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SAMPLING AND ANALYSES REPORT FOR DECEMBER 1991 SEMIANNUAL POSTBURN SAMPLING AT THE RM1 UCG SITE, HANNA, WYOMING

By
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SUMMARY

The December 1991 semiannual groundwater sampling at the Rocky Mountain 1 (RM1) underground coal gasification (UCG) site took place from December 5 through December 11, 1991. This event occurred nearly 27 months after the second groundwater restoration at the RM1 site and was the fourteenth sampling event since UCG operations ceased. Samples were collected for analyses on a full-suite set of parameters according to the established sampling schedule.

Analyses of groundwater samples collected during December 1991 show that most parameters are at or below baseline concentrations. Exceptions include benzene in wells EMW-1 and EMW-3, boron in wells CCW-1 and VIW-1, ammonia in well EMW-2, and total dissolved solids in wells VIW-1, EMW-2, and EMW-8.

INTRODUCTION

The Rocky Mountain 1 (RM1) underground coal gasification (UCG) test was conducted from November 16, 1987, through February 26, 1988 (United Engineers and Constructors 1989), at a site approximately one mile south of Hanna, Wyoming (Figure 1). The test consisted of a dual-module operation to evaluate the controlled retracting injection point (CRIP) technology, the elongated linked well (ELW) technology, and the interaction of closely spaced modules operating simultaneously. The test caused two cavities to form in the Hanna No. 1 coal seam and associated overburden. The Hanna No. 1 coal seam was approximately 30 ft thick and lay at depths between 350 and 365 ft below the surface in the test area. The coal seam was overlain by sandstones, siltstones, and claystones deposited by various fluvial environments. Details of the geology and hydrology were reported by Oliver (1987) and Mason et al. (1987).

The groundwater monitoring was designed to satisfy the requirements of the Wyoming Department of Environmental Quality (WDEQ) in addition to providing research data toward the development of UCG technology that minimizes environmental impacts. Further background material and the sampling and analytical procedures associated with the sampling task are described in the Rocky Mountain 1 Postburn Groundwater Monitoring Quality Assurance Plan (Mason and Johnson 1988).

SAMPLING ACTIVITIES

The December 1991 semiannual groundwater sampling at the RM1 UCG site took place from December 5 through December 11, 1991. This event occurred nearly 23 months after the second groundwater restoration at the RM1 site and was the fourteenth sampling event since UCG operations ceased. Samples were collected for analyses on a full-suite set of parameters (Table 1) according to the sampling schedule in Table 2 (Tables are located in Appendix A).

Water levels were measured across the site before any sampling activities were begun. Water-table elevations in the coal seam aquifer rose approximately 4 ft since June 1991. The water-level elevations on December 5, 1991, are listed in Table 3. A map of the potentiometric surface of the Hanna No. 1 coal seam (Figure 2) shows a hydraulic gradient from the southeast corner of the site to the northwest corner with a maximum elevation change of about 6 ft.

A total of 20 of the 22 wells originally specified in the Rocky Mountain 1 Postburn Groundwater Monitoring Quality Assurance Plan (Mason and Johnson 1988) were sampled during the December 1991 semiannual sampling. No sample was collected from unit C overburden well EMW-4 because there was an obstruction in the well bore at a depth of approximately 115 ft. This obstruction was first encountered during the December 1990 quarterly sampling. This deletion was discussed with WDEQ at the May 23, 1991, Technical Advisory Subcommittee (TASc) meeting.

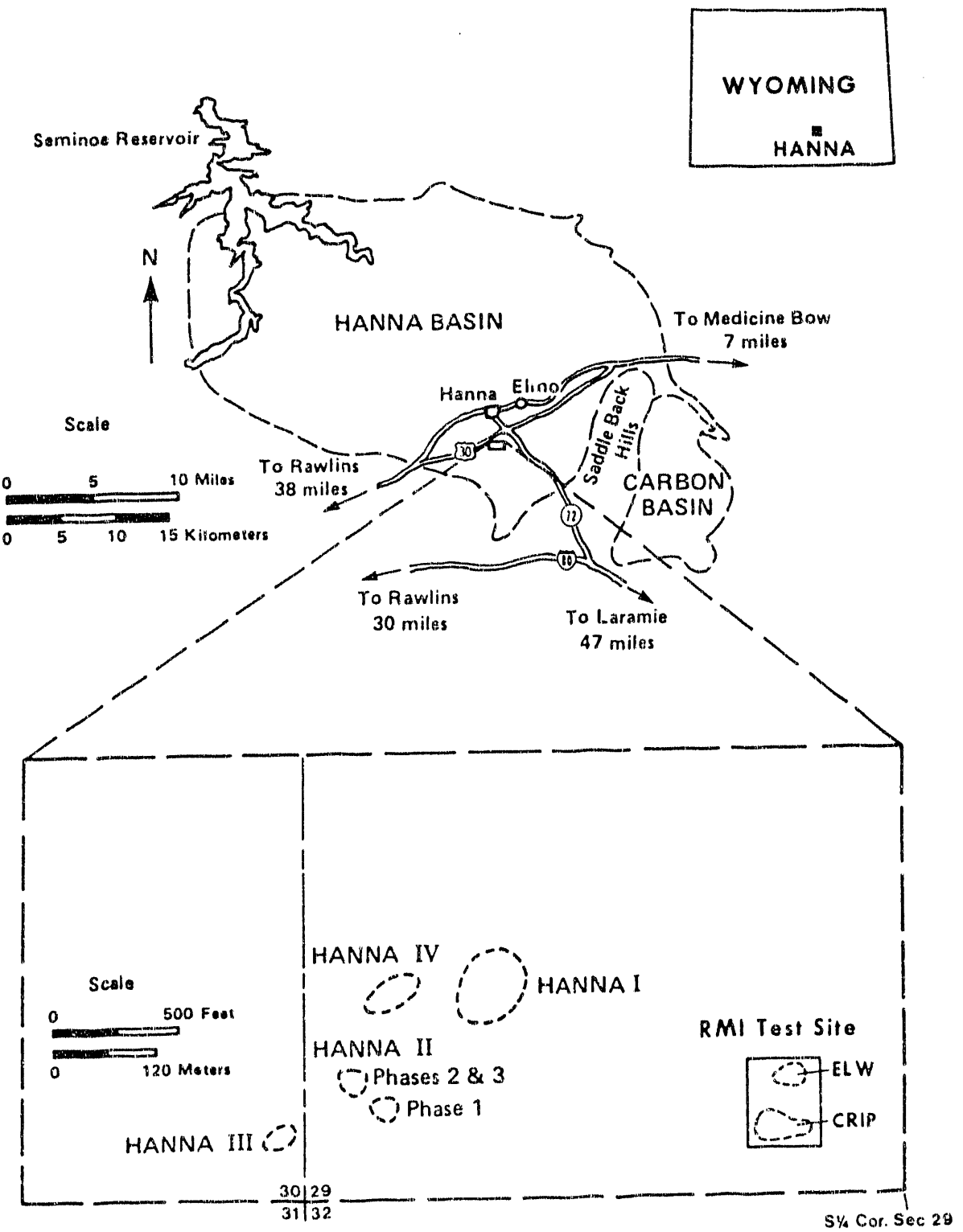

Figure 1. Location of Rocky Mountain 1 Underground Coal Gasification Site

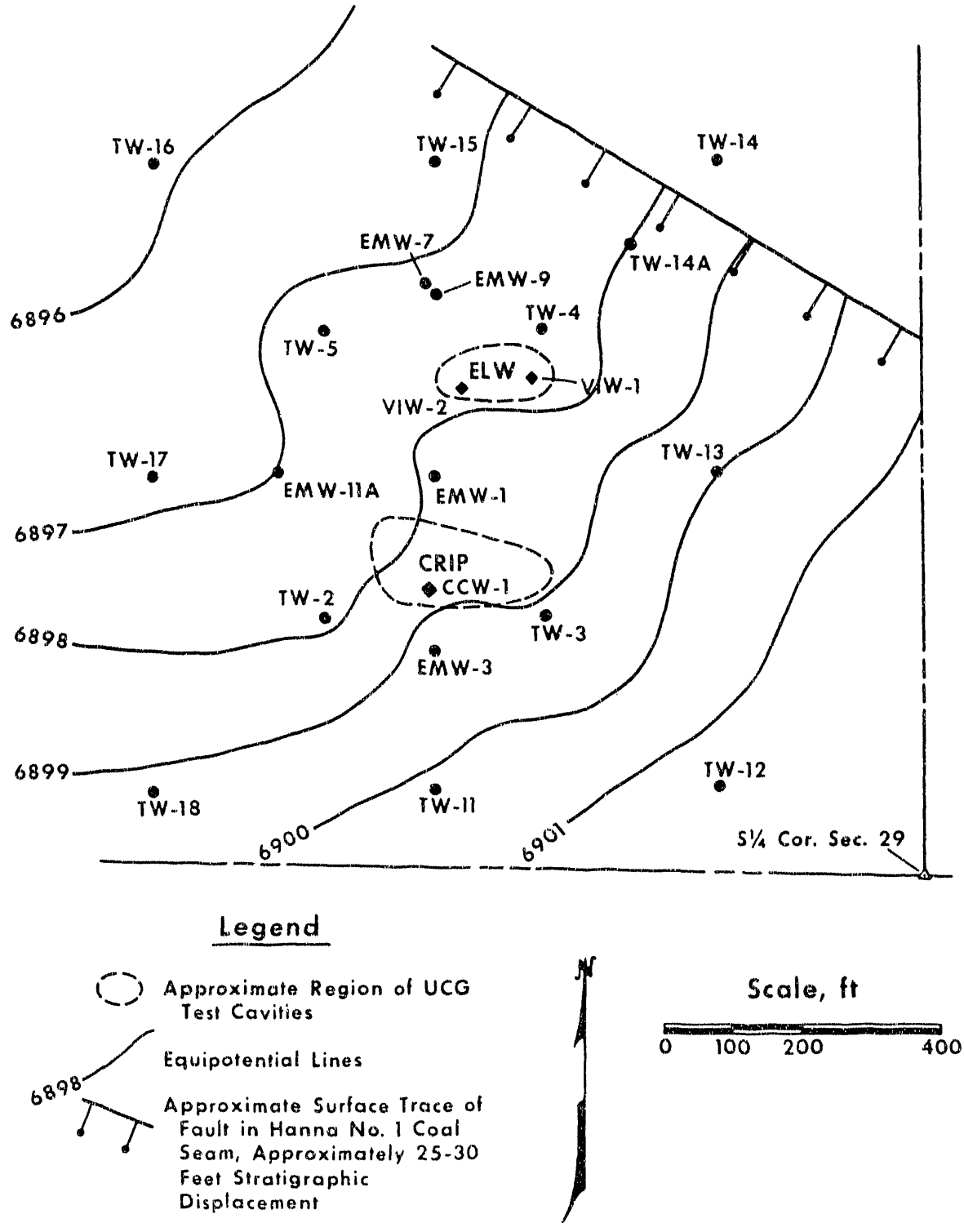

Figure 2. Potentiometric Surface Map of the Hanna No. 1 Coal Seam on December 5, 1991

CRIP cavity well CCW-1 was sampled in place of cavity well CPW-2 because a roof collapse in the CRIP cavity caused the casing to shift in CPW-2 (Lindblom 1990). This substitution was approved by WDEQ at the November 28, 1990, TASc meeting. The casing in well CCW-1 may also have shifted since the December 1990 sampling. An obstruction was encountered at a depth between 230 and 240 ft when lowering the sampling pump in well CCW-1. After several attempts, the sampling pump was successfully lowered to the required sampling depth.

Three quality assurance/quality control (QA/QC) samples were submitted to check sampling and analytical accuracy. All wells were sampled for the full suite of parameters, which is listed in Table 1. Results of the analyses of the volatile and semivolatile organic fractions are included in Appendix B.

The sampling activities performed by Western Research Institute (WRI) at the RM1 site during December 1991 are summarized in Table 4. This table lists the wells sampled, sampling date, sampling method, sample parameter suite, and observations made during sampling.

The wells were purged with a Bennett double action piston pump before sample collection to ensure that the samples were obtained from the hydrostratigraphic unit and not from the well bore. Water in the well bore is not necessarily representative of the groundwater in the geologic unit of interest. Stabilization of purging parameters (purge time, temperature, conductivity, pH, Eh, water level, and pump discharge rate) was used to indicate formation water recovery. As dictated by the WDEQ, wells were purged a minimum of 80 min at approximately 1.0 gal/min to ensure sampling of formation water. Flow rates were reduced only after 80 min to obtain samples, except in the case of well EMW-10, where the water level in the well bore dropped below the pump after only 53 min. Data were collected at 20-min intervals during well purging and recorded in WRI laboratory notebook number 0653. Well purging data are listed in Appendix C.

Also included in Appendix C is the WRI groundwater sampling record form. This form includes general sampling information, stabilized purging parameter data, field alkalinity titration data, and analytical submissions. Appendix C contains these data for each well sampled at RM1.

DISCUSSION OF ANALYSES AND RESULTS

Analyses of samples collected during the December 1991 semiannual sampling event shows that most parameters are consistent with previous sampling events and that groundwater quality at the RM1 site is at or near baseline levels. Results from the full-suite analyses of cavity, coal seam, and overburden wells are listed in Tables 5 through 7.

The highest baseline concentration (HBC) was established for some constituents prior to gasification operations at the RM1 site. These highest baseline concentrations were established as a guideline for target restoration values. Concentrations of total organic carbon

(TOC), total dissolved solids (TDS), and ammonia exceeding HBC levels have been consistently measured in coal seam wells in the eastern section of the RM1 site. These high concentrations were probably due to an influx of water from offsite, rather than directly resulting from UCG operations (Lindblom and Covell 1991). None of these three constituents exceeded HBC in any wells in December 1991.

Highest baseline concentrations for other indicator constituents were exceeded in several wells in December 1991 (all units are mg/L):

Coal Seam Wells

TDS	Benzene
VIW-1 = 3520	EMW-1 = 0.019
	EMW-3 = 0.018
HBC = 2750	
	Baseline = <0.005

Boron
CCW-1 = 0.721
VIW-1 = 0.662
HBC = 0.037

Overburden Wells

Ammonia	TDS
EMW-2 = 8.8	EMW-2 = 1360
	EMW-8 = 1380
HBC = 4.7	
	HBC = 1040

Water samples from several wells at the RM1 site show a slight increase in boron concentrations. Overburden well EMW-10 had the greatest increase. The boron concentration in this well rose at least 0.026 mg/L, from below detection limits in June 1991 (<0.020 mg/L) to 0.046 mg/L in December 1991. Several coal seam wells also exhibited an increase in boron concentrations. These increases ranged from approximately 0.001 mg/L to 0.014 mg/L. Previous boron levels (June 1991) in most of these wells were below analytical detection limits. WRI suggests that boron has been present in these wells at levels slightly below the analytical detection limits since gasification operations ceased. This assumption would make the increases in boron concentration more reasonable than if those previous boron levels measured at below analytical detection limits were assumed to be zero. However, the cause of these boron concentration increases is not known. Boron concentrations in the CRIP and the ELW cavities have consistently exceeded HBC levels. Boron concentrations have exceeded HBC (0.037 mg/L) in noncavity coal seam wells on four occasions since postburn sampling started, however, never by more than 0.01 mg/L. Two groundwater restorations at the RM1 site were unable to reduce the boron concentrations (Covell et al. 1992)

In a previous RM1 sampling report, a cyclic pattern of benzene contamination was described in coal seam well EMW-1. In this cyclic pattern, benzene levels were near 0.030 mg/L in the spring, near 0.040 mg/L during the summer, and <0.005 mg/L during the fall and winter. Analysis of water from EMW-1 in December 1991 showed a benzene level of 0.019 mg/L. This concentration was confirmed by a duplicate sample (TW-31), which also had a benzene concentration of 0.019 mg/L. This benzene concentration does not fit the previous observed pattern of benzene concentrations, however, the benzene concentration did decrease from June to December 1991. The benzene concentration in EMW-3 also dropped from 0.02 mg/L in June 1991 to 0.018 mg/L in December 1991.

Other elements of the volatile organic acid (VOA) analysis detected slight amounts of methylene chloride in some samples below the U.S. Environmental Protection Agency (EPA) mandated method detection limit of 0.010 mg/L. Carbon disulfide was also detected in the VOA analyses of all samples. The WRI analyst stated that the carbon disulfide detected in the samples and blanks is due to laboratory contamination and is unlikely to be present in any samples. VOA analyses were conducted using modified EPA Method 624. The EPA detection limits are applicable to the modified method.

The semivolatile analysis detected small amounts of di-n-butylphthalate, bis(2-ethylhexy) phthalate, and n-nitrosidiphenylamine. The concentrations of these compounds were all below the EPA mandated method detection limit of 0.01 mg/L, ranging from 0.001 mg/L to 0.003 mg/L. Semivolatile analyses were conducted using modified EPA Method 625. As with the VOA analyses, the EPA detection limits apply to the modified method.

The values obtained for the full-suite parameters in December 1991 are comparable to baseline values obtained prior to gasification operations. Except for the instances noted here, the groundwater is near baseline conditions.

QUALITY ASSURANCE AND QUALITY CONTROL

Table 8 lists the results of the quality assurance and quality control (QA/QC) standard, duplicate, and blank samples. Also included in the table are the expected results for each sample as determined by WRI's QA/QC officer, Dr. John McKay. The expected results for the duplicate sample were the results obtained from the regular sample of well EMW-1. Expected results for the rinsate sample were below analytical detection limits.

Acceptable variations from expected values are specific to each parameter. When the actual result is near or outside the acceptable limit, the parameter is reexamined to determine the cause. Questions concerning QA/QC acceptable limits should be addressed to WRI's QA/QC officer, Dr. John McKay or WRI's manager of analytical research, Dr. John Schabron.

Analyses of 41 samples were within acceptable limits. Two samples were not within acceptable limits. The analysis of the nitrite standard was off by a factor of three. The cause of the error is not known. WRI's QA/QC officer is discussing the matter with the analysts involved to determine if the problem lies in the preparation, the dilution, or the analysis of the sample. Once the source of the problem is known, steps will be taken to prevent future occurrences. Analysis of one of the sulfide standards exceeded acceptable limits. The analyst suggested that precipitation probl ms in the analytical procedure may have caused the incorrect results. This problem will be eliminated in future sampling events.

Concentrated stock solutions were supplied by the WRI QA/QC officer and submitted as field standard samples. Field standards were designed to check analytical accuracy and the effects of transportation and storage on samples of known concentrations. Standards of each element or compound to be analyzed were submitted anonymously within the regular sample set according to the instructions of the QA/QC officer. The sample preparation and analytical procedures were also supplied by the QA/QC officer.

A field duplicate sample was collected from well EMW-1, which has been one of the most contaminated wells at the RMI site. The regular and duplicate samples were prepared and preserved in an identical manner. The duplicate sample was submitted anonymously using a predetermined name. Field duplicates were designed to check analytical accuracy and precision. All values for the duplicate sample fell within an acceptable range of accuracy and precision.

Quality assurance and quality control rinsate samples were generated using the sampling pump, local tap water, and Type I water. Type I water is high-purity, deionized, distilled water prepared in WRI's analytical laboratory using distilled water as a feedstock and processed through a Millipore water purification system. The Millipore system recirculates water through four cartridges (one carbon adsorption, one particulate trap, and two ion exchanges) and has a conductivity of less than 2 μmhos/cm. The Type I water is assumed to be blank, and any level of the full-suite parameters detected in the rinsate samples is assumed to be the result of cross-contamination from the sample pump and line.

Rinsate sampling is intended to simulate the rinsing that occurs while purging each well before collecting samples. For this reason, the amount of local tap water and Type I water pumped through the sampling system for rinsate sampling represents an average amount of water purged from each well.

First, 75 gal of local tap water was pumped through the sampling system. The line was then evacuated with compressed air. Finally, 10 gal of Type I water was pumped through the line and sampled. The trace amounts of calcium, magnesium, sulfate, and sodium indicate only that 10 gal of Type I water is not sufficient to remove all traces of local tap water.

ACKNOWLEDGEMENTS

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DISCLAIMER

Mention of specific brand names or models of equipment is for information only and does not imply endorsement of any particular brand.

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APPENDIX A

Tables

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Table 1. Rocky Mountain 1 Groundwater Analysis Suites

Compliance Suite	Limited Suite	Full Suite	Field Measurements
Ammonia	Ammonia	Alkalinity	Alkalinity
Boron	Bicarbonate	Aluminum	Conductivity
Cyanide	Boron	Ammonia	Discharge Rate
Phenols	Cyanide	Arsenic	Eh
Sulfate	Fluoride	Barium	pH
Sulfide	Manganese	Bicarbonate	Pumping Time
TDS	Nitrate	BNA	Temperature
TOC	Nitrite	Boron	Water Level
	Phenols	Bromide	
	Sodium	Cadmium	
	Sulfate	Calcium	
	Sulfide	Carbonate	
	TDS	Chemical Oxygen Demand	
	TKN	Chloride	
	TOC	Chromium	
		Copper	
		Cyanide	
		Fluoride	
		Iron	
		Lead	
		Lithium	
		Magnesium	
		Manganese	
		Mercury	
		Molybdenum	
		Nickel	
		Nitrate	
		Nitrite	
		pH	
		Phenols	
		Potassium	
		Selenium	
		Silver	
		Sodium	
		Sulfate	
		Sulfide	
		TDS	
		TKN	
		Thiocyanate	
		TOC	
		Volatile Organics	
		Vanadium	
		Zinc	

Table 2. Rocky Mountain 1 Groundwater Restoration Monitoring Schedule

Year	Quarter	Inner-Ring Wells	Outer-Ring Wells	Cavity Wells
1988	1. March	FS	FS	FS
	2. June	CS	CS	FS
	3. September	CS	CS	CS
	4. December	CS	CS	CS
1989	1. March	CS	CS	CS
	2. June	CS, VOA	CS	CS, VOA
	3. September	CS, VOA	CS	CS, VOA
	4. December	FS	FS	FS
1990	1. March	CS, VOA	CS	CS, VOA
	2. June	LS, VOA	LS	LS, VOA
	3. September	CS, VOA	CS	CS, VOA
	4. December	FS	FS	FS
1991	2. June	LS, benzene	LS, benzene	LS, benzene
	4. December	FS	FS	FS
1992	2. June	LS, benzene	LS, benzene	LS, benzene
	4. December	FS	FS	FS

CS - Compliance Suite
LS - Limited Suite
FS - Full Suite
VOA - Volatile Organic Analysis

Table 3. Water-Level Elevations at the RMI Site on December 5, 1991

WELL	Well Casing Elevation, ft	Water Level Elevation, ft	Water Level Elevation, ft
EMW-1	6984.8	86.50	6898.30
EMW-2	6986.3	111.90	6874.40
EMW-3	7006.0	106.55	6899.45
EMW-4	6981.4	108.20	6873.20
EMW-6	6960.7	32.05	6928.65
EMW-8	6964.6	169.50	6795.10
EMW-9	6961.7	64.60	6897.10
EMW-10	6964.2	93.10	6871.10
EMW-11a	6980.8	83.80	6897.00
TW-2	6993.9	98.60	6897.80
TW-3	6998.2	99.15	6899.05
TW-4	6964.8	66.85	6897.95
TW-5	6968.6	71.30	6897.30
TW-11	7007.6	107.40	6900.20
TW-12	7009.2	107.75	6901.45
TW-13	6978.8	78.80	6900.00
TW-14	6950.7	73.60	6877.10
TW-14a	6956.4	58.30	6898.10
TW-15	6967.4	70.50	6896.90
TW-16	6986.4	90.50	6895.90
TW-17	6973.9	76.95	6896.95
TW-18	6995.1	95.70	6899.40
VIW-1	6968.0	70.20	6897.80
CCW-1	6994.2	95.05	6898.70

Note: Water levels measured from the top of the well casing

Table 4. RMI Sampling Summary for December 1991

Well Name	Date Sampled	Sample Method	Parameter Suite	Comments
EMW-1	12/10/91	Bennett pump	FS	Water is clear andhas sulfur odor
EMW-2	12/10/91	Teflon bailer	FS	Some organic material in water
EMW-3	12/10/91	Bennett pump	FS	Colorless water; strong sulfur odor
EMW-8	12/8/91	Teflon bailer	FS	Colorless, odor-free water
EMW-9	12/8/91	Bennett pump	FS	Colorless, odor-free water
EMW-10	12/8/91	Bennett pump	FS	Colorless, odor-free water
EMW-11a	12/10/91	Bennett pump	FS	Colorless water; slight sulfur odor
TW-2	12/10/91	Bennett pump	FS	Colorless water; slight sulfur odor
TW-3	12/8/91	Bennett pump	FS	Colorless water; slight sulfur odor
TW-4	12/8/91	Bennett pump	FS	Colorless water; slight sulfur odor
TW-5	12/8/91	Bennett pump	FS	Colorless, odor-free water
TW-11	12/7/91	Bennett pump	FS	Colorless water; moderate sulfur odor
TW-12	12/7/91	Bennett pump	FS	Colorless water; moderate sulfur odor. Replace Bennett pump.

Table 4. RWI Sampling Summary for December 1991 (continued)

Well Name	Date Sampled	Sample Method	Parameter Suite	Comments
TW-13	12/7/91	Bennett pump	FS	Water has gray fine material. Slight sulfur odor
TW-15	12/5/91	Bennett pump	FS	Colorless odor-free water
TW-16	12/5/91	Bennett pump	FS	Colorless water; slight sulfur odor
TW-17	12/7/91	Bennett pump	FS	Colorless water; slight sulfur odor
TW-18	12/7/91	Bennett pump	FS	Water is clear; slight sulfur odor
VIW-1	12/10/91	Bennett pump	FS	Colorless water; slight petroleum odor.
CCW-1[a]	12/10/91	Bennett pump	FS	Water is warm, dark color; strong sulfur odor

[a] Well obstructed at 230-240 ft. After several attempts, the Bennett pump dropped to 300 ft.

Table 5. Analytical Results for Samples Obtained from Cavity Wells

Parameter	Well Name	
	VIW-1	CCW-1
Benzene, µg/L	<10	<10
Phenolics, mg/L	<0.02	<0.02
Chemical Oxygen Demand, mg/L	39	30
Ammonia, mg/L	4.5	6.8
Nitrite, mg/L	<0.03	0.04
Nitrate, mg/L	<0.03	<0.03
Total Kjeldahl Nitrogen, mg/L	4.4	6.9
Total Organic Carbon, mg/L	<10	<10
Sulfide, mg/L	<1	<1
Cyanide, mg/L	<0.020	<0.020
Alkalinity (lab), meq $CaCO_3$	446	301
Bicarbonate, meq $CaCO_3$	438	292
Bromide, mg/L	0.30	0.30
Carbonate, meq $CaCO_3$	7	9
Chloride, mg/L	22	53
Fluoride, mg/L	3.0	5.6
pH (lab)	8.3	8.5
Sulfate, mg/L	2400	1200
Total Dissolved Solids, mg/L	3520	2010
Thiocyanate, mg/L	<0.5	<0.5
Total Suspended Solids, mg/L	<10	28
Aluminum, mg/L	<.045	<.045
Arsenic, mg/L	<0.005	<0.005
Barium, mg/L	0.054	0.023
Boron, mg/L	0.662	0.721
Cadmium, mg/L	<.010	<.010
Calcium, mg/L	282	23.0
Chromium, mg/L	<0.008	<0.008
Copper, mg/L	<0.006	<0.006
Iron, mg/L	1.58	0.332
Lead, mg/L	<0.050	<0.050
Lithium, mg/L	0.603	0.474
Magnesium, mg/L	31.7	6.15
Manganese, mg/L	0.352	0.106
Mercury, mg/L	<0.0002	<0.0002
Molybdenum, mg/L	0.030	0.045
Nickel, mg/L	<0.020	<0.020
Potassium, mg/L	75.5	30.0
Selenium, mg/L	<0.100	0.144
Silver, mg/L	<0.007	<0.007
Sodium, mg/L	674	642
Sample Temperature, °C	[a]	16.9
Corrected Conductivity, mmhos/cm (field)	[a]	2760
pH (field)	[a]	8.65
Eh, mV (field)[b]	[a]	-16.09
Sample Discharge Rate, gpm	[a]	1.09
Alkalinity, meq $CaCO_3$ (field)	[a]	357.42

[a] Value not determined
[b] Corrected to Standard H^+ Electrode

Table 6. Analytical Results for Samples Obtained from Coal Seam Wells

Parameter	Well Name			
	EMW-1	EMW-3	EMW-9	EMW-11a
Benzene, µg/L	19	18	<10	<10
Phenolics, mg/L	<0.02	<0.02	<0.02	<0.02
Chemical Oxygen Demand, mg/L	56	58	89	60
Ammonia, mg/L	4.0	2.9	3.4	4.2
Nitrite, mg/L	<0.03	<0.03	<0.03	<0.03
Nitrate, mg/L	<0.03	<0.03	<0.03	<0.03
Total Kjeldahl Nitrogen, mg/L	3.8	2.7	3.8	4.3
Total Organic Carbon, mg/L	18	22	30	18
Sulfide, mg/L	<1	<1	<1	<1
Cyanide, mg/L	<0.02	<0.02	<0.02	<0.02
Alkalinity (lab), meq $CaCO_3$	1190	750	606	1200
Bicarbonate, meq $CaCO_3$	1170	743	591	1180
Bromide, mg/L	0.1	<0.01	<0.01	1.3
Carbonate, meq $CaCO_3$	19	7	15	16
Chloride, mg/L	25	5.2	13	28
Fluoride, mg/L	1.2	1.1	1.8	1.1
pH (lab)	8.2	8.0	8.4	8.2
Sulfate, mg/L	570	560	1100	690
Total Dissolved Solids, mg/L	2010	1590	2110	2260
Thiocyanate, mg/L	<0.5	<0.5	<0.5	<0.5
Total Suspended Solids, mg/L	<10	<10	<10	<10
Aluminum, mg/L	<0.045	<0.045	<0.045	<0.045
Arsenic, mg/L	<0.005	<0.005	<0.005	<0.005
Barium, mg/L	0.072	0.077	0.048	0.056
Boron, mg/L	0.024	0.034	0.021	0.020
Cadmium, mg/L	<0.010	<0.010	<0.010	<0.010
Calcium, mg/L	16.1	9.50	10.5	21.4
Chromium, mg/L	<0.008	<0.008	<0.008	<0.008
Copper, mg/L	<0.006	<0.006	<0.006	<0.006
Iron, mg/L	0.061	0.102	0.025	0.067
Lead, mg/L	<0.050	<0.050	<0.050	<0.050
Lithium, mg/L	0.102	0.074	0.082	0.115
Magnesium, mg/L	9.07	5.73	6.28	17.5
Manganese, mg/L	<0.003	<0.003	0.005	0.005
Mercury, mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, mg/L	0.022	0.016	<0.010	0.024
Nickel, mg/L	<0.020	<0.020	<0.020	<0.020
Potassium, mg/L	6.05	<5.0	6.49	6.94
Selenium, mg/L	<0.100	<0.100	<0.100	0.170
Silver, mg/L	<0.007	<0.007	<0.007	<0.007
Sodium, mg/L	766	564	707	821
Vanadium, mg/L	<0.008	<0.008	<0.008	<0.008
Zinc, mg/L	<0.003	<0.003	<0.003	<0.003
Sample Temperature, °C	9.3	9.5	9.80	8.9
Corrected Conductivity, mmhos/cm (field)	2480	2250	2750	2520
pH (field)	8.25	8.25	8.41	8.14
Eh, mV (field)[a]	-2.03	99.45	130.12	21.71
Sample Discharge Rate, gpm	1.20	1.0	1.20	1.20
Alkalinity, meq $CaCO_3$ (field)	1261.02	863.44	[b]	1257.01

[a] Corrected to Standard H^+ Electrode

[b] Value not determined

Table 6. Analytical Results for Samples Obtained from Coal Seam Wells (continued)

Parameter	Well Name			
	TW-2	TW-3	TW-4	TW-5
Benzene, µg/L	<10	<10	<10	<10
Phenolics, mg/L	<0.02	<0.02	<0.02	<0.02
Chemical Oxygen Demand, mg/L	90	50	66	98
Ammonia, mg/L	3.8	2.7	2.3	3.5
Nitrite, mg/L	<0.03	<0.03	<0.03	<0.03
Nitrate, mg/L	<0.03	<0.03	<0.03	<0.03
Total Kjeldahl Nitrogen, mg/L	4.1	2.7	2.6	4.1
Total Organic Carbon, mg/L	29	16	22	32
Sulfide, mg/L	<1	<1	<1	<1
Cyanide, mg/L	<0.02	<0.02	<0.02	<0.02
Alkalinity (lab), meq $CaCO_3$	858	687	764	629
Bicarbonate, meq $CaCO_3$	823	669	739	613
Bromide, mg/L	<0.01	<0.01	<0.01	0.10
Carbonate, meq $CaCO_3$	35	18	25	16
Chloride, mg/L	10	4.1	5.5	19
Fluoride, mg/L	0.87	1.4	2.0	1.5
pH (lab)	8.6	8.5	8.5	8.4
Sulfate, mg/L	790	610	370	1200
Total Dissolved Solids, mg/L	2100	1620	1430	2440
Thiocyanate, mg/L	<0.5	<0.5	<0.5	<0.5
Total Suspended Solids, mg/L	<10	<10	<10	<10
Aluminum, mg/L	<0.045	<0.045	<0.045	<0.045
Arsenic, mg/L	<0.005	<0.005	<0.005	<0.005
Barium, mg/L	0.048	0.099	0.033	0.059
Boron, mg/L	0.020	<0.020	0.024	<0.020
Cadmium, mg/L	<0.010	<0.010	<0.010	<0.010
Calcium, mg/L	19.5	8.93	5.94	14.4
Chromium, mg/L	<0.008	<0.008	<0.008	<0.008
Copper, mg/L	<0.006	<0.006	<0.006	<0.006
Iron, mg/L	0.076	0.052	0.015	0.059
Lead, mg/L	<0.050	<0.050	<0.050	<0.050
Lithium, mg/L	0.108	0.062	0.054	0.102
Magnesium, mg/L	16.4	4.69	3.25	8.90
Manganese, mg/L	<0.003	<0.003	<0.003	0.004
Mercury, mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, mg/L	0.022	0.012	0.011	0.012
Nickel, mg/L	<0.020	<0.020	<0.020	<0.020
Potassium, mg/L	6.495	<5.0	<5.0	7.17
Selenium, mg/L	<0.100	<0.100	<0.100	<0.100
Silver, mg/L	<0.007	<0.007	<0.007	<0.007
Sodium, mg/L	734	587	529	823
Vanadium, mg/L	<0.008	<0.008	<0.008	<0.008
Zinc, mg/L	<0.003	<0.003	<0.003	<0.003
Sample Temperature, °C	8.2	10.4	9.30	7.8
Corrected Conductivity, mmhos/cm (field)	2690	2150	1920	3220
pH (field)	8.31	8.34	8.41	8.34
Eh, mV (field)[a]	30.48	-5.13	52.27	92.82
Sample Discharge Rate, gpm	1.2	1.0	1.2	1.1
Alkalinity, meq $CaCO_3$ (field)	995.97	791.15	855.41	718.86

[a] Corrected to Standard H^+ Electrode

Table 6. Analytical Results for Samples Obtained from Coal Seam Wells (continued)

Parameter	Well Name			
	TW-11	TW-12	TW-13	TW-15
Benzene, µg/L	<10	<10	<10	<10
Phenolics, mg/L	<0.02	<0.02	<0.02	<0.02
Chemical Oxygen Demand, mg/L	62	68	250	76
Ammonia, mg/L	3.3	3.1	2.5	2.5
Nitrite, mg/L	<0.03	<0.03	<0.03	<0.03
Nitrate, mg/L	<0.03	<0.03	<0.03	<0.03
Total Kjeldahl Nitrogen, mg/L	3.4	3.0	2.8	2.8
Total Organic Carbon, mg/L	23	16	26	29
Sulfide, mg/L	<1	<1	<1	<1
Cyanide, mg/L	<0.02	<0.02	<0.02	<0.02
Alkalinity (lab), meq $CaCO_3$	772	721	699	773
Bicarbonate, meq $CaCO_3$	753	702	676	754
Bromide, mg/L	<0.01	<0.01	<0.01	<0.01
Carbonate, meq $CaCO_3$	19	19	23	19
Chloride, mg/L	4.6	4.4	3.2	5.9
Fluoride, mg/L	1.2	1.6	1.9	2.7
pH (lab)	8.4	8.5	8.5	8.4
Sulfate, mg/L	520	610	420	400
Total Dissolved Solids, mg/L	1570	1650	1430	1450
Thiocyanate, mg/L	<0.5	<0.5	<0.5	<0.5
Total Suspended Solids, mg/L	<10	<10	730	<10
Aluminum, mg/L	<0.045	<0.045	<0.045	<0.045
Arsenic, mg/L	<0.005	<0.005	<0.005	<0.005
Barium, mg/L	0.044	0.056	0.129	0.030
Boron, mg/L	0.026	<0.020	0.026	0.023
Cadmium, mg/L	<0.010	<0.010	<0.010	<0.010
Calcium, mg/L	18.6	11.6	6.69	6.02
Chromium, mg/L	<0.008	<0.008	<0.008	<0.008
Copper, mg/L	<0.006	<0.006	<0.006	<0.006
Iron, mg/L	0.052	0.042	0.121	0.072
Lead, mg/L	<0.050	<0.050	<0.050	<0.050
Lithium, mg/L	0.085	0.071	0.052	0.059
Magnesium, mg/L	17.7	9.02	3.34	3.26
Manganese, mg/L	0.004	<0.003	0.004	0.004
Mercury, mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, mg/L	0.015	<0.010	<0.010	<0.010
Nickel, mg/L	<0.020	<0.020	<0.020	<0.020
Potassium, mg/L	5.60	5.15	<5.0	<5.0
Selenium, mg/L	0.134	<0.100	0.116	<0.100
Silver, mg/L	<0.007	<0.007	<0.007	<0.007
Sodium, mg/L	567	564	532	535
Vanadium, mg/L	<0.008	<0.008	<0.008	<0.008
Zinc, mg/L	<0.003	<0.003	<0.003	<0.003
Sample Temperature, °C	8.2	8.2	9.1	8.7
Corrected Conductivity, mmhos/cm (field)	1920	1900	1940	2080
pH (field)	8.22	8.25	8.40	8.45
Eh, mV (field)[a]	17.38	78.48	81.69	142.33
Sample Discharge Rate, gpm	1.2	1.25	0.50	0.32
Alkalinity, meq $CaCO_3$ (field)	831.31	771.07	763.04	[b]

[a] Corrected to Standard H^+ Electrode

[b] Value not determined

Table 6. Analytical Results for Samples Obtained from Coal Seam Wells (continued)

Parameter	Well Name TW-16	TW-17	TW-18
Benzene, µg/L	<10	<10	<10
Phenolics, mg/L	<0.02	<0.02	<0.02
Chemical Oxygen Demand, mg/L	84	110	100
Ammonia, mg/L	3.0	3.7	7.2
Nitrite, mg/L	<0.03	<0.03	<0.03
Nitrate, mg/L	<0.03	<0.03	<0.03
Total Kjeldahl Nitrogen, mg/L	3.4	4.1	7.3
Total Organic Carbon, mg/L	30	40	38
Sulfide, mg/L	<1	<1	<1
Cyanide, mg/L	<0.02	<0.02	<0.02
Alkalinity (lab), meq $CaCO_3$	695	755	767
Bicarbonate, meq $CaCO_3$	678	737	759
Bromide, mg/L	<0.01	<0.01	<0.01
Carbonate, meq $CaCO_3$	17	17	19
Chloride, mg/L	9.7	12	16
Fluoride, mg/L	1.9	1.4	0.83
pH (lab)	8.4	8.4	8.1
Sulfate, mg/L	740	1100	1100
Total Dissolved Solids, mg/L	1760	2280	2330
Thiocyanate, mg/L	<0.5	<0.5	<0.5
Total Suspended Solids, mg/L	<10	<10	<10
Aluminum, mg/L	<0.045	<0.045	<0.045
Arsenic, mg/L	<0.005	<0.005	<0.005
Barium, mg/L	0.026	0.061	0.044
Boron, mg/L	<0.020	<0.020	0.026
Cadmium, mg/L	<0.010	<0.010	<0.010
Calcium, mg/L	8.19	22.2	67.7
Chromium, mg/L	<0.008	<0.008	<0.008
Copper, mg/L	<0.006	<0.006	<0.006
Iron, mg/L	0.085	0.035	0.160
Lead, mg/L	<0.050	<0.050	<0.050
Lithium, mg/L	0.062	0.102	0.154
Magnesium, mg/L	5.09	17.7	61.9
Manganese, mg/L	<0.003	0.006	0.013
Mercury, mg/L	<0.0002	<0.0002	<0.0002
Molybdenum, mg/L	0.012	0.016	0.022
Nickel, mg/L	<0.020	<0.020	<0.020
Potassium, mg/L	<5.0	6.49	11.2
Selenium, mg/L	<0.100	<0.100	0.110
Silver, mg/L	<0.007	<0.007	<0.007
Sodium, mg/L	665	814	672
Vanadium, mg/L	<0.008	<0.008	<0.008
Zinc, mg/L	<0.003	<0.003	<0.003
Sample Temperature, °C	9.1	9.9	8.9
Corrected Conductivity, mmhos/cm (field)	2440	2360	2220
pH (field)	8.40	8.25	8.09
Eh, mV (field)[a]	81.49	125.81	44.11
Sample Discharge Rate, gpm	1.2	1.2	1.2
Alkalinity, meq $CaCO_3$ (field)	[b]	759.02	823.28

[a] Corrected to Standard H^+ Electrode

[b] Value not determined

Table 7. Analytical Results for Samples Obtained from Overburden Wells

Parameter	Well Name		
	EMW-2	EMW-8	EMW-10
Benzene, µg/L	<10	<10	<10
Phenolics, mg/L	<0.02	<0.02	<0.02
Chemical Oxygen Demand, mg/L	28	46	<20
Ammonia, mg/L	7.8	2.9	3.9
Nitrite, mg/L	<0.03	<0.03	<0.03
Nitrate, mg/L	<0.03	<0.03	<0.03
Total Kjeldahl Nitrogen, mg/L	7.6	3.1	3.9
Total Organic Carbon, mg/L	<10	10	<10
Sulfide, mg/L	<1	<1	<1
Cyanide, mg/L	<0.02	<0.02	<0.02
Alkalinity (lab), meq $CaCO_3$	1240	1140	456
Bicarbonate, meq $CaCO_3$	950	1100	452
Bromide, mg/L	0.20	0.20	<0.1
Carbonate, meq $CaCO_3$	289	40	4
Chloride, mg/L	55	53	2.1
Fluoride, mg/L	1.3	2.1	<0.01
pH (lab)	9.5	8.6	7.9
Sulfate, mg/L	7.7	100	80
Total Dissolved Solids, mg/L	1360	1380	545
Thiocyanate, mg/L	<0.5	<0.5	<0.5
Total Suspended Solids, mg/L	20	11	<10
Aluminum, mg/L	<0.045	<0.045	<0.045
Arsenic, mg/L	<0.005	<0.005	<0.005
Barium, mg/L	0.077	0.204	0.076
Boron, mg/L	0.058	0.054	0.046
Cadmium, mg/L	<0.010	<0.010	<0.010
Calcium, mg/L	1.97	6.22	58.1
Chromium, mg/L	<0.008	<0.008	<0.008
Copper, mg/L	<0.006	<0.006	<0.006
Iron, mg/L	0.006	0.006	0.578
Lead, mg/L	<0.050	<0.050	<0.050
Lithium, mg/L	0.103	0.087	0.044
Magnesium, mg/L	2.28	4.43	30.3
Manganese, mg/L	<0.003	<0.003	0.053
Mercury, mg/L	<0.0002	<0.0002	<0.0002
Molybdenum, mg/L	0.020	0.021	0.013
Nickel, mg/L	<0.020	<0.020	<0.020
Potassium, mg/L	16.1	7.84	8.96
Selenium, mg/L	<0.100	<0.100	<0.100
Silver, mg/L	<0.007	<0.007	<0.007
Sodium, mg/L	571	581	112
Vanadium, mg/L	<0.008	<0.008	<0.008
Zinc, mg/L	<0.003	<0.003	<0.003
Sample Temperature, °C	6.7	7.3	7.2
Corrected Conductivity, mmhos/cm (field)	2200	2070	730
pH (field)	9.8	8.67	7.53
Eh, mV (field)[a]	-9.97	91.57	167.28
Sample Discharge Rate, gpm	[b]	[b]	0.5
Alkalinity, meq $CaCO_3$ (field)	[c]	[c]	502.00

[a] Corrected to Standard H^+ Electrode
[b] Well was bailed
[c] Value not determined

Table 8. Analytical Results for Quality Assurance/Quality Control Samples

Parameter	Rinsate[a]	Standard		Duplicate	
	Actual	Actual	Expected	Actual	Expected
Benzene, µg/L	<10	95	100	19	19
Phenolics, mg/L	<0.020	0.29	0.30	<0.020	<0.020
COD, mg/L	<20	85	88.0	54	56
Ammonia, mg/L	<0.2	16	16.0	4.2	4.0
Nitrate, mg/L	<0.03	20	18.6	0.04	<0.03
Nitrite, mg/L	<0.03	2.0	6.5	<0.03	<0.03
TKN, mg/L	<1.0	2.8	3.7	3.9	3.8
TOC, mg/L	<10	34	34.4	17	18
Sulfide, mg/L	<1	7.9/21	8.7	<1	<1
Cyanide, mg/L	<0.020	0.114	0.100	<0.02	<0.02
Alk. (lab), meq $CaCO_3$	<10	188	196	1190	1190
Bicarb., meq $CaCO_3$	<10	168	176	1170	1170
Carbonate, meq $CaCO_3$	<1	20	20.8	18	19
Bromide, mg/L	<0.010	12	12.0	0.10	0.10
Chloride, mg/L	<0.010	370	386	15	25
Fluoride, mg/L	<0.2	17	20.8	1.2	1.2
pH (lab)	8.3	9.1	9.1	8.2	8.2
Sulfate, mg/L	0.02	67	61.3	570	570
TDS, mg/L	<10	1170	1260	2010	2010
Thiocyanate, mg/L	<0.5	8.6	8.8	<0.5	<0.5
TSS, mg/L	<10	78	70.0	<10	<10
Aluminum, mg/L	<0.045	2.17	2.00	<0.045	<0.045
Arsenic, mg/L	<0.005	0.112	0.100	<0.005	<0.005
Barium, mg/L	<0.010	2.11	2.00	0.071	0.072
Boron, mg/L	<0.020	2.06	2.00	<0.020	0.026
Cadmium, mg/L	<0.010	0.105	0.100	<0.010	<0.010
Calcium, mg/L	1.01	0.087	0.100	15.8	16.1
Chromium, mg/L	<0.008	0.115	0.100	<0.008	<0.008
Copper, mg/L	<0.006	0.108	0.100	<0.006	<0.006
Iron, mg/L	<0.006	0.101	0.100	0.062	0.061
Lead, mg/L	<0.050	0.080	0.100	<0.050	<0.050
Lithium, mg/L	<0.010	2.002	2.00	0.098	0.102
Magnesium, mg/L	0.081	0.104	0.100	8.90	9.07
Manganese, mg/L	<0.003	0.103	0.100	<0.003	<0.003
Mercury, mg/L	<0.0002	0.0020	0.002	<0.0002	<0.0002
Molybdenum, mg/L	<0.010	0.105	0.100	0.027	0.022
Nickel, mg/L	<0.020	0.110	0.100	<0.020	<0.020
Potassium, mg/L	<5.0	21.5	20.0	6.05	6.05
Selenium, mg/L	<0.100	0.110	0.100	<0.100	<0.100
Silver, mg/L	<0.007	2.18	2.00	<0.007	<0.007
Sodium, mg/L	0.665	2.26	2.00	759	766
Vanadium, mg/L	<0.008	0.105	0.100	<0.008	<0.008
Zinc, mg/L	<0.003	0.105	0.100	<0.003	<0.003

[a] Expected results for rinsate sample parameters are below detection limit.

APPENDIX B

VOA Analytical Results

Sample Number
LAB BLANK

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)V8021::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/12/91 08:11
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l) or ug/Kg (Circle One)	C.A.S. Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	8.J	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. (single component pesticides)= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-01-23-TW32-A DUP

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RM123::A6
Sample Matrix: water
Data release Authorized by: Jeff Clark

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-11-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/16/91 13:05
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/L) or ug/Kg (Circle One)	C.A.S. Number		(ug/L) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	3.J	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	6.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	19.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (this is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-01-23-1W32-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM122::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-11-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/16/91 11:45
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l) or ug/Kg (Circle One)	C.A.S. Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	2.J	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	5.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)= 10 ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

M - Compound not present in Calibration File.

Sample Number
0653-01-23-TW31-A DUP

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM125::A6
Sample Matrix: water
Data release Authorized by: Jeff Clark

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-11-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/16/91 14:25
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/L) or ug/Kg (Circle One)	C.A.S. Number		(ug/L) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	2.J	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	20.
75-15-0	Carbon Disulfide	5.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (this is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-01-23-1W31-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM121::A6
Sample Matrix: water
Data release Authorized by: Jeff Clark

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-11-91

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/16/91 11:07
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/L) or ug/Kg (Circle One)	C.A.S. Number		(ug/L) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	19.
75-15-0	Carbon Disulfide	7.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-01-23-1W30-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RM113::A6
Sample Matrix: water
Data release Authorized by: Jeff Clark

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/13/91 11:42
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l) or ug/Kg (Circle One)	C.A.S. Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	95.
75-15-0	Carbon Disulfide	5.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	97.
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	100.
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	92.
				Total Xylenes	45.

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration file.

Sample Number
0653-39-23-CCW1-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM119::A6
Sample Matrix: water
Data release Authorized by:

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-11-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/13/91 17:02
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/L) or ug/Kg (Circle One)	C.A.S. Number		(ug/L) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	5.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-41-23-0101-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RM120::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-11-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/16/91 10:26
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/L) or ug/Kg (Circle One)	C.A.S. Number		(ug/L) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	6.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

| Sample Number 1
0653-33-23-CMW11-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM117::A6
Sample Matrix: water
Data release Authorized by: Jeff Clark

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-11-91

Volatile Compounds
Concentration: Low Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/13/91 15:45
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		ug/L or ug/Kg (Circle One)	C.A.S. Number		ug/L or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	2.J	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	2.J
75-15-0	Carbon Disulfide	5.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-17-23-EMW10-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RM108::A6
Sample Matrix: water
Data release Authorized by: Jeff C. Cawli

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/13/91 13:45
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l) or ug/Kg (Circle One)	C.A.S. Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	3.J	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	7.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-21-23-CMW9-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RM109::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/12/91 16:33
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l) or ug/Kg (Circle One)	C.A.S. Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	7.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-19-23-EMW8-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RIII4::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/13/91 13:06
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l) or ug/Kg (Circle One)	C.A.S. Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	5.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-29-23-EMW3-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RM115::A6
Sample Matrix: water
Data release Authorized by: Jeff Clark

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-11-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/13/91 14:23
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/L) or ug/Kg (Circle One)	C.A.S. Number		(ug/L) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	18.
75-15-0	Carbon Disulfide	6.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (this is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-37-23-EMW2-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM124::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-11-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/16/91 13:47
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		ug/L or ug/Kg (Circle One)	C.A.S. Number		ug/L or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	4.J	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	5.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (this is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

M - Compound not present in Calibration File.

Sample Number
0653-35-23-EMW1-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM118::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-11-91

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/13/91 16:23
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		ug/l or ug/Kg (Circle One)	C.A.S. Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	2.J	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	19.
75-15-0	Carbon Disulfide	6.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
10653-09-23-1W18-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RM1109::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/12/91 12:52
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l) or ug/Kg (Circle One)	C.A.S. Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	2.J	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	7.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
10653-07-23-1W17-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM103::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/12/91 10:16
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l) or ug/Kg (Circle One)	C.A.S. Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	8.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (this is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
10653-05-23-TW16-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RM102::A6
Sample Matrix: water
Data release Authorized by: Jeff Clark

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/12/91 09:37
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l) or ug/Kg (Circle One)	C.A.S. Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	3.J	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	8.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
10653-03-23-1W15-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM101::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/12/91 08:55
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l or ug/Kg (Circle One)	C.A.S. Number		(ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	8.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide paraneters where the identification has been confirmed by GC/MS. Single component pesticides)= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
10653-15-23-1W13-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RM107::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/12/91 15:17
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l) or ug/Kg (Circle One)	C.A.S. Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	7.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
10653-13-23-TW12-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RM106::A6
Sample Matrix: water
Data release Authorized by: Jeff Clark

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/12/91 14:11
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/l) or ug/Kg (Circle One)	C.A.S. Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	8.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Form 1 7/85

Sample Number
10653-11-23-1W11-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >KM105::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/12/91 13:32
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/L) or ug/Kg (Circle One)	C.A.S. Number		(ug/L) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	7.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (this is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-23-23-1W5-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM110::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/13/91 09:43
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/L) or ug/Kg (Circle One)	C.A.S. Number		(ug/L) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	7.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (this is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-25-23-1W4-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM111::A6
Sample Matrix: water
Data release Authorized by: _____

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/13/91 10:21
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/L) or ug/Kg (Circle One)	C.A.S. Number		(ug/L) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	3.J	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	6.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (this is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration file.

Sample Number
0653-27-23-1W3-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID:)RM112::A6
Sample Matrix: water
Data release Authorized by: Jeff Clark

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-09-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/13/91 11:03
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/L) or ug/Kg (Circle One)	C.A.S. Number		(ug/L) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	10.U	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	2.J
75-15-0	Carbon Disulfide	7.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is (than the specified detection limit but) than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Sample Number
0653-31-23-TW2-A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Western Research Institute
Lab Sample ID: >RM116::A6
Sample Matrix: water
Data release Authorized by: Jeff Clone

Case No.: RM-1
QC Report No.: 1
Contract No.:
Date Sample Received:12-11-91

Volatile Compounds
Concentration: (Low) Medium (Circle One)
Date Extracted: .....
Date Analyzed: 12/13/91 15:00
Conc/Dil factor: 1 pH : .....
Percent Moisture: (Not Decanted) .....

C.A.S. Number		(ug/L) or ug/Kg (Circle One)	C.A.S. Number		(ug/L) or ug/Kg (Circle One)
74-87-3	Chloromethane	10.U	78-87-5	1,2-Dichloropropane	10.U
74-83-9	Bromomethane	10.U	10061-02-6	Trans-1,3-Dichloropropene	10.U
75-01-4	Vinyl Chloride	10.U	79-01-6	Trichloroethene	10.U
75-00-3	Chloroethane	10.U	124-48-1	Dibromochloromethane	10.U
75-09-2	Methylene Chloride	2.J	79-00-5	1,1,2-Trichloroethane	10.U
67-64-1	Acetone	10.U	71-43-2	Benzene	10.U
75-15-0	Carbon Disulfide	6.JB	10061-01-5	cis-1,3-Dichloropropene	10.U
75-35-4	1,1-Dichloroethene	10.U	110-75-8	2-Chloroethylvinylether	10.U
75-34-3	1,1-Dichloroethane	10.U	75-25-2	Bromoform	10.U
156-60-5	Trans-1,2-Dichloroethene	10.U	108-10-1	4-Methyl-2-Pentanone	10.U
67-66-3	Chloroform	10.U	591-78-6	2-Hexanone	10.U
107-02-2	1,2-Dichloroethane	10.U	127-18-4	Tetrachloroethene	10.U
78-93-3	2-Butanone	10.U	79-34-5	1,1,2,2-Tetrachloroethane	10.U
71-55-6	1,1,1-Trichloroethane	10.U	108-88-3	Toluene	10.U
56-23-6	Carbon Tetrachloride	10.U	108-90-7	Chlorobenzene	10.U
108-05-4	Vinyl Acetate	10.U	100-41-4	Ethylbenzene	10.U
75-27-4	Bromodichloromethane	10.U	100-42-5	Styrene	10.U
				Total Xylenes	10.U

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is < than the specified detection limit but > than zero (e.g. 10J). If limit of detection is 10 ug/L and a conentration of 3.0 ug/L is calculated, report as 3J.

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/uL in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns data the user to take appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

OPTIONAL FLAGS

N - Compound not present in Calibration File.

Lab Name : WESTERN RESEARCH INST
Case No : KM1

Sample Number
831-23-TW2-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/12/91
Date Analyzed: 920103 00:44
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup _ Yes XX No
Separatory Funnel Extraction _ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
837-23-EMW2B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/12/91
Date Analyzed: 920102 23:46
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrososdiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RMI

Sample Number
801-23-1W31-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/12/91
Date Analyzed: 920102 22:48
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : KM1

Sample Number
029-23-EMU3-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/12/91
Date Analyzed: 920102 21:50
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-0	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-0	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-0	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
M41-23-UIU1B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/12/91
Date Analyzed: 920102 20:53
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrososdiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RMI

Sample Number
M35-23-CMW18

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/12/91
Date Analyzed: 920102 19:55
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
833-23-EMW11A

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/12/91
Date Analyzed: 920102 18:57
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrososdiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
101-23-TW32-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/12/91
Date Analyzed: 920102 17:02
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
839-23-CCWI-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/12/91
Date Analyzed: 920102 17:02
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
M21-23-EMW9-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/11/91
Date Analyzed: 911231 05:04
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup _ Yes XX No
Separatory Funnel Extraction _ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
101-23-TW30-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/11/91
Date Analyzed: 911231 04:01
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	59		7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	11	
106-44-5	4-Methylphenol	57		100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	8	J
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	8	J
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	15		206-44-00	Fluoranthene	8	J
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	8	J
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	6	J
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	5	J
95-95-4	2,4,5-Trichlorophenol	42		117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	7	J
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	6	J
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	6	J
208-96-8	Acenaphthylene	13		193-39-5	Indeno(1,2,3-cd)Pyrene	5	J
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	3	J
83-32-9	Acenaphthene	11		191-24-2	Benzo(g,h,i)perylene	4	J

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
MD9-23-TW18-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/11/91
Date Analyzed: 911231 02:59
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup _ Yes XX No
Separatory Funnel Extraction _ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RMI

Sample Number
MOS-23-TW16-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/11/91
Date Analyzed: 911231 01:56
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup _ Yes XX No
Separatory Funnel Extraction _ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RMI

Sample Number
803-23-TW25-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/11/91
Date Analyzed: 911231 00:53
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup _ Yes XX No
Separatory Funnel Extraction _ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RMI

Sample Number
815-23-TU13-8

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/11/91
Date Analyzed: 911230 23:50
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Seperatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
827-23-TW3-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/11/91
Date Analyzed: 911230 22:48
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RMI

Sample Number
817-23-EMW10-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/10/91
Date Analyzed: 911230 21:45
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	1	J
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	2	J
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
807-23-TW17-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/10/91
Date Analyzed: 911230 20:42
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	1	J
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	1	J
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
813-23-TW12-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/10/91
Date Analyzed: 911230 19:39
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
911-23-IW11-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/10/91
Date Analyzed: 911230 18:36
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction ✓ Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	26	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	26	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	26	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	26	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	26	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	26	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	26	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	26	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RMI

Sample Number
819-23-EMW8-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/10/91
Date Analyzed: 911230 17:34
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	12	U	51-28-5	2,4-Dinitrophenol	29	U
111-44-4	bis(2-Chloroethyl)ether	12	U	100-02-7	4-Nitrophenol	29	U
95-57-8	2-Chlorophenol	12	U	132-64-9	Dibenzofuran	12	U
541-73-1	1,3-Dichlorobenzene	12	U	121-14-2	2,4-Dinitrotoluene	12	U
106-46-7	1,4-Dichlorobenzene	12	U	606-20-2	2,6-Dinitrotoluene	12	U
95-50-1	1,2-Dichlorobenzene	12	U	84-66-2	Diethylphthalate	12	U
95-48-7	2-Methylphenol	12	U	7005-72-3	4-Chlorophenyl-phenylether	12	U
108-60-1	2,2'-oxybis(1-Chloropropane)	12	U	86-73-7	fluorene	12	U
106-44-5	4-Methylphenol	12	U	100-01-6	4-Nitroaniline	29	U
621-64-7	N-Nitroso-di-n-propylamine	12	U	534-52-1	4,6-Dinitro-2-methylphenol	29	U
67-72-1	Hexachloroethane	12	U	86-30-6	N-Nitrosodiphenylamine (1)	3	J
98-95-3	Nitrobenzene	12	U	101-55-3	4-Bromophenyl-phenylether	12	U
78-59-1	Isophorone	12	U	118-74-1	Hexachlorobenzene	12	U
88-75-5	2-Nitrophenol	12	U	87-86-5	Pentachlorophenol	29	U
105-67-9	2,4-Dimethylphenol	12	U	85-01-8	Phenanthrene	12	U
111-91-1	bis(2-Chloroethoxy)methane	12	U	120-12-7	Anthracene	12	U
120-83-2	2,4-Dichlorophenol	12	U	86-74-8	Carbazole	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U	84-74-2	Di-n-Butylphthalate	1	J
91-20-3	Naphthalene	12	U	206-44-00	Fluoranthene	12	U
106-47-8	4-Chloroaniline	12	U	129-00-00	Pyrene	12	U
87-68-3	Hexachlorobutadiene	12	U	85-68-7	Butylbenzylphthalate	12	U
59-50-7	4-Chloro-3-methylphenol	12	U	91-94-1	3,3'-Dichlorobenzidine	12	U
91-57-6	2-Methylnaphthalene	12	U	56-55-3	Benzo(a)Anthracene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U	117-81-7	bis(2-Ethylhexyl)phthalate	12	U
88-06-2	2,4,6-Trichlorophenol	12	U	218-01-9	Chrysene	12	U
95-95-4	2,4,5-Trichlorophenol	29	U	117-84-00	Di-n-octylphthalate	12	U
91-58-7	2-Chloronaphthalene	12	U	205-99-2	Benzo(b)fluoranthene	12	U
88-74-4	2-Nitroaniline	29	U	207-08-9	Benzo(k)fluoranthene	12	U
131-11-3	Dimethylphthalate	12	U	50-32-8	Benzo(a)Pyrene	12	U
208-96-8	Acenaphthylene	12	U	193-39-5	Indeno(1,2,3-cd)Pyrene	12	U
99-09-2	3-Nitroaniline	29	U	53-70-3	Dibenz(a,h)anthracene	12	U
83-32-9	Acenaphthene	12	U	191-24-2	Benzo(g,h,i)perylene	12	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
823-23-TW5-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/10/91
Date Analyzed: 911230 16:32
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup _ Yes XX No
Separatory Funnel Extraction _ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	1	J
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
825-23-TU4-B

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/10/91
Date Analyzed: 911230 15:31
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup _ Yes XX No
Separatory Funnel Extraction _ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
BLANK 12/12/91

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/12/91
Date Analyzed: 911226 19:04
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2 Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
BLANK 12/11/91

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/11/91
Date Analyzed: 911226 18:00
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-00-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

Lab Name : WESTERN RESEARCH INST
Case No : RM1

Sample Number
BLANK 12/10/91

ORGANICS ANALYSIS DATA SHEET
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 12/10/91
Date Analyzed: 911226 16:55
Conc/Dil Factor: 1.00000
Percent Moisture: 0.0

GPC Cleanup __ Yes XX No
Separatory Funnel Extraction __ Yes
Continuous Liquid-Liquid Extraction X Yes

C.A.S. Number		UG/L		C.A.S. Number		UG/L	
108-95-2	Phenol	10	U	51-28-5	2,4-Dinitrophenol	25	U
111-44-4	bis(2-Chloroethyl)ether	10	U	100-02-7	4-Nitrophenol	25	U
95-57-8	2-Chlorophenol	10	U	132-64-9	Dibenzofuran	10	U
541-73-1	1,3-Dichlorobenzene	10	U	121-14-2	2,4-Dinitrotoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	606-20-2	2,6-Dinitrotoluene	10	U
95-50-1	1,2-Dichlorobenzene	10	U	84-66-2	Diethylphthalate	10	U
95-48-7	2-Methylphenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U	86-73-7	Fluorene	10	U
106-44-5	4-Methylphenol	10	U	100-01-6	4-Nitroaniline	25	U
621-64-7	N-Nitroso-di-n-propylamine	10	U	534-52-1	4,6-Dinitro-2-methylphenol	25	U
67-72-1	Hexachloroethane	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
98-95-3	Nitrobenzene	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
78-59-1	Isophorone	10	U	118-74-1	Hexachlorobenzene	10	U
88-75-5	2-Nitrophenol	10	U	87-86-5	Pentachlorophenol	25	U
105-67-9	2,4-Dimethylphenol	10	U	85-01-8	Phenanthrene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U	120-12-7	Anthracene	10	U
120-83-2	2,4-Dichlorophenol	10	U	86-74-8	Carbazole	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U	84-74-2	Di-n-Butylphthalate	10	U
91-20-3	Naphthalene	10	U	206-44-00	Fluoranthene	10	U
106-47-8	4-Chloroaniline	10	U	129-60-00	Pyrene	10	U
87-68-3	Hexachlorobutadiene	10	U	85-68-7	Butylbenzylphthalate	10	U
59-50-7	4-Chloro-3-methylphenol	10	U	91-94-1	3,3'-Dichlorobenzidine	10	U
91-57-6	2-Methylnaphthalene	10	U	56-55-3	Benzo(a)Anthracene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	117-81-7	bis(2-Ethylhexyl)phthalate	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	218-01-9	Chrysene	10	U
95-95-4	2,4,5-Trichlorophenol	25	U	117-84-00	Di-n-octylphthalate	10	U
91-58-7	2-Chloronaphthalene	10	U	205-99-2	Benzo(b)fluoranthene	10	U
88-74-4	2-Nitroaniline	25	U	207-08-9	Benzo(k)fluoranthene	10	U
131-11-3	Dimethylphthalate	10	U	50-32-8	Benzo(a)Pyrene	10	U
208-96-8	Acenaphthylene	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
99-09-2	3-Nitroaniline	25	U	53-70-3	Dibenz(a,h)anthracene	10	U
83-32-9	Acenaphthene	10	U	191-24-2	Benzo(g,h,i)perylene	10	U

(1)-Cannot be separated from diphenylamine

APPENDIX C

Field Sampling Data

2 TITLE TW-15

PROJECT NO. [illegible]
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: TW-15
Date: 05 DEC 91

Project: RM-1
Book: 0653
Page: 02

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
0900	not measured, standardizing probes				61.4	—
0920	n.m.	2090	n.m.	n.m.	90.8	1.13
0940	9.2	2150	n.m.	-31.8	114.0	1.30
1000	9.1	2050	8.65	-94.4	131.3	1.13
1020	9.3	2020	8.62	-105.3	144.9	1.11
1040	9.7	1970	8.58	-117.6	155.4	1.09
1100	9.7	2040	8.53	-113.8	157.9	0.75
1120	8.9	2080	8.47	-94.9	156.95	0.32
1140	8.7	2080	8.45	-84.5	151.30	0.32

Conduct. meter reads 1143 µS at 6.4°C in 0.01M KCl
Eh reads 255.1 mV at 5.1°C in ZoBell Soln
pH meter calibrated in pH 7.00 and 10.00 buffer.

1045 ~~1100~~ Flow rate reduced to 0.75 gpm pressure = 60 psig
1110 Flow rate reduced to 0.32 gpm pressure = 50 psig
Water is clear and odor free

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[margin note, vertical:] 1/5th 1/8 [illegible] 12 Dec 91

TITLE TW-15 PROJECT NO. 0013/430 0653 3

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RM-1 Well Name TW-15

Date 05DEC91 Field Crew LINDBLOM, LEWIS

Weather SUNNY, WINDY Air Temperature 30 (F°)

Measuring Point TOC Sampling Device Bennett Pump

Depth to Water 70.5 Depth of Sampling Device 518

Field Analyses at Time of Sampling

Temperature 57 (°C)

Corrected Conductivity 2080 (μmhos/cm at 25°C)

pH 8.45

Eh -84.5 (mV, Field Electrode)

Eh 142.33 (mV, Corrected to Standard Hydrogen Electrode)

Discharge Rate 0.32 (gallons/min)

Alkalinity Titration

Filtered Sample pH

mls of Sample Tested ml

mls of HCl Added to Reach pH 4.5 ml

Normality of HCl N

Total Alkalinity (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-03-23-TW-15	-A; A640	VOA	A6501; A6502
0653-03-23-TW-15	-B	BNA	A6503
0653-03-23-TW-15	-C	Total Phenols	A6504
0653-03-23-TW-15	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6505
0653-03-23-TW-15	-E	Sulfide	A6506
0653-03-23-TW-15	-F	Cyanide	A6507
0653-03-23-TW-15	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3, Alk~~	A6508
0653-03-23-TW-15	-H	Trace metals, Metals, SCN	A6509
0653-03-23-TW-15	-J	TSS, HCO_3, Alk, CO_3	A6510

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4 **TITLE** TW-16

PROJECT NO. 0013430
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: TW-16

Date: 12/06/91

Project: RM-1

Book: 0653

Page: 25

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1210	8.9	2490	8.48	-171.5	82.1	1.33
1230	8.9	2470	9.05	-183.4	102.3	1.25
1250	8.8	2440	8.72	-156.4	107.05	1.33 @ 1245
1310	9.0	2310	8.61	-154.0	108.50	1.20
1330	9.1	1990	8.46	-147.7	110.35	1.20
1340	9.1	1970	8.41	-141.7	110.95	1.20
1350	9.1	2440	8.40	-145.7	111.20	1.20

Water is clear with slight sulfur odor

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12/7/91

TITLE TW-16

PROJECT NO. 2013/430
BOOK NO. 0653

5

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI
Well Name TW-16
Date 12 DEC. 91
Field Crew Ladlam, Lucy
Weather pltly cloudy, windy
Air Temperature 25 (F°)

Measuring Point TOC
Sampling Device Bennett Pump
Depth to Water 90.95'
Depth of Sampling Device 395'

Field Analyses at Time of Sampling

Temperature 9.1 (°C)
Corrected Conductivity 2440 (µmhos/cm at 25°C)
pH 8.40
Eh 145.7 (mV, Field Electrode)
Eh 81.49 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.20 (gallons/min)

Alkalinity Titration
Filtered Sample pH
mls of Sample Tested ml
mls of HCl Added to Reach pH 4.5 ml
Normality of HCl N
Total Alkalinity (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-05-23-TW16	-A; A&E	VOA	A6511; A6512
0653-05-23-TW16	-B	BNA	A6513
0653-05-23-TW16	-C	Total Phenols	A6514
0653-05-23-TW16	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6515
0653-05-23-TW16	-E	Sulfide	A6516
0653-05-23-TW16	-F	Cyanide	A6517
0653-05-23-TW16	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3, ALK~~	A6518
0653-05-23-TW16	-H	Trace Metals, ~~SCN~~	A6519
0653-05-23-TW16	-J	TSS HCO_3, CO_3, ALK	A6520
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6 **TITLE** TW-17

PROJECT NO: 2213/930
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: TW-17 Project: RM-1

Date: 07 DEC 91 Book: 0653

Page: 06

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
~~1120~~	____	not measured. Standing	pumps		11.8	1.33
~~1140~~	9.9	2810	8.20	-110.9	84.65	1.33
~~1200~~	9.8	2340	8.20	-102.5	86.2	1.25
~~1220~~	9.7	2100	8.20	-100.6	87.15	1.20
~~1240~~	9.9	2360	8.25	-102.1	87.65	1.20

Eh meter reads 237.7 mV in Zobell Standard @ 16.4°C
pH meter calibrated in pH 7.00 and 10.00 buffer
Cond. meter reads 1150 µS in 0.01M KCl 15°C

Water is clear. Slight sulfur odor

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TITLE TW-17 PROJECT NO. 013143 BOOK NO. 0653 7

WRI WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RM-1 Well Name TW-17

Date 07 Dec 91 Field Crew Anderson, Lowry

Weather Clear, windy Air Temperature 20 (F°)

Measuring Point TOC Sampling Device Bennett Pump

Depth to Water ~~16.35~~ 17.17 76.3 Depth of Sampling Device 324'

Field Analyses at Time of Sampling

Temperature 9.9 (°C)
Corrected Conductivity 2360 (µmhos/cm at 25°C)
pH 8.25
Eh -102.1 (mV, Field Electrode)
Eh 125.81 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.20 (gallons/min)

Alkalinity Titration
Filtered Sample pH 8.57
mls of Sample Tested 25 ml
mls of HCl Added to Reach pH 4.5 18.9 ml
Normality of HCl 0.02005 N
Total Alkalinity 759.62 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-07-23-TW17	-A	VOA	A6521, A6522
0653-07-23-TW17	-B	BNA	A6523
0653-07-23-TW17	-C	Total Phenols	A6524
0653-07-23-TW17	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6525
0653-07-23-TW17	-E	Sulfide	A6526
0653-07-23-TW17	-F	Cyanide	A6527
0653-07-23-TW17	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3, ALK~~	A6528
0653-07-23-TW17	-H	Metals, ~~SCN~~ Thiocyanate	A6529 → A6531
0653-07-23-TW17	-J	TSS ~~HCO_3 CO_3 AK~~	A6532

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8 TITLE TW-18

PROJECT NO. 0013930
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: TW-18 Project: Rm-1

Date: 07DEC91 Book: 0653

Page: 08

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
0844	8.1	2080	8.20	-179.4	84.75	1.20
0904	8.5	2170	8.27	-202.2	106.9	1.22
0924	8.7	2280	8.11	-186.6	109.3	1.20
0944	8.9	1900	8.10	-193.7	110.1	1.25
1004	8.9	2220	8.09	-182.4	110.6	1.2

Water is clear. Slight sulfur odor

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TITLE TLJ-1B

PROJECT NO. 0131930 9
BOOK NO. 0653

WRI WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RM-1 Well Name TLJ-1B
Date 07DEC91 Field Crew LINDBLOM, LEVELY
Weather clear, windy Air Temperature 28 (F°)

Measuring Point TOC Sampling Device BENNETT Pump
Depth to Water 95.9 Depth of Sampling Device 294'

Field Analyses at Time of Sampling

Temperature 8.9 (°C)
Corrected Conductivity 222.0 (µmhos/cm at 25°C)
pH 8.09
Eh -182.9 (mV, Field Electrode)
Eh 44.1 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.6 (gallons/min)
Alkalinity Titration
Filtered Sample pH 7.97
mls of Sample Tested 25 ml
mls of HCl Added to Reach pH 4.5 20.5 ml
Normality of HCl 0.02005 N
Total Alkalinity 823.35 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-09-23-TLJ18	-A; Acid	VOA	A6533, A6534
0653-09-23-TLJ18	-B	BNA	A6535
0653-09-23-TLJ18	-C	Total Phenols	A6536
0653-09-23-TLJ18	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6537
0653-09-23-TLJ18	-E	Sulfide	A6538
0653-09-23-TLJ18	-F	Cyanide	A6539
0653-09-23-TLJ18	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3, Alk~~	A6540
0653-09-23-TLJ18	-H	Thiocyanate, Metals, ~~SCN~~ 3 samples	A6541 → A6543
	-J	TSS ~~HCO_3, CO_3, Alk~~	A6544

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10 **TITLE** TW-11

PROJECT NO. 6013/930
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: TW-11 Project: RMI

Date: 01DEC91 Book: 0653

Page: 10

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1030	8.0	2640	8.10	137.4	106.4	1.20
1050	8.2	1950	8.34	-213.1	122.6	1.33
1110	8.2	1920	8.33	-222.0	129.45	1.20
1130	8.2	1950	8.2	-211.8	131.90	1.20
1150	8.2	1920	8.22	-209.0	132.85	1.20

Water is clear with moderate sulfur odor

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TLW 11

PROJECT NO. 03131930
Book No. 0653

11

TITLE

WRI WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI
Well Name TLW-11
Date 07 DEC 91
Field Crew Lindham, Lowry
Weather Clear, windy
Air Temperature 36 (F°)

Measuring Point TOC
Sampling Device Bennett Pump
Depth to Water 108
Depth of Sampling Device 331

Field Analyses at Time of Sampling

Temperature 8.2 (°C)
Corrected Conductivity 1920 (µmhos/cm at 25°C)
pH 8.22
Eh -204.0 (mV, Field Electrode)
Eh 17.35 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 12.0 (gallons/min)

Alkalinity Titration
Filtered Sample pH 5.25
mls of Sample Tested 25 ml
mls of HCl Added to Reach pH 4.5 20.7 ml
Normality of HCl 0.1600 N
Total Alkalinity 531.31 (mg/L Equiv. $CaCO_3$)

Analytical Submissions	Analysis Requested	Tag Numbers
~~0653-11-23-TLW11~~ 0653-11-23-TLW11-A; Alkp	VOA	A6545, A6546
0653-11-23-~~TLW11~~ TLW11-B	BNA	A6547
0653-11-23-~~TLW11~~ TLW11-C	Total Phenols	A6548
0653-11-23-~~TLW11~~ TLW11-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6549
0653-11-23-~~TLW11~~ TLW11-E	Sulfide	A6550
0653-11-23-~~TLW11~~ TLW11-F	Cyanide	A6551
0653-11-23-~~TLW11~~ TLW11-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3, ALK~~	A6552
0653-11-23-~~TLW11~~ TLW11-H 3 samples	Metals, ~~SCN~~ Thiocyanate	A6553 → A6555
0653-11-23-~~TLW11~~ TLW11-J	TSS ~~Hard, Ca, Alk, pH~~	A6556

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12 **TITLE**

PROJECT NO. (X)13930
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: TW-12 Project: RMI

Date: 07DEC 91 Book: 0653

Page: 12

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1240	7.0	2140	8.14	-173.1	~~+0.6~~ 102.0	1.09
1300	8.1	2010	8.30	-167.0	119.3	1.18
1320	8.1	1960	8.50	-155.3	124.1	1.2
1340	8.2	1970	8.24	-149.8	125.3	1.25
1400	8.2	1900	8.25	-147.9	126.15	1.25

Water is clear with moderate sulfur odor

1215 - Replaced Bennett Pump

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TITLE TW-12 PROJECT NO. 0013930 BOOK NO. 0653 13

WRI WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RM1 Well Name TW-12
Date 27 DEC 91 Field Crew Lindblom Lamm
Weather Clear Windy Air Temperature (F°)

Measuring Point TOC Sampling Device Bennett Pump
Depth to Water 18.1 Depth of Sampling Device 34+

Field Analyses at Time of Sampling

Temperature 8.2 (°C)
Corrected Conductivity 1960 (µmhos/cm at 25°C)
pH 8.25
Eh -142.9 (mV, Field Electrode)
Eh 73.48 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.25 (gallons/min)

Alkalinity Titration
Filtered Sample pH 8.26
mls of Sample Tested 25 ml
mls of HCl Added to Reach pH 4.5 19.2 ml
Normality of HCl 0.620008 N
Total Alkalinity 771.07 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-13 23 TW12	-A	VOA	A6557, A6558
0653-13 23 -TW12	-B	BNA	A6557
0653-13 23 -TW12	-C	Total Phenols	A6560
0653-13 23 -TW12	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6561
0653-13 23 -TW12	-E	Sulfide	A6562
0653-13 23 -TW12	-F	Cyanide	A6563
0653-13 23 -TW12	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3, ALK~~	A6564
0653-13 23 -TW12	-H	Metals, ~~SEN~~ Thiocyanate	A6565 → A6566
0653-13 23 -TW12	-J	TSS ~~HCO, CO_3 ALK~~ pH	A6568

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14 TITLE TW-13 PROJECT NO. 0313930
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: TW-13 Project: RMI

Date: 12-7-91 Book: 0653

Page: 14

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1435	7.6	2250	8.99	-213.5	70.1	1.2
1455	8.2	2110	9.18	-239.8	95.2	1.13
1515	8.5	1960	9.13	-232.8	103.6	1.2
1535	8.8	1840	8.67	-207.6	107.7	1.09
1555	9.0	1780	8.60	-194.8	110.0	0.5
1605	9.1	1940	8.4	-145.5	110.9	0.5

1555 Turned down flow to 0.5gpm Pressure = 50 psig.

water has gray fines. Slight sulfur odor

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SIGNATURE R. Smith DATE 12/10/91

DISCLOSED TO AND UNDERSTOOD BY DATE WITNESS Brian Looney DATE 12-10-91

TITLE TW-13 PROJECT NO. 0013930 BOOK NO. 0653 15

WRI WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI Well Name TW-13

Date 0 Field Crew Lindblom, Leuny

Weather Clear, windy Air Temperature 30 (F°)

Measuring Point TOC Sampling Device Bennett Pump

Depth to Water 79.3 Depth of Sampling Device 361

Field Analyses at Time of Sampling

Temperature 9.1 (°C)
Corrected Conductivity 1940 (µmhos/cm at 25°C)
pH 8.4
Eh -145.5 (mV, Field Electrode)
Eh 81.69 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 0.5 (gallons/min)
Alkalinity Titration
Filtered Sample pH 8.32
mls of Sample Tested 25 ml
mls of HCl Added to Reach pH 4.5 19.0 ml
Normality of HCl 0.02008 N
Total Alkalinity 763.01 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-15-23-TW13	-A, Adup	VOA	A6569, A6570
0653-15-23-TW13	-B	BNA	A6571
0653-15-23-TW13	-C	Total Phenols	A6572
0653-15-23-TW13	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6573
0653-15-23-TW13	-E	Sulfide	A6574
0653-15-23-TW13	-F	Cyanide	A6575
0653-15-23-TW13	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3, Alk~~	A6576
0653-15-23-TW13	-H	3 samples Metals, ~~SEN~~ Thiocyanate	A6577-A6579
0653-15-23-TW13	-J	TSS ~~HCO_3, CO_3, Alk~~ pH	A6580
		Appx 1700 mls sample	

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SIGNATURE 12/10/91

DISCLOSED TO AND UNDERSTOOD BY DATE WITNESS DATE 12-10-91

16 **TITLE** EMW-10

PROJECT NO. 0013430
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: EMW-10 Project: RMI

Date: 12-8-91 Book: 0653

Page: 16

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
0700	n.m.	standardizing	probes		91.2	1.2
0720		"	"		114.5	1.2
0740	8.8	0870	7.44	-71.7	131.0	1.1
0800	7.4	0910	7.50	-61.6	142.5	0.63
0820	7.2	0730	7.53	-58.2	143.5	0.5

Eh meter reads 242.7mV in Zobell Std 14.2°C
pH meter calibrated in 7.0 & 10.0 buffer
cond meter reads 12.18ms in 0.10 M KCl 8.5°C

0753: Reduced Flow to 0.63 ~5psig
Water level dropping below pump intake

Water is clear and odor free

SCIENTIST SIGNATURE: Jon R Lindblom

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TITLE Emw-10 PROJECT NO. 023193 BOOK NO. 0653 17

WRI WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI Well Name EMW-10

Date 12/8/91 Field Crew Lindsey, Lowry

Weather Cloudy sunny Windy Air Temperature 30 (F°)

Measuring Point TOC Sampling Device Bennett Pump

Depth to Water 90.9 Depth of Sampling Device 147'

Field Analyses at Time of Sampling

Temperature 7.2 (°C)

Corrected Conductivity 730 (µmhos/cm at 25°C)

pH 7.53

Eh -55.2 (mV, Field Electrode)

Eh 167.2 (mV, Corrected to Standard Hydrogen Electrode)

Discharge Rate 0.5 (gallons/min)

Alkalinity Titration

Filtered Sample pH 7.67

mls of Sample Tested 25 ml

mls of HCl Added to Reach pH 4.5 12.5 ml

Normality of HCl 0.0205 N

Total Alkalinity 504.00 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653 17-23 EMW10	-A/Dup	VOA	A6625 A6626
0653 17-23 EMW10	-B	BNA	A6627
0653 17-23 EMW10	-C	Total Phenols	A6628
0653 17-23 EMW10	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6629
0653 17-23 EMW10	-E	Sulfide	A6630
0653 17-23 EMW10	-F	Cyanide	A6631
0653 17-23 EMW10	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3, Alk~~	A6632
0653 17-23 EMW10	-H	Sulfide, Metals, SCN	A6633
0653 17-23 EMW10	-J	TOC, COD, OK, TSS	A6634

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18 **TITLE** EMW-8

PROJECT NO. 0013192
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: EMW-8 Project: RM1

Date: 12/8/91 Book: 0653

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FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
0900	7.3	2070	8.67	134.0	169.4	BAIL

water is clear and odorless

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TITLE EMW-8

PROJECT NO. 0613430
BOOK NO. 0653

19

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI
Well Name EMW-8
Date 12/8/91
Field Crew Lindham, Lowry
Weather Pt/y cloudy, windy
Air Temperature 15 (F°)

Measuring Point TOC
Sampling Device Teflon Bailer
Depth to Water 169.4
Depth of Sampling Device 324

Field Analyses at Time of Sampling

Temperature 7.3 (°C)
Corrected Conductivity 2076 (µmhos/cm at 25°C)
pH 3.47
Eh -134.0 (mV, Field Electrode)
Eh 411.57 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate BAIL (gallons/min)

Alkalinity Titration
Filtered Sample pH _____
mls of Sample Tested _____ ml
mls of HCl Added to Reach pH 4.5 _____ ml
Normality of HCl _____ N
Total Alkalinity _____ (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-14-23-EMW8	-A	Adup VOA	A6613, A6614
0653-14-23-EMW8	-B	BNA	A6615
0653-14-23-EMW8	-C	Total Phenols	A6616
0653-14-23-EMW8	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6617
0653-14-23-EMW8	-E	Sulfide	A6618
0653-14-23-EMW8	-F	Cyanide	A6619
0653-14-23-EMW8	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3~~, ALK	A6620
0653-14-23-EMW8	-H	3 samples Metals, ~~SCN~~ Thiocyanate	A6621 – A6623
0653-14-23-EMW8	-J	pH TSS ~~HCO_3, CO_3~~, NH	A6624

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DATE 12/16/91

WITNESS

DATE 12-20-91

Duplicate 12/16/91

20 TITLE EMW-9

PROJECT NO. 00124930
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: EMW-9
Date: 12/8/91

Project: RMI
Book: 0653
Page: 20

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
8:40	9.0	1900	8.25	-126.0	55.6	1.2
900	9.1	2600	9.03	-169.9	79.6	1.2
~~0110~~						
~~0420~~						
~~1000~~						
1045	9.5	2990	9.51	598	60.6	1.2
1105	9.3	2890	8.64	-138.4	81.1	1.22
1125	9.4	2850	8.54	-136.0	86.0	1.2
1145	9.3	2890	8.50	-124.2	89.2	1.23
1205	9.3	2880	8.40	-110.5	91.35	1.20
1215	9.8	2780	8.41	-47.7	89.2	1.20

0110 Generator quit.
0420 - Restarted generator
0932 - resumed pumping
0945 - Generator quit
1015 - Resume pumping
1205 Reduced flow rate pressure = 50.75 psig
1215 Generator quit ∴ NO withdrawal
Water is clear and odor free

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TITLE EMW-9 PROJECT NO. 00131950 BOOK NO. 0653 21

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI | Well Name EMW-9
Date 12/8/91 | Field Crew Lindsey, Lowry
Weather ~~Partly~~ cldy, windy | Air Temperature 15 (F°)

Measuring Point TOC | Sampling Device Bennett Pump
Depth to Water 62.15 | Depth of Sampling Device 364'

Field Analyses at Time of Sampling

Temperature 9.8 (°C)
Corrected Conductivity 2750 (µmhos/cm at 25°C)
pH 8.41
Eh -97.7 (mV, Field Electrode)
Eh 150.12 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.20 (gallons/min)
Alkalinity Titration
Filtered ~~Sample~~ pH
mls of Sample Tested ml
mls of HCl Added to Reach pH 4.5 ml
Normality of HCl N
Total Alkalinity (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-21-23-EMW9	-A; Alk	VOA	A6625; A6626
0653-21-23 EMW9	-B	BNA	A6627
0653 21-23 - EMW9	-C	Total Phenols	A6628
0653-21-23 - EMW9	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6629
0653-21-23 - EMW9	-E	Sulfide	A6630
0653-21-23 - EMW9	-F	Cyanide	A6631
0653-21-23 - EMW9	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3, ALK~~	A6632
0653-21-23 - EMW9	-H	3 mets Metals, SGN Thiox.	A6633 → A6635
0653-21-23 - EMW9	-J	all TSS H_2O, CO_3, Alk	A6636

SCIENTIST SIGNATURE L. R. Lindsey DATE 12/11/91

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22 **TITLE** TW-5

PROJECT NO. (0131930
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: TW-5 Project: RMI

Date: 08DEC91 Book: 0653

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FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1310	9.1	3060	8.56	-142.0	62.9	1.1
1330	8.4	3120	8.62	-129.4	89.75	1.1
1350	7.9	3140	8.55	-168.6	96.15	1.1
1410	7.8	3230	8.38	-143.1	98.7	1.1
1430	7.8	3220	8.34	-133.2	99.7	1.1

water is clear and odor free

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TITLE TW-5

PROJECT NO. 00131930 23
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI
Date 05 Dec 91
Weather Clear windy

Well Name TW-5
Field Crew Lindham, Lowry, Patterson
Air Temperature 18 (F°)

Measuring Point TOC
Depth to Water 75.2

Sampling Device Bennett Pump
Depth of Sampling Device 359

Field Analyses at Time of Sampling

Temperature 2.8 (°C)
Corrected Conductivity 3220 (µmhos/cm at 25°C)
pH 5.34
Eh -133.2 (mV, Field Electrode)
Eh 92.8 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.1 (gallons/min)

Alkalinity Titration
Filtered Sample pH 5.35
mls of Sample Tested 25 ml
mls of HCl Added to Reach pH 4.5 17.9 ml
Normality of HCl 0.1000 N
Total Alkalinity 716.8 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-23-23-TW5	.A; Adup	VOA	A6637; A6638
0653-23-23-TW5	.B	BNA	A6639
0653-23-23-TW5	.C	Total Phenols	A6640
0653-23-23-TW5	.D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6641
0653-23-23-TW5	.E	Sulfide	A6642
0653-23-23-TW5	.F	Cyanide	A6643
0653-23-23-TW5	.G	Sulfate, TDS, Br, Cl, F, HCO_3, CO_3, ALK	A6644
0653-23-23-TW5	.H	3 metals, SGN Thiocyanate	A6645→A6647
0653-23-23-TW5	.J	TSS HCO_3/CO_3 ALK	A6648

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24 TITLE TW-4

PROJECT NO. 001319 2
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: TW-4

Project: RD1

Date: 08 DEC 91

Book: 0653

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FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1505	8.9	2230	8.54	-176.9	79.15	1.33
1525	9.9	2100	8.62	-206.9	83.25	1.33
1545	9.7	2040	8.65	-203.2	88.6	1.33
1605	9.3	2010	8.49	-182.4	90.6	1.2
1625	9.3	1920	8.41	-175.1	91.55	1.2

water is clear, slight sulfur odor

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TITLE TW-4 PROJECT NO. 0018430 BOOK NO. 0653 25

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI Well Name TW-4

Date 05 Dec 91 Field Crew Lindblom, Lowry, Patterson

Weather clear ~~cold~~ windy Air Temperature 15 (F°)

Measuring Point TOC Sampling Device Bennett Pump

Depth to Water 68.65 Depth of Sampling Device 372

Field Analyses at Time of Sampling

Temperature 9.3 (°C)

Corrected Conductivity 1920 (µmhos/cm at 25°C)

pH 8.41

Eh -175.1 (mV, Field Electrode)

Eh 522.7 (mV, Corrected to Standard Hydrogen Electrode)

Discharge Rate 1.6 (gallons/min)

Alkalinity Titration

Filtered Sample pH 9.35

mls of Sample Tested 25 ml

mls of HCl Added to Reach pH 4.5 21.3 ml

Normality of HCl 0.1202 N

Total Alkalinity 855.41 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-25-23-TW4	-A	VOA	A6649, A6650
0653-25-23-TW4	-B	BNA	A6651
0653-25-23-TW4	-C	Total Phenols	A6652
0653-25-23-TW4	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6653
0653-25-23-TW4	-E	Sulfide	A6654
0653-25-23-TW4	-F	Cyanide	A6655
0653-25-23-TW4	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3, ALK~~	A6656
0653-25-23-TW4	-H	3 acids Metals, ~~FCN~~ Thiocyanide	A6657 → A6659
0653-25-23-TW4	-J	pH TSS Alk, Cl, NH	A6660

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26 **TITLE**

PROJECT NO. 0013/933
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: TW-3
Date: 12/8/91

Project: RM 1
Book: 0653
Page: 26

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1655	n.m.				92.7	1.1
1715	11.0	2320	8.82	-250.4	113.3	1.1
1735	11.1	2230	8.76	-231.7	119.3	1.0
1755	10.8	2150	8.50	-219.6	121.45	1.1
1815	10.4	2150	8.34	-233.4	122.4	1.0

Water is clear, slight sulfur odor

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TITLE TW-3 PROJECT NO. 0131(93) 27
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI
Date 12/8/91
Weather clear windy
Well Name TW-3
Field Crew Lindholm Lowry Patterson
Air Temperature 10 (F°)

Measuring Point TOC
Depth to Water 102.0
Sampling Device Bennett Pump
Depth of Sampling Device 343'

Field Analyses at Time of Sampling

Temperature 10.4 (°C)
Corrected Conductivity 2150 (µmhos/cm at 25°C)
pH 5.34
Eh -233.4 (mV, Field Electrode)
Eh -5.13 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.0 (gallons/min)
Alkalinity Titration
Filtered Sample pH 6.6
mls of Sample Tested 25 ml
mls of HCl Added to Reach pH 4.5 19.7 ml
Normality of HCl 0.02005 N
Total Alkalinity 791.15 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-27-23-TW3	-A	VOA	A6660, A6662
0653-27-23-TW3	-B	BNA	A6663
0653-27-23-TW3	-C	Total Phenols	A6664
0653-27-23-TW3	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6665
0653-27-23-TW3	-E	Sulfide	A6666
0653-27-23-TW3	-F	Cyanide	A6667
0653-27-23-TW3	-G	Sulfate, TDS, Br, Cl, F, HCO_3, CO_3, ALK	A6668
0653-27-23-TW3	-H	3 pc. + 2 Metals, SEN Dissolved	A6669 → A6671
0653-27-23-TW3	-J	Oil, HCO_3, Cr+ TSS ALK	A6672

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28 **TITLE** EMW-3

PROJECT NO. 0931432
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: EMW-3 Project: RMI

Date: ~~12/9/91~~ 12/10/91 Book: 0653

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FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
0730	n.m.	standardizing probes			101.05	—
0750	8.4	2330	8.36	-167.1	122.3	1.2
0810	7.4	2280	8.44	-146.0	131.85	1.0
0830	—	—	—	—	12/10/91	—
0850	—	—	—	—	—	—
—	—	—	—	—	~~101.0~~ SL	—
0700	n.m.	standardizing probes			101.0	—
0720	9.3	2310	8.16	-146.6	121.9	1.0
0740	9.8	2270	8.30	-137.4	128.85	1.0
0800	10.4	2270	8.41	-135	132.5	0.9
0820	9.5	2250	8.25	-128.1	133.4	1.0
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—

Water clear - Strong Sulfur odor
Cond. Meter reads 1176 uS at 19°C in 0.10M KCl
Eh meter reads 263.2 mV in Zobell at ~6.4°C.
pH meter calibrated in pH 7.00 & 10.00 buffers

0820 - ~~Brk~~ Generator quit. Pulled Pump

10/10/91 0700 Restarted pumping
cond. meter reads 11.65 mS at 5.3 °C in 0.10M KCl
Eh meter reads 260.1 mV in Zobell at 5.2°C
pH meter calibrated in pH 7.00 & 10.00 Buffer

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TITLE EMW-3 PROJECT NO. 0653 BOOK NO. 0653 29

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project Rm I — Well Name EMW-3
Date 12/10/91 — Field Crew Lindblom, Lowry
Weather clear, windy — Air Temperature 15 (F°)

Measuring Point TOC — Sampling Device Bennett Pump
Depth to Water ~~107.6~~ 107.5 — Depth of Sampling Device 344
54 12/10/91

Field Analyses at Time of Sampling

Temperature 9.5 (°C)
Corrected Conductivity 3300 (µmhos/cm at 25°C)
pH 8.25
Eh -128.1 (mV, Field Electrode)
Eh 99.45 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.0 (gallons/min)
Alkalinity Titration
Filtered Sample pH 8.21
mls of Sample Tested 35 ml
mls of HCl Added to Reach pH 4.5 21.5 ml
Normality of HCl 0.0200 N
Total Alkalinity 863.41 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-24-23-EMW3	-A	VOA	A6673, A6674
0653-24-23-EMW3	-B	BNA	A6675
0653-24-23-EMW3	-C	Total Phenols	A6676
0653-24-23-EMW3	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6677
0653-24-23-EMW3	-E	Sulfide	A6678
0653-24-23-EMW3	-F	Cyanide	A6679
0653-24-23-EMW3	-G	Sulfate, TDS, Br, Cl, F, HCO_3, CO_3, ALK	A6681
0653-24-23-EMW3	-H	Metals, SGN Thallium	A6681 → A6683
0653-24-23-EMW3	-J	TSS	A6684

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30 **TITLE** TW-2

PROJECT NO. 60731430
BOOK NO. 3653

WESTERN RESEARCH INSTITUTE

Project RMI Well Name TW-2

Date 10 Dec 91

Power Requirements —

Phase —

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
0850	6.0	2470	8.01	-157.2	111.6	1.1
0910	7.8	2800	9.01	-207.7	114.4	1.22
0930	8.0	2660	8.96	-214.5	120.8	1.2
0950	8.1	2730	8.37	-204.1	124.95	1.2
1010	8.2	2690	8.31	-195.9	125.95	1.2

COMMENTS

Water is Clear, Slight Sulfur odor

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WITNESS [signature] DATE 12-10-91

TITLE TW-2

PROJECT NO. 0015/930 31
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI — Well Name TW-2
Date 12/06/91 — Field Crew Lindblom, Lowry
Weather Clear, windy — Air Temperature 30 (F°)

Measuring Point TOC — Sampling Device Bennett Pump
Depth to Water 99.9 — Depth of Sampling Device 340

Field Analyses at Time of Sampling

Temperature 5.2 (°C)
Corrected Conductivity 2610 (µmhos/cm at 25°C)
pH 3.31
Eh -195.9 (mV, Field Electrode)
Eh 307.5 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.2 (gallons/min)

Alkalinity Titration
Filtered Sample pH 8.35
mls of Sample Tested 25 ml
mls of HCl Added to Reach pH 4.5 24.8 ml
Normality of HCl 0.1 N
Total Alkalinity 995.1 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-31-23-TW2	-A	VOA	A6685, A6686
0653 31 23 TW2	-B	BNA	A6687
0653-31-23-TW2	-C	Total Phenols	A6688
0653 31-23 TW2	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6689
0653 31-23-TW2	-E	Sulfide	A6690
0653-31-23-TW2	-F	Cyanide	A6691
0653-31-23-TW2	-G	Sulfate, TDS, Br, Cl, F, HCO_3, CO_3, ALK	A6642
0653 31-23 TW2	-H	Metals, SCN	A6643 → A6645
0653-31-23-TW2	-J	TSS	A6696

SIGNED L R Lindblom 12/10/91

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32 **TITLE** EMW-11a

PROJECT NO. 00137.30
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Project RM1 Well Name EMW-11a

Date 10 Dec 91

Power Requirements

Phase

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1035	8.3	~~2500~~ 2,100	8.10	-204.2	77.5	1.20
1055	8.5	2400	8.14	-222.8	95.3	1.20
1115	8.7	2220	8.13	-213.7	96.6	1.20
1135	8.8	2220	8.13	-209.2	92.3	1.20
1155	8.9	2520	8.14	-205.3	97.7	1.20

COMMENTS

water is clear, slight sulfur odor

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TITLE EMW-11a

PROJECT NO. 0013930 33
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI
Well Name EMW-11a
Date 11 DEC 91
Field Crew Lindblom Lowry
Weather Clear windy
Air Temperature 30 (F°)

Measuring Point TOC
Sampling Device Bennett Pump
Depth to Water 85.0
Depth of Sampling Device 340'

Field Analyses at Time of Sampling

Temperature 8.9 (°C)
Corrected Conductivity 2536 (µmhos/cm at 25°C)
pH 8.14
Eh -205.3 (mV, Field Electrode)
Eh 31.71 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.20 (gallons/min)

Alkalinity Titration
Filtered Sample pH 8.18
mls of Sample Tested 25 ml
mls of HCl Added to Reach pH 4.5 31.3 ml
Normality of HCl 0.02005 N
Total Alkalinity 125.40 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested ...	Tag Numbers
0653-31-23-EMW11a	-A	VOA	A6697, A6698
0653-31-23-EMW11a	-B	BNA	A6699
0653 31-23 EMW11a	-C	Total Phenols	A6700
0653 31-23 EMW11a	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6003
0653 31 23 EMW11a	-E	Sulfide	A6004
0653 31-23 EMW11a	-F	Cyanide	A6005
0653-31-23-EMW11a	-G	Sulfate, TDS, Br, Cl, F, ~~HCO3, CO3~~, ALK	A6006
0653 31-23 EMW11a	-H	3 pairs Metals, ~~SGN~~ Thallium	A6007 → A6009
0653 31-23 EMW11a	-J	pH TDS, Cl, F TSS Oil &	A6010

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WITNESS — DATE 12-10-91

TITLE EMW-1

PROJECT NO. 0013193
BOOK NO. 0653

WRI WESTERN RESEARCH INSTITUTE

Project RM 1 Well Name EMW-1
Date 10DEC91
Power Requirements
Phase

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1220	7.9	3050	8.13	-80.4	79.85	1.2
1240	9.5	2320	9.19	-266.0	100.30	1.27
1300	9.4	2230	9.15	-264.0	103.45	1.20
1320	9.3	2390	8.90	-257.7	104.5	1.20
1340	9.3	2480	8.25	-229.4	104.45	1.20

COMMENTS

water is clear. Slight sulfur odor

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TITLE EMW-1 PROJECT NO. 0653/1630 35
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI
Date 10 DEC 91
Weather Clear windy

Well Name EMW-1
Field Crew Lindham, Luxury
Air Temperature 30 (F°)

Measuring Point TOC
Depth to Water 56.5

Sampling Device Bennett Pump
Depth of Sampling Device 354

Field Analyses at Time of Sampling

Temperature 9.3 (°C)
Corrected Conductivity 3450 (µmhos/cm at 25°C)
pH 3.25
Eh -229.7 (mV, Field Electrode)
Eh -2.03 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.50 (gallons/min)

Alkalinity Titration
Filtered Sample pH 8.15
mls of Sample Tested 25 ml
mls of HCl Added to Reach pH 4.5 31.4 ml
Normality of HCl 0.02008 N
Total Alkalinity 1261.01 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-35-23-EMW-1	-A	VOA	A6011, A6012
0653-35-23-EMW-1	-B	BNA	A6013
0653-35-23-EMW-1	-C	Total Phenols	A6014
0653-35-23-EMW-1	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6015
0653-35-23-EMW-1	-E	Sulfide	A6016
0653-35-23-EMW-1	-F	Cyanide	A6017
0653-35-23-EMW-1	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3~~, Alk	A6018
0653-35-23-EMW-1	-H	Spec., Metc's TGN Thiocyanate	A6019 → A6021
0653-35-23-EMW-1	-J	HCO_3, CO_3, pH TSS PVK	A6022

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36 TITLE EMW-2 PROJECT NO. [illegible] BOOK NO. [illegible]

WESTERN RESEARCH INSTITUTE

Project RM-1 Well Name EMW-2

Date 10 DEC 91

Power Requirements

Phase

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1300	6.7	2200	4.8	-235.0	111.05	BAIL

COMMENTS

some organic material in water

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TITLE EMW-2 PROJECT NO. X13/450 37
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

WRI GROUNDWATER SAMPLING RECORD

Project RMI
Well Name EMW-2
Date 10DEC91
Field Crew Lindblom, Lowry
Weather clear windy
Air Temperature 32 (F°)

Measuring Point TOC
Sampling Device Teflon Bailer
Depth to Water 111.05
Depth of Sampling Device 301

Field Analyses at Time of Sampling

Temperature 6.7 (°C)
Corrected Conductivity 2200 (umhos/cm at 25°C)
pH 7.5
Eh +350 (mV, Field Electrode)
Eh +547 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate BAIL (gallons/min)
Alkalinity Titration
Filtered Sample pH
mls of Sample Tested ml
mls of HCl Added to Reach pH 4.5 ml
Normality of HCl N
Total Alkalinity (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-31-23-EMW-2	-A	VOA	A6023, A6024
0653-31-23-EMW-2	-B	BNA	A6025
0653-31-23-EMW-2	-C	Total Phenols	A6026
0653-31-23-EMW-2	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6027
0653-31-23-EMW-2	-E	Sulfide	A6028
0653-31-23-EMW-2	-F	Cyanide	A6029
0653-31-23-EMW-2	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3~~, ALK	A6030
0653-31-23-EMW-2	-H	Metals, SGN Total and Dissolved	A6031 → A6033
0653-31-23-EMW-2	-J	pH TSS ~~HCO_3, CO_3~~, ALK	A6034

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38 TITLE CCW-1

PROJECT NO. [illegible]
BOOK NO. [illegible]

WESTERN RESEARCH INSTITUTE

Project RM-1 Well Name CCW-1

Date 10 Dec 91

Power Requirements

Phase

FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1420	9.2	2810	8.26	-211.7	97.10	1.09
1440	16.0	2650	8.71	-250.6	97.65	1.09
1500	16.4	2600	8.69	-249.5	98.0	1.09
1520	16.5	2660	8.67	-253.5	98.25	1.09
1540	16.9	2760	8.65	-250.3	98.45	1.09

COMMENTS

Well bore has obstruction at 240 feet. Very difficult to lower pump beyond it. Pump eventually lowered to bottom of well at 308'. Pump placed at 302 feet for sampling.

Water is black and cloudy

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TITLE CCW-1 PROJECT NO. [illegible] 39
BOOK NO. [illegible]

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WRI GROUNDWATER SAMPLING RECORD

Project RM-1 Well Name CCW-1
Date 12 Dec 91 Field Crew Lindblom Lowry
Weather Clear, windy Air Temperature 30 (F°)

Measuring Point TOC Sampling Device Bennett Pump
Depth to Water 97.25 Depth of Sampling Device 300'

Field Analyses at Time of Sampling

Temperature 16.9 (°C)
Corrected Conductivity 2760 (μmhos/cm at 25°C)
pH 5.65
Eh -250.3 (mV, Field Electrode)
Eh +16.04 (mV, Corrected to Standard Hydrogen Electrode)
Discharge Rate 1.09 (gallons/min)
Alkalinity Titration
Filtered Sample pH 8.59
mls of Sample Tested 25 ml
mls of HCl Added to Reach pH 4.5 8.9 ml
Normality of HCl 0.01008 N
Total Alkalinity 35.42 (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-39-23-CCW1	-A; Aliq	VOA	A6047; A6048
0653 39-23-CCW1	-B	BNA	A6049
0653-39-23-CCW1	-C	Total Phenols	A6050
0653 39-23-CCW1	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6051
0653-39-23-CCW1	-E	Sulfide	A6052
0653-39-23 CCW1	-F	Cyanide	A6053
0653 39-23 CCW1	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3, Alk~~	A6054
0653-39-23 CCW1	-H	3 acids Metals; ~~Sol~~ Filtered &	A6055→A6057
0653-39-23 CCW1	-J	pH TSS HCO_3, CO_3, Alk	A6058

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40 TITLE VIW-1 PROJECT NO. 6078/5[illegible]
BOOK NO. 0653

WESTERN RESEARCH INSTITUTE

Well Name: VIW-1 Project: RM 1
Date: 10 Dec 91 Book: 0653
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FIELD MEASUREMENTS DURING WELL PURGING

Time	Temp., °C	Corrected Conductivity, µmhos/cm	pH	Eh, mV	Water Level, (feet below top of casing)	Pump Rate, gpm
1605	13.9	3850	8.08	-197.2	71.7	1.33
1625	14.9	4090	7.46	-226.9	73.0	1.33
1645	15.0	3960	7.97	-234.2	73.7	1.33
1705	15.0	3840	7.96	-233.8	74.2	1.2
1725	—	n.m.	—	—	74.55	n.m.
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—

Water is clear. Slight petroleum odor.
1724 - Generator quit. Grabbed sample.
NO power to measure parameters @ 1725
Previous measurements show stable parameters

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TITLE VIW-1 PROJECT NO. 0131430 BOOK NO. 0653 41

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WRI GROUNDWATER SAMPLING RECORD

Project RM-1 Well Name VIW-1

Date 10 DEC 91 Field Crew Lindsley, Lucy

Weather Clear windy Air Temperature 25 (F°)

Measuring Point TOC Sampling Device

Depth to Water 72.35 Depth of Sampling Device 375 ft

Field Analyses at Time of Sampling

Temperature — (°C)

Corrected Conductivity — (µmhos/cm at 25°C)

pH —

Eh — (mV, Field Electrode)

Eh — (mV, Corrected to Standard Hydrogen Electrode)

Discharge Rate — (gallons/min)

Alkalinity Titration

Filtered Sample pH

mls of Sample Tested ml

mls of HCl Added to Reach pH 4.5 ml

Normality of HCl N

Total Alkalinity (mg/L Equiv. $CaCO_3$)

Analytical Submissions		Analysis Requested	Tag Numbers
0653-41-23 VIW1	-A	VOA	A6059, A6060
0653-41-23 VIW1	-B	BNA	A6061
0653-41-23 VIW1	-C	Total Phenols	A6062
0653 41-23 VIW1	-D	TKN, NH_3, TOC, COD, NO_3, NO_2	A6063
0653 41-23 VIW1	-E	Sulfide	A6064
0653-41-23 VIW1	-F	Cyanide	A6107
0653 41-23-VIW1	-G	Sulfate, TDS, Br, Cl, F, ~~HCO_3, CO_3~~, ALK	A6065
0653 41-23 VIW1	-H	Sperts Metals, ~~SCN~~ Thiocyanate	A6066 - A6068
0653-41-23 VIW1	-J	pH TSS HCO3 Cl, Alk	A6069

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