Nitrobenzene	100	84.7	85	100	73.6	74	74	142	14	22
2-Nitrophenol	100	104	104	100	84.6	85	67	149	20 Q	19

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LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260910090501

Work Order # 9608968

Method Semivolatiles by SW8270B
Test Code 827SWA1T
Date Prepared 09/03/96 15:00:
Date Analyzed 09/10/96 10:46
Instrument MSD2
Column
Analyst MCL
Reviewer SDL
Reporting Subset
Spikes Subset
Specs Subset
Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AR	100 uL
SP-1-729-C	250 uL		

Analyte	LCS Lab Sample ID LCS965831 File ID Q9908			LCS Duplicate Lab Sample ID LCSD965831 File ID Q9909			Recovery Spec. Limits		RPD	
	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Low %	High %	Result %	Spec. Limit %
4-Nitrophenol	100	34.6	35 Q	100	35.6	36 Q	56	131	2.8	20
Pentachlorophenol	100	111	111	100	102	102	47	143	8.4	18
Phenanthrene	100	96.4	96	100	89.5	89	74	132	7.6	17
Phenol	100	42.1	42 Q	100	40.9	41 Q	70	123	2.4	18
Pyrene	100	98.9	99	100	94.4	94	74	148	5.2	21
1,2,4-Trichlorobenzene	100	77.6	78	100	68.2	68 Q	71	129	14	16
2,4,5-Trichlorophenol	100	111	111	100	95.4	95	80	132	16 Q	15
2,4,6-Trichlorophenol	100	107	107	100	90.7	91	76	128	16 Q	15

Surrogate(s)									
2-Fluorobiphenyl	100	76.4	76	100	67.4	67	43	116	
2-Fluorophenol	200	132	66	200	110	55 Q	60	124	
Nitrobenzene-d5	100	89.7	90	100	77.6	78	45	114	
Phenol-d5	200	89.1	44	200	75.6	38	28	122	
Terphenyl-d14	100	106	106	100	97.3	97	66	122	
2,4,6-Tribromophenol	200	181	91	200	162	81	26	123	

09/18/96 11:07:56

ANALYSIS BATCH SUMMARY

Analysis Batch # MSMSD260911084202

Work Order # 9608968

Method Semivolatiles by GC/MS
Test Code 827SSALA
Initial Calibration # MSD2960907100100
Calibration Date 09/07/96

Analysis Start Date/Time 09/11/96 08:42:00
Analysis Stop Date/Time 09/11/96 19:39:00

Instrument MSD2
Analyst MCL
Reviewer SDL

Sequence/Analysis Time		Project Sample ID	Lab Sample ID	Sample Type	Analysis File #
1	09/11/96 08:42		TUNE	GC/MS tune files	Q9925
2	09/11/96 09:03		SSTD050	Continuing Calibration Verification	Q9926
5	09/11/96 11:02		LCS965831	Lab Control Sample	Q9929
6	09/11/96 11:42		LCSD965831	Lab Control Sample Duplicate	Q9930
7	09/11/96 12:21		BLK963336	Blank, Method	Q9931
9	09/11/96 13:41	MW-6	9608968-07A	Sample	Q9933

RESULTS

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260911084202

Project Sample ID MW-6
Lab Sample ID 9608968-07A
File # Q9933
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 13:41

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 5

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	83-32-9	ND R	3.03	3.03
Acenaphthylene	208-96-8	ND R	2.47	2.47
Acetophenone	98-86-2	3.49 R	2.71	2.71
4-Aminobiphenyl	92-67-1	ND R	2.44	2.44
Aniline	62-53-3	ND R	3.43	3.43
Anthracene	120-12-7	ND R	1.42	1.42
Benz(a)anthracene	56-55-3	ND R	13.2	13.2
Benz(a)pyrene	50-32-8	ND R	1.87	1.87
Benzidine	92-87-5	ND RZ	8.82	8.82
Benzo(b)fluoranthene	205-99-2	ND R	2.62	2.62
Benzo(g,h,i)perylene	191-24-2	ND R	2.55	2.55
Benzo(k)fluoranthene	207-08-9	ND R	3.63	3.63
Benzoic acid	65-85-0	178 R	28.4	28.4
Benzyl alcohol	100-51-6	ND R	3.28	3.28
4-Bromophenylphenyl ether	101-55-3	ND R	2.26	2.26
Butylbenzylphthalate	85-68-7	ND R	3.72	3.72
4-Chloro-3-methylphenol	59-50-7	ND R	2.05	2.05
p-Chloroaniline	106-47-8	ND R	2.54	2.54
bis(2-Chloroethoxy)methane	111-91-1	ND R	2.51	2.51
bis(2-Chloroethyl)ether	111-44-4	ND R	3.49	3.49
bis(2-Chloroisopropyl)ether	108-60-1	ND R	3.04	3.04
1-Chloronaphthalene	90-13-1	ND R		
2-Chloronaphthalene	91-58-7	ND R	3.42	3.42
2-Chlorophenol	95-57-8	ND R	3.31	3.31
4-Chlorophenylphenyl ether	7005-72-3	ND R	1.12	1.12

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260911084202

Project Sample ID MW-6
Lab Sample ID 9608968-07A
File # Q9933
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 13:41

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 5

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	218-01-9	ND R	3.66	3.66
Di-n-butylphthalate	84-74-2	ND R	1.31	1.31
Di-n-octylphthalate	117-84-0	ND R	3.66	3.66
Dibenz(a,h)anthracene	53-70-3	ND R	2.07	2.07
Dibenz(a,j)acridine	224-42-0	ND R		
Dibenzofuran	132-64-9	ND R	2.88	2.88
1,2-Dichlorobenzene	95-50-1	ND R	3.29	3.29
1,3-Dichlorobenzene	541-73-1	ND R	3.11	3.11
1,4-Dichlorobenzene	106-46-7	ND R	3.57	3.57
3,3'-Dichlorobenzidine	91-94-1	ND R	3.30	3.30
2,4-Dichlorophenol	120-83-2	ND R	2.56	2.56
2,6-Dichlorophenol	87-65-0	ND R	3.33	3.33
Diethylphthalate	84-66-2	ND R	3.12	3.12
p-Dimethylaminoazobenzene	60-11-7	ND R	4.05	4.05
7,12-Dimethylbenz(a)anthracene	57-97-6	ND R	3.74	3.74
Dimethylphenethylamine	122-09-8	ND R	45.1	45.1
2,4-Dimethylphenol	105-67-9	ND R	5.52	5.52
Dimethylphthalate	131-11-3	ND R	2.83	2.83
4,6-Dinitro-2-methylphenol	534-52-1	ND R	5.61	5.61
2,4-Dinitrophenol	51-28-5	ND R	12.0	12.0
2,4-Dinitrotoluene	121-14-2	ND R	3.30	3.30
2,6-Dinitrotoluene	606-20-2	ND R	2.34	2.34
Diphenylamine/N-NitrosoDPA	122-39-4	ND R	2.65	2.65
1,2-Diphenylhydrazine	122-66-7	ND R		
Ethyl methanesulfonate	62-50-0	ND R	3.73	3.73

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260911084202

Project Sample ID MW-6 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-07A | Date Received 08/29/96 | Column ___ | Spikes Subset ___ | Report As received

File # Q9933 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture ___

Method Semivolatiles by SW8270B | Date Analyzed 09/11/96 13:41 | Reviewer SDL

Test Code 827SWA1T

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 5

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	117-81-7	ND R	3.61	3.61
Fluoranthene	206-44-0	ND R	2.08	2.08
Fluorene	86-73-7	ND R	2.05	2.05
Hexachlorobenzene	118-74-1	ND R	1.65	1.65
Hexachlorobutadiene	87-68-3	ND R	3.67	3.67
Hexachlorocyclopentadiene	77-47-4	ND R	20.5	20.5
Hexachloroethane	67-72-1	ND R	4.76	4.76
Indeno(1,2,3-cd)pyrene	193-39-5	ND R	2.24	2.24
Isophorone	78-59-1	ND R	1.81	1.81
Methyl methanesulfonate	66-27-3	ND R	5.28	5.28
3-Methylcholanthrene	56-49-5	ND R	1.57	1.57
2-Methylnaphthalene	91-57-6	ND R	3.48	3.48
4-Methylphenol/3-Methylphenol	NO_CAS	96.8 FR	2.42	2.42
2-Methylphenol	95-48-7	285	3.18	3.18
N-Nitroso-di-n-butylamine	924-16-3	ND R	3.24	3.24
N-Nitroso-di-n-propylamine	621-64-7	ND R	2.89	2.89
N-Nitrosodimethylamine	62-75-9	ND R	3.19	3.19
N-Nitrosopiperidine	100-75-4	ND R	2.38	2.38
Naphthalene	91-20-3	ND R	2.51	2.51
1-Naphthylamine	134-32-7	ND R	5.90	5.90
2-Naphthylamine	91-59-8	ND R	5.24	5.24
2-Nitroaniline	88-74-4	ND R	2.54	2.54
3-Nitroaniline	99-09-2	ND R	3.38	3.38
4-Nitroaniline	100-01-6	ND R	2.53	2.53
Nitrobenzene	98-95-3	ND R	2.45	2.45

R E S U L T S (Cont'd)

Work Order # 9608968

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Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260911084202

Project Sample ID MW-6
Lab Sample ID 9608968-07A
File # Q9933
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 13:41

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 1060 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 5

Analyte	CAS #	Measured Concentration ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	88-75-5	ND R	1.99	1.99
4-Nitrophenol	100-02-7	ND R	7.74	7.74
Pentachlorobenzene	608-93-5	ND R	2.09	2.09
Pentachloronitrobenzene	82-68-8	ND R	6.84	6.84
Pentachlorophenol	87-86-5	ND R	5.99	5.99
Phenacetin	62-44-2	ND R	2.07	2.07
Phenanthrene	85-01-8	ND R	1.44	1.44
Phenol	108-95-2	2.84 R	2.54	2.54
2-Picoline	109-06-8	ND R	8.40	8.40
Pronamide	23950-58-5	ND R	3.29	3.29
Pyrene	129-00-0	ND R	3.73	3.73
Pyridine	110-86-1	ND R	4.23	4.23
1,2,4,5-Tetrachlorobenzene	95-94-3	ND R	3.16	3.16
2,3,4,6-Tetrachlorophenol	58-90-2	ND R	2.04	2.04
1,2,4-Trichlorobenzene	120-82-1	ND R	2.29	2.29
2,4,5-Trichlorophenol	95-95-4	ND R	2.53	2.53
2,4,6-Trichlorophenol	88-06-2	ND R	2.04	2.04

R E S U L T S (Cont'd)

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260911084202

Project Sample ID MW-6 | Date Collected 08/28/96 | Instrument MSD2 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608968-07A | Date Received 08/29/96 | Column ___ | Spikes Subset ___ | Report As received

File # Q9933 | Date Prepared 09/03/96 15:00: | Analyst MCL | Specs Subset ___ | % Moisture ___

Method Semivolatiles by SW8270B | Date Analyzed 09/11/96 13:41 | Reviewer SDL

Test Code 827SWA1T

Surrogate(s)	CAS #	Spiked Conc. ug/L	Measured Concentration ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	321-60-8	94.3	63.7	68	43	116
2-Fluorophenol	367-12-4	189	117	62	60	124
Nitrobenzene-d5	4165-60-0	94.3	68.7	73	45	114
Phenol-d5	4165-62-2	189	76.2	40	28	122
Terphenyl-d14	1718-51-0	94.3	85.0	90	66	122
2,4,6-Tribromophenol	118-79-6	189	136	72	26	123

LABORATORY BLANK INFORMATION

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260911084202

Lab Sample ID BLK963336
File # Q9931
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 12:21

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
Acenaphthene	ND	0.642	0.642
Acenaphthylene	ND	0.524	0.524
Acetophenone	ND	0.574	0.574
4-Aminobiphenyl	ND	0.518	0.518
Aniline	ND	0.727	0.727
Anthracene	ND	0.301	0.301
Benz(a)anthracene	ND	2.80	2.80
Benz(a)pyrene	ND	0.397	0.397
Benzidine	ND	1.87	1.87
Benzo(b)fluoranthene	ND	0.556	0.556
Benzo(g,h,i)perylene	ND	0.540	0.540
Benzo(k)fluoranthene	ND	0.770	0.770
Benzoic acid	ND	6.03	6.03
Benzyl alcohol	ND	0.695	0.695
4-Bromophenylphenyl ether	ND	0.480	0.480
Butylbenzylphthalate	ND	0.789	0.789
4-Chloro-3-methylphenol	ND	0.435	0.435
p-Chloroaniline	ND	0.539	0.539
bis(2-Chloroethoxy)methane	ND	0.532	0.532
bis(2-Chloroethyl)ether	ND	0.739	0.739
bis(2-Chloroisopropyl)ether	ND	0.644	0.644
1-Chloronaphthalene	ND		
2-Chloronaphthalene	ND	0.725	0.725
2-Chlorophenol	ND	0.702	0.702
4-Chlorophenylphenyl ether	ND	0.237	0.237

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260911084202

Lab Sample ID BLK963336
File # Q9931
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 12:21

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
Chrysene	ND	0.776	0.776
Di-n-butylphthalate	ND	0.278	0.278
Di-n-octylphthalate	ND	0.775	0.775
Dibenz(a,h)anthracene	ND	0.438	0.438
Dibenz(a,j)acridine	ND		
Dibenzofuran	ND	0.610	0.610
1,2-Dichlorobenzene	ND	0.697	0.697
1,3-Dichlorobenzene	ND	0.660	0.660
1,4-Dichlorobenzene	ND	0.756	0.756
3,3'-Dichlorobenzidine	ND	0.700	0.700
2,4-Dichlorophenol	ND	0.542	0.542
2,6-Dichlorophenol	ND	0.706	0.706
Diethylphthalate	ND	0.662	0.662
p-Dimethylaminoazobenzene	ND	0.859	0.859
7,12-Dimethylbenz(a)anthracene	ND	0.792	0.792
Dimethylphenethylamine	ND	9.57	9.57
2,4-Dimethylphenol	ND	1.17	1.17
Dimethylphthalate	ND	0.599	0.599
4,6-Dinitro-2-methylphenol	ND	1.19	1.19
2,4-Dinitrophenol	ND	2.54	2.54
2,4-Dinitrotoluene	ND	0.700	0.700
2,6-Dinitrotoluene	ND	0.497	0.497
Diphenylamine/N-NitrosoDPA	ND	0.562	0.562
1,2-Diphenylhydrazine	ND		
Ethyl methanesulfonate	ND	0.791	0.791

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260911084202

Lab Sample ID BLK963336
File # Q9931
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 12:21

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
bis(2-Ethylhexyl)phthalate	ND	0.765	0.765
Fluoranthene	ND	0.442	0.442
Fluorene	ND	0.435	0.435
Hexachlorobenzene	ND	0.349	0.349
Hexachlorobutadiene	ND	0.779	0.779
Hexachlorocyclopentadiene	ND	4.34	4.34
Hexachloroethane	ND	1.01	1.01
Indeno(1,2,3-cd)pyrene	ND	0.475	0.475
Isophorone	ND	0.384	0.384
Methyl methanesulfonate	ND	1.12	1.12
3-Methylcholanthrene	ND	0.332	0.332
2-Methylnaphthalene	ND	0.737	0.737
4-Methylphenol/3-Methylphenol	ND	0.514	0.514
2-Methylphenol	ND	0.674	0.674
N-Nitroso-di-n-butylamine	ND	0.686	0.686
N-Nitroso-di-n-propylamine	ND	0.612	0.612
N-Nitrosodimethylamine	ND	0.677	0.677
N-Nitrosopiperidine	ND	0.505	0.505
Naphthalene	ND	0.532	0.532
1-Naphthylamine	ND	1.25	1.25
2-Naphthylamine	ND	1.11	1.11
2-Nitroaniline	ND	0.538	0.538
3-Nitroaniline	ND	0.717	0.717
4-Nitroaniline	ND	0.537	0.537
Nitrobenzene	ND	0.520	0.520

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260911084202

Lab Sample ID BLK963336
File # Q9931
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 12:21

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 1000 (mL)
Extract/Digestate Volume 1.0 (mL)
Dilution Factor 1

Analyte	Measured Conc. ug/L	Detection Limit ug/L	Reporting Limit ug/L
2-Nitrophenol	ND	0.422	0.422
4-Nitrophenol	ND	1.64	1.64
Pentachlorobenzene	ND	0.443	0.443
Pentachloronitrobenzene	ND	1.45	1.45
Pentachlorophenol	ND	1.27	1.27
Phenacetin	ND	0.439	0.439
Phenanthrene	ND	0.305	0.305
Phenol	ND	0.539	0.539
2-Picoline	ND	1.78	1.78
Pronamide	ND	0.697	0.697
Pyrene	ND	0.790	0.790
Pyridine	ND	0.897	0.897
1,2,4,5-Tetrachlorobenzene	ND	0.670	0.670
2,3,4,6-Tetrachlorophenol	ND	0.433	0.433
1,2,4-Trichlorobenzene	ND	0.485	0.485
2,4,5-Trichlorophenol	ND	0.536	0.536
2,4,6-Trichlorophenol	ND	0.433	0.433

LABORATORY BLANK INFORMATION (cont'd)

Extraction Batch # 3510960903150000
Analysis Batch # MSMSD260911084202

Lab Sample ID BLK963336
File # Q9931
Method Semivolatiles by SW8270B
Test Code 827SWA1T

Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 12:21

Instrument MSD2
Column
Analyst MCL
Reviewer SDL

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Surrogate(s)	Spiked Conc. ug/L	Measured Conc. ug/L	Recovery %	Specification Limits Low %	Specification Limits High %
2-Fluorobiphenyl	100	71.7	72	43	116
2-Fluorophenol	200	137	68	60	124
Nitrobenzene-d5	100	85.7	86	45	114
Phenol-d5	200	90.1	45	28	122
Terphenyl-d14	100	112	112	66	122
2,4,6-Tribromophenol	200	164	82	26	123

09/18/96 11:07:56

LABORATORY CONTROL SAMPLE

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260911084202

Work Order # 9608968

Method Semivolatiles by SW8270B
Test Code 827SWA1T
Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 11:42
Instrument MSD2
Column
Analyst MCL
Reviewer SDL
Reporting Subset
Spikes Subset
Specs Subset
Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AR	100 uL
SP-1-729-C	250 uL		

LCS Lab Sample ID LCS965831 File ID Q9929

LCS Duplicate Lab Sample ID LCSD965831 File ID Q9930

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
Acenaphthene	100	89.9	90	100	83.8	84	76	133	6.9	21
Acenaphthylene	100	89.9	90	100	83.2	83	74	134	8.1	21
Aniline	100	39.0	39	100	26.3	26	22	113	40 Q	32
Anthracene	100	94.9	95	100	89.2	89	68	128	6.5	21
Benz(a)anthracene	100	93.2	93	100	87.3	87	82	132	6.7	21
Benz(a)pyrene	100	91.3	91	100	85.9	86	77	141	5.6	19
Benzidine	100	ND	NC	100	ND	NC	0.1	75	NC	263
Benzo(b)fluoranthene	100	91.1	91	100	83.1	83	73	135	9.2	28
Benzo(g,h,i)perylene	100	98.9	99	100	93.4	93	74	144	6.2	20
Benzo(k)fluoranthene	100	91.6	92	100	87.2	87	64	148	5.6	26
Benzoic acid	100	39.8	40	100	41.6	42	0.1	230	4.9	140
Benzyl alcohol	100	79.3	79	100	72.9	73	66	138	7.9	19
4-Bromophenylphenyl ether	100	93.0	93	100	87.9	88	69	127	5.5	18
Butylbenzylphthalate	100	100	100	100	94.0	94	69	150	6.2	25
4-Chloro-3-methylphenol	100	97.4	97	100	85.9	86	64	141	12	19
p-Chloroaniline	100	66.0	66	100	62.3	62	50	134	6.2	26
bis(2-Chloroethoxy)methane	100	95.1	95	100	86.0	86	75	137	9.9	21
bis(2-Chloroethyl)ether	100	89.5	89	100	78.9	79	76	124	13	21
bis(2-Chloroisopropyl)ether	100	76.4	76	100	66.7	67 Q	68	128	13	23
2-Chloronaphthalene	100	86.4	86	100	79.5	79	72	118	8.5	16

09/18/96 11:07:56

LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260911084202

Work Order # 9608968

Method Semivolatiles by SW8270B
Test Code 827SWA1T
Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 11:42
Instrument MSD2
Column
Analyst MCL
Reviewer SDL
Reporting Subset
Spikes Subset
Specs Subset
Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AR	100 uL
SP-1-729-C	250 uL		

LCS Lab Sample ID LCS965831 File ID Q9929

LCS Duplicate Lab Sample ID LCSD965831 File ID Q9930

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
2-Chlorophenol	100	96.2	96	100	80.0	80 Q	81	117	18 Q	17
4-Chlorophenylphenyl ether	100	87.2	87	100	82.7	83	79	133	4.7	18
Chrysene	100	103	103	100	97.4	97	85	133	6.0	21
Di-n-butylphthalate	100	94.9	95	100	90.3	90	68	135	5.4	21
Di-n-octylphthalate	100	104	104	100	96.2	96	54	146	8.0	22
Dibenz(a,h)anthracene	100	98.5	98	100	92.3	92	73	145	6.3	20
Dibenzofuran	100	89.4	89	100	83.0	83	82	130	7.0	16-
1,2-Dichlorobenzene	100	78.0	78	100	68.5	68 Q	73	121	14	22
1,3-Dichlorobenzene	100	77.0	77	100	68.2	68 Q	70	120	12	27
1,4-Dichlorobenzene	100	80.2	80	100	70.0	70	70	120	13	24
3,3'-Dichlorobenzidine	100	75.8	76	100	65.2	65	49	140	16	33
2,4-Dichlorophenol	100	98.9	99	100	84.7	85	60	135	15	19
Diethylphthalate	100	88.4	88	100	83.9	84	83	123	4.6	15
2,4-Dimethylphenol	100	80.5	81	100	65.8	66	32	119	19	33
Dimethylphthalate	100	92.1	92	100	87.5	87	84	130	5.6	21
4,6-Dinitro-2-methylphenol	100	104	104	100	98.5	99	53	163	4.9	18
2,4-Dinitrophenol	100	90.1	90	100	84.3	84	24	191	6.9	23
2,4-Dinitrotoluene	100	93.5	94	100	88.2	88	72	139	6.6	20
2,6-Dinitrotoluene	100	93.8	94	100	87.3	87	76	140	7.7	18
Diphenylamine/N-NitrosoDPA	100	81.6	82	100	77.8	78	47	117	5.0	21

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LABORATORY CONTROL SAMPLE Cont'd

Work Order # 9608968

Extraction Batch # 3510960903150000

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Analysis Batch # MSMSD260911084202

Method Semivolatiles by SW8270B
Test Code 827SWA1T
Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 11:42
Instrument MSD2
Column
Analyst MCL
Reviewer SDL
Reporting Subset
Spikes Subset
Specs Subset
Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AR	100 uL
SP-1-729-C	250 uL		

LCS Lab Sample ID LCS965831 File ID Q9929			LCS Duplicate Lab Sample ID LCSD965831 File ID Q9930			Recovery Spec. Limits		RPD	
Analyte	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Spiked Conc. ug/L	Measured Conc. ug/L	Rec. %	Low %	High %	Result %	Spec. Limit %
bis(2-Ethylhexyl)phthalate	100	101	101	100	96.8	97	74	144	4.0	22
Fluoranthene	100	91.1	91	100	85.9	86	77	129	5.6	19
Fluorene	100	88.8	89	100	84.0	84	79	121	5.8	17
Hexachlorobenzene	100	87.7	88	100	82.2	82	66	126	7.1	19
Hexachlorobutadiene	100	72.8	73	100	64.8	65	51	147	12	20
Hexachlorocyclopentadiene	100	42.7	43	100	42.6	43	0.1	148	0	49
Hexachloroethane	100	68.2	68	100	59.1	59 Q	62	127	14	28
Indeno(1,2,3-cd)pyrene	100	95.8	96	100	91.6	92	75	141	4.3	19
Isophorone	100	88.9	89	100	82.0	82	81	133	8.2	18
2-Methylnaphthalene	100	82.3	82	100	74.2	74	63	134	10	21
4-Methylphenol/3-Methylphenol	100	77.7	78	100	68.1	68	62	126	14	17
2-Methylphenol	100	92.2	92	100	77.8	78	72	126	16	19
N-Nitroso-di-n-propylamine	100	76.2	76	100	69.6	70	68	128	8.2	21
N-Nitrosodimethylamine	100	54.4	54	100	51.1	51	27	155	5.7	24
Naphthalene	100	86.2	86	100	77.8	78	70	133	9.8	17
2-Nitroaniline	100	85.5	86	100	80.7	81	69	140	6.0	24
3-Nitroaniline	100	74.3	74	100	71.3	71	69	133	4.1	22
4-Nitroaniline	100	65.1	65	100	57.7	58 Q	59	137	11	19
Nitrobenzene	100	85.4	85	100	76.9	77	74	142	9.9	22
2-Nitrophenol	100	104	104	100	88.3	88	67	149	17	19

09/18/96 11:07:56

LABORATORY CONTROL SAMPLE Cont'd

Extraction Batch # 3510960903150000

Analysis Batch # MSMSD260911084202

Work Order # 9608968

Method Semivolatiles by SW8270B
Test Code 827SWA1T
Date Prepared 09/03/96 15:00:
Date Analyzed 09/11/96 11:42
Instrument MSD2
Column
Analyst MCL
Reviewer SDL
Reporting Subset
Spikes Subset
Specs Subset
Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 1000 (mL)
Extract Mass or Vol 1.0 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
SP-1-728-B	100 uL	SP-1-694-AR	100 uL
SP-1-729-C	250 uL		

LCS Lab Sample ID LCS965831 File ID Q9929

LCS Duplicate Lab Sample ID LCSD965831 File ID Q9930

Analyte	LCS Spiked Conc. ug/L	LCS Measured Conc. ug/L	LCS Rec. %	LCSD Spiked Conc. ug/L	LCSD Measured Conc. ug/L	LCSD Rec. %	Recovery Spec. Limits Low %	Recovery Spec. Limits High %	RPD Result %	RPD Spec. Limit %
4-Nitrophenol	100	33.3	33 Q	100	36.7	37 Q	56	131	11	20
Pentachlorophenol	100	112	112	100	101	101	47	143	10	18
Phenanthrene	100	97.2	97	100	90.9	91	74	132	6.4	17
Phenol	100	42.8	43 Q	100	40.3	40 Q	70	123	7.2	18
Pyrene	100	99.7	100	100	94.0	94	74	148	6.2	21
1,2,4-Trichlorobenzene	100	77.9	78	100	70.0	70 Q	71	129	11	16
2,4,5-Trichlorophenol	100	108	108	100	95.8	96	80	132	12	15
2,4,6-Trichlorophenol	100	103	103	100	92.2	92	76	128	11	15

Surrogate(s)									
2-Fluorobiphenyl	100	75.7	76	100	68.5	68	43	116	
2-Fluorophenol	200	133	66	200	110	55 Q	60	124	
Nitrobenzene-d5	100	90.0	90	100	79.1	79	45	114	
Phenol-d5	200	89.2	45	200	76.5	38	28	122	
Terphenyl-d14	100	106	106	100	98.0	98	66	122	
2,4,6-Tribromophenol	200	173	87	200	162	81	26	123	

Method Semivolatiles by GC/MS Specification# 827S

Lab Sample ID File ID	Project Sample ID/Description	Analyte	Flag	Comment/Narrative	Corrective Action
LCS965809 P8188		Terphenyl-d14	Q	The recovery for this analyte did not meet the specified tolerance for the LCS.	The recovery for this analyte was within the specified tolerance for the calibration check standard.
LCSD965809 P8189		Benzidine		The recovery for this analyte did not meet the specified tolerance for the LCSD. Benzidine is subject to erratic behavior and may not be recovered according to Method 8270B. Sample results will be flagged.	The recovery for this analyte was not within the specified tolerance for the calibration check standard. Per CSC, ok to report.
LCSD965831 Q9909		Benzidine	Q	Benzidine was not recovered in the LCS/LCSD. Benzidine is subject to erratic behavior and may not be recovered according to method 8270B. Sample results for this analyte were flagged.	The recovery for this analyte was not within the specified tolerance for the calibration check standard. Per CSC, ok to report.
LCSD965831 Q9909		4-Nitrophenol	Q	Tolerance for separatory funnel (Method 3510) is 21-65.	
LCSD965831 Q9909		Phenol	Q	Tolerance for separatory funnel (Method 3510) is 18-79.	
LCSD965831 Q9909		Many analytes	Q	The recoveries for many analytes did not meet the specified tolerances for the LCSD. Some RPDs were outside of tolerances.	The analytes were within tolerances for the calibration check standard.
LCSD965831 Q9930		4-Nitrophenol	Q	Tolerance for separatory funnel (Method 3510) is 21-65.	
LCSD965831 Q9930		Phenol	Q	Tolerance for separatory funnel (Method 3510) is 18-79.	
LCSD965831 Q9930		Many LCS analytes	Q	Many analytes were outside of tolerances for accuracy in the LCS (low) also causing some RPDs to be outside of tolerances indicating an extraction problem.	Per CSC, ok to report.

Method Semivolatiles by GC/MS Specification# 827S

Lab Sample ID File ID	Project Sample ID/Description	Analyte	Flag	Comment/Narrative	Corrective Action
LCSD965831 Q9930		Benzidine		Benzidine was not recovered in the LCS/LCSD. Benzidine is subject to erratic behavior and may not be recovered according to method 8270B. Sample results for this analyte were flagged.	The recovery for this analyte was not within the specified tolerance for the calibration check standard. Per CSC, ok to report.
9608968-08A P8199	FB-1	Terphenyl-d14	Q	The percent recovery for terphenyl-d14 was outside of tolerances.	Allowed one acid surrogate and one base/ neutral surrogate out per sample.
9608968-05A Q9921	MW-7	2-Fluorophenol	Q	The percent recovery for 2-Fluorophenol was outside of tolerances.	Allowed one acid surrogate and one base/ neutral surrogate out per sample.
9608968-06A Q9922	MW-9	4-Methylphenol/3-Methylphenol	F	The F flag indicates that 3-methylphenol coelutes with 4-methylphenol. The calibration response factor is based on 4-methylphenol only. Any identification for 4-methylphenol should be regarded as a possible sum of the two indistinguishable isomers.	
9608968-06A Q9922	MW-9	2-Fluorophenol	Q	The percent recovery for 2-Fluorophenol was outside of tolerances.	Allowed one acid surrogate and one base/ neutral surrogate out per sample.
9608968-07A Q9923	MW-6	4-Methylphenol/3-Methylphenol	F	The F flag indicates that 3-methylphenol coelutes with 4-methylphenol. The calibration response factor is based on 4-methylphenol only. Any identification for 4-methylphenol should be regarded as a possible sum of the two indistinguishable isomers.	
9608968-07A Q9923	MW-6	Benzoic acid		The XX flag indicates that the concentration for this analyte exceeds the calibration range but the peak is not saturated, so the concentration reported is an accurate reflection of the amount of this analyte present in the sample.	

Method Semivolatiles by GC/MS Specification# 827S

Lab Sample ID File ID	Project Sample ID/Description	Analyte	Flag	Comment/Narrative	Corrective Action
9608968-07A Q9933	MW-6	4-Methylphenol/3-Methylphenol	F	The F flag indicates that 3-methylphenol coelutes with 4-methylphenol. The calibration response factor is based on 4-methylphenol only. Any identification for 4-methylphenol should be regarded as a possible sum of the two indistinguishable isomers.	

QUALITY CONTROL EXCEPTION REPORT **REPORT COPY 9608968**
LEVEL 2 - ANALYTICAL

QCER # 960903-16 **Revised:**

Analyst: KAREN WONG Instrument: 3510 Date Analyzed: 09/03/96
Batch #: 3510960903150000 Matrix: water Status: C
Prot Spec: 8270-03.003 Analysis File #: _____

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608968	FEDERAL PPBD	JAL	
9609002			

SAMPLE PREPARATION:

PROBLEM IDENTIFICATION
- Sample Went Dry _
- Loss of ____ % of Sample _
- Emulsion Formed _
- Blank Contamination _
- Instrument _
- Hold Time _
- MS/MSD Not Available X
- Instrument _
- Other (Describe) _

CORRECTIVE ACTION TAKEN
- Reprepare Sample _
- Sample Sent for Analysis X
- Resample _
- Other (Describe) _

Comments: _____

SAMPLE ANALYSIS:

PROBLEM IDENTIFICATION
- Surrogate Recovery _
- MS/MSD Recovery _
- LCS/LCSD Recovery _
- MS/MSD Precision _
- LCS/LCSD Precision _
- Standard _
- Blank Contamination _
- Instrument _
- Hold Time _
- No MS/MSD Available for Batch _
- Sample pH _
- Dil. Due to Hi-Level Non-Target Analytes _
- Serial Dilution _
- Analytical Spike _
- Internal Standard _
- Other (Describe) _

PROBABLE CAUSE
- Matrix Effect _
- Instrument _
- Spiking Error _
- Contamination _
- Coelution _
- Unknown _
- Other(Describe) _

CORRECTIVE ACTION TAKEN
- Reprepare Sample _
- Reanalyze Sample _
- Reanalyze LCS/LCSD _
- Recalibrate Instrument _
- Analyze Out of Hold Time _
- Prepare New Standard _
- Flag Data _
- Resample _
- Analyze by MSA _
- Perform Analytical Spike _
- No Action Required _
- Level 3 QCER to Follow _
- Other (Describe) _

Comments: _____

Distribution: CSC, Lab, Report

QUALITY CONTROL EXCEPTION REPORT
LEVEL 2 - ANALYTICAL

REPORT COPY 960896

QCER # 960910-16

Revised:

Analyst: CAROL LOVETT Instrument: msd#2 Date Analyzed: 09/10/9
Batch #: MSD2960910090500 Matrix: liquid Status: C
Prot Spec: 827S 03.003 Analysis File #: _____

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608968	FEDERAL PPBD	JAL	

SAMPLE PREPARATION:

PROBLEM IDENTIFICATION

- Sample Went Dry _
- Loss of ____ % of Sample _
- Emulsion Formed _
- Blank Contamination _
- Instrument _
- Hold Time _
- MS/MSD Not Available _
- Instrument _
- Other (Describe) _

CORRECTIVE ACTION TAKEN

- Reprepare Sample _
- Sample Sent for Analysis _
- Resample _
- Other (Describe) _

Comments: _____

SAMPLE ANALYSIS:

PROBLEM IDENTIFICATION

- Surrogate Recovery _
- MS/MSD Recovery _
- LCS/LCSD Recovery X
- MS/MSD Precision _
- LCS/LCSD Precision X
- Standard _
- Blank Contamination _
- Instrument _
- Hold Time _
- No MS/MSD Available for Batch _
- Sample pH _
- Dil. Due to Hi-Level Non-Target Analytes _
- Serial Dilution _
- Analytical Spike _
- Internal Standard _
- Other (Describe) _

PROBABLE CAUSE

- Matrix Effect _
- Instrument _
- Spiking Error _
- Contamination _
- Coelution _
- Unknown X
- Other(Describe) _

CORRECTIVE ACTION TAKEN

- Reprepare Sample _
- Reanalyze Sample _
- Reanalyze LCS/LCSD _
- Recalibrate Instrument _
- Analyze Out of Hold Time _
- Prepare New Standard _
- Flag Data _
- Resample _
- Analyze by MSA _
- Perform Analytical Spike _
- No Action Required _
- Level 3 QCER to Follow _
- Other (Describe) X

SEE BELOW

Comments: lcs965831: benzidine nd lcsd965831: Many analytes were recovered low also causing some rpds to be outside of tolerances (high). Per CSC, ok to report.

Distribution: CSC, Lab, Report

QUALITY CONTROL EXCEPTION REPORT **REPORT COPY 9608968**
LEVEL 2 - ANALYTICAL

QCER # 960911-09 **Revised: 09/16/96**

Analyst: CAROL LOVETT Instrument: msd#2 Date Analyzed: 09/11/96
Batch #: MSD2960911084200 Matrix: liquid Status: C
Prot Spec: 827S 03.003 Analysis File #: _____

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608968-07A	FEDERAL PPBD	JAL	MW-6

SAMPLE PREPARATION:

PROBLEM IDENTIFICATION
- Sample Went Dry _
- Loss of ____ % of Sample _
- Emulsion Formed _
- Blank Contamination _
- Instrument _
- Hold Time _
- MS/MSD Not Available _
- Instrument _
- Other (Describe) _

CORRECTIVE ACTION TAKEN
- Reprepare Sample _
- Sample Sent for Analysis _
- Resample _
- Other (Describe) _

Comments: _____

SAMPLE ANALYSIS:

PROBLEM IDENTIFICATION
- Surrogate Recovery _
- MS/MSD Recovery _
- LCS/LCSD Recovery X
- MS/MSD Precision _
- LCS/LCSD Precision X
- Standard _
- Blank Contamination _
- Instrument _
- Hold Time _
- No MS/MSD Available for Batch _
- Sample pH _
- Dil. Due to Hi-Level Non-Target Analytes _
- Serial Dilution _
- Analytical Spike _
- Internal Standard _
- Other (Describe) _

PROBABLE CAUSE
- Matrix Effect _
- Instrument _
- Spiking Error _
- Contamination _
- Coelution _
- Unknown X
- Other(Describe) X

EXT PBLM

CORRECTIVE ACTION TAKEN
- Reprepare Sample _
- Reanalyze Sample _
- Reanalyze LCS/LCSD _
- Recalibrate Instrument _
- Analyze Out of Hold Time _
- Prepare New Standard _
- Flag Data _
- Resample _
- Analyze by MSA _
- Perform Analytical Spike _
- No Action Required _
- Level 3 QCER to Follow _
- Other (Describe) X

SEE BELOW

Comments: lcs/d965831: benzidine nd/nd lcsd965831: Many analytes were outside of tolerances for accuratcy (low) also causing some rpds to beoutside of tolerances (high) indicating an extraction problem. Per CSC, ok to report.

Distribution: CSC, Lab, Report

QUALITY CONTROL EXCEPTION REPORT **REPORT COPY 9608968**
LEVEL 2 - SAMPLE CONTROL

QCER # 960829-05 **Revised:**

Analyst: PB Instrument: _____ Date Analyzed: 08/29/96
Batch #: _____ Matrix: WATER Status: C
Prot Spec: _____ Analysis File #: _____

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608967-07A	FEDERAL_PPBD	JAL	MW-6
9608968-04A	FEDERAL_PPBD	JAL	MW-24
9608969-06A	FEDERAL_PPBD	JAL	MW-9
9608970-05A	FEDERAL_PPBD	JAL	MW-7

PROBLEM IDENTIFICATION:

- Sample pH _
- Sample Temperature X
- Bubbles/Headspace in VOA Vials _
- Sample Broken _
- Insufficient Sample Size _
- Holding Time Exceeded Upon Receipt _
- Other (Describe) _

CORRECTIVE ACTION TAKEN:

- Resample _
- Log for Analysis X
- Log Using Alternate Split _
- Use spare split _
- Adjust Preservation _
- Level 3 QCER to Follow _
- Other (Describe) _

Comments: The following sample id's were received at temperatures above 6 C: MW-6, MW-9, TB-1 (all splits); MW-7 (metals and SVOC only); MW-24 (SVOC only)
Logged for analysis per JAL.

Distribution: CSC, Lab, Report

QUALITY CONTROL EXCEPTION REPORT **REPORT COPY 9608968**
LEVEL 2 - ANALYTICAL

QCER # 960902-02 **Revised: 09/03/96**

Analyst: KAREN WONG Instrument: cont 1/1 Date Analyzed: 09/02/96
Batch #: 3520960830170000 Matrix: water Status: I
Prot Spec: 8270-03.03 Analysis File #: _____

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608968-03A	FEDERAL PPBD	JAL	MW-23
9608968-04A	FEDERAL PPBD	JAL	MW-24
9608968-05A	FEDERAL PPBD	JAL	MW-7
9608968-06A	FEDERAL PPBD	JAL	MW-9
9608968-07A	FEDERAL PPBD	JAL	MW-6

SAMPLE PREPARATION:

PROBLEM IDENTIFICATION
Sample Went Dry _
Loss of ____ % of Sample _
Emulsion Formed _
Blank Contamination _
Instrument _
Hold Time _
MS/MSD Not Available _
Instrument _
Other (Describe) X
Exceeded extraction time

CORRECTIVE ACTION TAKEN
Reprepare Sample X
Sample Sent for Analysis _
Resample _
Other (Describe) _

Comments: The base fraction for these samples were turned off 9/2/96 at 10:30 am. They extracted for 19 hours and 10 minutes longer than the 24 hour limit. The spares will be re-extracted within hold by 3510.

SAMPLE ANALYSIS:

PROBLEM IDENTIFICATION
Surrogate Recovery _
MS/MSD Recovery _
LCS/LCSD Recovery _
MS/MSD Precision _
LCS/LCSD Precision _
Standard _
Blank Contamination _
Instrument _
Hold Time _
No MS/MSD Available for Batch _
Sample pH _
Dil. Due to Hi-Level Non-Target Analytes _
Serial Dilution _
Analytical Spike _
Internal Standard _
Other (Describe) _

PROBABLE CAUSE
Matrix Effect _
Instrument _
Spiking Error _
Contamination _
Coelution _
Unknown _
Other(Describe) _

CORRECTIVE ACTION TAKEN
Reprepare Sample _
Reanalyze Sample _
Reanalyze LCS/LCSD _
Recalibrate Instrument _
Analyze Out of Hold Time _
Prepare New Standard _
Flag Data _
Resample _
Analyze by MSA _
Perform Analytical Spike _
No Action Required _
Level 3 QCER to Follow _
Other (Describe) _

Comments: _____

Distribution: CSC, Lab, Report

QUALITY CONTROL EXCEPTION REPORT
LEVEL 2 - ANALYTICAL

REPORT COPY 9608968

QCER # 960905-03

Revised: 09/06/9

Analyst: CAROL LOVET Instrument: msd#1 Date Analyzed: 09/05/9
Batch #: MSD1960905080400 Matrix: liquid Status: C
Prot Spec: 827S 03.000 Analysis File #: _____

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608929			
9608968	FEDERAL PPBD	JAL	
9608953			

SAMPLE PREPARATION:

PROBLEM IDENTIFICATION
- Sample Went Dry _
- Loss of ____ % of Sample _
- Emulsion Formed _
- Blank Contamination _
- Instrument _
- Hold Time _
- MS/MSD Not Available _
- Instrument _
- Other (Describe) _

CORRECTIVE ACTION TAKEN
- Reprepare Sample _
- Sample Sent for Analysis _
- Resample _
- Other (Describe) _

Comments: _____

SAMPLE ANALYSIS:

PROBLEM IDENTIFICATION
- Surrogate Recovery X
- MS/MSD Recovery _
- LCS/LCSD Recovery X
- MS/MSD Precision _
- LCS/LCSD Precision _
- Standard _
- Blank Contamination _
- Instrument _
- Hold Time _
- No MS/MSD Available for Batch _
- Sample pH _
- Dil. Due to Hi-Level Non-Target Analytes _
- Serial Dilution _
- Analytical Spike _
- Internal Standard _
- Other (Describe) _

PROBABLE CAUSE
- Matrix Effect _
- Instrument _
- Spiking Error _
- Contamination _
- Coelution _
- Unknown X
- Other(Describe) _

CORRECTIVE ACTION TAKEN
- Reprepare Sample _
- Reanalyze Sample _
- Reanalyze LCS/LCSD _
- Recalibrate Instrument _
- Analyze Out of Hold Time _
- Prepare New Standard _
- Flag Data _
- Resample _
- Analyze by MSA _
- Perform Analytical Spike _
- No Action Required X
- Level 3 QCER to Follow _
- Other (Describe) X

SEE BELOW

Comments: lcs/d965809: benzidine nd/nd lcs985809: terphenyl-d14 124% Per CSC, ok to report. Samples were outside of hold times and could not be reextracted. Per CSCs, ok to report. 9608968-08a terphenyl-d14 127% 9608929-03a terphenyl-d14 125%

Distribution: CSC, Lab, Report

QUALITY CONTROL EXCEPTION REPORT (Cont'd)
LEVEL 2 - ANALYTICAL

QCER # 960905-03 Revised: 09/06/96

Benzidine is subject to erratic behavior and may not be reovereed according to Method 8270B.

09/11/96 16:49:13

RADIAN ANALYTICAL SERVICES
FPAS REPORT
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Work Order # 9608969

Client FEDERAL PAPERBOARD
Facility WILMINGTON
Client Code FEDERAL PPBD

Certified By Julie A Peacock
Date 9/12/96

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09/11/96 16:49:13

WORK ORDER SUMMARY

Report RADIAN CORPORATION
To 3200 E. CHAPEL HILL RD.
RTP, NC 27709
Attention Jim Narkunas

Client Code FEDERAL PPBD
Client FEDERAL PAPERBOARD
Facility WILMINGTON
Work ID Wilmington Semiannua

Work Order # 9608969
Page 1

RCN 258-058-11-05

Prepared Radian Analytical Services
By 14046 Summit Dr., Bldg. B
P. O. Box 201088
Austin, TX 78720-1088

CSC JALINDSEY

Case # NA
SDG # NA
RAS # 60126AJAL

New York ELAP ID #: 10915

Project Sample ID/ Description	Lab Sample ID	Test Code(s)	Method Desciption
MW-12	01A	DGTSWA00	Digestion by SW846
		ICTSW1CR	Metals by ICP
MW-10	02A	DGTSWA00	Digestion by SW846
		ICTSW1CR	Metals by ICP
MW-23	03A	DGTSWA00	Digestion by SW846
		ICTSW1CR	Metals by ICP
MW-24	04A	DGTSWA00	Digestion by SW846
		ICTSW1CR	Metals by ICP
MW-7	05A	DGTSWA00	Digestion by SW846
		ICTSW1CR	Metals by ICP
MW-9	06A	DGTSWA00	Digestion by SW846
		ICTSW1CR	Metals by ICP
MW-6	07A	DGTSWA00	Digestion by SW846
		ICTSW1CR	Metals by ICP
FB-1	08A	DGTSWA00	Digestion by SW846
		ICTSW1CR	Metals by ICP
MW-6	09A MS	DGTSWA00	Digestion by SW846
		ICTSW1CR	Metals by ICP
	10A MSD	DGTSWA00	Digestion by SW846
		ICTSW1CR	Metals by ICP

FLAG DEFINITIONS

Flag	Definition
< DL	Result less than stated Detection Limit and greater than or equal to zero.
NA	Analyte concentration not available for this analysis.
NC	RPD and/or % Recovery not calculated. See Narrative for explanation.
ND	Not detected. No instrument response for analyte or result less than zero.
NR	Not reported. Result greater than or equal to stated Detection Limit and less than specified Reporting Limit.
NS	Analyte not spiked.
B	Analyte detected in method blank at concentration greater than the Reporting Limit (and greater than zero).
C	Confirming data obtained using second GC column or GCMS.
E	Analyte concentration exceeded calibration range.
F	Interference or coelution suspected. See Narrative for explanation.
H	Presence of analyte previously confirmed by historical data.
I	Analyte identification suspect. See Narrative for explanation.
J	Result is less than stated Detection Limit but greater than or equal to specified Reporting Limit.
K	Peak did not meet method identification criteria. Analyte not detected on other GC column.
M	Result modified from previous Report. See Narrative for explanation.
P	Analyte not confirmed. Results from primary and secondary GC columns differ by greater than a factor of 3.
Q	QC result does not meet tolerance in Protocol Specification.
R	Result reported elsewhere.
S	Analyte concentration obtained using Method of Standard Additions (MSA).
T	Second column confirmational analysis not performed.
X	See Narrative for explanation.
Y	See Narrative for explanation.
Z	See Narrative for explanation.

ANALYTICAL PROTOCOL SUMMARY

Work Order # 9608969

Client FEDERAL PAPERBOARD

Facility WILMINGTON

Client Code FEDERAL PPBD

Method Metals by ICP

Specification # ICPS

Project Sample ID/Description	Lab Sample ID	Test Code(s)	Extraction/Digestion Batch #	Analysis Batch #
FB-1	9608969-08A	ICTSW1CR	IDIG960905083000	EMJ61E60909105001
MW-10	9608969-02A	ICTSW1CR	IDIG960905083000	EMJ61E60909105001
MW-12	9608969-01A	ICTSW1CR	IDIG960905083000	EMJ61E60909105001
MW-23	9608969-03A	ICTSW1CR	IDIG960905083000	EMJ61E60909105001
MW-24	9608969-04A	ICTSW1CR	IDIG960905083000	EMJ61E60909105001
MW-6	9608969-07A	ICTSW1CR	IDIG960905083000	EMJ61E60909105001
MW-7	9608969-05A	ICTSW1CR	IDIG960905083000	EMJ61E60909105001
MW-9	9608969-06A	ICTSW1CR	IDIG960905083000	EMJ61E60909105001

RESULTS SUMMARY

Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608969-08A		9608969-02A		9608969-01A		9608969-03A	
File ID:	J61E0909-28		J61E0909-18		J61E0909-17		J61E0909-19	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	09/05/96		09/05/96		09/05/96		09/05/96	
Date Analyzed:	09/09/96		09/09/96		09/09/96		09/09/96	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	mg/L		mg/L		mg/L		mg/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Chromium	< DL	0.000810	0.00450	0.000810	0.00506	0.000810	ND	0.000810

RESULTS SUMMARY (Cont'd)

Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Project Sample ID:	MW-24		MW-6		MW-7		MW-9	
Lab ID:	9608969-04A		9608969-07A		9608969-05A		9608969-06A	
File ID:	J61E0909-20		J61E0909-24		J61E0909-21		J61E0909-22	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/05/96		09/05/96		09/05/96		09/05/96	
Date Analyzed:	09/09/96		09/09/96		09/09/96		09/09/96	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	mg/L		mg/L		mg/L		mg/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Chromium	ND	0.000810	0.00859	0.000810	0.00140	0.000810	ND	0.000810

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ANALYSIS BATCH SUMMARY

Analysis Batch # EMJ61E60909105001

Work Order # 9608969

Method Metals by ICP

Test Code ICTSW1CR

Initial Calibration # NA

Calibration Date NA

Analysis Start Date/Time 09/09/96 10:50:00

Analysis Stop Date/Time 09/09/96 13:56:00

Instrument J61E

Analyst PLS

Reviewer MCM

Sequence/Analysis Time		Project Sample ID	Lab Sample ID	Sample Type	Analysis File #
1	09/09/96		STD1-BLANK	Initial Calibration Standard 1	J61E0909-1
2	09/09/96		S3	Initial Calibration Standard 1	J61E0909-2
3	09/09/96		S2	Initial Calibration Standard 1	J61E0909-3
4	09/09/96		S4	Initial Calibration Standard 1	J61E0909-4
5	09/09/96		S5	Initial Calibration Standard 1	J61E0909-5
6	09/09/96		S7	Initial Calibration Standard 1	J61E0909-6
7	09/09/96		STD_2-W	Initial Calibration Verification	J61E0909-7
8	09/09/96		CICSA-W	Interference Check Sample-Majors	J61E0909-8
9	09/09/96		CICSAB-W	Interference Check Sample-Majors/Minors	J61E0909-9
10	09/09/96		CCV-2-W	Continuing Calibration Verification	J61E0909-10
11	09/09/96		CCB-W	Blank, Continuing Calibration	J61E0909-11
12	09/09/96		BLK963398	Sample	J61E0909-12
13	09/09/96		BLK963398	Blank, Method	J61E0909-13
14	09/09/96		DCS965950	Detectability Check Sample	J61E0909-14
15	09/09/96		LCS965949	Lab Control Sample	J61E0909-15
16	09/09/96		LCSD965949	Lab Control Sample Duplicate	J61E0909-16
17	09/09/96	MW-12	9608969-01A	Sample	J61E0909-17
18	09/09/96	MW-10	9608969-02A	Sample	J61E0909-18
19	09/09/96	MW-23	9608969-03A	Sample	J61E0909-19
20	09/09/96	MW-24	9608969-04A	Sample	J61E0909-20
21	09/09/96	MW-7	9608969-05A	Sample	J61E0909-21
22	09/09/96	MW-9	9608969-06A	Sample	J61E0909-22
23	09/09/96	MW-6	9608969-07A	Serial Dilutions	J61E0909-23
24	09/09/96	MW-6	9608969-07A	Sample	J61E0909-24
25	09/09/96	MW-6	9608969-07A	Analytical Spike	J61E0909-25
26	09/09/96	MW-6	9608969-09A	Matrix Spike	J61E0909-26
27	09/09/96	MW-6	9608969-10A	Matrix Spike Duplicate	J61E0909-27
28	09/09/96	FB-1	9608969-08A	Sample	J61E0909-28
29	09/09/96		CICSA-W	Interference Check Sample-Majors	J61E0909-29
30	09/09/96		CICSAB-W	Interference Check Sample-Majors/Minors	J61E0909-30

ANALYSIS BATCH SUMMARY (cont'd)

Analysis Batch # EMJ61E60909105001

Work Order # 9608969

Method Metals by ICP
Test Code ICTSW1CR
Initial Calibration # NA
Calibration Date NA

Analysis Start Date/Time 09/09/96 10:50:00
Analysis Stop Date/Time 09/09/96 13:56:00

Instrument J61E
Analyst PLS
Reviewer MCM

Sequence/Analysis Time	Project Sample ID	Lab Sample ID	Sample Type	Analysis File #
31 09/09/96		CCV-2-W	Continuing Calibration Verification	J61E0909-31
32 09/09/96		CCB-W	Blank, Continuing Calibration	J61E0909-32

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RESULTS

Work Order # 9608969

Digestion Batch # IDIG960905083000

Analysis Batch # EMJ61E60909105001

Project Sample ID MW-12

Lab Sample ID 9608969-01A

File # J61E0909-17

Method ICP Analysis by SW6010A

Test Code ICTSW1CR

Date Collected 08/27/96

Date Received 08/29/96

Date Prepared 09/05/96

Date Analyzed 09/09/96

Instrument J61E

Column

Analyst PLS

Reviewer MCM

Reporting Subset

Spikes Subset

Specs Subset

Matrix W

Report As received

% Moisture

Aliquot Mass/Volume 50 (mL)

Extract/Digestate Volume 50 (mL)

Dilution Factor 1

Analyte	CAS #	Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Chromium	7440-47-3	0.00506	0.000810	0.000810

RESULTS

Digestion Batch # IDIG960905083000
Analysis Batch # EMJ61E60909105001

Work Order # 9608969

Project Sample ID MW-10
Lab Sample ID 9608969-02A
File # J61E0909-18
Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96

Instrument J61E
Column
Analyst PLS
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 50 (mL)
Extract/Digestate Volume 50 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Chromium	7440-47-3	0.00450	0.000810	0.000810

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RESULTS

Digestion Batch # IDIG960905083000
Analysis Batch # EMJ61E60909105001

Work Order # 9608969

Project Sample ID MW-23
Lab Sample ID 9608969-03A
File # J61E0909-19
Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96

Instrument J61E
Column
Analyst PLS
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 50 (mL)
Extract/Digestate Volume 50 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Chromium	7440-47-3	ND	0.000810	0.000810

RESULTS

Digestion Batch # IDIG960905083000
Analysis Batch # EMJ61E60909105001

Project Sample ID MW-24
Lab Sample ID 9608969-04A
File # J61E0909-20
Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96

Instrument J61E
Column
Analyst PLS
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Analyte	CAS #	Aliquot Mass/Volume 50 (mL) Extract/Digestate Volume 50 (mL) Dilution Factor 1 Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Chromium	7440-47-3	ND	0.000810	0.000810

RESULTS

Digestion Batch # IDIG960905083000
Analysis Batch # EMJ61E60909105001

Project Sample ID MW-7
Lab Sample ID 9608969-05A
File # J61E0909-21
Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96

Instrument J61E
Column
Analyst PLS
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 50 (mL)
Extract/Digestate Volume 50 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Chromium	7440-47-3	0.00140	0.000810	0.000810

RESULTS

Digestion Batch # IDIG960905083000
Analysis Batch # EMJ61E60909105001

Project Sample ID MW-9
Lab Sample ID 9608969-06A
File # J61E0909-22
Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96

Instrument J61E
Column
Analyst PLS
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Analyte	CAS #	Aliquot Mass/Volume 50 (mL) Extract/Digestate Volume 50 (mL) Dilution Factor 1 Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Chromium	7440-47-3	ND	0.000810	0.000810

RESULTS

Digestion Batch # IDIG960905083000
Analysis Batch # EMJ61E60909105001

Work Order # 9608969

Project Sample ID MW-6
Lab Sample ID 9608969-07A
File # J61E0909-24
Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96

Instrument J61E
Column
Analyst PLS
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 50 (mL)
Extract/Digestate Volume 50 (mL)
Dilution Factor 1

Analyte	CAS #	Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Chromium	7440-47-3	0.00859	0.000810	0.000810

RESULTS

Digestion Batch # IDIG960905083000
Analysis Batch # EMJ61E60909105001

Project Sample ID FB-1
Lab Sample ID 9608969-08A
File # J61E0909-28
Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96

Instrument J61E
Column
Analyst PLS
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Analyte	CAS #	Aliquot Mass/Volume 50 (mL) Extract/Digestate Volume 50 (mL) Dilution Factor 1 Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Chromium	7440-47-3	< DL	0.000810	0.000810

LABORATORY BLANK INFORMATION

Digestion Batch # _____
Analysis Batch # EMJ61E60909105001

Lab Sample ID CCB-W
File # J61E0909-32
Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Date Prepared _____
Date Analyzed 09/09/96

Instrument J61E
Column _____
Analyst PLS
Reviewer MCM

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W

Analyte	Aliquot Mass/Volume _____ (mL) Extract/Digestate Volume _____ (mL) Dilution Factor 1 Measured Conc. mg/L	Detection Limit mg/L	Reporting Limit mg/L
Chromium	-0.000480 J	0.000810	-1000

LABORATORY BLANK INFORMATION

Digestion Batch # _____
Analysis Batch # EMJ61E60909105001

Lab Sample ID CCB-W
File # J61E0909-11
Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Date Prepared _____
Date Analyzed 09/09/96

Instrument J61E
Column _____
Analyst PLS
Reviewer MCM

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W

Analyte	Aliquot Mass/Volume _____ (mL) Extract/Digestate Volume _____ (mL) Dilution Factor 1 Measured Conc. mg/L	Detection Limit mg/L	Reporting Limit mg/L
Chromium	0.000300 J	0.000810	-1000

LABORATORY BLANK INFORMATION

Digestion Batch # IDIG960905083000
Analysis Batch # EMJ61E60909105001

Lab Sample ID BLK963398
File # J61E0909-13
Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Date Prepared 09/05/96
Date Analyzed 09/09/96

Instrument J61E
Column
Analyst PLS
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Aliquot Mass/Volume 50 (mL)
Extract/Digestate Volume 50 (mL)
Dilution Factor 1

Analyte	Measured Conc. mg/L	Detection Limit mg/L	Reporting Limit mg/L
Chromium	ND	0.000810	0.000810

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LABORATORY CONTROL SAMPLE

Digestion Batch # IDIG960905083000

Analysis Batch # EMJ61E60909105001

Work Order # 9608969

Method ICP Analysis by SW6010A
Test Code ICTSW1CR
Date Prepared 09/05/96
Date Analyzed 09/09/96
Instrument J61E
Column
Analyst PLS
Reviewer MCM
Reporting Subset
Spikes Subset
Specs Subset
Matrix W
Report As received
% Moisture
Aliquot Mass or Vol 50 (mL)
Extract Mass or Vol 50 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added

Analyte	LCS Lab Sample ID LCS965949 File ID J61E0909-15			LCS Duplicate Lab Sample ID LCSD965949 File ID J61E0909-16			Recovery Spec. Limits		RPD	
	Spiked Conc. mg/L	Measured Conc. mg/L	Rec. %	Spiked Conc. mg/L	Measured Conc. mg/L	Rec. %	Low %	High %	Result %	Spec. Limit %
Chromium	0.0800	0.0840	105	0.0800	0.0835	104	80	120	0.96	20

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MATRIX SPIKE(S)

Digestion Batch # IDIG960905083000

Analysis Batch # EMJ61E60909105001

Work Order # 9608969

Project Sample ID MW-6
Method ICP Analysis by SW6010A
Test Code ICTSW1CR

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96

Instrument J61E
Column
Analyst PLS
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Spike Sol'n # Vol. Added

Surrogate Sol'n Vol. Added

Sample	Spiked Sample	Spiked Sample Dup
Lab Sample ID 9608969-07A	Lab Sample ID 9608969-09A MS	Lab Sample ID 9608969-10A MSD
File # J61E0909-24	File # J61E0909-26	File # J61E0909-27
Aliquot Mass/Vol 50 (mL)	Aliquot Mass/Vol 50 (mL)	Aliquot Mass/Vol 50 (mL)
Extract Mass/Vol 50 (mL)	Extract Mass/Vol 50 (mL)	Extract Mass/Vol 50 (mL)
Dil Fact. 1	Dil Fact. 1	Dil Fact. 1

Analyte	Spike Sol'n Conc. mg/L	Measured Conc. mg/L	Spiked Conc. mg/L	Measured Conc. mg/L	Rec. %	Spiked Conc. mg/L	Measured Conc. mg/L	Rec. %	Recovery Specification Limits Low %	High %	RPD Result %	Specification Limit %
Chromium	.08	0.00859	0.0800	0.0854	96	0.0800	0.0873	98	80	120	2.1	20

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ANALYTICAL SPIKE(S)

Digestion Batch # IDIG960905083000

Analysis Batch # EMJ61E60909105001

Work Order # 9608969

Project Sample ID MW-6

Method ICP Analysis by SW6010A

Test Code ICTSW1CR

Date Collected 08/28/96

Date Received 08/29/96

Date Prepared 09/05/96

Date Analyzed 09/09/96

Instrument J61E

Column

Analyst PLS

Reviewer MCM

Reporting Subset

Spikes Subset

Specs Subset

Matrix W

Report As received

% Moisture

Spike Sol'n #	Vol. Added	Sample	Spiked Sample	Spiked Sample Dup	Recovery Specification Limits	RPD
		Lab Sample ID 9608969-07A	Lab Sample ID 9608969-07A	Lab Sample ID		
		File # J61E0909-24	File # J61E0909-25	File #		
Surrogate Sol'n	Vol. Added	Aliquot Mass/Vol 50 (mL)	Aliquot Mass/Vol 50 (mL)	Aliquot Mass/Vol		
		Extract Mass/Vol 50 (mL)	Extract Mass/Vol 50 (mL)	Extract Mass/Vol		
		Dil Fact. 1	Dil Fact. 1.0204	Dil Fact.		

Analyte	Spike Sol'n Conc. mg/L	Measured Conc. mg/L	Spiked Conc. mg/L	Measured Conc. mg/L	Rec. %	Spiked Conc.	Measured Conc.	Rec. %	Low %	High %	Result %	Specification Limit %
Chromium		0.00859	0.0816	0.0803	88				75	125		

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SERIAL DILUTION CHECK

Digestion Batch # IDIG960905083000

Analysis Batch # EMJ61E60909105001

Work Order # 9608969

Project Sample ID MW-6

Method ICP Analysis by SW6010A

Test Code ICTSW1CR

Date Prepared 09/05/96

Date Analyzed 09/09/96

Instrument J61E

Analyst PLS

Reviewer MCM

Reporting Subset ___

Spikes Subset ___

Specs Subset ___

Matrix W

Report As received

	Sample Result Lab Sample ID 9608969-07A Dilution Factor 1		Diluted Sample Result Lab Sample ID 9608969-07A Dilution Factor 5		% Difference	
Analyte	Measured Concentration mg/L	Detection Limit mg/L	Measured Concentration mg/L	Detection Limit mg/L	Result	Specification Limit %
Chromium	0.00859	0.000810	0.0131	0.00405	52 Q	10

ANALYTICAL PROTOCOL SUMMARY
COMMENTS/NARRATIVE

Method Metals by ICP Specification# ICPS

Lab Sample ID File ID	Project Sample ID/Description	Analyte	Flag	Comment/Narrative	Corrective Action

QUALITY CONTROL EXCEPTION REPORT **REPORT COPY 9608969**
LEVEL 2 - SAMPLE CONTROL

QCER # 960829-05 **Revised:**

Analyst: PB Instrument: _____ Date Analyzed: 08/29/96
Batch #: _____ Matrix: WATER Status: C
Prot Spec: _____ Analysis File #: _____

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608967-07A	FEDERAL_PPBD	JAL	MW-6
9608968-04A	FEDERAL_PPBD	JAL	MW-24
9608969-06A	FEDERAL_PPBD	JAL	MW-9
9608970-05A	FEDERAL_PPBD	JAL	MW-7

PROBLEM IDENTIFICATION:

- Sample pH _
- Sample Temperature X
- Bubbles/Headspace in VOA Vials _
- Sample Broken _
- Insufficient Sample Size _
- Holding Time Exceeded Upon Receipt _
- Other (Describe) _

CORRECTIVE ACTION TAKEN:

- Resample _
- Log for Analysis X
- Log Using Alternate Split _
- Use spare split _
- Adjust Preservation _
- Level 3 QCER to Follow _
- Other (Describe) _

Comments: The following sample id's were received at temperatures above 6 C: MW-6, MW-9, TB-1 (all splits); MW-7 (metals and SVOC only); MW-24 (SVOC only)
Logged for analysis per JAL.

Distribution: CSC, Lab, Report

QUALITY CONTROL EXCEPTION REPORT
LEVEL 2 - SAMPLE CONTROL

REPORT COPY 9608969

QCER # 960829-06

Revised:

Analyst: PB
Instrument: _____
Date Analyzed: 08/29/96
Batch #: _____
Matrix: water
Status: C
Prot Spec: _____
Analysis File #: _____

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608969-07A	FEDERAL_PPBD	JAL	MW-6
9608970-07A	FEDERAL_PPBD	JAL	MW-6

PROBLEM IDENTIFICATION:

Sample pH	X
Sample Temperature	_
Bubbles/Headspace in VOA Vials	_
Sample Broken	_
Insufficient Sample Size	_
Holding Time Exceeded Upon Receipt	_
Other (Describe)	_

CORRECTIVE ACTION TAKEN:

Resample	_
Log for Analysis	X
Log Using Alternate Split	_
Use spare split	_
Adjust Preservation	X
Level 3 QCER to Follow	_
Other (Describe)	_

Comments: Sample MW-6 for metals analysis was received at a pH of 2.5 pH adjusted with HNO3 to <2 and logged for analysis per JAL.

Distribution: CSC, Lab, Report

09/10/96 16:21:53

RADIAN ANALYTICAL SERVICES
FPAS REPORT
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Work Order # 9608970

Client FEDERAL PAPERBOARD
Facility WILMINGTON
Client Code FEDERAL PPBD

Certified By Julie A Barcock
Date 9/11/96

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09/10/96 16:21:53

WORK ORDER SUMMARY

Report RADIAN CORPORATION
To 3200 E. CHAPEL HILL RD.
RTP, NC 27709
Attention Jim Narkunas

Client Code FEDERAL PPBD
Client FEDERAL PAPERBOARD
Facility WILMINGTON
Work ID Wilmington Semiannua

Work Order # 9608970
Page 1

RCN 258-058-11-05

Prepared Radian Analytical Services
By 14046 Summit Dr., Bldg. B
P. O. Box 201088
Austin, TX 78720-1088

CSC JALINDSEY

Case # NA
SDG # NA
RAS # 60126AJAL

New York ELAP ID #: 10915

Project Sample ID/ Description	Lab Sample ID	Test Code(s)	Method Desciption
MW-12	01A	ASGSWA00	Arsenic by GFAAS
		DIFSWA00	Digestion by SW846
MW-10	02A	ASGSWA00	Arsenic by GFAAS
		DIFSWA00	Digestion by SW846
MW-23	03A	ASGSWA00	Arsenic by GFAAS
		DIFSWA00	Digestion by SW846
MW-24	04A	ASGSWA00	Arsenic by GFAAS
		DIFSWA00	Digestion by SW846
MW-7	05A	ASGSWA00	Arsenic by GFAAS
		DIFSWA00	Digestion by SW846
MW-9	06A	ASGSWA00	Arsenic by GFAAS
		DIFSWA00	Digestion by SW846
MW-6	07A	ASGSWA00	Arsenic by GFAAS
		DIFSWA00	Digestion by SW846
FB-1	08A	ASGSWA00	Arsenic by GFAAS
		DIFSWA00	Digestion by SW846
MW-6	09A MS	ASGSWA00	Arsenic by GFAAS
		DIFSWA00	Digestion by SW846
	10A MSD	ASGSWA00	Arsenic by GFAAS
		DIFSWA00	Digestion by SW846

WORK ORDER COMMENTS

Post digestion spikes not performed on all GFAAS analyses per Item 271 of the New York ELAP manual. Post digestion spikes were performed, as necessary, when recoveries for serial dilutions or matrix spikes for an analytical batch did not fall within recovery tolerances.

FLAG DEFINITIONS

Flag	Definition
< DL	Result less than stated Detection Limit and greater than or equal to zero.
NA	Analyte concentration not available for this analysis.
NC	RPD and/or % Recovery not calculated. See Narrative for explanation.
ND	Not detected. No instrument response for analyte or result less than zero.
NR	Not reported. Result greater than or equal to stated Detection Limit and less than specified Reporting Limit.
NS	Analyte not spiked.
B	Analyte detected in method blank at concentration greater than the Reporting Limit (and greater than zero).
C	Confirming data obtained using second GC column or GCMS.
E	Analyte concentration exceeded calibration range.
F	Interference or coelution suspected. See Narrative for explanation.
H	Presence of analyte previously confirmed by historical data.
I	Analyte identification suspect. See Narrative for explanation.
J	Result is less than stated Detection Limit but greater than or equal to specified Reporting Limit.
K	Peak did not meet method identification criteria. Analyte not detected on other GC column.
M	Result modified from previous Report. See Narrative for explanation.
P	Analyte not confirmed. Results from primary and secondary GC columns differ by greater than a factor of 3.
Q	QC result does not meet tolerance in Protocol Specification.
R	Result reported elsewhere.
S	Analyte concentration obtained using Method of Standard Additions (MSA).
T	Second column confirmational analysis not performed.
X	See Narrative for explanation.
Y	See Narrative for explanation.
Z	See Narrative for explanation.

ANALYTICAL PROTOCOL SUMMARY

Work Order # 9608970

Client FEDERAL PAPERBOARD

Facility WILMINGTON

Client Code FEDERAL PPBD

Method Arsenic by GFAAS

Specification # ASGS

Project Sample ID/Description	Lab Sample ID	Test Code(s)	Extraction/Digestion Batch #	Analysis Batch #
FB-1	9608970-08A	ASGSWA00	GDIG960905080000	AAZ4__60909103101
MW-10	9608970-02A	ASGSWA00	GDIG960905080000	AAZ4__60909103101
MW-12	9608970-01A	ASGSWA00	GDIG960905080000	AAZ4__60909103101
MW-23	9608970-03A	ASGSWA00	GDIG960905080000	AAZ4__60909103101
MW-24	9608970-04A	ASGSWA00	GDIG960905080000	AAZ4__60909103101
MW-6	9608970-07A	ASGSWA00	GDIG960905080000	AAZ4__60909103101
MW-7	9608970-05A	ASGSWA00	GDIG960905080000	AAZ4__60909103101
MW-9	9608970-06A	ASGSWA00	GDIG960905080000	AAZ4__60909103101

RESULTS SUMMARY

Method Arsenic by SW7060A

Test Code ASGSWA00

Project Sample ID:	FB-1		MW-10		MW-12		MW-23	
Lab ID:	9608970-08A		9608970-02A		9608970-01A		9608970-03A	
File ID:	Z4090910-28		Z4090910-30		Z4090910-29		Z4090910-31	
Date Collected:	08/28/96		08/27/96		08/27/96		08/27/96	
Date Prepared:	09/05/96		09/05/96		09/05/96		09/05/96	
Date Analyzed:	09/09/96 13:02:00		09/09/96 13:13:00		09/09/96 13:08:00		09/09/96 13:19:00	
Dilution Factor:	1		1		1		1	
Matrix:	Water		Water		Water		Water	
Units:	mg/L		mg/L		mg/L		mg/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Arsenic	ND	0.00392	ND	0.00392	< DL	0.00392	0.0258	0.00392

RESULTS SUMMARY (Cont'd)

Method Arsenic by SW7060A
Test Code ASGSWA00

Project Sample ID:	MW-24		MW-6		MW-7		MW-9	
Lab ID:	9608970-04A		9608970-07A		9608970-05A		9608970-06A	
File ID:	Z4090910-32		Z4090910-42		Z4090910-33		Z4090910-34	
Date Collected:	08/28/96		08/28/96		08/28/96		08/28/96	
Date Prepared:	09/05/96		09/05/96		09/05/96		09/05/96	
Date Analyzed:	09/09/96 13:25:00		09/09/96 14:37:00		09/09/96 13:31:00		09/09/96 13:36:00	
Dilution Factor:	1		4		1		1	
Matrix:	Water		Water		Water		Water	
Units:	mg/L		mg/L		mg/L		mg/L	
Report as:	received		received		received		received	
Column:								
Analyte	Conc.	DL	Conc.	DL	Conc.	DL	Conc.	DL
Arsenic	0.0138	0.00392	0.149	0.0157	0.00989	0.00392	0.0111	0.00392

ANALYSIS BATCH SUMMARY

Analysis Batch # AAZ4 60909103101

Work Order # 9608970

Method Arsenic by GFAAS
Test Code ASGSWA00
Initial Calibration # Z4960909103100
Calibration Date 09/09/96

Analysis Start Date/Time 09/09/96 10:31:00
Analysis Stop Date/Time 09/09/96 15:00:00

Instrument Z4
Analyst MSC
Reviewer MCM

Sequence/Analysis Time		Project Sample ID	Lab Sample ID	Sample Type	Analysis File #
1	09/09/96 10:31:00		S_0	Initial Calibration Blank	Z4090910-1
2	09/09/96 10:37:00		S 3	Initial Calibration Standard 1	Z4090910-2
3	09/09/96 10:43:00		S 15	Initial Calibration Standard 2	Z4090910-3
4	09/09/96 10:49:00		S 30	Initial Calibration Standard 3	Z4090910-4
5	09/09/96 10:55:00		S 60	Initial Calibration Standard 4	Z4090910-5
6	09/09/96 11:01:00		ICV	Initial Calibration Verification	Z4090910-6
7	09/09/96 11:07:00		ICB	Blank, Initial Calibration	Z4090910-7
8	09/09/96 11:12:00		ABLK963395	Blank, Method	Z4090910-8
9	09/09/96 11:18:00		ADCS965942	Detectability Check Sample	Z4090910-9
10	09/09/96 11:24:00		ALCS965941	Lab Control Sample	Z4090910-10
11	09/09/96 11:31:00		BLK963395	Blank, Method	Z4090910-11
12	09/09/96 11:36:00		ADCS965942	Detectability Check Sample	Z4090910-12
13	09/09/96 11:42:00		LCS965941	Lab Control Sample	Z4090910-13
14	09/09/96 11:57:00		LCSD965941	Lab Control Sample Duplicate	Z4090910-14
15	09/09/96 12:02:00		A960897007A	Sample	Z4090910-15
16	09/09/96 12:05:00		A960897007A	Sample	Z4090910-16
17	09/09/96 12:12:00		A960897007A	Serial Dilutions	Z4090910-17
18	09/09/96 12:17:00		A960897007A	Analytical Spike	Z4090910-18
19	09/09/96 12:20:00		A960897007A	Analytical Spike	Z4090910-19
20	09/09/96 12:26:00		A960897009A	Matrix Spike	Z4090910-20
21	09/09/96 12:29:00		A960897009A	Matrix Spike	Z4090910-21
22	09/09/96 12:32:00		A960897009A	Matrix Spike	Z4090910-22
23	09/09/96 12:38:00		CCV	Continuing Calibration Verification	Z4090910-23
24	09/09/96 12:44:00		CCB	Blank, Continuing Calibration	Z4090910-24
25	09/09/96 12:50:00		A960897010A	Matrix Spike Duplicate	Z4090910-25
26	09/09/96 12:53:00		A960897010A	Matrix Spike Duplicate	Z4090910-26
27	09/09/96 12:56:00		A960897010A	Matrix Spike Duplicate	Z4090910-27
28	09/09/96 13:02:00	FB-1	9608970-08A	Sample	Z4090910-28
29	09/09/96 13:08:00	MW-12	9608970-01A	Sample	Z4090910-29
30	09/09/96 13:13:00	MW-10	9608970-02A	Sample	Z4090910-30

ANALYSIS BATCH SUMMARY (cont'd)

Analysis Batch # AAZ4 60909103101

Method Arsenic by GFAAS
Test Code ASGSWA00
Initial Calibration # Z4960909103100
Calibration Date 09/09/96

Analysis Start Date/Time 09/09/96 10:31:00
Analysis Stop Date/Time 09/09/96 15:00:00

Instrument Z4
Analyst MSC
Reviewer MCM

Sequence/Analysis Time		Project Sample ID	Lab Sample ID	Sample Type	Analysis File #
31	09/09/96 13:19:00	MW-23	9608970-03A	Sample	Z4090910-31
32	09/09/96 13:25:00	MW-24	9608970-04A	Sample	Z4090910-32
33	09/09/96 13:31:00	MW-7	9608970-05A	Sample	Z4090910-33
34	09/09/96 13:36:00	MW-9	9608970-06A	Sample	Z4090910-34
35	09/09/96 13:42:00		CCV	Continuing Calibration Verification	Z4090910-35
36	09/09/96 13:48:00		CCB	Blank, Continuing Calibration	Z4090910-36
37	09/09/96 14:08:00		A960897007A	Sample	Z4090910-37
38	09/09/96 14:14:00	MW-6	9608970-07A	Serial Dilutions	Z4090910-38
39	09/09/96 14:19:00		A960897007A	Analytical Spike	Z4090910-39
40	09/09/96 14:25:00	MW-6	9608970-09A	Matrix Spike	Z4090910-40
41	09/09/96 14:31:00	MW-6	9608970-10A	Matrix Spike Duplicate	Z4090910-41
42	09/09/96 14:37:00	MW-6	9608970-07A	Sample	Z4090910-42
43	09/09/96 14:43:00	MW-6	9608970-07A	Analytical Spike	Z4090910-43
44	09/09/96 14:48:00		CCV	Continuing Calibration Verification	Z4090910-44
45	09/09/96 14:54:00		CCB	Blank, Continuing Calibration	Z4090910-45

RESULTS

Digestion Batch # GDIG960905080000
Analysis Batch # AAZ4 60909103101

Work Order # 9608970

Project Sample ID FB-1
Lab Sample ID 9608970-08A
File # Z4090910-28
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
~~Date Analyzed~~ ~~09/09/96 13:02:00~~

Instrument Z4
Column
Analyst MSC
~~Reviewer~~ ~~MCM~~

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Analyte	CAS #	Aliquot Mass/Volume 50 (mL) Extract/Digestate Volume 50 (mL) Dilution Factor 1 Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	7440-38-2	ND	0.00392	0.00392

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RESULTS

Work Order # 9608970

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Digestion Batch # GDIG960905080000

Analysis Batch # AAZ4 60909103101

Project Sample ID MW-12
Lab Sample ID 9608970-01A
File # Z4090910-29
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96 13:08:00

Instrument Z4
Column
Analyst MSC
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Analyte	CAS #	Aliquot Mass/Volume 50 (mL) Extract/Digestate Volume 50 (mL) Dilution Factor 1 Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	7440-38-2	~~< DL~~ .0015 mg/L	0.00392	0.00392

RESULTS

Digestion Batch # GDIG960905080000
Analysis Batch # AAZ4 60909103101

Project Sample ID MW-10
Lab Sample ID 9608970-02A
File # Z4090910-30
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96 13:13:00

Instrument Z4
Column
Analyst MSC
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Analyte	CAS #	Aliquot Mass/Volume 50 (mL) Extract/Digestate Volume 50 (mL) Dilution Factor 1 Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	7440-38-2	ND	0.00392	0.00392

RESULTS

Digestion Batch # GDIG960905080000
Analysis Batch # AAZ4 60909103101

Project Sample ID MW-23
Lab Sample ID 9608970-03A
File # Z4090910-31
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Collected 08/27/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96 13:19:00

Instrument Z4
Column
Analyst MSC
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Analyte	CAS #	Aliquot Mass/Volume 50 (mL) Extract/Digestate Volume 50 (mL) Dilution Factor 1 — Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	7440-38-2	0.0258	0.00392	0.00392

RESULTS

Digestion Batch # GDIG960905080000

Analysis Batch # AAZ4 60909103101

Project Sample ID MW-24 | Date Collected 08/28/96 | Instrument Z4 | Reporting Subset ___ | Matrix W

Lab Sample ID 9608970-04A | Date Received 08/29/96 | Column _____ | Spikes Subset ___ | Report As received

File # Z4090910-32 | Date Prepared 09/05/96 | Analyst MSC | Specs Subset ___ | % Moisture _____

Method Arsenic by SW7060A | Date Analyzed 09/09/96 13:25:00 | Reviewer MCM

Test Code ASGSWA00

Analyte	CAS #	Aliquot Mass/Volume 50 (mL) Extract/Digestate Volume 50 (mL) Dilution Factor 1 Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	7440-38-2	0.0138	0.00392	0.00392

RESULTS

Digestion Batch # GDIG960905080000
Analysis Batch # AAZ4 60909103101

Work Order # 9608970

Project Sample ID MW-7
Lab Sample ID 9608970-05A
File # Z4090910-33
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96 13:31:00

Instrument Z4
Column
Analyst MSC
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Analyte	CAS #	Aliquot Mass/Volume 50 (mL) Extract/Digestate Volume 50 (mL) Dilution Factor 1 — Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	7440-38-2	0.00989	0.00392	0.00392

RESULTS

Digestion Batch # GDIG960905080000
Analysis Batch # AAZ4 60909103101

Work Order # 9608970

Project Sample ID MW-9
Lab Sample ID 9608970-06A
File # Z4090910-34
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96 13:36:00

Instrument Z4
Column
Analyst MSC
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Analyte	CAS #	Aliquot Mass/Volume 50 (mL) Extract/Digestate Volume 50 (mL) Dilution Factor 1 Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	7440-38-2	0.0111	0.00392	0.00392

RESULTS

Digestion Batch # GDIG960905080000
Analysis Batch # AAZ4 60909103101

Work Order # 9608970

Project Sample ID MW-6
Lab Sample ID 9608970-07A
File # Z4090910-42
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96 14:37:00

Instrument Z4
Column
Analyst MSC
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Aliquot Mass/Volume 50 (mL)
Extract/Digestate Volume 50 (mL)
Dilution Factor 4

Analyte	CAS #	Measured Concentration mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	7440-38-2	0.149	0.0157	0.0157

LABORATORY BLANK INFORMATION

Digestion Batch # _____
Analysis Batch # AAZ4 60909103101

Lab Sample ID CCB
File # Z4090910-24
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Prepared _____
Date Analyzed 09/09/96 12:44:00

Instrument Z4
Column _____
Analyst MSC
Reviewer MCM

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W

Analyte	Aliquot Mass/Volume _____ (mL) Extract/Digestate Volume 1 (mL) Dilution Factor 1 Measured Conc. mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	0.000390 J	0.00392	-1000

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LABORATORY BLANK INFORMATION

Work Order # 9608970

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Digestion Batch # _____

Analysis Batch # AAZ4 60909103101

Lab Sample ID CCB
File # Z4090910-36
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Prepared _____
Date Analyzed 09/09/96 13:48:00

Instrument Z4
Column _____
Analyst MSC
Reviewer MCM

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W

Analyte	Aliquot Mass/Volume _____ (mL) Extract/Digestate Volume 1 (mL) Dilution Factor 1 Measured Conc. mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	-0.000050 J	0.00392	-1000

LABORATORY BLANK INFORMATION

Digestion Batch # _____
Analysis Batch # AAZ4 60909103101

Lab Sample ID CCB
File # Z4090910-45
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Prepared _____
Date Analyzed 09/09/96 14:54:00

Instrument Z4
Column _____
Analyst MSC
Reviewer MCM

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W

Analyte	Aliquot Mass/Volume _____ (mL) Extract/Digestate Volume 1 (mL) Dilution Factor 1 Measured Conc. mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	-0.000580 J	0.00392	-1000

LABORATORY BLANK INFORMATION

Digestion Batch # _____
Analysis Batch # AAZ4 60909103101

Lab Sample ID ICB
File # Z4090910-7
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Prepared _____
Date Analyzed 09/09/96 11:07:00

Instrument Z4
Column _____
Analyst MSC
Reviewer MCM

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W

Analyte	Aliquot Mass/Volume _____ (mL) Extract/Digestate Volume 1 (mL) Dilution Factor 1 Measured Conc. mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	0.00103 J	0.00392	-1000

LABORATORY BLANK INFORMATION

Digestion Batch # GDIG960905080000
Analysis Batch # AAZ4 60909103101

Lab Sample ID BLK963395
File # Z4090910-11
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Prepared 09/05/96
Date Analyzed 09/09/96 11:31:00

Instrument Z4
Column
Analyst MSC
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W

Analyte	Aliquot Mass/Volume 50 (mL) Extract/Digestate Volume 50 (mL) Dilution Factor 1 Measured Conc. mg/L	Detection Limit mg/L	Reporting Limit mg/L
Arsenic	< DL	0.00392	0.00392

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LABORATORY CONTROL SAMPLE

Digestion Batch # GDIG960905080000

Analysis Batch # AAZ4 60909103101

Work Order # 9608970

Method Arsenic by SW7060A

Test Code ASGSWA00

Date Prepared 09/05/96

Date Analyzed 09/09/96 11:57:00

Instrument Z4

Column

Analyst MSC

Reviewer MCM

Reporting Subset

Spikes Subset

Specs Subset

Matrix W

Report As received

% Moisture

Aliquot Mass or Vol 50 (mL)

Extract Mass or Vol 50 (mL)

Control Std. #	Vol. Added	Surrogate Sol'n #	Vol. Added
LCS	1 ml		

Analyte	LCS Lab Sample ID LCS965941 File ID Z4090910-13			LCS Duplicate Lab Sample ID LCSD965941 File ID Z4090910-14			Recovery Spec. Limits		RPD	
	Spiked Conc. mg/L	Measured Conc. mg/L	Rec. %	Spiked Conc. mg/L	Measured Conc. mg/L	Rec. %	Low %	High %	Result %	Spec. Limit %
Arsenic	0.0500	0.0481	96	0.0500	0.0498	100	75	125	4.1	20

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MATRIX SPIKE(S)

Digestion Batch # GDIG960905080000

Analysis Batch # AAZ4 60909103101

Work Order # 9608970

Project Sample ID MW-6
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96 14:31:00

Instrument Z4
Column
Analyst MSC
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Spike Sol'n #	Vol. Added	Sample	Spiked Sample	Spiked Sample Dup	Recovery Specification Limits	RPD
		Lab Sample ID 9608970-07A	Lab Sample ID 9608970-09A MS	Lab Sample ID 9608970-10A MSD		
Surrogate Sol'n	Vol. Added	File # Z4090910-42	File # Z4090910-40	File # Z4090910-41		
		Aliquot Mass/Vol 50 (mL)	Aliquot Mass/Vol 50 (mL)	Aliquot Mass/Vol 50 (mL)		
		Extract Mass/Vol 50 (mL)	Extract Mass/Vol 50 (mL)	Extract Mass/Vol 50 (mL)		
		Dil Fact. 4	Dil Fact. 10	Dil Fact. 10		

Analyte	Spike Sol'n Conc. mg/L	Measured Conc. mg/L	Spiked Conc. mg/L	Measured Conc. mg/L	Rec. %	Spiked Conc. mg/L	Measured Conc. mg/L	Rec. %	Low %	High %	Result %	Specification Limit %
Arsenic	0.050	0.149	0.0500	0.201	104	0.0500	0.212	126 Q	75	125	19	20

09/10/96 16:21:53

ANALYTICAL SPIKE(S)

Digestion Batch # GDIG960905080000

Analysis Batch # AAZ4 60909103101

Work Order # 9608970

Project Sample ID MW-6
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Collected 08/28/96
Date Received 08/29/96
Date Prepared 09/05/96
Date Analyzed 09/09/96 14:43:00

Instrument Z4
Column
Analyst MSC
Reviewer MCM

Reporting Subset
Spikes Subset
Specs Subset

Matrix W
Report As received
% Moisture

Spike Sol'n #	Vol. Added	Sample Lab Sample ID 9608970-07A File # Z4090910-42 Aliquot Mass/Vol 50 (mL) Extract Mass/Vol 50 (mL) Dil Fact. 4	Spiked Sample Lab Sample ID 9608970-07A File # Z4090910-43 Aliquot Mass/Vol 50 (mL) Extract Mass/Vol 50 (mL) Dil Fact. 4	Spiked Sample Dup Lab Sample ID File # Aliquot Mass/Vol Extract Mass/Vol Dil Fact.	Recovery Specification Limits	RPD
Surrogate Sol'n	Vol. Added					

Analyte	Spike Sol'n Conc. mg/L	Measured Conc. mg/L	Spiked Conc. mg/L	Measured Conc. mg/L	Rec. %	Spiked Conc.	Measured Conc.	Rec. %	Low %	High %	Result %	Specification Limit %
Arsenic	0.020	0.149	0.0800	0.230	101				85	115		

09/10/96 16:21:53

SERIAL DILUTION CHECK

Digestion Batch # GDIG960905080000
Analysis Batch # AAZ4 60909103101

Work Order # 9608970

Project Sample ID MW-6
Method Arsenic by SW7060A
Test Code ASGSWA00

Date Prepared 09/05/96
Date Analyzed 09/09/96 14:14:00

Instrument Z4
Analyst MSC
Reviewer MCM

Reporting Subset ___
Spikes Subset ___
Specs Subset ___

Matrix W
Report As received

	Sample Result Lab Sample ID 9608970-07A Dilution Factor 4		Diluted Sample Result Lab Sample ID 9608970-07A Dilution Factor 20		% Difference	
Analyte	Measured Concentration mg/L	Detection Limit mg/L	Measured Concentration mg/L	Detection Limit mg/L	Result	Specification Limit %
Arsenic	0.149	0.0157	0.153	0.0784	49 Q	10

ANALYTICAL PROTOCOL SUMMARY
COMMENTS/NARRATIVE

Method Arsenic by GFAAS Specification# ASGS

Lab Sample ID File ID	Project Sample ID/Description	Analyte	Flag	Comment/Narrative	Corrective Action

QUALITY CONTROL EXCEPTION REPORT **REPORT COPY 960897**
LEVEL 2 - SAMPLE CONTROL

QCER # 960829-05 **Revised:**

Analyst: PB Instrument: _____ Date Analyzed: 08/29/9
Batch #: _____ Matrix: WATER Status: C
Prot Spec: _____ Analysis File #: _____

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608967-07A	FEDERAL_PPBD	JAL	MW-6
9608968-04A	FEDERAL_PPBD	JAL	MW-24
9608969-06A	FEDERAL_PPBD	JAL	MW-9
9608970-05A	FEDERAL_PPBD	JAL	MW-7

PROBLEM IDENTIFICATION:

- Sample pH _
- Sample Temperature X
- Bubbles/Headspace in VOA Vials _
- Sample Broken _
- Insufficient Sample Size _
- Holding Time Exceeded Upon Receipt _
- Other (Describe) _

CORRECTIVE ACTION TAKEN:

- Resample _
- Log for Analysis X
- Log Using Alternate Split _
- Use spare split _
- Adjust Preservation _
- Level 3 QCER to Follow _
- Other (Describe) _

Comments: The following sample id's were received at temperatures above 6 C: MW-6, MW-9, TB-1 (all splits); MW-7 (metals and SVOC only); MW-24 (SVOC only)
Logged for analysis per JAL.

Distribution: CSC, Lab, Report

QUALITY CONTROL EXCEPTION REPORT **REPORT COPY 9608970**
LEVEL 2 - SAMPLE CONTROL

QCER # 960829-06 **Revised:**

Analyst: PB Instrument: _____ Date Analyzed: 08/29/96
Batch #: _____ Matrix: water Status: C
Prot Spec: _____ Analysis File #: _____

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608969-07A	FEDERAL PPBD	JAL	MW-6
9608970-07A	FEDERAL PPBD	JAL	MW-6

PROBLEM IDENTIFICATION:

Sample pH	X
Sample Temperature	_
Bubbles/Headspace in VOA Vials	_
Sample Broken	_
Insufficient Sample Size	_
Holding Time Exceeded Upon Receipt	_
Other (Describe)	_

CORRECTIVE ACTION TAKEN:

Resample	_
Log for Analysis	X
Log Using Alternate Split	_
Use spare split	_
Adjust Preservation	X
Level 3 QCER to Follow	_
Other (Describe)	_

Comments: Sample MW-6 for metals analysis was received at a pH of 2.5 pH adjusted with HNO3 to <2 and logged for analysis per JAL.

Distribution: CSC, Lab, Report

QUALITY CONTROL EXCEPTION REPORT
LEVEL 2 - ANALYTICAL

REPORT COPY 9608970

QCER # 960909-04

Revised: 09/10/96

Analyst: MARISSA SNOW CURLEE Instrument: Z4 PE 4100 Date Analyzed: 09/09/96
Batch #: Z4960909103100 01 Matrix: WATER Status: C
Prot Spec: XXGS 00 Analysis File #: _____ Analyte: AS

Lab Sample ID:	Client ID:	CSC:	Project Sample ID:
9608970-07A	FEDERAL PPBD	JAL	MW-6

SAMPLE PREPARATION:

PROBLEM IDENTIFICATION

- Sample Went Dry _
- Loss of ____ % of Sample _
- Emulsion Formed _
- Blank Contamination _
- Instrument _
- Hold Time _
- MS/MSD Not Available _
- Instrument _
- Other (Describe) _

CORRECTIVE ACTION TAKEN

- Reprepare Sample _
- Sample Sent for Analysis _
- Resample _
- Other (Describe) _

Comments: _____

SAMPLE ANALYSIS:

PROBLEM IDENTIFICATION

- Surrogate Recovery _
- MS/MSD Recovery X
- LCS/LCSD Recovery _
- MS/MSD Precision _
- LCS/LCSD Precision _
- Standard _
- Blank Contamination _
- Instrument _
- Hold Time _
- No MS/MSD Available for Batch _
- Sample pH _
- Dil. Due to Hi-Level Non-Target Analytes _
- Serial Dilution _
- Analytical Spike _
- Internal Standard _
- Other (Describe) _

PROBABLE CAUSE

- Matrix Effect _
- Instrument _
- Spiking Error _
- Contamination _
- Coelution _
- Unknown _
- Other(Describe) X

SAMPLE DILUTED 1/10

CORRECTIVE ACTION TAKEN

- Reprepare Sample _
- Reanalyze Sample _
- Reanalyze LCS/LCSD _
- Recalibrate Instrument _
- Analyze Out of Hold Time _
- Prepare New Standard _
- Flag Data _
- Resample _
- Analyze by MSA _
- Perform Analytical Spike _
- No Action Required X
- Level 3 QCER to Follow _
- Other (Describe) _

Comments: SAMPLE MW-6 MSD OUTSIDE TOLERANCE AT 126%. MS, ANALYTICAL SPIKE, AND LCS/LCSD WITHIN TOLERANCE FOR ARSENIC.

RADIAN INTERNATIONAL LLC

CUSTODY NUMBER: 96- 0843

CHAIN OF CUSTODY ADDENDUM

RECEIVED BY: Tom Baraga

DATE: 8/29/96

UNPACKED DATE: 8/29/96

WORK ORDER(S): 9608 96.7
968
969
970

NUMBER OF OUTER CONTAINERS RECEIVED WITH CHAIN OF CUSTODY 2

CLIENT CODE: FEDERAL PPBD

(Check the appropriate answer. Add comments or explanations as needed)

CUSTODY SEAL ON COOLER/OUTER CONTAINER BY: TJB

Present	X YES	____ NO
Custody Number	signed #.	____ NO
Container sealed with tape	X YES	____ NO
Seal is intact	X YES	____ NO

If seal not intact, list air bill number of that container(s).

SAMPLE TEMPERATURE UPON ARRIVAL BY: TJB/JK PYROMETER # P-2

The temperature of the container(s) is: (acceptable tolerance 2 - 6°C)

1 12 °C (#1) 2 6 °C (#2) 3 ____ °C 4 ____ °C 5 ____ °C 6 ____ °C 7 ____ °C

When samples are received not requiring cooling ____ NA

If the temperature(s) are outside the acceptable range of 2 - 6°C

Client Services was notified, (JAK CSC) ✓ YES

OK to analyze samples: ✓ YES ____ NO

All samples not listed below were within the acceptable temperature tolerance of 2 - 6°C. Samples affected and their temperatures:

Sample ID	Temp. (°C)	Sample ID	Temp. (°C)	Sample ID	Temp. (°C)

SEE ATTACHMENT ADDITIONAL COMMENTS

mag c:\forms\coc-add.aam Rev.1/8/96

0413

CONDITION OF BOTTLES/CONTAINERS BY: JK (COMMENT ANY PROBLEMS)

Bottles received match COC ✓ YES ____ NO

Bottles received intact ✓ YES ____ NO

Comments:
NO TIMES LISTED ON SAMPLE LABELS. (Log per COC per JAL)

pH OF SAMPLES/PRESERVATION BY: TJB (COMMENT ANY PROBLEMS)

Acid preserved samples are <2pH TJB ✗ YES ✗ NO

(as indicated by * on COC) See below-AB

Base preserved samples are >12pH ____ YES ____ NO

(as indicated by # on COC)

Water samples for Cyanide checked ____ YES ____ NO

(as noted with a ✓ on COC)

Water Sulfide samples appear to be preserved with zinc acetate ____ YES ____ NO

____ NA

If pH/preservation is outside acceptable limits, Client Services was notified

(JAL CSC) ✓ YES ADJUST ✓ YES ____ NO

Sample IDs and pH of samples received outside of acceptable pH range.

All other samples not listed are at the appropriate pH.

Sample ID	pH	Sample ID	pH	Sample ID	pH	Sample ID	pH
MW-6	2.5						

Comments:

SHIPPING DOCUMENTATION

Freightbill is available and attached to chain-of-custody.

FED/EX 1911472006 ✓ YES ____ NO

OTHER COMMENTS;

CLIENT CHAIN-OF-CUSTODY IS SIGNED/DATED WITH TIME BY SAMPLE CONTROL AS RECEIVED, WITH THE SAMPLE CONTROL ADDENDUM NUMBER NOTED IN THE COMMENTS SECTION.

✓ YES ____ NO

SAMPLE CONTROL ADDENDUM VERIFIED BY: Patty Bell DATE: 8/29/96

RADIAN INTERNATIONAL LLC

SAMPLE CONTROL ADDENDUM NUMBER #96-0843

ADDITIONAL COMMENTS: BY: JK

METALS

MW-6 8°C
MW-7 10°C
MW-9 10°C

SVOCS

MW-6 12°C 2EA.
MW-7 12°C 2EA.
MW-9 12°C 2EA.
MW-24 12°C

VOCS

MW-6 12, 12, 16
TB-1 11, 12
MW-9 16, 16, 18

SAMPLE CONTROL ADDENDUM VERIFIED BY: Polly Bell DATE: 8/29/96

RADIAN CORPORATION

Chain of Custody Record

Page 1 of 1

PROJECT: IP

SITE: Wilmington, NC

COLLECTED BY (Signature): S. Haynes / J. Regan

ANALYSES: VOCs 8260 (MEK, 2K) / SVOCs 8270 / Metals 6010 PER RAS PER JAL

9608967, 968, 969, 970

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	VOCs 8260 (MEK, 2K)	SVOCs 8270	Metals 6010 PER RAS PER JAL						REMARKS	SAM ID NO. (for lab use only)
MW-12	Water	08/27/96/1435	6	3	2	1*							Cooler #2
MW-10		08/27/96/1611	6	3	2	1*							
MW-23		08/27/96/1605	6	3	2	1*							
MW-24		08/28/96/0925	6	3	2	1*							
MW-7		08/28/96/1035	6	3	2	1*						3 mm AB	
MW-9		08/28/96/1130	6	3	2	1*							Cooler #1
MW-6		08/28/96/1210	6	3	2	1							
FB-1		08/28/96/0930	6	3	2	1*							Cooler #2
TB-1	↓	08/28/96/1210	2									3 mm AB	Cooler #1

REMARKS

RELINQUISHED BY:	DATE	TIME

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME
			Jennifer Regan	08/28/96	1730						

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°C	SEAL #	CONDITION
Tom Pouza	8/29/96	930							

REMARKS: addendum 96-0843

4-88-30337

FedEx USA Airbill Number 1114 7200 6 FedEx Retention Copy

1 From

Date 08/28/96 Sender's FedEx Account Number 1328-4690-1

Sender's Name Jennifer Regan Phone (919) 461-1452

Dept./Floor/Suite/Room

Company 1600 Perimeter Park Rd.

Address Radian International

City Morrisville State NC Zip 27560

2 Your Internal Billing Reference Information 258-058-11-02

3 To

Recipient's Name Radian International Phone ( )

Dept./Floor/Suite/Room

Company Sample Control

Address 14046 Summit Drive

(To "HOLD" at FedEx location, print FedEx address here)

City Austin State TX Zip 78728

For HOLD at FedEx Location check here

1 [ ] Hold Weekday (Not available at all locations) (Not available with FedEx First Overnight or FedEx Standard Overnight)

3 [ ] Hold Saturday (Not available at all locations) (Not available with FedEx First Overnight or FedEx Standard Overnight)

For Saturday Delivery check here

3 [ ] (Extra Charge. Not available to all locations) (Not available with FedEx First Overnight or FedEx Standard Overnight)

4a Express Package Service *Packages under 150 lbs.*

1 [X] FedEx Priority Overnight [ ] FedEx Standard Overnight [ ]

[ ] FedEx Government Next Day Overnight [ ]

6 [ ] NEW FedEx First Overnight (Earliest next business morning delivery) (Higher rates apply)

4b Express Freight Service *Packages over 150 lbs.*

7 [ ] FedEx Overnight Freight (Next business day delivery) [ ] FedEx 2Day Freight (Two business day delivery) [ ] FedEx Express Saver Freight (Three business day delivery)

(Call for delivery schedule. See rate detail for descriptions of freight packaging.)

5 Packaging 1 [ ] FedEx Letter 2 [ ] FedEx Pak 3 [ ] FedEx Box 4 [ ] FedEx Tube 5 [X] Other Pkg

6 Special Handling

Does this shipment contain dangerous goods? [ ] Yes [ ] Yes

6 [ ] Dry Ice (Dry Ice: UN 1845) (Dangerous Goods Shipper's Declaration required) CA [ ] Cargo Aircraft Only

7 Payment

Bill to: 1 [X] Sender (Section 1A, Rate Section) 2 [ ] Recipient 3 [ ] Third Party 4 [ ] Credit Card 5 [ ] Cash/Check

[ ] Obtain Recipient FedEx Account No.

FedEx Account No.

Credit Card No. Exp. Date

Total Packages 2 Total Weight 118 Total Charges $

*Where applicable, a separate Service Guide may apply. SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY

Credit Card Auth.

8 Release Signature

Your signature authorizes FedEx Express to deliver this shipment without obtaining a signature if FedEx Express has determined it is safe to do so and hold harmless FedEx Express from any resulting claims.

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[ ] Check here if there are more than four packages in this shipment

Rev. Date 3/96 PART #147957

GBFE 7/96

1 9 1 1 4 7 2 0 0 6