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September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc. Griffith, Indiana

EPA Work Assignment 030-ROBF-05J7
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Introduction

Black & Veatch Special Projects Corp. (BVSPC), under the Alternative Remedial Contracting Strategy, has been tasked by the U.S. Environmental Protection Agency (EPA) to provide field oversight during the remedial design and expedited remedial action to EPA Region V in their endeavor to complete remediation of the American Chemical Services site. The Respondents are the American Chemical Services Technical Committee, and their contractor is Montgomery Watson (MW).

Purpose

The purpose of this document is to present BVSPC's evaluation and comparison of groundwater split sample analytical results with MW's data. Note this sampling event is the abbreviated list of "indicator" parameters for MW. BVSPC is tasked to provide this data evaluation report under it's Remedial Action Oversight work plan with the EPA.

Sampling Effort

During the week of September 14, 1998, BVSPC collected split samples from three monitoring wells and five residential wells during the field oversight. Sampling was performed in accordance with the EPA-approved Mini-Quality Assurance Project Plan (September 5, 1997).

Laboratory

The EPA split samples were analyzed by Contract Laboratory Program (CLP) analytical services in accordance with the procedures outlined in the User's Guide to the CLP, EPA, February 1995. PDP Analytical Services, The Wooklands, Texas, analyzed the organic samples. Region V Central Regional Laboratory (CRL), Chicago, Illinois, analyzed the inorganic samples. MW's samples were analyzed by Quanterra Environmental Services Laboratory for organic and inorganic analyses.

Data Validation

EPA Region V CRL validated the spiit sample data and BVSPC reviewed the validated data using the EPA CLP National Functional Guidelines for Organic Data Review (EPA 540/R-94/012, February 1994) and EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (EPA 540/R-94/013, February 1994). The MW analytical data used for comparison was provided in the Technical Memorandum, September 1998 Groundwater Sampling Results Report, submitted in January 1999. The MW report states that their data was validated using the same functional guidelines referenced above.

The EPA split sample analytical results were acceptable; however, due to minor analytical quality control problems, some of the compounds/analytes were qualified.

- Semivolatile:

  The semi-volatile water blank SBLK12 was found to contain neither TCLs or TICs. Semi-volatile water blank SBLK10 was found to contain the common laboratory chemical butylbenzylphthalate and no TICs. The presence of the common laboratory chemical in any sample associated with this blank is flagged as undetected (U) when the sample results are less than ten (10) times the blank concentration. The semi-volatile method blank summary (Form IV SVOA) lists the samples associated with these blanks.

- Additional Information:

  Volatile sample EARY8 (MW48) was found to contain levels of chloroethane and benzene over the calibration range. The value for chloroethane should be taken from EARY8DL, and the value for benzene should be taken from EARY8DL2. Volatile sample EARY9 (MW49) was found to contain levels of chloroethane and benzene over the calibration range. The value for chloroethane should be taken from EARY9DL, and the value for benzene should be taken from EARY9DL2. Volatile sample EARZ5 (MW9R) was found to contain levels of chloroethane and benzene over the calibration range. The value for chloroethane should be taken from EARZ5DL2, and the value for benzene should be taken from EARZ5DL.

Appendix A contains a copy of the chain-of-custody records, the data validation narratives, and the raw data sheets from EPA for split samples. Qualifiers are fully explained in the narratives. The raw data sheets and data validation

narratives for the MW data have not been appended to this report; however, the data are contained in the September 1998 Groundwater Sampling Results Report.

Data Comparison

BVSPC compared the validated split sample data to MW's data. Summary comparison tables of the data were produced for each of the following analyses:

- Volatile Organic Compounds (Table 1).
- Semivolatile Organic Compounds (Table 2).
- Pesticides/PCBs (Table 3).
- Inorganic Analytes (Table 4).
- 30% Relative Percent Deference (Table 5).

Generally, both data sets were consistent.

Precision

Precision of the laboratory analyses was assessed by comparing the detected concentrations for each sample for organic and inorganic analysis. The relative percent difference (RPD) was calculated for each pair of results using the following equation:

$$RPD = \frac{Pc - Dc}{(Pc + Dc) / 2} \; x \; 100$$

where:

P_c = Primary Concentration (assumed EPA's data)
D_c = Duplicate Concentration (assumed MW's data)

Sample variation comparison RPD values for compounds/analytes that exceeded the 30% RPD criteria are highlighted in bold and italics in each table. All other compounds/analytes were consistent, comparable, and within the 30% RPD range between EPA and MW's data.

Conclusions

The overall sample analytical results between EPA and MW's data were comparable; however, differences in concentrations for some compounds/analytes were noted (see Table 5). These compounds/analytes should be viewed carefully in future sampling events.

The following issues were noted during the data evaluation:

- Trace levels of volatile organic compounds were detected in MW and EPA equipment blank split samples. Two compounds, acetone and chloroform, are common laboratory contaminants. Benzene was also detected. The EPA sample also included bromodichloromethane.
- Trace levels of the volatile organic compound methylene chloride, which is a common laboratory contaminant, were detected. cis-1,2-Dichloroethane and benzene were also detected. All EPA sample trip blanks contained the above detections.
- MW's volatile organic sample bottle for 1002 Reder was broken in transit to the laboratory.

	Table 1 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	MW48 (Upper Aquifer)		MW49 (Upper Aquifer)	
	EARY8 USEPA	ACS-GWMW48-06 PRP	EARY9 USEPA	ACS-GWMW49-06 PRP
Volatile Organic Compounds				
Chloromethane	1 U	--	1 U	--
Bromomethane	1 U	--	1 U	--
Vinyl chloride	1 U	10 U	1 U	10 U
Chloroethane	810 D	610 JD	620 D	650 D
Methylene chloride	1 J	--	2	--
Acetone	5 U	--	5 U	--
Carbon disulfide	1 U	--	1 U	--
1,1-Dichloroethene	1 U	10 U	1 U	10 U
1,1-Dichloroethane	1 U	--	1 U	--
cis-1,2-Dichloroethene	1 U	10 U	1 U	10 U
trans-1,2-Dichloroethene	***4***	***1 J***	***1***	***5 J***
1,2-Dichloroethene (total)	--	--	--	--
Chloroform	1 U	--	1 U	--
1,2-Dichloroethane	1 U	10 U	1 U	10 U
2-Butanone	5 U	--	5 U	--
Bromochloromethane	1 U	--	1 U	--
1,1,1-Trichloroethane	1 U	10 U	1 U	10 U
Carbon tetrachloride	1 U	--	1 U	--
Bromodichloromethane	1 U	--	1 U	--
1,2-Dichloropropane	1 U	--	1 U	--
cis-1,3-dichloropropene	1 U	--	1 U	--
Trichloroethene	1 U	10 U	1 U	10 U
Dibromochloromethane	1 U	--	1 U	--
1,1,2-Trichloroethane	1 U	10 U	1 U	10 U
Benzene	***5,200 D***	***7,800 D***	***7,600 D***	***4,700 D***
trans-1,3-Dichloropropene	1 U	--	1 U	--
Bromoform	1 U	--	1 U	--
4-Methyl-2-pentanone	2 J	--	5 U	--
2-Hexanone	5 U	--	5 U	--
Tetrachloroethene	1 U	10 U	1 U	10 U
1,1,2,2-Tetrachloroethane	1 U	--	1 U	--
1,2-Dibromoethane	1 U	--	1 U	--
Toluene	2	--	2	--
Chlorobenzene	1	--	1 U	--
Ethylbenzene	1	--	1 U	--
Styrene	1 U	--	1 U	--
Xylene (total)	1	--	0.6 J	--
1,3-Dichlorobenzene	1 U	--	1 U	--
1,4-Dichlorobenzene	1 U	--	1 U	--
1,2-Dichlorobenzene	1 U	--	1 U	--
1,2-Dibromo-3-chloropropane	1 U	--	1 U	--
1,2,4-Trichlorobenzene	1 U	--	1 U	--
VOA TICs	6	3	8	2

Bold and italicized results have %RPD > 30%.

Table 1
September 1998 Upper and Lower Aquifer
Monitoring Well Sample Data Comparison
American Chemical Services, Inc.

Compound/Analyte	Sample Location/Concentration (µg/l)			
	1033 Reder Rd.		1029 Reder Rd.	
	EARZ0 USEPA	ACS-GWPWD-06 PRP	EARZ1 USEPA	ACS-GWPWC-06 PRP
Volatile Organic Compounds				
Chloromethane	1 U	10 U	1 U	10 U
Bromomethane	1 U	10 U	1 U	10 U
Vinyl chloride	1 U	10 U	1 U	10 U
Chloroethane	1 U	10 U	1 U	10 U
Methylene chloride	2 U	10 U	2 U	10 U
Acetone	5 U	10 U	5 U	10 U
Carbon disulfide	1 U	10 U	1 U	10 U
1,1-Dichloroethene	1 U	10 U	1 U	10 U
1,1-Dichloroethane	1 U	10 U	1 U	10 U
cis-1,2-Dichloroethene	1 U	--	1 U	--
trans-1,2-Dichloroethene	1 U	--	1 U	--
1,2-Dichloroethene (total)	--	10 U	--	10 U
Chloroform	1 U	10 U	1 U	10 U
1,2-Dichloroethane	1 U	10 U	1 U	10 U
2-Butanone	5 U	10 U	5 U	10 U
Bromochloromethane	1 U	10 U	1 U	--
1,1,1-Trichloroethane	1 U	10 U	1 U	10 U
Carbon tetrachloride	1 U	10 U	1 U	10 U
Bromodichloromethane	1 U	--	1 U	10 U
1,2-Dichloropropane	1 U	10 U	1 U	10 U
cis-1,3-dichloropropene	1 U	10 U	1 U	10 U
Trichloroethene	1 U	10 U	1 U	10 U
Dibromochloromethane	1 U	10 U	1 U	10 U
1,1,2-Trichloroethane	1 U	10 U	1 U	10 U
Benzene	1 U	10 U	1 U	10 U
trans-1,3-Dichloropropene	1 U	10 U	1 U	10 U
Bromoform	1 U	10 U	1 U	10 U
4-Methyl-2-pentanone	5 U	10 U	5 U	10 U
2-Hexanone	5 U	10 U	5 U	10 U
Tetrachloroethene	1 U	10 U	1 U	10 U
1,1,2,2-Tetrachloroethane	1 U	10 U	1 U	10 U
1,2-Dibromoethane	1 U	--	1 U	--
Toluene	1 U	10 U	1 U	10 U
Chlorobenzene	1 U	10 U	1 U	10 U
Ethylbenzene	1 U	10 U	1 U	10 U
Styrene	1 U	10 U	1 U	10 U
Xylene (total)	1 U	10 U	1 U	10 U
1,3-Dichlorobenzene	1 U	--	1 U	--
1,4-Dichlorobenzene	1 U	--	1 U	--
1,2-Dichlorobenzene	1 U	--	1 U	--
1,2-Dibromo-3-chloropropane	1 U	--	1 U	--
1,2,4-Trichlorobenzene	1 U	--	1 U	--
VOA TICs	0	0	0	0

Bold and italicized results have %RPD > 30%.

	Table 1 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	1002 Reder Rd.		1009 Reder Rd.	
	EARZ2 USEPA	ACS-GWPWY-06 PRP	EARZ3 USEPA	ACS-GWPWB-06 PRP
Volatile Organic Compounds				
Chloromethane	1 U	--	1 U	10 U
Bromomethane	1 U	--	1 U	10 U
Vinyl chloride	1 U	--	1 U	10 U
Chloroethane	1 U	--	1 U	10 U
Methylene chloride	2 U	--	2 U	10 U
Acetone	5 U	--	5 U	10 U
Carbon disulfide	1 U	--	1 U	10 U
1,1-Dichloroethene	1 U	--	1 U	10 U
1,1-Dichloroethane	1 U	--	1 U	10 U
cis-1,2-Dichloroethene	1 U	--	1 U	--
trans-1,2-Dichloroethene	1 U	--	1 U	--
1,2-Dichloroethene (total)	--	--	--	10 U
Chloroform	1 U	--	1 U	10 U
1,2-Dichloroethane	1 U	--	1 U	10 U
2-Butanone	5 U	--	5 U	10 U
Bromochloromethane	1 U	--	1 U	--
1,1,1-Trichloroethane	1 U	--	1 U	10 U
Carbon tetrachloride	1 U	--	1 U	10 U
Bromodichloromethane	1 U	--	1 U	10 U
1,2-Dichloropropane	1 U	--	1 U	10 U
cis-1,3-dichloropropene	1 U	--	1 U	10 U
Trichloroethene	1 U	--	1 U	10 U
Dibromochloromethane	1 U	--	1 U	10 U
1,1,2-Trichloroethane	1 U	--	1 U	10 U
Benzene	1 U	--	1 U	10 U
trans-1,3-Dichloropropene	1 U	--	1 U	10 U
Bromoform	1 U	--	1 U	10 U
4-Methyl-2-pentanone	5 U	--	5 U	10 U
2-Hexanone	5 U	--	5 U	10 U
Tetrachloroethene	1	--	1 U	10 U
1,1,2,2-Tetrachloroethane	1 U	--	1 U	10 U
1,2-Dibromoethane	1 U	--	1 U	--
Toluene	1 U	--	1 U	10 U
Chlorobenzene	1 U	--	1 U	10 U
Ethylbenzene	1 U	--	1 U	10 U
Styrene	1 U	--	1 U	10 U
Xylene (total)	1 U	--	1 U	10 U
1,3-Dichlorobenzene	1 U	--	1 U	--
1,4-Dichlorobenzene	1 U	--	1 U	--
1,2-Dichlorobenzene	1 U	--	1 U	--
1,2-Dibromo-3-chloropropane	1 U	--	1 U	--
1,2,4-Trichlorobenzene	1 U	--	1 U	--
VOA TICs	0	--	0	0

Bold and italicized results have %RPD > 30%.

Table 1
September 1998 Upper and Lower Aquifer
Monitoring Well Sample Data Comparison
American Chemical Services, Inc.

Compound/Analyte	Sample Location/Concentration (µg/l)			
	1007 Reder Rd.		MW9R (Lower Aquifer)	
	EARZ4 USEPA	ACS-GWPWA-06 PRP	EARZ5 USEPA	ACS-GWMW9R-06 PRP
Volatile Organic Compounds				
Chloromethane	1 U	10 U	1 U	10 U
Bromomethane	1 U	10 U	1 U	10 U
Vinyl chloride	1 U	10 U	4	4 J
Chloroethane	1 U	10 U	1,900 D	2,000 D
Methylene chloride	2 U	10 U	8	10 U
Acetone	5 U	10 U	5 U	10 U
Carbon disulfide	1 U	10 U	0.8 J	10 U
1,1-Dichloroethene	1 U	10 U	1 U	10 U
1,1-Dichloroethane	1 U	10 U	1 U	10 U
cis-1,2-Dichloroethene	1 U	--	1 U	--
trans-1,2-Dichloroethene	1 U	--	1	--
1,2-Dichloroethene (total)	--	10 U	--	1 J
Chloroform	1 U	10 U	1 U	10 U
1,2-Dichloroethane	1 U	10 U	1 U	10 U
2-Butanone	5 U	10 U	5 U	10 U
Bromochloromethane	1 U	--	1 U	--
1,1,1-Trichloroethane	1 U	10 U	1 U	10 U
Carbon tetrachloride	1 U	10 U	1 U	10 U
Bromodichloromethane	1 U	10 U	1 U	10 U
1,2-Dichloropropane	1 U	10 U	1 U	10 U
cis-1,3-dichloropropene	1 U	10 U	1 U	10 U
Trichloroethene	1 U	10 U	1 U	10 U
Dibromochloromethane	1 U	10 U	1 U	10 U
1,1,2-Trichloroethane	1 U	10 U	1 U	10 U
Benzene	1 U	10 UJ	100 D	100
trans-1,3-Dichloropropene	1 U	10 U	1 U	10 U
Bromoform	1 U	10 U	1 U	10 U
4-Methyl-2-pentanone	5 U	10 U	5 U	10 U
2-Hexanone	5 U	10 U	5 U	10 U
Tetrachloroethene	1 U	10 U	1 U	10 U
1,1,2,2-Tetrachloroethane	1 U	10 U	1 U	10 U
1,2-Dibromoethane	1 U	--	1 U	--
Toluene	1 U	10 U	1 U	10 U
Chlorobenzene	1 U	10 U	1 U	10 U
Ethylbenzene	1 U	10 U	1 U	10 U
Styrene	1 U	10 U	1 U	10 U
Xylene (total)	1 U	10 U	1 U	10 U
1,3-Dichlorobenzene	1 U	--	1 U	--
1,4-Dichlorobenzene	1 U	--	1 U	--
1,2-Dichlorobenzene	1 U	--	1 U	--
1,2-Dibromo-3-chloropropane	1 U	--	1 U	--
1,2,4-Trichlorobenzene	1 U	--	1 U	--
VOA TICs	0	0	3	0

Bold and italicized results have %RPD > 30%.

Table 1
September 1998 Upper and Lower Aquifer
Monitoring Well Sample Data Comparison
American Chemical Services, Inc.

Compound/Analyte	Sample Location/Concentration (µg/l)			
	1007 Reder Rd.		MW9R (Lower Aquifer)	
	EARZ4 USEPA	ACS-GWPWA-06 PRP	EARZ5 USEPA	ACS-GWMW9R-06 PRP
Volatile Organic Compounds				
Chloromethane	1 U	10 U	1 U	10 U
Bromomethane	1 U	10 U	1 U	10 U
Vinyl chloride	1 U	10 U	4	4 J
Chloroethane	1 U	10 U	1,900 D	2,000 D
Methylene chloride	2 U	10 U	8	10 U
Acetone	5 U	10 U	5 U	10 U
Carbon disulfide	1 U	10 U	0.8 J	10 U
1,1-Dichloroethene	1 U	10 U	1 U	10 U
1,1-Dichloroethane	1 U	10 U	1 U	10 U
cis-1,2-Dichloroethene	1 U	--	1 U	--
trans-1,2-Dichloroethene	1 U	--	1	--
1,2-Dichloroethene (total)	--	10 U	--	1 J
Chloroform	1 U	10 U	1 U	10 U
1,2-Dichloroethane	1 U	10 U	1 U	10 U
2-Butanone	5 U	10 U	5 U	10 U
Bromochloromethane	1 U	--	1 U	--
1,1,1-Trichloroethane	1 U	10 U	1 U	10 U
Carbon tetrachloride	1 U	10 U	1 U	10 U
Bromodichloromethane	1 U	10 U	1 U	10 U
1,2-Dichloropropane	1 U	10 U	1 U	10 U
cis-1,3-dichloropropene	1 U	10 U	1 U	10 U
Trichloroethene	1 U	10 U	1 U	10 U
Dibromochloromethane	1 U	10 U	1 U	10 U
1,1,2-Trichloroethane	1 U	10 U	1 U	10 U
Benzene	1 U	10 UJ	100 D	100
trans-1,3-Dichloropropene	1 U	10 U	1 U	10 U
Bromoform	1 U	10 U	1 U	10 U
4-Methyl-2-pentanone	5 U	10 U	5 U	10 U
2-Hexanone	5 U	10 U	5 U	10 U
Tetrachloroethene	1 U	10 U	1 U	10 U
1,1,2,2-Tetrachloroethane	1 U	10 U	1 U	10 U
1,2-Dibromoethane	1 U	--	1 U	--
Toluene	1 U	10 U	1 U	10 U
Chlorobenzene	1 U	10 U	1 U	10 U
Ethylbenzene	1 U	10 U	1 U	10 U
Styrene	1 U	10 U	1 U	10 U
Xylene (total)	1 U	10 U	1 U	10 U
1,3-Dichlorobenzene	1 U	--	1 U	--
1,4-Dichlorobenzene	1 U	--	1 U	--
1,2-Dichlorobenzene	1 U	--	1 U	--
1,2-Dibromo-3-chloropropane	1 U	--	1 U	--
1,2,4-Trichlorobenzene	1 U	--	1 U	--
VOA TICs	0	0	3	0

Bold and italicized results have %RPD > 30%.

Table 1
September 1998 Upper and Lower Aquifer
Monitoring Well Sample Data Comparison
American Chemical Services, Inc.

Compound/Analyte	Sample Location/Concentration (µg/l)			
	TB01	TB02	TB03	EB01
	EARZ8	EARZ9	EWT61	EARZ6
	USEPA	USEPA	USEPA	USEPA
Volatile Organic Compounds				
Chloromethane	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2	2	2	2 U
Acetone	5 U	5 U	5 U	10
Carbon disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	0.8 J	0.8 J	0.9 J	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
1,2-Dichloroethene (total)	--	--	--	--
Chloroform	1 U	1 U	1 U	2
1,2-Dichloroethane	5 U	5 U	5 U	1 U
2-Butanone	1 U	1 U	1 U	5 U
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	0.9 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	0.6 J	0.6 J	0.9 J	0.7 J
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylene (total)	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
VOA TICs	0	0	0	0

Bold and italicized results have %RPD > 30%.

	Table 2a September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	MW48 (Upper Aquifer)		MW49 (Upper Aquifer)	
	EARY8 USEPA	ACS-GWMW48-06 PRP	EARY9 USEPA	ACS-GWMW49-06 PRP
Semivolatile Organic Compound				
Phenol	23	--	26	--
bis(2-Chloroethyl)ether	7	--	14	--
2-Chlorophenol	5 U	--	5 U	--
1,3-Dichlorobenzene	--	--	--	--
1,4-Dichlorobenzene	--	--	--	--
1,2-Dichlorobenzene	--	--	--	--
2-Methylphenol	5 U	--	5 U	--
2,2'-oxybis-(1-Chloropropane)	17	--	5 U	--
4-Methylphenol	5 U	--	5 U	--
N-Nitroso-di-n-propylamine	5 U	--	5 U	--
Hexachloroethane	5 U	--	5 U	--
Nitrobenzene	5 U	--	5 U	--
Isophorone	14	--	5 U	--
2-Nitrophenol	5 U	--	5 U	--
2,4-Dimethylphenol	5 U	--	5 U	--
bis(2-Chloroethoxy)methane	5 U	--	5 U	--
2,4-Dichlorophenol	5 U	--	5 U	--
1,2,4-Trichlorobenzene	5 U	--	5 U	--
Naphthalene	5 U	--	5 U	--
4-Chloroaniline	5 U	--	5 U	--
Hexachlorobutadiene	5 U	--	5 U	--
4-Chloro-3-methylphenol	5 U	--	5 U	--
2-Methylnaphthalene	5 U	--	5 U	--
Hexachlorocyclopentadiene	5 U	--	5 U	--
2,4,6-Trichlorophenol	5 U	--	5 U	--
2,4,5-Trichlorophenol	20 U	--	20 U	--
2-Chloronaphthalene	5 U	--	5 U	--
2-Nitroaniline	20 U	--	20 U	--
Dimethylphthalate	5 U	--	5 U	--
Acenaphthylene	5 U	--	5 U	--
2,6-Dinitrotoluene	5 U	--	5 U	--
3-Nitroaniline	20 U	--	20 U	--
Acenaphthene	5 U	--	5 U	--
2,4-Dinitrophenol	20 U	--	20 U	--
4-Nitrophenol	20 U	--	20 U	--
Dibenzofuran	5 U	--	5 U	--
2,4-Dinitrotoluene	5 U	--	5 U	--
Diethylphthalate	5 U	--	5 U	--
4-Chlorophenyl-phenylether	5 U	--	5 U	--

Bold and italicized results have %RPD > 30%.

	Table 2a September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	1033 Reder Rd.		1029 Reder Rd.	
	EARZ0 USEPA	ACS-GWPWD-06 PRP	EARZ1 USEPA	ACS-GWPWC-06 PRP
Semivolatile Organic Compound				
Phenol	5 U	10 U	5 U	10 U
bis(2-Chloroethyl)ether	5 U	10 U	5 U	10 U
2-Chlorophenol	5 U	10 U	5 U	10 U
1,3-Dichlorobenzene	--	10 U	--	10 U
1,4-Dichlorobenzene	--	10 U	--	10 U
1,2-Dichlorobenzene	--	10 U	--	10 U
2-Methylphenol	5 U	10 U	5 U	10 U
2,2'-oxybis-(1-Chloropropane)	5 U	10 U	5 U	10 U
4-Methylphenol	5 U	10 U	5 U	10 U
N-Nitroso-di-n-propylamine	5 U	10 U	5 U	10 U
Hexachloroethane	5 U	10 U	5 U	10 U
Nitrobenzene	5 U	10 U	5 U	10 U
Isophorone	5 U	10 U	5 U	10 U
2-Nitrophenol	5 U	10 U	5 U	10 U
2,4-Dimethylphenol	5 U	10 U	5 U	10 U
bis(2-Chloroethoxy)methane	5 U	10 U	5 U	10 U
2,4-Dichlorophenol	5 U	10 U	5 U	10 U
1,2,4-Trichlorobenzene	5 U	10 U	5 U	10 U
Naphthalene	5 U	10 U	5 U	10 U
4-Chloroaniline	5 U	10 U	5 U	10 U
Hexachlorobutadiene	5 U	10 U	5 U	10 U
4-Chloro-3-methylphenol	5 U	10 U	5 U	10 U
2-Methylnaphthalene	5 U	10 U	5 U	10 U
Hexachlorocyclopentadiene	5 U	10 U	5 U	10 U
2,4,6-Trichlorophenol	5 U	10 U	5 U	10 U
2,4,5-Trichlorophenol	20 U	25 U	20 U	26 U
2-Chloronaphthalene	5 U	10 U	5 U	10 U
2-Nitroaniline	20 U	25 U	20 U	26 U
Dimethylphthalate	5 U	10 U	5 U	10 U
Acenaphthylene	5 U	10 U	5 U	10 U
2,6-Dinitrotoluene	5 U	10 U	5 U	10 U
3-Nitroaniline	20 U	25 U	20 U	26 U
Acenaphthene	5 U	10 U	5 U	10 U
2,4-Dinitrophenol	20 U	25 U	5 U	26 U
4-Nitrophenol	20 U	25 U	20 U	26 U
Dibenzofuran	5 U	10 U	20 U	10 U
2,4-Dinitrotoluene	5 U	10 U	5 U	10 U
Diethylphthalate	5 U	10 U	5 U	10 U
4-Chlorophenyl-phenylether	5 U	10 U	5 U	10 U

Bold and italicized results have %RPD > 30%.

Table 2a
September 1998 Upper and Lower Aquifer
Monitoring Well Sample Data Comparison
American Chemical Services, Inc.

Compound/Analyte	Sample Location/Concentration (µg/l)			
	1002 Reder Rd.		1009 Reder Rd.	
	EARZ2 USEPA	ACS-GWPWY-06 PRP	EARZ3 USEPA	ACS-GWPWB-06 PRP
Semivolatile Organic Compound				
Phenol	5 U	10 U	5 U	10 U
bis(2-Chloroethyl)ether	5 U	10 U	5 U	10 U
2-Chlorophenol	5 U	10 U	5 U	10 U
1,3-Dichlorobenzene	--	10 U	--	10 U
1,4-Dichlorobenzene	--	10 U	--	10 U
1,2-Dichlorobenzene	--	10 U	--	10 U
2-Methylphenol	5 U	10 U	5 U	10 U
2,2'-oxybis-(1-Chloropropane)	5 U	10 U	5 U	10 U
4-Methylphenol	5 U	10 U	5 U	10 U
N-Nitroso-di-n-propylamine	5 U	10 U	5 U	10 U
Hexachloroethane	5 U	10 U	5 U	10 U
Nitrobenzene	5 U	10 U	5 U	10 U
Isophorone	5 U	10 U	5 U	10 U
2-Nitrophenol	5 U	10 U	5 U	10 U
2,4-Dimethylphenol	5 U	10 U	5 U	10 U
bis(2-Chloroethoxy)methane	5 U	10 U	5 U	10 U
2,4-Dichlorophenol	5 U	10 U	5 U	10 U
1,2,4-Trichlorobenzene	5 U	10 U	5 U	10 U
Naphthalene	5 U	10 U	5 U	10 U
4-Chloroaniline	5 U	10 U	5 U	10 U
Hexachlorobutadiene	5 U	10 U	5 U	10 U
4-Chloro-3-methylphenol	5 U	10 U	5 U	10 U
2-Methylnaphthalene	5 U	10 U	5 U	10 U
Hexachlorocyclopentadiene	5 U	10 U	5 U	10 U
2,4,6-Trichlorophenol	5 U	10 U	5 U	10 U
2,4,5-Trichlorophenol	20 U	26 U	20 U	26 U
2-Chloronaphthalene	5 U	10 U	5 U	10 U
2-Nitroaniline	20 U	26 U	20 U	26 U
Dimethylphthalate	5 U	10 U	5 U	10 U
Acenaphthylene	5 U	10 U	5 U	10 U
2,6-Dinitrotoluene	5 U	10 U	5 U	10 U
3-Nitroaniline	20 U	26 U	20 U	26 U
Acenaphthene	5 U	10 U	5 U	10 U
2,4-Dinitrophenol	20 U	26 U	20 U	26 U
4-Nitrophenol	20 U	26 U	20 U	26 U
Dibenzofuran	5 U	10 U	5 U	10 U
2,4-Dinitrotoluene	5 U	10 U	5 U	10 U
Diethylphthalate	5 U	10 U	5 U	10 U
4-Chlorophenyl-phenylether	5 U	10 U	5 U	10 U

Bold and italicized results have %RPD > 30%.

	Table 2a September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	1007 Reder Rd.		MW9R (Lower Aquifer)	
	EARZ4 USEPA	ACS-GWPWA-06 PRP	EARZ5 USEPA	ACS-GWMW9R-06 PRP
Semivolatile Organic Compound				
Phenol	5 U	10 U	4 J	10 U
bis(2-Chloroethyl)ether	5 U	10 U	16	10 U
2-Chlorophenol	5 U	10 U	5 U	10 U
1,3-Dichlorobenzene	--	10 U	--	10 U
1,4-Dichlorobenzene	--	10 U	--	10 U
1,2-Dichlorobenzene	--	10 U	--	10 U
2-Methylphenol	5 U	10 U	5 U	10 U
2,2'-oxybis-(1-Chloropropane)	5 U	10 U	5 U	10 U
4-Methylphenol	5 U	10 U	5 U	10 U
N-Nitroso-di-n-propylamine	5 U	10 U	5 U	10 U
Hexachloroethane	5 U	10 U	5 U	10 U
Nitrobenzene	5 U	10 U	5 U	10 U
Isophorone	5 U	10 U	5 U	10 U
2-Nitrophenol	5 U	10 U	5 U	10 U
2,4-Dimethylphenol	5 U	10 U	5 U	10 U
bis(2-Chloroethoxy)methane	5 U	10 U	5 U	10 U
2,4-Dichlorophenol	5 U	10 U	5 U	10 U
1,2,4-Trichlorobenzene	5 U	10 U	5 U	10 U
Naphthalene	5 U	10 U	5 U	10 U
4-Chloroaniline	5 U	10 U	5 U	10 U
Hexachlorobutadiene	5 U	10 U	5 U	10 U
4-Chloro-3-methylphenol	5 U	10 U	5 U	10 U
2-Methylnaphthalene	5 U	10 U	5 U	10 U
Hexachlorocyclopentadiene	5 U	10 U	5 U	10 U
2,4,6-Trichlorophenol	5 U	10 U	5 U	10 U
2,4,5-Trichlorophenol	20 U	26 U	20 U	25 U
2-Chloronaphthalene	5 U	10 U	5 U	10 U
2-Nitroaniline	20 U	26 U	20 U	25 U
Dimethylphthalate	5 U	10 U	5 U	10 U
Acenaphthylene	5 U	10 U	5 U	10 U
2,6-Dinitrotoluene	5 U	10 U	5 U	10 U
3-Nitroaniline	20 U	26 U	20 U	25 U
Acenaphthene	5 U	10 U	5 U	10 U
2,4-Dinitrophenol	20 U	26 U	20 U	25 U
4-Nitrophenol	20 U	26 U	20 U	25 U
Dibenzofuran	5 U	10 U	5 U	10 U
2,4-Dinitrotoluene	5 U	10 U	5 U	10 U
Diethylphthalate	5 U	10 U	5 U	10 U
4-Chlorophenyl-phenylether	5 U	10 U	5 U	10 U

Bold and italicized results have %RPD > 30%.

	Table 2a September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	EB01 (Equipment Blank)			
	EARZ6 USEPA	PRP		
Semivolatile Organic Compound				
Phenol	5 U			
bis(2-Chloroethyl)ether	5 U			
2-Chlorophenol	5 U			
1,3-Dichlorobenzene	--			
1,4-Dichlorobenzene	--			
1,2-Dichlorobenzene	--			
2-Methylphenol	5 U			
2,2'-oxybis-(1-Chloropropane)	5 U			
4-Methylphenol	5 U			
N-Nitroso-di-n-propylamine	5 U			
Hexachloroethane	5 U			
Nitrobenzene	5 U			
Isophorone	5 U			
2-Nitrophenol	5 U			
2,4-Dimethylphenol	5 U			
bis(2-Chloroethoxy)methane	5 U			
2,4-Dichlorophenol	5 U			
1,2,4-Trichlorobenzene	5 U			
Naphthalene	5 U			
4-Chloroaniline	5 U			
Hexachlorobutadiene	5 U			
4-Chloro-3-methylphenol	5 U			
2-Methylnaphthalene	5 U			
Hexachlorocyclopentadiene	5 U			
2,4,6-Trichlorophenol	5 U			
2,4,5-Trichlorophenol	20 U			
2-Chloronaphthalene	5 U			
2-Nitroaniline	20 U			
Dimethylphthalate	5 U			
Acenaphthylene	5 U			
2,6-Dinitrotoluene	5 U			
3-Nitroaniline	20 U			
Acenaphthene	5 U			
2,4-Dinitrophenol	20 U			
4-Nitrophenol	20 U			
Dibenzofuran	5 U			
2,4-Dinitrotoluene	5 U			
Diethylphthalate	5 U			
4-Chlorophenyl-phenylether	5 U			

Bold and italicized results have %RPD > 30%.

	Table 2b September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	MW48 (Upper Aquifer)		MW49 (Upper Aquifer)	
	EARY8 USEPA	ACS-GWMW48-06 PRP	EARY9 USEPA	ACS-GWMW49-06 PRP
Semivolatile Organic Compound				
Fluorene	5 U	--	5 U	--
4-Nitroaniline	20 U	--	20 U	--
4,6-Dinitro-2-methylphenol	20 U	--	20 U	--
N-Nitrosodiphenylamine	5 U	--	5 U	--
4-Bromophenyl-phenylether	5 U	--	5 U	--
Hexachlorobenzene	5 U	--	5 U	--
Pentachlorophenol	20 U	--	20 U	--
Phenanthrene	5 U	--	5 U	--
Anthracene	5 U	--	5 U	--
Carbazole	5 U	--	5 U	--
Di-n-butylphthalate	5 U	--	5 U	--
Fluoranthene	5 U	--	5 U	--
Pyrene	5 U	--	5 U	--
Butylbenzylphthalate	5 U	--	5 U	--
',3'-Dichlorobenzidine	5 U	--	5 U	--
Benzo(a)anthracene	5 U	--	5 U	--
Chrysene	5 U	--	5 U	--
bis(2-Ethylhexyl)phthalate	5 U	--	5 U	--
Di-n-octylphthalate	5 U	--	5 U	--
Benzo(b)fluoranthene	5 U	--	5 U	--
Benzo(k)fluoranthene	5 U	--	5 U	--
Benzo(a)pyrene	5 U	--	5 U	--
Indeno(1,2,3-cd)pyrene	5 U	--	5 U	--
Dibenzo(a,h)anthracene	5 U	--	5 U	--
Benzo(g,h,i)perylene	5 U	--	5 U	--
SVOA TICs	16	--	14	--

Bold and italicized results have %RPD > 30%.

Compound/Analyte	Table 2b September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
	Sample Location/Concentration (µg/l)			
	1033 Reder Rd.		1029 Reder Rd.	
	EARZ0 USEPA	ACS-GWPWD-06 PRP	EARZ1 USEPA	ACS-GWPWC-06 PRP
Semivolatile Organic Compound				
Fluorene	5 U	10 U	5 U	10 U
4-Nitroaniline	20 U	25 U	20 U	26 U
4,6-Dinitro-2-methylphenol	20 U	25 U	20 U	26 U
N-Nitrosodiphenylamine	5 U	10 U	5 U	10 U
4-Bromophenyl-phenylether	5 U	10 U	5 U	10 U
Hexachlorobenzene	5 U	10 U	5 U	10 U
Pentachlorophenol	20 U	25 U	20 U	26 U
Phenanthrene	5 U	10 U	5 U	10 U
Anthracene	5 U	10 U	5 U	10 U
Carbazole	5 U	10 U	5 U	10 U
Di-n-butylphthalate	5 U	10 U	5 U	10 U
Fluoranthene	5 U	10 U	5 U	10 U
Pyrene	5 U	10 U	5 U	10 U
Butylbenzylphthalate	5 U	10 U	5 U	10 U
3,3'-Dichlorobenzidine	5 U	10 U	5 U	10 U
Benzo(a)anthracene	5 U	10 U	5 U	10 U
Chrysene	5 U	10 U	5 U	10 U
bis(2-Ethylhexyl)phthalate	5 U	10 U	5 U	10 U
Di-n-octylphthalate	5 U	10 U	5 U	10 U
Benzo(b)fluoranthene	5 U	10 U	5 U	10 U
Benzo(k)fluoranthene	5 U	10 U	5 U	10 U
Benzo(a)pyrene	5 U	10 U	5 U	10 U
Indeno(1,2,3-cd)pyrene	5 U	10 U	5 U	10 U
Dibenzo(a,h)anthracene	5 U	10 U	5 U	10 U
Benzo(g,h,i)perylene	5 U	10 U	5 U	10 U
SVOA TICs	0	0	0	1

Bold and italicized results have %RPD > 30%.

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	Table 2b September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	1002 Reder Rd.		1009 Reder Rd.	
	EARZ2 USEPA	ACS-GWPWY-06 PRP	EARZ3 USEPA	ACS-GWPWB-06 PRP
Semivolatile Organic Compound				
Fluorene	5 U	10 U	5 U	10 U
4-Nitroaniline	20 U	26 U	20 U	26 U
4,6-Dinitro-2-methylphenol	20 U	26 U	20 U	26 U
N-Nitrosodiphenylamine	5 U	10 U	5 U	10 U
4-Bromophenyl-phenylether	5 U	10 U	5 U	10 U
Hexachlorobenzene	5 U	10 U	5 U	10 U
Pentachlorophenol	20 U	26 U	20 U	26 U
Phenanthrene	5 U	10 U	5 U	10 U
Anthracene	5 U	10 U	5 U	10 U
Carbazole	5 U	10 U	5 U	10 U
Di-n-butylphthalate	5 U	10 U	5 U	10 U
Fluoranthene	5 U	10 U	5 U	10 U
Pyrene	5 U	10 U	5 U	10 U
Butylbenzylphthalate	5 U	10 U	5 U	10 U
`,3'-Dichlorobenzidine	5 U	10 U	5 U	10 U
Benzo(a)anthracene	5 U	10 U	5 U	10 U
Chrysene	5 U	10 U	5 U	10 U
bis(2-Ethylhexyl)phthalate	5 U	10 U	5 U	10 U
Di-n-octylphthalate	5 U	10 U	5 U	10 U
Benzo(b)fluoranthene	5 U	10 U	5 U	10 U
Benzo(k)fluoranthene	5 U	10 U	5 U	10 U
Benzo(a)pyrene	5 U	10 U	5 U	10 U
Indeno(1,2,3-cd)pyrene	5 U	10 U	5 U	10 U
Dibenzo(a,h)anthracene	5 U	10 U	5 U	10 U
Benzo(g,h,i)perylene	5 U	10 U	5 U	10 U
SVOA TICs	0	0	1	1

Bold and italicized results have %RPD > 30%.

	Table 2b September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	1007 Reder Rd.		MW9R (Lower Aquifer)	
	EARZ4 USEPA	ACS-GWPWA-06 PRP	EARZ5 USEPA	ACS-GWMW9R-06 PRP
Semivolatile Organic Compound				
Fluorene	5 U	10 U	5 U	10 U
4-Nitroaniline	20 U	26 U	20 U	25 U
4,6-Dinitro-2-methylphenol	20 U	26 U	20 U	25 U
N-Nitrosodiphenylamine	5 U	10 U	5 U	10 U
4-Bromophenyl-phenylether	5 U	10 U	5 U	10 U
Hexachlorobenzene	5 U	10 U	5 U	10 U
Pentachlorophenol	20 U	26 U	20 U	25 U
Phenanthrene	5 U	10 U	5 U	10 U
Anthracene	5 U	10 U	5 U	10 U
Carbazole	5 U	10 U	5 U	10 U
Di-n-butylphthalate	5 U	10 U	5 U	10 U
Fluoranthene	5 U	10 U	5 U	10 U
Pyrene	5 U	10 U	5 U	10 U
Butylbenzylphthalate	5 U	10 U	5 U	10 U
3,3'-Dichlorobenzidine	5 U	10 U	5 U	10 U
Benzo(a)anthracene	5 U	10 U	5 U	10 U
Chrysene	5 U	10 U	5 U	10 U
bis(2-Ethylhexyl)phthalate	5 U	10 U	5 U	10 U
Di-n-octylphthalate	5 U	10 U	5 U	10 U
Benzo(b)fluoranthene	5 U	10 U	5 U	10 U
Benzo(k)fluoranthene	5 U	10 U	5 U	10 U
Benzo(a)pyrene	5 U	10 U	5 U	10 U
Indeno(1,2,3-cd)pyrene	5 U	10 U	5 U	10 U
Dibenzo(a,h)anthracene	5 U	10 U	5 U	10 U
Benzo(g,h,i)perylene	5 U	10 U	5 U	10 U
SVOA TICs	0	1	14	22

Bold and italicized results have %RPD > 30%.

	Table 2b September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	EB01 (Equipment Blank)			
	EARZ6 USEPA	PRP		
Semivolatile Organic Compound				
Fluorene	5 U			
4-Nitroaniline	20 U			
4,6-Dinitro-2-methylphenol	20 U			
N-Nitrosodiphenylamine	5 U			
4-Bromophenyl-phenylether	5 U			
Hexachlorobenzene	5 U			
Pentachlorophenol	20 U			
Phenanthrene	5 U			
Anthracene	5 U			
Carbazole	5 U			
Di-n-butylphthalate	5 U			
Fluoranthene	5 U			
Pyrene	5 U			
Butylbenzylphthalate	5 U			
`,3'-Dichlorobenzidine	5 U			
Benzo(a)anthracene	5 U			
Chrysene	5 U			
bis(2-Ethylhexyl)phthalate	5 U			
Di-n-octylphthalate	5 U			
Benzo(b)fluoranthene	5 U			
Benzo(k)fluoranthene	5 U			
Benzo(a)pyrene	5 U			
Indeno(1,2,3-cd)pyrene	5 U			
Dibenzo(a,h)anthracene	5 U			
Benzo(g,h,i)perylene	5 U			
SVOA TICs	0			

	Table 3 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	MW48 (Upper Aquifer)		MW49 (Upper Aquifer)	
	EARY8 USEPA	ACS-GWMW48-06 PRP	EARY9 USEPA	ACS-GWMW49-06 PRP
Pesticides/PCBs				
Alpha-BHC	0.01 U	--	0.01 U	--
Beta-BHC	0.01 U	--	0.01 U	--
Delta-BHC	0.01 U	--	0.01 U	--
Lindane	0.01 U	--	0.01 U	--
Heptachlor	0.01 U	--	0.01 U	--
Aldrin	0.01 U	--	0.01 U	--
Heptachlor Epoxide	0.01 U	--	0.01 U	--
Endosulfan I	0.01 U	--	0.01 U	--
Dieldrin	0.02 U	--	0.02 U	--
p,p'-DDE	0.02 U	--	0.02 U	--
Endrin	0.02 U	--	0.02 U	--
Endosulfan II	0.02 U	--	0.02 U	--
p,p'-DDD	0.02 U	--	0.02 U	--
Endosulfan Sulfate	0.02 U	--	0.02 U	--
p,p'-DDT	0.02 U	--	0.02 U	--
Methoxychlor	0.10 U	--	0.10 U	--
Endrin Ketone	0.02 U	--	0.02 U	--
Endrin Aldehyde	0.02 U	--	0.02 U	--
Alpha-chlordane	0.01 U	--	0.01 U	--
Gamma-chlordane	0.01 U	--	0.01 U	--
Toxaphene	1.00 U	--	1.00 U	--
Aroclor 1016	0.20 U	--	0.20 U	--
Aroclor 1221	0.40 U	--	0.40 U	--
Aroclor 1232	0.20 U	--	0.20 U	--
Aroclor 1242	0.20 U	--	0.20 U	--
Aroclor 1248	0.20 U	--	0.20 U	--
Aroclor 1254	0.20 U	--	0.20 U	--
Aroclor 1260	0.20 U	--	0.20 U	--

	Table 3 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	1033 Reder Rd.		1029 Reder Rd.	
	EARZ0 USEPA	ACS-GWPWD-06 PRP	EARZ1 USEPA	ACS-GWPWC-06 PRP
Pesticides/PCBs				
Alpha-BHC	0.01 U	0.051 U	0.01 U	0.052 U
Beta-BHC	0.01 U	0.051 U	0.01 U	0.052 U
Delta-BHC	0.01 U	0.051 U	0.01 U	0.052 U
Lindane	0.01 U	0.051 U	0.01 U	0.052 U
Heptachlor	0.01 U	0.051 U	0.01 U	0.052 U
Aldrin	0.01 U	0.051 U	0.01 U	0.052 U
Heptachlor Epoxide	0.01 U	0.051 U	0.01 U	0.052 U
Endosulfan I	0.01 U	0.051 U	0.01 U	0.052 U
Dieldrin	0.02 U	0.10 U	0.02 U	0.10 U
p,p'-DDE	0.02 U	0.10 U	0.02 U	0.10 U
Endrin	0.02 U	0.10 U	0.02 U	0.10 U
Endosulfan II	0.02 U	0.10 U	0.02 U	0.10 U
p,p'-DDD	0.02 U	0.10 U	0.02 U	0.10 U
Endosulfan Sulfate	0.02 U	0.10 U	0.02 U	0.10 U
p,p'-DDT	0.02 U	0.10 U	0.02 U	0.10 U
Methoxychlor	0.10 U	0.51 U	0.10 U	0.52 U
Endrin Ketone	0.02 U	0.10 U	0.02 U	0.10 U
Endrin Aldehyde	0.02 U	0.10 U	0.02 U	0.10 U
Alpha-chlordane	0.01 U	0.051 U	0.01 U	0.052 U
Gamma-chlordane	0.01 U	0.051 U	0.01 U	0.052 U
Toxaphene	1.00 U	5.1 U	1.00 U	5.2 U
Aroclor 1016	0.20 U	1.0 U	0.20 U	1.0 U
Aroclor 1221	0.40 U	2.0 U	0.40 U	2.1 U
Aroclor 1232	0.20 U	1.0 U	0.20 U	1.0 U
Aroclor 1242	0.20 U	1.0 U	0.20 U	1.0 U
Aroclor 1248	0.20 U	1.0 U	0.20 U	1.0 U
Aroclor 1254	0.20 U	1.0 U	0.20 U	1.0 U
Aroclor 1260	0.20 U	1.0 U	0.20 U	1.0 U

Bold and italicized results %RPD>30%.

	Table 3 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	1002 Reder Rd.		1009 Reder Rd.	
	EARZ2 USEPA	ACS-GWPWY-06 PRP	EARZ3 USEPA	ACS-GWPWB-06 PRP
Pesticides/PCBs				
Alpha-BHC	0.01 U	0.052 U	0.01 U	0.054 U
Beta-BHC	0.01 U	0.052 U	0.01 U	0.054 U
Delta-BHC	0.01 U	0.052 U	0.01 U	0.054 U
Lindane	0.01 U	0.052 U	0.01 U	0.054 U
Heptachlor	0.01 U	0.052 U	0.01 U	0.054 U
Aldrin	0.01 U	0.052 U	0.01 U	0.054 U
Heptachlor Epoxide	0.01 U	0.052 U	0.01 U	0.054 U
Endosulfan I	0.01 U	0.052 U	0.01 U	0.054 U
Dieldrin	0.02 U	0.10 U	0.02 U	0.11 U
p,p'-DDE	0.02 U	0.10 U	0.02 U	0.11 U
Endrin	0.02 U	0.10 U	0.02 U	0.11 U
Endosulfan II	0.02 U	0.10 U	0.02 U	0.11 U
p,p'-DDD	0.02 U	0.10 U	0.02 U	0.11 U
Endosulfan Sulfate	0.02 U	0.10 U	0.02 U	0.11 U
p,p'-DDT	0.02 U	0.10 U	0.02 U	0.11 U
Methoxychlor	0.10 U	0.52 U	0.10 U	0.54 U
Endrin Ketone	0.02 U	0.10 U	0.02 U	0.11 U
Endrin Aldehyde	0.02 U	0.10 U	0.02 U	0.11 U
Alpha-chlordane	0.01 U	0.052 U	0.01 U	0.054 U
Gamma-chlordane	0.01 U	0.052 U	0.01 U	0.054 U
Toxaphene	1.00 U	5.2 U	1.00 U	5.4 U
Aroclor 1016	0.20 U	1.0 U	0.20 U	1.1 U
Aroclor 1221	0.40 U	2.1 U	0.40 U	2.2 U
Aroclor 1232	0.20 U	1.0 U	0.20 U	1.1 U
Aroclor 1242	0.20 U	1.0 U	0.20 U	1.1 U
Aroclor 1248	0.20 U	1.0 U	0.20 U	1.1 U
Aroclor 1254	0.20 U	1.0 U	0.20 U	1.1 U
Aroclor 1260	0.20 U	1.0 U	0.20 U	1.1 U

Bold and italicized results %RPD>30%.

	Table 3 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	1007 Reder Rd.		MW9R (Lower Aquifer)	
	EARZ4 USEPA	ACS-GWPWA-06 PRP	EARZ5 USEPA	ACS-GWMW9R-06 PRP
Pesticides/PCBs				
Alpha-BHC	0.01 U	0.052 U	0.01 U	0.053 U
Beta-BHC	0.01 U	0.052 U	0.01 U	0.053 U
Delta-BHC	0.01 U	0.052 U	0.01 U	0.053 U
Lindane	0.01 U	0.052 U	0.01 U	0.053 U
Heptachlor	0.01 U	0.052 U	0.01 U	0.053 U
Aldrin	0.01 U	0.052 U	0.01 U	0.053 U
Heptachlor Epoxide	0.01 U	0.052 U	0.01 U	0.053 U
Endosulfan I	0.01 U	0.052 U	0.01 U	0.053 U
Dieldrin	0.02 U	0.10 U	0.02 U	0.11 U
p,p'-DDE	0.02 U	0.10 U	0.02 U	0.11 U
Endrin	0.02 U	0.10 U	0.02 U	0.11 U
Endosulfan II	0.02 U	0.10 U	0.02 U	0.11 U
p,p'-DDD	0.02 U	0.10 U	0.02 U	0.11 U
Endosulfan Sulfate	0.02 U	0.10 U	0.02 U	0.11 U
p,p'-DDT	0.02 U	0.10 U	0.02 U	0.11 U
Methoxychlor	0.10 U	0.52 U	0.10 U	0.53 U
Endrin Ketone	0.02 U	0.10 U	0.02 U	0.11 U
Endrin Aldehyde	0.02 U	0.10 U	0.02 U	0.11 U
Alpha-chlordane	0.01 U	0.052 U	0.01 U	0.053 U
Gamma-chlordane	0.01 U	0.052 U	0.01 U	0.053 U
Toxaphene	1.00 U	5.2 U	1.00 U	5.3 U
Aroclor 1016	0.20 U	1.0 U	0.20 U	1.1 U
Aroclor 1221	0.40 U	2.1 U	0.40 U	2.1 U
Aroclor 1232	0.20 U	1.0 U	0.20 U	1.1 U
Aroclor 1242	0.20 U	1.0 U	0.20 U	1.1 U
Aroclor 1248	0.20 U	1.0 U	0.20 U	1.1 U
Aroclor 1254	0.20 U	1.0 U	0.20 U	1.1 U
Aroclor 1260	0.20 U	1.0 U	0.20 U	1.1 U

Bold and italicized results %RPD>30%.

	Table 3 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	EB01 (Equipment Blank)			
	EARZ6 USEPA	PRP		
Pesticides/PCBs				
Alpha-BHC	0.01 U			
Beta-BHC	0.01 U			
Delta-BHC	0.01 U			
Lindane	0.01 U			
Heptachlor	0.01 U			
Aldrin	0.01 U			
Heptachlor Epoxide	0.01 U			
Endosulfan I	0.01 U			
Dieldrin	0.02 U			
p,p'-DDE	0.02 U			
Endrin	0.02 U			
Endosulfan II	0.02 U			
p,p'-DDD	0.02 U			
Endosulfan Sulfate	0.02 U			
p,p'-DDT	0.02 U			
Methoxychlor	0.10 U			
Endrin Ketone	0.02 U			
Endrin Aldehyde	0.02 U			
Alpha-chlordane	0.01 U			
Gamma-chlordane	0.01 U			
Toxaphene	1.00 U			
Aroclor 1016	0.20 U			
Aroclor 1221	0.40 U			
Aroclor 1232	0.20 U			
Aroclor 1242	0.20 U			
Aroclor 1248	0.20 U			
Aroclor 1254	0.20 U			
Aroclor 1260	0.20 U			

	Table 4 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	MW48 (Upper Aquifer)		MW49 (Upper Aquifer)	
	98ZB06S01 USEPA	ACS-GWMW48-06 PRP	98ZB06S02 USEPA	ACS-GWMW49-06 PRP
Inorganic Analytes				
Aluminum	1,470	--	80 U	--
Antimony	1.3	--	1 U	--
Arsenic	***63***	***9.0 B***	***10***	***46.0***
Barium	145	--	89.2	--
Beryllium	2 U	--	2 U	--
Cadmium	0.3	--	0.2 U	--
Calcium	93,900	--	97,400	--
Chromium	17.4	--	10 U	--
Cobalt	6 U	--	6 U	--
Copper	6 U	--	6 U	--
Iron	54,100	--	17,200	--
Lead	***4***	***0.90 U***	2 U	0.90 U
Magnesium	12,100	--	12,500	--
Manganese	1,480	--	388	--
Mercury	0.1 U	--	0.1 U	--
Nickel	30.9	--	20 U	--
Potassium	5,210	--	5,440	--
Selenium	1.9	--	1 U	--
Silver	6 U	--	6 U	--
Sodium	26,500	--	33,400	--
Thallium	2 U	--	2 U	--
Vanadium	5 U	--	5 U	--
Zinc	53.6	--	40 U	--
Cyanide	8 U	--	8 U	--

Bold and italicized results have %RPD > 30%. Table 4-1 t:\projects\acs\data\sept98\metals.wk4

	Table 4 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	1033 Reder Rd.		1029 Reder Rd.	
	98ZB06S03 USEPA	ACS-GWPWD-06 PRP	98ZB06S04 USEPA	ACS-GWPWC-06 PRP
Inorganic Analytes				
Aluminum	80 U	21.0 UB	80 U	24.5 UB
Antimony	1 U	33.0 U	1 U	33.0 U
Arsenic	0.8 U	1.8 U	0.8 U	1.8 U
Barium	140	144 B	152	153 B
Beryllium	2 U	0.40 U	2 U	0.40 U
Cadmium	0.2 U	2.6 U	0.2 U	2.6 U
Calcium	93,000	87,800	87,700	79,900
Chromium	10 U	2.7 U	10 U	13.5 U
Cobalt	6 U	2.4 U	6 U	2.4 U
Copper	6 U	4.8 UB	6 U	5.8 UB
Iron	2,460	2,330	2,760	2,440
Lead	2 U	0.90 U	2 U	0.90 U
Magnesium	47,700	45,400	50,000	45,400
Manganese	37.3	34.5 UJE	37.7	32.0 UJE
Mercury	0.1 U	0.10 U	0.1 U	0.12 B
Nickel	20 U	10.8 U	20 U	10.8 U
Potassium	***2,160***	***1,560 UB***	***2,260***	***1,530 UB***
Selenium	2 U	2.2 U	2 U	2.2 U
Silver	6 U	5.0 U	6 U	5.0 U
Sodium	20,300	18,500	24,500	22,400
Thallium	2 U	2.8 U	2 U	2.8 U
Vanadium	5 U	21.4 UB	5 U	23.5 UB
Zinc	40 U	19.5 UB	40 U	14.2 UB
Cyanide	8 U	0.70 U	8 U	0.70 U

Bold and italicized results have %RPD > 30%. Table 4-2 t:\projects\acs\data\sept98\metals.wk4

	Table 4 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	1002 Reder Rd.		1009 Reder Rd.	
	98ZB06S05 USEPA	ACS-GWPWY-06 PRP	98ZB06S06 USEPA	ACS-GWPWB-06 PRP
Inorganic Analytes				
Aluminum	80 U	43.0 UB	80 U	85.2 UB
Antimony	1 U	33.0 U	1 U	33.0 U
Arsenic	0.8 U	1.8 U	0.8 U	1.8 U
Barium	128	133 B	115	124 B
Beryllium	2 U	0.40 U	2 U	0.40 U
Cadmium	0.2 U	2.6 U	0.2 U	2.6 U
Calcium	83,500	77,900	88,700	85,000
Chromium	10 U	2.7 U	10 U	3.0 UB
Cobalt	6 U	2.4 U	6 U	2.4 U
Copper	6 U	2.9 U	6 U	4.1 UB
Iron	3,090	2,890	2,970	3,180
Lead	2 U	0.90 U	2 U	0.90 U
Magnesium	43,700	41,100	40,900	40,900
Manganese	32.9	30.3 UJE	59.6	56.8 JE
Mercury	***0.1 U***	***0.14 B***	0.1 U	0.10 U
Nickel	20 U	10.8 U	20 U	10.8 U
Potassium	***1,990***	***1,220 U***	1,450	1,220 U
Selenium	1 U	2.2 U	1 U	2.2 U
Silver	6 U	5.0 U	6 U	5.0 U
Sodium	21,000	18,900	13,800	13,400
Thallium	2 U	2.8 U	2 U	2.8 U
Vanadium	5 U	21.3 UB	5 U	13.0 UB
Zinc	40 U	17.2 UB	40	15.4 UB
Cyanide	8 U	0.70 U	8 U	0.70 U

Bold and italicized results have %RPD > 30%.

Compound/Analyte	Table 4 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc. Sample Location/Concentration (µg/l)			
	1007 Reder Rd.		MW9R (Lower Aquifer)	
	98ZB06S07 USEPA	ACS-GWPWA-06 PRP	98ZB06508 USEPA	ACS-GWMW9R-06 PRP
Inorganic Analytes				
Aluminum	80 U	161 UB	***105***	***73.9 UB***
Antimony	1 U	33.0 U	1 U	33.0 U
Arsenic	0.8 U	1.8 U	1	1.8 U
Barium	97.6	109 B	288	285
Beryllium	2 U	0.40 U	2 U	0.40 U
Cadmium	0.3	2.6 U	0.2 U	2.6 U
Calcium	83,300	85,200	157,000	148,000
Chromium	10 U	2.7 U	10 U	2.7 U
Cobalt	6 U	2.4 U	6 U	2.4 U
Copper	6 U	3.8 B	6 U	5.0 UB
Iron	2,740	3,180	13,200	11,800
Lead	***2***	***0.90 U***	2 U	0.90 U
Magnesium	38,400	39,800	27,900	27,200
Manganese	52.2	54.2 JE	223	196 JE
Mercury	0.1 U	0.10 U	0.1 U	0.10 U
Nickel	20 U	10.8 U	20 U	10.8 U
Potassium	1,510	1,220 U	7,490	6,200 U
Selenium	2 U	2.2 U	1 U	2.2 U
Silver	6 U	5.0 U	6 U	5.0 U
Sodium	14,300	14,100	70,100	64,500
Thallium	2 U	2.8 U	4 U	2.8 U
Vanadium	5 U	27.5 UB	5 U	36.1 UB
Zinc	105	139	40 U	14.5 UB
Cyanide	8 U	0.70 U	8 U	0.70 U

Bold and italicized results have %RPD > 30%.

	Table 4 September 1998 Upper and Lower Aquifer Monitoring Well Sample Data Comparison American Chemical Services, Inc.			
Compound/Analyte	Sample Location/Concentration (µg/l)			
	EB01 (Equipment Blank)			
	98ZB06R01 USEPA	PRP		
Inorganic Analytes				
Aluminum	80 U			
Antimony	1 U			
Arsenic	0.8 U			
Barium	6 U			
Beryllium	2 U			
Cadmium	0.2 U			
Calcium	500 U			
Chromium	10 U			
Cobalt	6 U			
Copper	6 U			
Iron	80 U			
Lead	2 U			
Magnesium	100 U			
Manganese	5 U			
Mercury	0.1 U			
Nickel	20 U			
Potassium	500 U			
Selenium	1 U			
Silver	6 U			
Sodium	1,000 U			
Thallium	2 U			
Vanadium	5 U			
Zinc	40 U			
Cyanide	8 U			

Bold and italicized results have %RPD > 30%. Table 4-5

	Table 5 September 1998 Upper and Lower Aquifer 30% Relative Percent Difference American Chemical Services, Inc.		
Compound/Analyte	USEPA	PRP	Well Location
Volatile Organic Compounds			
Benzene	5,200 D	7,800 D	MW48
Benzene	7,600 D	4,700 D	MW49
trans-1,2-Dichloroethene	4	1 J	MW48
trans-1,2-Dichloroethene	1	5 J	MW49
Inorganic Analytes			
Aluminum	105	73.9 UB	MW9R
Arsenic	63	9.0 B	MW48
	10	46.0	MW49
Lead	4	0.90 U	MW48
	2	0.90 U	1007 Reder
Mercury	0.1 U	0.14 B	1002 Reder
Potassium	2,160	1,560 UB	1033 Reder
	1,990	1,220 U	1002 Reder
	2,260	1,530 UB	1029 Reder
Vanadium	5 U	21.4 B	1033 Reder
Zinc	40 U	20 B	1033 Reder

APPENDIX

Appendix A

Chain-of-Custody Records
Data Validation Narratives
Analytical Data Sheets
for
USEPA Split Samples

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on Oct 6, 1998

FROM: Stephen L. Ostrodka, Chief (HSRL-5J) for Steve Ostrodka
Superfund Technical Support Section Richard L Bojnik 10/27/98

TO: Data User: B+V

We have reviewed the data for the following case:

SITE NAME: American Chemical Services (IN)

CASE NUMBER: 26483 SDG NUMBER: EARY8

Number and Type of Samples: 13 (water)

Sample Numbers: EARY8-9 EARZ0-9 EWT61

Laboratory: PDP Analytical Hrs. for Review: 11.5 + 1.0

Following are our findings:

the data are acceptable and useable with the qualifications described in the attached narrative.
Richard L Bojnik

CC: Cecilia Moore
Region 5 TPO
Mail Code: SM-5J

NARRATIVE

Contractor: PDP
Site: American Chemical Services(IN)

Case: 26483
SDG: EARY8

This case consists of 13 low concentration water samples EARY8-9, EARZ0-9, EWT61. These samples were collected on September 15, 1998 and were received by the laboratory on September 16, 1998 All samples except EARZ8 and EWT61, trip blanks, which was analyzed only for volatiles, were analyzed for the volatiles, semi-volatiles, and pesticide/PCB organic analytes. All samples were analyzed according to CLP Low Concentration Water (OLC02.1).

The VOA analyses were performed within the technical holding time of 14 days after sample collection, for preserved water samples; therefore, the results are acceptable. All semi-volatile and pesticide/PCB samples were extracted within the 7 day holding time for water samples, and analyzed within the 40 day hold time; therefore, the results are acceptable.

Samples EARZ6 was listed on the COC as a field blank.

The reviewer's narrative and data qualifiers are noted in the following pages.

Reviewed by: M. Kaminsky Lockheed-Martin ESAT
Date: October 20, 1998

NARRATIVE

Contractor: PDP
Site: American Chemical Services(IN)

Case: 26483
SDG: EARY8

1.HOLDING TIMES

This case consists of 13 low concentration water samples EARY8-9, EARZ0-9, EWT61. These samples were collected on September 15, 1998 and were received by the laboratory on September 16, 1998 All samples except EARZ8 and EWT61, trip blanks, which was analyzed only for volatiles, were analyzed for the volatiles, semi-volatiles, and pesticide/PCB organic analytes. All samples were analyzed according to CLP Low Concentration Water (OLC02.1).

The VOA analyses were performed within the technical holding time of 14 days after sample collection, for preserved water samples; therefore, the results are acceptable. A semi-volatile and pesticide/PCB samples were extracted within the 7 day holding time for water samples, and analyzed within the 40 day hold time; therefore, the results are acceptable.

2.GC/MS TUNING

All GC/MS tuning complied with the mass list and ion abundance criteria for BFB, and all samples were analyzed within the 12 hour periods for instrument performance checks.

All GC/MS tuning complied with the mass list and ion abundance criteria for DFTPP, and all samples were analyzed within the 12 hour periods for instrument performance checks. GC Resolution Check Mixes met the 60% resolution criteria. Endrin and DDT degradation checks using PEM MIX on DB-608 and RTX-1701 columns were <20%; therefore, the results are acceptable. The Florisil Cartridge Check met QC criteria; therefore, the results are acceptable.

3.CALIBRATION

Initial and continuing calibrations of the volatile, semi-volatile, and pesticide/PCBs were evaluated for the target compound list and outliers are recorded on the forms included as part of the narrative.

4.BLANKS

VOA:

The volatile water blanks VBLK02, VBLK03, VBLK04, and VBLK05 as well as the holding blank VHBLK01 and an instrument blank, VIBLK01 were found to contain neither TCLs or TICs. The volatile method blank summary (Form IV VOA) lists the samples associated with these blanks.

SVOA:

The semi-volatile water blank SBLK12 was found to contain neither TCLs or TICs. Semi-volatile water blank SBLK10 was found to contain the common laboratory chemical butylbenzylphthalate and no TICs. The presence of the common laboratory chemical in any sample associated with this blank is flagged as

Reviewed by: M. Kaminsky Lockheed-Martin ESAT
Date: October 20, 1998

NARRATIVE

Contractor: PDP Case: 26483
Site: American Chemical Services(IN) SDG: EARY8

undetected (U) when the sample results are less than ten (10) times the blank concentration. The semi-volatile method blank summary (Form IV SVOA) lists the samples associated with these blanks.

PESTICIDE/PCB:

The pesticide blank PBLK33 was found to be clean. The pesticide/PCB blank summary (Form IV PEST) lists the samples associated with this blank.

5.SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

VOA:

The volatile water system monitoring compounds were within the QC limits for all samples; therefore the results are acceptable.

SVOA:

The semi-volatile water surrogate compounds were within the QC limits for all samples; therefore, the results are acceptable.

PESTICIDE/PCB:

The pesticide surrogate compounds were within the QC limits for all samples, therefore, the results are acceptable.

6. LABORATORY CONTROL SAMPLE

VOA:

All recoveries for the volatile water samples were within QC limits; therefore, the results are acceptable.

SVOA:

All recoveries for the semi-volatile water samples were within QC limits; therefore, the results are acceptable.

PESTICIDE/PCB:

All recoveries for the pesticide water samples were within QC limits; therefore, the results are acceptable.

7.FIELD BLANKS AND FIELD DUPLICATES

Sample EARZ8 was listed on the COC as a trip blank. This sample was found to contain 3 volatile TCLs and no TICs. Sample EWT61 was listed on the COC as a trip blank. This sample was found to contain 3 volatile TCLs and no TICs. Sample EARZ6 was listed on the COC as a field blank. This sample was found to contain 4 volatile TCLs and no other TCLs or TICs.

8.INTERNAL STANDARDS

VOA:

NARRATIVE

Contractor: PDP Case: 26483
Site: American Chemical Services(IN) SDG: EARY8

Internal standard retention times and areas met QC requirements, so no qualification is needed.

SVOA:

Internal standard retention times and areas met QC requirements, so no qualification is needed.

9.COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA, SVOA, and pesticide/PCB compounds were properly identified.

10.COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

All CRQLs were properly reported and no dilutions were performed All target compounds were properly reported.

11.SYSTEM PERFORMANCE

GC/MS baseline and pesticide baselines indicated acceptable performance.

12.ADDITIONAL INFORMATION

Volatile sample EARY8 was found to contain levels of chloroethane and benzene over the calibration range. The value for chloroethane should be taken from EARY8DL, and the value for benzene should be taken from EARY8DL2. Volatile sample EARY9 was found to contain levels of chloroethane and benzene over the calibration range. The value for chloroethane should be taken from EARY9DL, and the value for benzene should be taken from EARY9DL2. Volatile sample EARZ5 was found to contain levels of chloroethane and benzene over the calibration range. The value for chloroethane should be taken from EARZ5DL2, and the value for benzene should be taken from EARZ5DL.

Reviewed by: M. Kaminsky Lockheed-Martin ESAT
Date: October 20, 1998

CALIBRATION OUTLIERS
LOW CONCENTRATION WATER VOLATILE TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 26483
COLUMN: DB624
HEATED PURGE (Y/N): N

LABORATORY: PDP
SITENAME: Omega Chem

Instrument# EHP5972		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		9-16 2030			9-17 2300			9-18 1123			9-18 2317			9-22 1512		
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Chloromethane	0.01															
Bromomethane	0.10	0194			0252	29.9	J							0136	299	J
Vinyl chloride	0.10															
Chloroethane	0.01															
Methylene chloride	0.01															
Acetone	0.01															
Carbon disulfide	0.01															
1,1-Dichloroethene	0.10															
1,1-Dichloroethane	0.20															
cis-1,2-Dichloroethene	0.10															
trans-1,2-Dichloroethene	0.10															
Chloroform	0.20															
1,2-Dichloroethane	0.10															
2-Butanone	0.01															
Bromochloromethane	0.10															
1,1,1-Trichloroethane	0.10															
Carbon tetrachloride	0.10															
Bromodichloromethane	0.20															
1,2-Dichloropropane	0.01															
cis-1,3-Dichloropropene	0.20															
Trichloroethene	0.30															
Dibromochloromethane	0.10															
1,1,2-Trichloroethane	0.10															
Benzene	0.50															
tran-1,3-Dichloropropene	0.10															
Bromoform	0.10															
4-Methyl-2-pentanone	0.01															
2-Hexanone	0.01															
Tetrachloroethene	0.20															
1,1,2,2-Tetrachloroethane	0.50															
1,2-Dibromoethane	0.10															
Toluene	0.40															
Chlorobenzene	0.50															
Ethylbenzene	0.10															
Styrene	0.30															
Xylene (total)	0.30															
1,2-Dibromo-3-chloropropane	0.10															
1,3-Dichlorobenzene	0.60															
1,4-Dichlorobenzene	0.50															
1,2-Dichlorobenzene	0.40															
Bromofluorobenzene	0.40															

Samples affected:				
	VBLK02	VBLK03	VBLK04	VBLK05
	VLCS02	VLCS03	VLCS04	VLCS05
	EARY8	EARY9	EARZ0-5, 7, 9	EARY8DL2, 9DL2
		EARZ6		EARZ8, 5DL, 5DL2
		EARY8DL		EWT61
				EARY9DL
				VHBLK01
				VIBLK01

Reviewer's Init/Date: MK 10-19-98

J/R = All positive results are estimated "J" and non-detected results are unusable "R"

* = These flags should be applied to the analytes on the sample data sheets.
# = Minimum Relative Response Factor

CALIBRATION OUTLIER
LOW CONCENTRATION WATER SEMIVOLATILE TCL COMPOUNDS
(Page 1 of 2)

CASE\SAS#: 26423
COLUMN:

LABORATORY: PDP
SITE NAME: [illegible]

Instrument# DHP 5971A		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		9-21 1019			9-21 1526			9-22 1159								
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Phenol	0.80															
bis(2-chloroethyl) Ether	0.70															
2-Chlorophenol	0.70															
2-Methylphenol	0.70															
2,2'-Oxybis(1-chl-propane)	0.01															
4-Methylphenol	0.60															
N-nitroso-di-n-propylamine	0.50															
Hexachloroethane	0.30															
Nitrobenzene	0.20															
Isophorone	0.40															
2-Nitrophenol	0.10															
2,4-Dimethylphenol	0.20															
bis-(2-chloroethoxyl)methane	0.30															
2,4-Dichlorophenol	0.20															
1,2,4-Trichlorobenzene	0.20															
Naphthalene	0.70															
4-Chloroaniline	0.01															
Hexachlorobutadiene	0.01															
4-Chloro-3-methylphenol	0.20															
2-Methylnaphthalene	0.40															
Hexachlorocyclopentadiene	0.01															
2,4,6-Trichlorophenol	0.20															
2,4,5-Trichlorophenol	0.20															
2-Chloronaphthalene	0.80															
2-Nitroaniline	0.01															
Dimethyl phthlate	0.01															
Acenaphthylene	1.30															
2,6-Dinitrotoluene	0.20															
3-Nitroaniline	0.01															
Acenaphthene	0.30															
2,4-Dinitrophenol	0.01	0143	35.2	5												
4-Nitrophenol	0.01															
Dibenzofuran	0.80															
2,4-Dinitrotoluene	0.20															

Affected samples:

		SBLK10	SBLK12	
		SLCS10	SLCS12	
		EARY8-9	EARZ5	
		EARZ0-4, 6, 7		

Reviewer's Init/Date: [illegible] K. 10-1 9-98

J/R = All positive results are estimated "J" and non-detected results are unusable "R"

* = These flags should be applied to the analytes on the sample data sheets.
\# = Minimum Relative Response Factor

CALIBRATION OUTLIER
LOW CONCENTRATION WATER SEMIVOLATILE TCL COMPOUNDS
(Page 2 of 2)

CASE\SAS#: 26483
COLUMN:

LABORATORY: PDP
SITE NAME: Omega

Instrument# DFIP5971A		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		9-21 1019			9-21 1526			9-22 1159								
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Diethylphthalate	0.01															
4-Chlorophenyl-phenylether	0.40															
Fluorene	0.90															
4-Nitroaniline	0.01	0183	37.8	J												
4,6-Dinitro-2-methylphenol	0.01															
N-nitrosodiphenylamine	0.01															
4-Bromophenyl-phenylether	0.10															
Hexachlorobenzene	0.10															
Pentachlorophenol	0.05															
Phenanthrene	0.70															
Anthracene	0.70															
Di-n-butylphthalate	0.01															
Fluoranthene	0.60															
Pyrene	0.60															
Butylbenzylphthalate	0.01															
3,3'-Dichlorobenzidine	0.01	0058	52.9	J				0038	34.5	J						
Benzo(a)anthracene	0.80															
Chrysene	0.70															
bis(2-Ethylhexyl)phthalate	0.01															
Di-n-octyl phthalate	0.01															
Benzo(b)fluoranthene	0.70															
Benzo(k)fluoranthene	0.70															
Benzo(a)pyrene	0.70															
Indeno(1,2,3-cd)pyrene	0.50															
Dibenz(a,h)anthrancene	0.40															
Benzo(g,h,i)perylene	0.50															
Nitrobenzene-d5	0.01															
2-Fluorobiphenyl	0.70															
Terphenyl-d14	0.50															
Phenol-d5	0.80															
2-Fluorophenol	0.60															
2,4,6-Tribromophenol	0.01															

Reviewer's Init/Date: MK 10-19-98

J/R = All positive results are estimated "J" and non-detected results are unusable "R"

* = These flags should be applied to the analytes on the sample data sheets.
# = Minimum Relative Response Factor

PESTICIDE/PCB TCL COMPOUNDS

(Page 1 of 1)

CASE\SAS#: 26483
COLUMN: RTX 1701

LABORATORY: PDP
SITE NAME: Omnium

Instrument# EHP5890B		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		9-24 1903			9-25 0159											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
alpha-BHC	0.01															
beta-BHC	0.40															
delta-BHC	0.90															
gamma-BHC	0.01															
Heptachlor	0.01															
Aldrin	0.01															
Heptachlor epoxide	0.10															
Endosulfan I	0.10															
Dieldrin	0.05															
4, 4'-DDE	0.70															
Endrin	0.70															
Endosulfan II	0.01															
4, 4'-DDD	0.60															
Endosulfan sulfate	0.60															
4, 4'-DDT	0.01															
Methoxychlor	0.01															
Endrin ketone	0.80															
Endrin aldehyde	0.70															
alpha chlordane	0.01															
gamma chlordane	0.01															
Arochlor 1016																
Arochlor 1221																
Arochlor 1232																
Arochlor 1242																
Arochlor 1248																
Arochlor 1254																
Arochlor 1260																

Affected samples:

	PBLK33			
	PLCS33			
	EARY8,9			
	EARZO-7			

Reviewer's Init/Date: 10-20-98 MK

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CASE\SAS#: 26463
COLUMN: DB608

LABORATORY: PDP
SITE NAME: American Chem

Instrument# E HP5890A		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		9-24 1235			9-25 0131											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
alpha-BHC	0.01															
beta-BHC	0.40															
delta-BHC	0.90															
gamma-BHC	0.01															
Heptachlor	0.01															
Aldrin	0.01															
Heptachlor epoxide	0.10															
Endosulfan I	0.10															
Dieldrin	0.05															
4, 4'-DDE	0.70															
Endrin	0.70															
Endosulfan II	0.01															
4, 4'-DDD	0.60															
Endosulfan sulfate	0.60															
4, 4'-DDT	0.01															
Methoxychlor	0.01															
Endrin ketone	0.80															
Endrin aldehyde	0.70															
alpha chlordane	0.01															
gamma chlordane	0.01															
Arochlor 1016																
Arochlor 1221																
Arochlor 1232																
Arochlor 1242																
Arochlor 1248																
Arochlor 1254																
Arochlor 1260																

Affected samples:

PBLK33			
PLCS33			
EARY8-9			
EARZ0-7			

Reviewer's Init/Date: MK 10-20-95

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

ORGANIC DATA QUALIFIER DEFINITIONS

For the purpose of defining the flagging nomenclature used in this document, the following code letters and associated definitions are provided:

VALUE - when/if the result of a value is greater than or equal to the Contract Required Quantitation Limit (CRQL).

U Indicates that the compound was analyzed for, but not detected. The sample quantitation limit corrected for dilution and percent moisture is reported.

J Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of a compound where the result is less than the sample quantitation limit, but greater than zero. The flag is also used to indicate a reported result having an associated QC problem.

R Indicates the data are unusable. (NOTE: The analyte may or may not be present.)

N Indicates presumptive evidence of a compound. This flag is only used for a tentatively identified compound, where the identification is based on a mass spectral library search.

P Indicates a pesticide/Aroclor target analyte when there is greater than 25% difference for the detected concentrations between the two GC columns. The lower of the two results is reported.

C Indicates pesticide results that have been confirmed by GC/MS.

B Indicates the analyte is detected in the associated blank as well as in the sample.

E Indicates compounds whose concentrations exceed the calibration range of the instrument.

D Indicates an identified compound in an analysis has been diluted. This flag alerts the data user to any differences between the concentrations reported in the two analysis.

A Indicates tentatively identified compounds that are suspected to be aldol condensation products.

G Indicates the TCLP Matrix Spike Recovery was greater than the upper limit of the analytical method.

L Indicates the TCLP Matrix Spike Recovery was less than the lower limit of the analytical method.

T Indicates the analyte is found in the associated TCLP extraction blank as well as in the sample.

X,Y,Z are reserved for laboratory defined flags.

EPA United States Environmental Protection Agency Contract Laboratory Program

ganic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No.

1. Matrix (Enter in Column A)	2. Preservative (Enter in Column D)
1. Surface Water	1. HCl
2. Ground Water	2. HNO3
3. Leachate	3. NaHSO4
4. Field QC	4. H2SO4
5. Soil/Sediment	5. Ice only
6. Oil (High only)	6. Other (Specify in Column D)
7. Waste (High only)	N. Not preserved
8. Other (Specify in Column A)	

2. Region No.: 5
Sampling Co.: EVSPC
4. Date Shipped:
Carrier: Federal Express
6. Date Received -- Received by: 9/16/98 Margaret Sandoval
Sampler (Name): Steve Nickrick
Airbill Number: 8034819007[illegible]
Laboratory Contract Number: 68-D7-0004
Unit Price: 525 XY/IND
Sampler Signature: [illegible]
3. Purpose*: Lead: SF / [x] PRP / ST / FED; Early Action: CLEM / PA / REM / RI / SI / ESI; Long-Term Action: FS / [x] RD / [x] RA / O&M / NPLD
5. Ship To: PDI Analytical Services, 1650 Lake Front Circle, Suite 1, The Woodlands TX 77380
ATTN: Sachin Kudchadkar
7. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2) Other:	E RAS Analysis: VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K High Phases: Solids	Water-Miscible Liq.	Water-Immis. Liq.
FARY8	2	L	G	1	X				5-132244,5	ACS-GW01-001	9-15-98 1000		SRM			
FARY8	2	L	G	5		X	X		5-132246,7	↓	↓	-	SRM			
FARY9	2	L	G	1	X				5-129681,2	ACS-GW02-001	9-15-98 1115	–	SRM			
FARY9	2	L	G	5		X	X		5-129683,4	↓	↓	–	SRM			
FARZ6	4	L	G	1	X				5-129742,3	ACS-FB01-201	9-15-98 1015	–	SRM			
FARZ6	4	L	G	5		X	X		5-129744,5	↓	↓	–	SRM			
FARZ0	2	L	G	1	X				5-129687,8	ACS-GW03-001	9-15-98 1345	–	SRM			
FARZ0	2	L	G	5		X	X		5-129689,90	↓	↓	–	SRM			
FARZ8	4	L	G	1	X				5-129748,9	ACS-TB01-201	9-15-98 1600	–	SRM			

Shipment for Case Complete? (Y/N): Y
Page 1 of 1
Sample(s) to be Used for Laboratory QC:
Additional Sampler Signatures:
Chain of Custody Seal Number(s): 158575, 158756, [illegible]

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	9-15-98 1615				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact? Y/N/none
		Margaret Sandoval SK	~~9:30~~ 9:30 9/16/98		

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to CLASS

EPA Form 9110-2

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*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

371835

000007

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No.

1. Matrix (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Field QC
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify in Column A)

2. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaHSO4
4. H2SO4
5. Ice only
6. Other (Specify in Column D)
N. Not preserved

2. Region No.: —
Sampling Co.: [illegible]
4. Date Shipped: 9-16-98
Carrier: Federal Express
6. Date Received -- Received by: 9/17/98 SK / MS
Sampler (Name): [illegible]
Airbill Number: 803489900777
Laboratory Contract Number: 68-D7-0004
Unit Price: 525 [illegible]
Sampler Signature: [illegible]
5. Ship To: [illegible] Analytical Services, [illegible] Fort Worth, Suite B, [illegible] Lakewoodlands, TX [illegible]
ATTN: [illegible]
7. Transfer to:
Date Received
Received by
Contract Number
Price

3. Purpose*
Lead: SF, PRP, ST, FED
Early Action: CLEM, PA, REM, RI, SI, ESI
Long-Term Action: FS, RD, RA, O&M, NPLD

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2) Other:	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K High Phases Solids	Water-Miscible Liq.	Water-Immis. Liq.
EAR71	2	L	G	1	X				5-129694,5 . 001	ACS-GW04-001	9-15-98 1445	—	SRM			
EAR71	2	L	G	5		X	X		5-129696,7 . 001	↓	↓	—	SRM			
EAR70	2	L	G	1	X				5-129687,8 . 002	ACS-GW03-001	9-15-98 1345	—	SRM			
EAR70	2	L	G	5		X	X		5-129689,90 . 002	↓	↓	—	SRM			
EAR72	2	L	G	1	X				5-129700,1 . 003	ACS-GW05-001	9-15-98 1550	—	SRM			
EAR72	2	L	G	5		X	X		5-129702,3 . 003	↓	↓	—	SRM			
EAR73	2	L	G	1	X				5-129706-11 . 004	ACS-GW06-001	9-15-98 1818	—	SRM			
EAR73	2	L	G	5		X	X		5-129712-17 . 004	↓	↓	—	SRM			
EAR74	2	L	G	1	X				5-129724,5 . 005	ACS-GW07-001	9-15-98 1846	—	SRM			
EAR74	2	L	G	5		X	X		5-129726,7 . 005	↓	↓	—	SRM			

Shipment for Case Complete? (Y/N): Y
Page 1 of 2
Sample(s) to be Used for Laboratory QC: EAR73
Additional Sampler Signatures:
Chain of Custody Seal Number(s): 158577-9, 158584

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	9-16-98 1615				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	
		[signature]	9/17 1080	Case: 26483 SDG: EAR78	

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to C

EPA Form 9110-2

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIC

371 of 3

EPA United States Environmental Protection Agency
Contract Laboratory Program

anic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No.

1. Matrix (Enter in Column A)	2. Preservative (Enter in Column D)
1. Surface Water	1. HCl
2. Ground Water	2. HNO3
3. Leachate	3. NaHSO4
4. Field QC	4. H2SO4
5. Soil/Sediment	5. Ice only
6. Oil (High only)	6. Other (Specify in Column D)
7. Waste (High only)	N. Not preserved
8. Other (Specify in Column A)	

2. Region No.: [illegible]
Sampling Co.: [illegible]
4. Date Shipped: 9-16-98
Carrier: [illegible]
6. Date Received -- Received by: 9/17/98 SK/MS
Sampler (Name): [illegible]
Airbill Number: 803489900777
Laboratory Contract Number: 68-D7-0004
Unit Price: 525 xx/100
Sampler Signature: [illegible]
3. Purpose*: Lead: [ ] SF [X] PRP [ ] ST [ ] FED; Early Action: [ ] CLEM [ ] PA [ ] REM [ ] RI [ ] SI [ ] ESI; Long-Term Action: [ ] FS [ ] RD [X] RA [ ] O&M [ ] NPLD
5. Ship To: [illegible] 1650 [illegible] The Woodlands, TX 77[illegible]
ATTN: [illegible]
7. Transfer to:
Date Received
Received by
Contract Number
Price

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2) Other:	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K High Phases Solids	Water-Miscible Liq.	Water-Immis. Liq.
EARZ7	2	L	G	1	X				5-129730,1 .006	ACS-GW07-101	9-16-98 1046	-	SRM			
EARZ7	2	L	G	5		X	X		5-129732,3 006	↓	↓	-	SRM			
EARZ9	4	L	G	1	X				5-122301,2 007	ACS-TB02-201	9-16-98 1600	--	SRM			

Shipment for Case Complete? (Y/N)	Page	Sample(s) to be Used for Laboratory QC	Additional Sampler Signatures	Chain of Custody Seal Number(s)
	2 of 2	EARZ3		158577-9, 158584

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	9-16-98 1615				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [signature]	Date / Time 9-17 1000	Remarks Is custody seal intact? Y/N/none Case: 26483 SDG: EARY8	

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to CLASS

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*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

A21-012-16 REV

371834

600000

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No.

1. Matrix (Enter in Column A)
   1. Surface Water
   2. Ground Water
   3. Leachate
   4. Field QC
   5. Soil/Sediment
   6. Oil (High only)
   7. Waste (High only)
   8. Other (Specify in Column A)

2. Preservative (Enter in Column D)
   1. HCl
   2. HNO3
   3. NaHSO4
   4. H2SO4
   5. Ice only
   6. Other (Specify in Column D)
   N. Not preserved

2. Region No.: 5
Sampling Co.: BVSPC
4. Date Shipped: 1-17-98
Carrier: Federal Express
6. Date Received -- Received by: 9/18/98 SK / MS
Sampler (Name): Steve Mikurka
Airbill Number: 8034 [illegible]
Laboratory Contract Number: 68-D7-0004
Unit Price: 525 XX
Sampler Signature: [illegible]
5. Ship To: PDC Analytical Services, 1800 Atwater Circle, The Woodlands, TX 77380
ATTN: [illegible]
7. Transfer to:
Date Received
Received by
Contract Number
Price

3. Purpose*
Lead: [ ] SF [X] PRP [ ] ST [ ] FED
Early Action: [ ] CLEM [ ] PA [ ] REM [ ] RI [ ] SI [ ] ESI
Long-Term Action: [ ] FS [X] RD [X] RA [ ] O&M [ ] NPLD

CLP Sample Numbers (from labels)	A Matrix (from Box 1) / Other	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2) / Other	E RAS Analysis: VOA	BNA	Pest/PCB	High only / ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K High Phases: Solids	Water-Miscible Liq.	Water-Immis. Liq.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	X				[illegible]	[illegible]	[illegible]		[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		X	X		[illegible]	↓	[illegible]		[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	X				[illegible]	[illegible]	[illegible]		[illegible]			

Shipment for Case Complete? (Y/N)	Page	Sample(s) to be Used for Laboratory QC	Additional Sampler Signatures	Chain of Custody Seal Number(s)
	1 of 1			[illegible]

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[illegible]	9-17-98 1000				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	
		[illegible]	9-18-98 1002	Case: 26483 SDG: EAR78	

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to CLAS

EPA Form 9110-2

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

010400

3719

ONMENTAL PROTECTION AGENCY
(of Enforcement

ION 5
77 West ackson Boulevard
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: 98B06

PROJECT NAME: American Chemical Service

SAMPLERS: (Print Name and Sign) Steve Mrkvicka

Activity Code:

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Total Metals	Cyanide					CRL No.	TAG NUMBERS / Tag No.
S01	9-15	1000		X	ACS-GW01-001	2	1	1					98ZB06S01	5-132248,9
S02	9-15	1115		X	ACS-GW02-001	2	1	1					98ZB06S02	5-129685,6
R01	9-15	1015		X	ACS-EB01-201	2	1	1					98ZB06R01	5-129746,7
S03	9-15	1345		X	ACS-GW03-001	2	1	1					98ZB06S03	5-129692,3
S04	9-15	1445		X	ACS-GW04-001	2	1	1					98ZB06S04	5-129698,9
S05	9-15	1550		X	ACS-GW05-001	2	1	1					98ZB06S05	5-129704,5
S06	9-15	1818		X	ACS-GW06-001	6	3	3					98ZB06S06 MS/MSD	5-129718-23
S07	9-15	1846		X	ACS-GW07-001	2	1	1					98ZB06S07	5-129728,9
D01	9-15	1846		X	ACS-GW07-101	2	1	1					98ZB06D01	5-129734,5
S08	9-17	0935		X	ACS-GW08-001	2	1	1					98ZB06S08	5-129740,1

Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	9-17-98 1020	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) / Date / Time
		Lynette Burnett 9/17/98 1:11

Ship To:

ATTN:

Airbill Number

Chain of Custody Seal Numbers

Distribution: White - Accompanies Shipment; Pink - Coordinator Field Files; Yellow - Laboratory File

Printed on Recycled Paper/Printed with Soy Based Ink

5-60579

PDP ANALYTICAL SERVICES

1680 Lake Front Circle, Suite B • The Woodlands, TX 77380 • Phone (281)363-2233

Contract No. 68-D7-0004	Case No. 26483	SDG No. EARY8

SDG NARRATIVE

SAMPLE RECEIPT :

09/16/98 - Received one cooler:

Cooler 1 (Temperature:4^{0}C) (COC #371885) contained the following:

EARY8-	2-40 ml Vials and 2-2L Amber
EARY9-	2-40 ml Vials and 2-2L Amber
EARZ6-	2-40 ml Vials and 2-2L Amber
EARZ8-	2-40 ml Vials

No sample containers were received for sample" EARZ0". The SMO was notified. SMO notified PDP that sample containers were not included in this shipment and would be shipped at a later date.

09/17/98 - Received two coolers:

Cooler 1 and Cooler 2 (Temperature:4^{0}C) (COC #371883/ 371884) contained the following:

EARZ1-	2-40 ml Vials and 2-2L Amber
EARZ0-	2-40 ml Vials and 2-2L Amber
EARZ2-	2-40 ml Vials and 2-2L Amber
EARZ3-	2-40 ml Vials and 2-2L Amber
EARZ4-	2-40 ml Vials and 1-2L Amber
EARZ7-	2-40 ml Vials and 2-2L Amber
EARZ9-	2-40 ml Vials

One 40 ml vial for sample "EARZ4" was received broken. The SMO was notified. PDP was instructed to proceed with the analysis.

09/17/98 - Received two coolers:

Cooler 1 (Temperature:4^{0}C) (COC #371886) contained the following:

EARZ5-	2-40 ml Vials and 2-2L Amber
EWT61-	2-40 ml Vials

PDP ANALYTICAL SERVICES

1680 Lake Front Circle, Suite B • The Woodlands, TX 77380 • Phone (281)363-2233

Contract No. 68-D7-0004	Case No. 26483	SDG No. EARY8

SDG NARRATIVE

VOLATILES:

All samples were analyzed on a HP5972 GC/MS using a 60 meters long DB-624 column having a 0.53mm ID and 3um film thickness. The trap used was a OV-1/Tenax/Silica Gel (Tekmar #6. Cat 14-1755-003) . A 20 mL purge volume was used for all samples, blanks and standards. The concentrations of the standards and spikes were maintained at the levels required by the Statement of Work (SOW).

The following field samples are analyzed for volatiles in this SDG. The pH of the samples is listed against them.

EARY8	2.0	EARY9	2.0	EARZ0	2.0
EARZ1	2.0	EARZ2	2.0	EARZ3	2.0
EARZ4	2.0	EARZ5	2.0	EARZ6	2.0
EARZ7	2.0	EARZ8	2.0	EARZ9	2.0
EWT61	2.0				

Manual integration's were performed for the following samples for the compounds listed against them.

VSTD00101 - Chloromethane, Vinyl chloride, Bromomethane, Acetone.
VSTD00201 - Vinyl chloride, Chloroethane, Bromomethane, Carbon disulfide..
VSTD00501 - Bromomethane, Chloroethane, Vinyl Chloride, Acetone.
VSTD01001- Vinyl chloride, Bromomethane, Chloromethane, Acetone.
VSTD02501 - Chloromethane, Vinyl chloride, Chloroethane.
VSTD00504 - 2-Butanone.
VSTD00505 - Bromomethane, Chloroethane, Vinyl Chloride, 2-Butanone
VSTD00506 - Bromomethane, Vinyl Chloride, Acetone
VLCS02- Vinyl Chloride.
VLCS03- Vinyl Chloride.
VLCS04- Vinyl Chloride.
VLCS05- Vinyl Chloride.

These manual integration's were necessary because the software failed to accurately integrate the entire peak. In all the above instances, the quantitation reports are flagged with "m". A hard copy printout of the manual integration's along with the scan ranges and initials of the operator is included in the data package .

Samples "EARY8" , "EARY9", and "EARZ5" had high concentration of target compounds. Samples "EARY8", "EARY9", and "EARZ5" required two dilutions for all target compounds to be within the calibration range.

PDP ANALYTICAL SERVICES

1680 Lake Front Circle, Suite B • The Woodlands, TX 77380 • Phone (281)363-2233

Contract No. 68-D7-0004	Case No. 26483	SDG No. EARY8

SDG NARRATIVE

SEMIVOLATILES:

The following samples were extracted using continuous liquid/liquid extraction method on 09/17/98.

EARY8, EARY9, EARZ6, EARZ1, EARZ0, EARZ2, EARZ3, EARZ4, EARZ7

No problems were encountered.

The following samples were extracted using continuous liquid/liquid extraction method on 09/18/98.

EARZ5

No problems were encountered.

All samples were analyzed on a HP 5971A GC/MS using a 30 meters long and 0.25mm ID DB-5 column . A 1uL injection was used.

Manual integration's were performed for the following samples for the compounds listed against them.

SSTD00586- Indeno (1,2,3-cd) pyrene.
SSTD01086- Indeno (1,2,3-cd) pyrene
SSTD02086- 2,4,6-Trichlorophenol, Benzo(k) fluoranthene.
SSTD05086- Indeno (1,2,3-cd) pyrene.
SSTD08086-. Nitrobenzene, Isophorone, 2,6-Dinitrotoluene, Indeno (1,2,3-cd) pyrene.
SSTD02087- Indeno (1,2,3-cd) pyrene.
SSTD02088- Indeno (1,2,3-cd) pyrene.

Manual integration's was necessary on some calibration standards and sample because the software either failed to accurately integrate the entire peak or picked up the wrong peak.. In all the above instances, the quantitation reports are flagged with "m". A hard copy printout of the manual integration's along with the scan ranges and initials of the operator is included in the data package .

PESTICIDES:

The following samples were extracted using separatory funnel extraction method on 09/18/98

EARY8, EARY9, EARZ0, EARZ1, EARZ2, EARZ3, EARZ4, EARZ5, EARZ6, EARZ7

No problems were encountered during extraction.

PDP ANALYTICAL SERVICES

1680 Lake Front Circle, Suite B • The Woodlands, TX 77380 • Phone (281)363-2233

Contract No. 68-D7-0004	Case No. 26483	SDG No. EARY8

SDG NARRATIVE

All samples were analyzed on a HP 5890 GC using two columns:
1) DB608: 30m*0.53mmID*1um film thickness (J&W).
2) RTX1701: 30m*0.53mmID*.85um film thickness (RESTEK).

A 2uL injection was used.

Manual integration's were performed for the following compounds for the samples listed against them.

Column DB-608

Endosulfan sulfate-RESC11
Methoxychlor- PEM21, INDAM11
Endrin- INDAL11, INDAM11,
4,4'-DDD- INDAL11, INDAM11
4,4'-DDT- INDAL11, INDAM11
DCB- INDBL11, AR122112, AR123212, TOXAPH12, FLOL10785, EARY8, EARY9, EARZ5
TCMX- EARY8, EARZ5

Column DB-1701

Methoxychlor- RESC12, PEM12, PEM22, INDAL12, INDAM12, INDAM22, INDBM22, FLOL10785
Endrin Ketone- RESC12,
DCB- INDBL12, EARY8, EARY9, EARZ5
Endrin aldehyde- INDBL12, INDBM12
Endosulfan sulfate-INDBL12
Endrin ketone- INDBL12, INDBM12
TCMX - EARY8, EARZ5

These manual integration's were necessary because the software either failed to accurately integrate the entire peak or picked up the wrong peak.. In all the above instances, the quantitation reports are flagged with "m". A hard copy printout of the manual integration's and initials of the operator is included in the data package .

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature:

Redd Pakanati / Lab Mgr.
Signature and Title

10/1/98
Date of Signature

2LCA

LOW CONC. WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

	EPA SAMPLE NO.	BFB %REC #	OTHER	TOT OUT
01	VBLK02	97		0
02	VLCS02	87		0
03	EARY8	91		0
04	VBLK03	94		0
05	VLCS03	93		0
06	EARY9	96		0
07	EARZ6	96		0
08	EARY8DL	94		0
09	VBLK04	102		0
10	VLCS04	102		0
11	EARZ1	100		0
12	EARZ0	100		0
13	EARZ2	107		0
14	EARZ3	105		0
15	EARZ4	104		0
16	EARZ7	108		0
17	EARZ9	104		0
18	EARZ5	92		0
19	VBLK05	104		0
20	VLCS05	95		0
21	EARY8DL2	95		0
22	EARY9DL2	90		0
23	EARZ8	95		0
24	EARZ5DL2	100		0
25	EWT61	104		0
26	EARY9DL	96		0
27	VIBLK01	96		0
28	EARZ5DL	98		0
29	VHBLK01	95		0
30				

	QC LIMITS %REC
BFB = Bromofluorobenzene	(80-120)

Column to be used to flag recovery values
* Values outside of contract required QC limits

Pages 1 of 1

3LCA

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

VLCS02

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVLCS98I16 LCS Lot No.: 60

Lab File ID: E6284 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

LCS Aliquot: 10 (uL)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	%REC #	QC LIMITS
Vinyl chloride	100	104	104	60-140
1,2-Dichloroethane	100	101	101	60-140
Carbon tetrachloride	100	100	100	60-140
1,2-Dichloropropane	100	107	107	60-140
Trichloroethene	100	104	104	60-140
1,1,2-Trichloroethane	100	107	107	60-140
Benzene	100	104	104	60-140
cis-1,3-Dichloropropene	100	98	98	60-140
Bromoform	100	112	112	60-140
Tetrachloroethene	100	99	99	60-140
1,2-Dibromoethane	100	104	104	60-140
1,4-Dichlorobenzene	100	97	97	60-140

Column to be used to flag LCS recovery with an asterisk.

* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 12 total.

COMMENTS: _____

3LCA

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

VLCS03

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVLCS98I17 LCS Lot No.: 60

Lab File ID: E6295 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

LCS Aliquot: 10 (uL)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	%REC #	QC LIMITS
Vinyl chloride	100	112	112	60-140
1,2-Dichloroethane	100	107	107	60-140
Carbon tetrachloride	100	105	105	60-140
1,2-Dichloropropane	100	109	109	60-140
Trichloroethene	100	107	107	60-140
1,1,2-Trichloroethane	100	108	108	60-140
Benzene	100	100	100	60-140
cis-1,3-Dichloropropene	100	100	100	60-140
Bromoform	100	110	110	60-140
Tetrachloroethene	100	105	105	60-140
1,2-Dibromoethane	100	108	108	60-140
1,4-Dichlorobenzene	100	103	103	60-140

Column to be used to flag LCS recovery with an asterisk.

* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 12 total.

COMMENTS: _____

3LCA

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

VLCS04

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVLCS98I18 LCS Lot No.: 60

Lab File ID: E6308 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

LCS Aliquot: 10 (uL)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	%REC #	QC LIMITS
Vinyl chloride	100	115	115	60-140
1,2-Dichloroethane	100	104	104	60-140
Carbon tetrachloride	100	114	114	60-140
1,2-Dichloropropane	100	111	111	60-140
Trichloroethene	100	112	112	60-140
1,1,2-Trichloroethane	100	107	107	60-140
Benzene	100	109	109	60-140
cis-1,3-Dichloropropene	100	100	100	60-140
Bromoform	100	111	111	60-140
Tetrachloroethene	100	114	114	60-140
1,2-Dibromoethane	100	104	104	60-140
1,4-Dichlorobenzene	100	106	106	60-140

Column to be used to flag LCS recovery with an asterisk.

* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 12 total.

COMMENTS: _____

3LCA

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

VLCS05

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVLCS98I21 LCS Lot No.: 60

Lab File ID: E6348 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

LCS Aliquot: 10 (uL)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	%REC #	QC LIMITS
Vinyl chloride	100	107	107	60-140
1,2-Dichloroethane	100	105	105	60-140
Carbon tetrachloride	100	99	99	60-140
1,2-Dichloropropane	100	109	109	60-140
Trichloroethene	100	105	105	60-140
1,1,2-Trichloroethane	100	107	107	60-140
Benzene	100	103	103	60-140
cis-1,3-Dichloropropene	100	99	99	60-140
Bromoform	100	106	106	60-140
Tetrachloroethene	100	107	107	60-140
1,2-Dibromoethane	100	104	104	60-140
1,4-Dichlorobenzene	100	102	102	60-140

Column to be used to flag LCS recovery with an asterisk.

* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 12 total.

COMMENTS: _____

4LCA

LOW CONC. WATER VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I16 Date Analyzed: 09/18/98

Lab File ID: E6283 Time Analyzed: 0107

Instrument ID: E-HP5972

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VLCS02	EVLCS98I16	E6284	0204
02	EARY8	4913.002	E6291	0837
03				
04				
05				
06				
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COMMENTS: _____

4LCA

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE METHOD BLANK SUMMARY

VBLK03

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I17 Date Analyzed: 09/18/98

Lab File ID: E6294 Time Analyzed: 1219

Instrument ID: E-HP5972

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VLCS03	EVLCS98I17	E6295	1314
02	EARY9	4913.003	E6299	1707
03	EARZ6	4913.004	E6301	1916
04	EARY8DL	4913.002DL	E6302	2012
05				
06				
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COMMENTS: _____

4LCA

LOW CONC. WATER VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK04

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I18 Date Analyzed: 09/19/98

Lab File ID: E6307 Time Analyzed: 0015

Instrument ID: E-HP5972

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VLCS04	EVLCS98I18	E6308	0112
02	EARZ1	4915.001	E6309	0210
03	EARZ0	4915.002	E6310	0307
04	EARZ2	4915.003	E6311	0405
05	EARZ3	4915.004	E6312	0502
06	EARZ4	4915.005	E6313	0559
07	EARZ7	4915.006	E6314	0657
08	EARZ9	4915.007	E6315	0754
09	EARZ5	4917.001	E6316	0851
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COMMENTS: _____

4LCA

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE METHOD BLANK SUMMARY

VBLK05

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I21 Date Analyzed: 09/22/98

Lab File ID: E6347 Time Analyzed: 1611

Instrument ID: E-HP5972

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VLCS05	EVLCS98I21	E6348	1709
02	EARY8DL2	4913.002DL2	E6349	1808
03	EARY9DL2	4913.003DL2	E6350	1907
04	EARZ8	4913.005	E6351	2006
05	EARZ5DL2	4917.001DL2	E6352	2106
06	EWT61	4917.002	E6353	2206
07	EARY9DL	4913.003DL	E6354	2306
08	VIBLK01	VIBLK01	E6355	0008
09	EARZ5DL	4917.001DL	E6356	0107
10	VHBLK01	4913.001	E6357	0207
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COMMENTS: _____

1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I16 Date Received: _____

Lab File ID: E6283 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK02

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I16 Date Received: _____

Lab File ID: E6283 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK03

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I17 Date Received: _____

Lab File ID: E6294 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK03

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I17 Date Received: _____

Lab File ID: E6294 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK04

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I18 Date Received: _____

Lab File ID: E6307 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK04

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I18 Date Received: _____

Lab File ID: E6307 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK05

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I21 Date Received: _____

Lab File ID: E6347 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK05

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVBLK98I21 Date Received: _____

Lab File ID: E6347 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK01

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.001 Date Received: _____

Lab File ID: E6357 Date Analyzed: 09/23/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VHBLK01

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.001 Date Received: _____

Lab File ID: E6357 Date Analyzed: 09/23/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VIBLK01

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: VIBLK01 Date Received: _____

Lab File ID: E6355 Date Analyzed: 09/23/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VIBLK01

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: VIBLK01 Date Received: _____

Lab File ID: E6355 Date Analyzed: 09/23/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VLCS02

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVLCS98I16 Date Received: _____

Lab File ID: E6284 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	5	
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	5	
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	5	
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	5	
10061-01-5	cis-1,3-Dichloropropene	5	
79-01-6	Trichloroethene	5	
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	5	
71-43-2	Benzene	5	
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	6	
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	5	
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	5	
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	5	
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VLCS03

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVLCS98I17 Date Received: _____

Lab File ID: E6295 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	6	
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	5	
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	5	
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	5	
10061-01-5	cis-1,3-Dichloropropene	5	
79-01-6	Trichloroethene	5	
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	5	
71-43-2	Benzene	5	
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	5	
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	5	
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	5	
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	5	
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VLCS04

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVLCS98I18 Date Received: _____

Lab File ID: E6308 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	6	
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	5	
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	6	
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	6	
10061-01-5	cis-1,3-Dichloropropene	5	
79-01-6	Trichloroethene	6	
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	5	
71-43-2	Benzene	5	
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	6	
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	6	
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	5	
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	5	
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VLCS05

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: EVLCS98I21 Date Received: _____

Lab File ID: E6348 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	5	
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	5	
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	5	
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	5	
10061-01-5	cis-1,3-Dichloropropene	5	
79-01-6	Trichloroethene	5	
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	5	
71-43-2	Benzene	5	
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	5	
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	5	
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	5	
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	5	
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARY8

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.002 Date Received: 09/16/98 MW48

Lab File ID: E6291 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	720	E
75-09-2	Methylene chloride	1	J
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	4	
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1100	E
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	2	J
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	2	
108-90-7	Chlorobenzene	1	
100-41-4	Ethylbenzene	1	
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARY8

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

MW48

Lab Sample ID: 4913.002 Date Received: 09/16/98

Lab File ID: E6291 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 6

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
1. 115-07-1	Propene	4.36	7	JN
2. 628-16-0	1,5-Hexadiyne	19.05	910	JN
3. 352-93-2	Diethyl sulfide	20.27	8	JN
4. 4740-00-5	Thiophene, tetrahydro-3-met	26.66	2	JN
5.	Unknown	28.90	2	J
6. 873-94-9	Cyclohexanone, 3,3,5-trimet	32.56	15	JN
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARY8DL

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.002DL Date Received: 09/16/98

MW48

Lab File ID: E6302 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 80.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	80	U
74-83-9	Bromomethane	80	U
75-01-4	Vinyl chloride	80	U
75-00-3	Chloroethane	810	D
75-09-2	Methylene chloride	160	U
67-64-1	Acetone	400	U
75-15-0	Carbon disulfide	80	U
75-35-4	1,1-Dichloroethene	80	U
75-34-3	1,1-Dichloroethane	80	U
156-59-2	cis-1,2-Dichloroethene	80	U
156-60-5	trans-1,2-Dichloroethene	80	U
67-66-3	Chloroform	80	U
107-06-2	1,2-Dichloroethane	80	U
78-93-3	2-Butanone	400	U
74-97-5	Bromochloromethane	80	U
71-55-6	1,1,1-Trichloroethane	80	U
56-23-5	Carbon tetrachloride	80	U
75-27-4	Bromodichloromethane	80	U
78-87-5	1,2-Dichloropropane	80	U
10061-01-5	cis-1,3-Dichloropropene	80	U
79-01-6	Trichloroethene	80	U
124-48-1	Dibromochloromethane	80	U
79-00-5	1,1,2-Trichloroethane	80	U
71-43-2	Benzene	5100	ED
10061-02-6	trans-1,3-Dichloropropene	80	U
75-25-2	Bromoform	80	U
108-10-1	4-Methyl-2-pentanone	400	U
591-78-6	2-Hexanone	400	U
127-18-4	Tetrachloroethene	80	U
79-34-5	1,1,2,2-Tetrachloroethane	80	U
106-93-4	1,2-Dibromoethane	80	U
108-88-3	Toluene	80	U
108-90-7	Chlorobenzene	80	U
100-41-4	Ethylbenzene	80	U
100-42-5	Styrene	80	U
1330-20-7	Xylenes (total)	80	U
541-73-1	1,3-Dichlorobenzene	80	U
106-46-7	1,4-Dichlorobenzene	80	U
95-50-1	1,2-Dichlorobenzene	80	U
96-12-8	1,2-Dibromo-3-chloropropane	80	U
120-82-1	1,2,4-Trichlorobenzene	80	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARY8DL

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.002DL Date Received: 09/16/98

MW 98

Lab File ID: E6302 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 80.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARY8DL2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.002DL2 Date Received: 09/16/98

Lab File ID: E6349 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 400.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	400	U
74-83-9	Bromomethane	400	U
75-01-4	Vinyl chloride	400	U
75-00-3	Chloroethane	820	D
75-09-2	Methylene chloride	800	U
67-64-1	Acetone	2000	U
75-15-0	Carbon disulfide	400	U
75-35-4	1,1-Dichloroethene	400	U
75-34-3	1,1-Dichloroethane	400	U
156-59-2	cis-1,2-Dichloroethene	400	U
156-60-5	trans-1,2-Dichloroethene	400	U
67-66-3	Chloroform	400	U
107-06-2	1,2-Dichloroethane	400	U
78-93-3	2-Butanone	2000	U
74-97-5	Bromochloromethane	400	U
71-55-6	1,1,1-Trichloroethane	400	U
56-23-5	Carbon tetrachloride	400	U
75-27-4	Bromodichloromethane	400	U
78-87-5	1,2-Dichloropropane	400	U
10061-01-5	cis-1,3-Dichloropropene	400	U
79-01-6	Trichloroethene	400	U
124-48-1	Dibromochloromethane	400	U
79-00-5	1,1,2-Trichloroethane	400	U
71-43-2	Benzene	5200	D
10061-02-6	trans-1,3-Dichloropropene	400	U
75-25-2	Bromoform	400	U
108-10-1	4-Methyl-2-pentanone	2000	U
591-78-6	2-Hexanone	2000	U
127-18-4	Tetrachloroethene	400	U
79-34-5	1,1,2,2-Tetrachloroethane	400	U
106-93-4	1,2-Dibromoethane	400	U
108-88-3	Toluene	400	U
108-90-7	Chlorobenzene	400	U
100-41-4	Ethylbenzene	400	U
100-42-5	Styrene	400	U
1330-20-7	Xylenes (total)	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
96-12-8	1,2-Dibromo-3-chloropropane	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARY8DL2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.002DL2 Date Received: 09/16/98 MW48

Lab File ID: E6349 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 400.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARY9

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.003 Date Received: 09/16/98

Lab File ID: E6299 Date Analyzed: 09/18/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

MW49

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	510	E
75-09-2	Methylene chloride	2	
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1300	E
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	2	
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	0.6	J
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARY9

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.003 Date Received: 09/16/98

Lab File ID: E6299 Date Analyzed: 09/18/98 MW49

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 8

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
1. 115-07-1	Propene	4.39	11	JN
2. 75-08-1	Ethanethiol	11.72	18	JN
3.	Unknown	19.06	900	J
4. 352-93-2	Diethyl sulfide	20.29	9	JN
5. 110-81-6	Disulfide, diethyl	28.25	66	JN
6. 106-68-3	3-Octanone	28.91	2	JN
7. 873-94-9	Cyclohexanone, 3,3,5-trimet	32.57	6	JN
8.	Unknown	35.26	8	J
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARY9DL

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.003DL Date Received: 09/16/98

Lab File ID: E6354 Date Analyzed: 09/22/98

MW 49

Purge Volume: 20 (mL) Dilution Factor: 50.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	50	U
74-83-9	Bromomethane	50	U
75-01-4	Vinyl chloride	50	U
75-00-3	Chloroethane	620	D
75-09-2	Methylene chloride	100	U
67-64-1	Acetone	250	U
75-15-0	Carbon disulfide	50	U
75-35-4	1,1-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
156-59-2	cis-1,2-Dichloroethene	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	250	U
74-97-5	Bromochloromethane	50	U
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon tetrachloride	50	U
75-27-4	Bromodichloromethane	50	U
78-87-5	1,2-Dichloropropane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
79-01-6	Trichloroethene	50	U
124-48-1	Dibromochloromethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
71-43-2	Benzene	9000	ED
10061-02-6	trans-1,3-Dichloropropene	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-pentanone	250	U
591-78-6	2-Hexanone	250	U
127-18-4	Tetrachloroethene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
106-93-4	1,2-Dibromoethane	50	U
108-88-3	Toluene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
100-42-5	Styrene	50	U
1330-20-7	Xylenes (total)	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARY9DL

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.003DL Date Received: 09/16/98

Lab File ID: E6354 Date Analyzed: 09/22/98 MW49

Purge Volume: 20 (mL) Dilution Factor: 50.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARY9DL2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.003DL2 Date Received: 09/16/98

Lab File ID: E6350 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 800.0

MW49

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	800	U
74-83-9	Bromomethane	800	U
75-01-4	Vinyl chloride	800	U
75-00-3	Chloroethane	510	JD
75-09-2	Methylene chloride	1600	U
67-64-1	Acetone	4000	U
75-15-0	Carbon disulfide	800	U
75-35-4	1,1-Dichloroethene	800	U
75-34-3	1,1-Dichloroethane	800	U
156-59-2	cis-1,2-Dichloroethene	800	U
156-60-5	trans-1,2-Dichloroethene	800	U
67-66-3	Chloroform	800	U
107-06-2	1,2-Dichloroethane	800	U
78-93-3	2-Butanone	4000	U
74-97-5	Bromochloromethane	800	U
71-55-6	1,1,1-Trichloroethane	800	U
56-23-5	Carbon tetrachloride	800	U
75-27-4	Bromodichloromethane	800	U
78-87-5	1,2-Dichloropropane	800	U
10061-01-5	cis-1,3-Dichloropropene	800	U
79-01-6	Trichloroethene	800	U
124-48-1	Dibromochloromethane	800	U
79-00-5	1,1,2-Trichloroethane	800	U
71-43-2	Benzene	7600	D
10061-02-6	trans-1,3-Dichloropropene	800	U
75-25-2	Bromoform	800	U
108-10-1	4-Methyl-2-pentanone	4000	U
591-78-6	2-Hexanone	4000	U
127-18-4	Tetrachloroethene	800	U
79-34-5	1,1,2,2-Tetrachloroethane	800	U
106-93-4	1,2-Dibromoethane	800	U
108-88-3	Toluene	800	U
108-90-7	Chlorobenzene	800	U
100-41-4	Ethylbenzene	800	U
100-42-5	Styrene	800	U
1330-20-7	Xylenes (total)	800	U
541-73-1	1,3-Dichlorobenzene	800	U
106-46-7	1,4-Dichlorobenzene	800	U
95-50-1	1,2-Dichlorobenzene	800	U
96-12-8	1,2-Dibromo-3-chloropropane	800	U
120-82-1	1,2,4-Trichlorobenzene	800	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARY9DL2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.003DL2 Date Received: 09/16/98

Lab File ID: E6350 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 800.0 MW 49

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARZ0

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.002 Date Received: 09/17/98

Lab File ID: E6310 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

1033 Radar Rd.

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ0

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.002 Date Received: 09/17/98 1033

Lab File ID: E6310 Date Analyzed: 09/19/98 reder Rd.

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARZ1

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.001 Date Received: 09/17/98

Lab File ID: E6309 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

1029 Redo Rd

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ1

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.001 Date Received: 09/17/98

Lab File ID: E6309 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

1029 Reder Rd.

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
1.				
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARZ2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.003 Date Received: 09/17/98

Lab File ID: E6311 Date Analyzed: 09/19/98

1002 Reder Rd.

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.003 Date Received: 09/17/98

Lab File ID: E6311 Date Analyzed: 09/19/98 1002

Purge Volume: 20 (mL) Dilution Factor: 1.0 Reder Rd

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARZ3

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.004 Date Received: 09/17/98

Lab File ID: E6312 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0 1009 Reder

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ3

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.004 Date Received: 09/17/98

Lab File ID: E6312 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

1009 Reder Rd.

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ4

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.005 Date Received: 09/17/98

Lab File ID: E6313 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

1007 Peder Rd.

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

EARZ4

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.005 Date Received: 09/17/98

Lab File ID: E6313 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

1007 Reder Rd.

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARZ5

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4917.001 Date Received: 09/18/98

Lab File ID: E6316 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0 MW9R

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	4	
75-00-3	Chloroethane	1900	E
75-09-2	Methylene chloride	8	
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	0.8	J
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	120	E
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EARZ5

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4917.001 Date Received: 09/18/98

Lab File ID: E6316 Date Analyzed: 09/19/98 MW9R

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 3

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
1.	Unknown	12.80	8	J
2. 108-20-3	Diisopropyl ether	15.93	5	JN
3.	Unknown	19.36	9	J
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARZ5DL

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4917.001DL Date Received: 09/18/98

Lab File ID: E6356 Date Analyzed: 09/23/98

Purge Volume: 20 (mL) Dilution Factor: 10.0

MW9R

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	1700	ED
75-09-2	Methylene chloride	8	JD
67-64-1	Acetone	50	U
75-15-0	Carbon disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	50	U
74-97-5	Bromochloromethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	100	D
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylenes (total)	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ5DL

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4917.001DL Date Received: 09/18/98

Lab File ID: E6356 Date Analyzed: 09/23/98

Purge Volume: 20 (mL) Dilution Factor: 10.0

MW9R

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARZ5DL2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4917.001DL2 Date Received: 09/18/98

Lab File ID: E6352 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 200.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

MW9R

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	200	U
74-83-9	Bromomethane	200	U
75-01-4	Vinyl chloride	200	U
75-00-3	Chloroethane	1900	D
75-09-2	Methylene chloride	400	U
67-64-1	Acetone	1000	U
75-15-0	Carbon disulfide	200	U
75-35-4	1,1-Dichloroethene	200	U
75-34-3	1,1-Dichloroethane	200	U
156-59-2	cis-1,2-Dichloroethene	200	U
156-60-5	trans-1,2-Dichloroethene	200	U
67-66-3	Chloroform	200	U
107-06-2	1,2-Dichloroethane	200	U
78-93-3	2-Butanone	1000	U
74-97-5	Bromochloromethane	200	U
71-55-6	1,1,1-Trichloroethane	200	U
56-23-5	Carbon tetrachloride	200	U
75-27-4	Bromodichloromethane	200	U
78-87-5	1,2-Dichloropropane	200	U
10061-01-5	cis-1,3-Dichloropropene	200	U
79-01-6	Trichloroethene	200	U
124-48-1	Dibromochloromethane	200	U
79-00-5	1,1,2-Trichloroethane	200	U
71-43-2	Benzene	140	JD
10061-02-6	trans-1,3-Dichloropropene	200	U
75-25-2	Bromoform	200	U
108-10-1	4-Methyl-2-pentanone	1000	U
591-78-6	2-Hexanone	1000	U
127-18-4	Tetrachloroethene	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
106-93-4	1,2-Dibromoethane	200	U
108-88-3	Toluene	200	U
108-90-7	Chlorobenzene	200	U
100-41-4	Ethylbenzene	200	U
100-42-5	Styrene	200	U
1330-20-7	Xylenes (total)	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
96-12-8	1,2-Dibromo-3-chloropropane	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ5DL2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4917.001DL2 Date Received: 09/18/98 9/24/98

Lab File ID: E6352 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 200.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m) MW9R

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARZ6

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.004 Date Received: 09/16/98

Lab File ID: E6301 Date Analyzed: 09/18/98

EB01

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	10 ~~5~~	~~JU~~
75-15-0	Carbon disulfide	SW 9/24/98 1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	2	
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	0.9	J
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	0.7	J
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ6

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.004 Date Received: 09/16/98

Lab File ID: E6301 Date Analyzed: 09/18/98 EB01

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARZ7

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.006 Date Received: 09/17/98

Lab File ID: E6314 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

1007 Cedar Rd. duplicate

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EARZ7

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.006 Date Received: 09/17/98

Lab File ID: E6314 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

1007 Reter Rd duplicate

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARZ8

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.005 Date Received: 09/16/98

Lab File ID: E6351 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	0.8	J
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	0.6	J
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ8

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.005 Date Received: 09/16/98

Lab File ID: E6351 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 1.0 TB01

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EARZ9

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.007 Date Received: 09/17/98

Lab File ID: E6315 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

TB02

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	0.8	J
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	0.6	J
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ9

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.007 Date Received: 09/17/98

Lab File ID: E6315 Date Analyzed: 09/19/98

Purge Volume: 20 (mL) Dilution Factor: 1.0 TB02

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EWT61

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4917.002 Date Received: 09/18/98

Lab File ID: E6353 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

TB03

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	0.9	J
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	0.9	J
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO.

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EWT61

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4917.002 Date Received: 09/18/98

Lab File ID: E6353 Date Analyzed: 09/22/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

TB03

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (ug/L)	Q
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3LCC

LOW CONC. WATER PESTICIDE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

PLCS33

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No: 26483 SAS No: _____ SDG No: EARY8

Lab Sample ID: PESL139 LCS Lot No: _____

LCS Aliquot 1000 (uL) Date Extracted: 9/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 9/25/98

Injecton Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N

Instrument ID (1): E-HP5890A GC Column (1): DB-608 ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	% REC #	QC LIMITS
gamma-BHC (Lindane)	100	80	80	50-120
Heptachlor Epoxide	100	88	88	50-150
Dieldrin	200	182	91	30-130
4,4'-DDE	200	173	86	50-150
Endrin	200	192	96	50-120
Endosulfan sulfate	200	160	80	50-120
gamma-Chlordane	100	88	88	30-130

Instrument ID (2): E-HP5890B GC Column (2): ~~DB-1701~~ RTX-1701 AP 9/23/98 ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	% REC #	QC LIMITS
gamma-BHC (Lindane)	100	81	81	50-120
Heptachlor Epoxide	100	83	83	50-150
Dieldrin	200	199	100	30-130
4,4'-DDE	200	170	85	50-150
Endrin	200	209	104	50-120
Endosulfan sulfate	200	163	82	50-120
gamma-Chlordane	100	85	85	30-130

Column to be used to flag recovery values with an asterisk.
* Values outside of QC limits.
LCS Recovery: 0 outside limits out of 14 total.

COMMENTS: _____

EPA SAMPLE NO.

LOW CONC. WATER PESTICIDE METHOD BLANK SUMMARY

PBLK33

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Date Extracted: 09/18/98 Lab Sample ID: PESB154

Date Analyzed (1): 09/25/98 Date Analyzed (2): 09/25/98

Time Analyzed (1): 0322 Time Analyzed (2): 0350

Instrument ID (1): E-HP5890A Instrument ID (2): E-HP5890B

GC Column (1): DB-608 ID: 0.53 (mm) GC Column (2): RTX-1701 ID: 0.53 (mm)

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SEPF

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PLCS33	PESL139	09/25/98	09/25/98
02	EARY8	4913.002	09/25/98	09/25/98
03	EARY9	4913.003	09/25/98	09/25/98
04	EARZ0	4915.002	09/25/98	09/25/98
05	EARZ1	4915.001	09/25/98	09/25/98
06	EARZ2	4915.003	09/25/98	09/25/98
07	EARZ3	4915.004	09/25/98	09/25/98
08	EARZ4	4915.005	09/25/98	09/25/98
09	EARZ5	4917.001	09/25/98	09/25/98
10	EARZ6	4913.004	09/25/98	09/25/98
11	EARZ7	4915.006	09/25/98	09/25/98
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COMMENTS: _____

1LCD

EPA SAMPLE NO.

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

PBLK33

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: PESB154 Date Received:

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.01	U
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.01	U
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.02	U
72-55-9	4,4'-DDE	0.02	U
72-20-8	Endrin	0.02	U
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.02	U
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.01	U
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

2LCB
LOW CONC. WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

	EPA SAMPLE NO.	NBZ %REC #	FBP %REC #	TPH %REC #	PHL %REC #	2FP %REC #	TBP %REC #	OTHER	TOT OUT
01	SBLK10	60	53	79	58	59	66		0
02	SLCS10	68	69	89	71	68	69		0
03	EARY8	66	59	56	77	74	97		0
04	EARY9	59	55	65	67	65	90		0
05	EARZ6	60	58	86	65	68	77		0
06	EARZ1	61	54	85	66	67	98		0
07	EARZ0	62	56	91	70	69	93		0
08	EARZ2	64	57	69	69	72	87		0
09	EARZ3	68	66	78	70	70	92		0
10	EARZ4	74	73	90	77	77	101		0
11	EARZ7	60	57	84	61	61	81		0
12	SBLK12	58	58	67	58	57	59		0
13	SLCS12	64	64	91	75	70	74		0
14	EARZ5	75	60	64	86	83	105		0
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		QC LIMITS %REC
NBZ	= Nitrobenzene-d5	(23-120)
FBP	= 2-Fluorobiphenyl	(30-115)
TPH	= Terphenyl-d14	(18-140)
PHL	= Phenol-d5	(15-115)
2FP	= 2-Fluorophenol	(15-121)
TBP	= 2,4,6-Tribromophenol	(15-130)

Column to be used to flag recovery values.
* Values outside of contract required QC limits.
D Surrogate diluted out.

3LCB

LOW CONC. WATER SEMIVOLATILE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

SLCS10

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: SVOL197 LCS Lot No.:

Lab File ID: D4803 Date Extracted: 09/17/98

LCS Aliquot: 10 Sw 9/w/8 (uL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

COMPOUND	CONC ADDED (ug/L)	CONC RECOVERED (ug/L)	%REC #	QC LIMITS
Phenol	40000	28000	70	40-120
bis(2-Chloroethyl)ether	20000	16000	80	50-110
2-Chlorophenol	40000	29000	72	50-110
N-Nitroso-di-n-propylamine	20000	15000	75	30-110
Hexachloroethane	20000	8200	41	20-110
Isophorone	20000	12000	60	50-110
Naphthalene	20000	13000	65	30-110
4-Chloroaniline	40000	25000	62	10-120
2,4,6-Trichlorophenol	40000	27000	68	40-120
2,4-Dinitrotoluene	20000	12000	60	30-120
Diethylphthalate	20000	14000	70	50-120
N-Nitrosodiphenylamine (1)	20000	14000	70	30-110
Hexachlorobenzene	20000	15000	75	40-120
Benzo(a)pyrene	20000	12000	60	50-120

Column to be used to flag LCS recovery with an asterisk.
* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 14 total

COMMENTS:

3LCB

LOW CONC. WATER SEMIVOLATILE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

SLCS12

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: SVOL199 LCS Lot No.:

Lab File ID: D4822 Date Extracted: 09/18/98

LCS Aliquot: 10 5ml/ml (uL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

COMPOUND	CONC ADDED (ug/L)	CONC RECOVERED (ug/L)	%REC #	QC LIMITS
Phenol	40000	30000	75	40-120
bis(2-Chloroethyl)ether	20000	16000	80	50-110
2-Chlorophenol	40000	28000	70	50-110
N-Nitroso-di-n-propylamine	20000	15000	75	30-110
Hexachloroethane	20000	7200	36	20-110
Isophorone	20000	12000	60	50-110
Naphthalene	20000	12000	60	30-110
4-Chloroaniline	40000	22000	55	10-120
2,4,6-Trichlorophenol	40000	28000	70	40-120
2,4-Dinitrotoluene	20000	10000	50	30-120
Diethylphthalate	20000	14000	70	50-120
N-Nitrosodiphenylamine (1)	20000	14000	70	30-110
Hexachlorobenzene	20000	15000	75	40-120
Benzo(a)pyrene	20000	17000	85	50-120

Column to be used to flag LCS recovery with an asterisk.
* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 14 total

COMMENTS:

4LCB

LOW CONC. WATER SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK10

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: SVOB215 Date Extracted: 09/17/98

Lab File ID: D4802 Date Analyzed: 09/21/98

Instrument ID: D-HP5971A Time Analyzed : 1616

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES and LCS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SLCS10	SVOL197	D4803	09/21/98
02	EARY8	4913.002	D4806	09/21/98
03	EARY9	4913.003	D4807	09/21/98
04	EARZ6	4913.004	D4808	09/21/98
05	EARZ1	4915.001	D4809	09/21/98
06	EARZ0	4915.002	D4810	09/21/98
07	EARZ2	4915.003	D4811	09/21/98
08	EARZ3	4915.004	D4812	09/21/98
09	EARZ4	4915.005	D4813	09/22/98
10	EARZ7	4915.006	D4814	09/22/98
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COMMENTS: _____

4LCB

LOW CONC. WATER SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK12

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: SVOB217 Date Extracted: 09/18/98

Lab File ID: D4820 Date Analyzed: 09/22/98

Instrument ID: D-HP5971A Time Analyzed : 1330

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES and LCS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SLCS12	SVOL199	D4822	09/22/98
02	EARZ5	4917.001	D4828	09/22/98
03				
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FORM IV LCSV

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LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK12

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: SVOB217 Date Received: _____

Lab File ID: D4820 Date Extracted: 09/18/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenz(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK12

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: SVOB217 Date Received: _____

Lab File ID: D4820 Date Extracted: 09/18/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (ug/L)	Q
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LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARY8

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4913.002 Date Received: 09/16/98

Lab File ID: D4806 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	23	
111-44-4	bis(2-Chloroethyl)ether	7	
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	17	
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	14	
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARY8

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4913.002 Date Received: 09/16/98

Lab File ID: D4806 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenz(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

EPA SAMPLE NO.

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARY8

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4913.002 Date Received: 09/16/98

Lab File ID: D4806 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

Number TICs found: 16

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (ug/L)	Q
1. 873949	CYCLOHEXANONE, 3,3,5-TRIMETH	10.42	410	NJ
2. 116029	CYCLOHEXANOL, 3,3,5-TRIMETHY	10.68	32	NJ
3. 112367	ETHANE, 1,1'-OXYBIS[2-ETHOXY	11.43	26	NJ
4.	UNKNOWN	12.52	10	J
5.	UNKNOWN	12.82	14	J
6.	UNKNOWN	13.89	13	J
7.	UNKNOWN	16.66	18	J
8. 90277	BENZENEACETIC ACID, .ALPHA.-	17.18	14	NJ
9.	UNKNOWN	19.29	130	J
10. 101100	PROPANOIC ACID, 2-(3-CHLOROP	20.24	19	NJ
11. 76733	SECOBARBITAL	22.12	12	NJ
12.	UNKNOWN	22.72	21	J
13.	UNKNOWN	25.19	14	J
14.	UNKNOWN	25.53	57	J
15.	UNKNOWN	25.70	17	J
16.	UNKNOWN	26.94	12	J
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LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARY9

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4913.003 Date Received: 09/16/98

Lab File ID: D4807 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	26	
111-44-4	bis(2-Chloroethyl)ether	14	
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARY9

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4913.003 Date Received: 09/16/98

Lab File ID: D4807 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenz(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EARY9

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4913.003 Date Received: 09/16/98

Lab File ID: D4807 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

Number TICs found: 14

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (ug/L)	Q
1. 110816	DISULFIDE, DIETHYL	7.35	11	NJ
2. 873949	CYCLOHEXANONE, 3,3,5-TRIMETH	10.36	160	NJ
3.	UNKNOWN	10.74	200	J
4.	UNKNOWN	11.43	17	J
5.	UNKNOWN	12.03	14	J
6.	UNKNOWN	12.52	23	J
7. 76222	CAMPHOR	12.63	17	NJ
8. 535808	BENZOIC ACID, 3-CHLORO-	16.62	16	NJ
9.	UNKNOWN	17.19	22	J
10.	UNKNOWN	19.23	49	J
11. 101100	PROPANOIC ACID, 2-(3-CHLOROP	20.21	11	NJ
12. 76733	SECOBARBITAL	22.10	14	NJ
13.	UNKNOWN	22.70	16	J
14.	UNKNOWN	25.52	57	J
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LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ0

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.002 Date Received: 09/17/98

Lab File ID: D4810 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ0

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.002 Date Received: 09/17/98

Lab File ID: D4810 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	~~2~~ 5	~~J~~ U mk
91-94-1	3,3'-Dichlorobenzidine	5	U 10-22-98
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenz(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

EPA SAMPLE NO.

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ0

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.002 Date Received: 09/17/98

Lab File ID: D4810 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (ug/L)	Q
1.				
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1LCB

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ1

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.001 Date Received: 09/17/98

Lab File ID: D4809 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ1

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.001 Date Received: 09/17/98

Lab File ID: D4809 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenz(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

EPA SAMPLE NO.

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ1

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.001 Date Received: 09/17/98

Lab File ID: D4809 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (ug/L)	Q
1.				
2.				
3.				
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1LCB

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.003 Date Received: 09/17/98

Lab File ID: D4811 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.003 Date Received: 09/17/98

Lab File ID: D4811 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenz(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

EPA SAMPLE NO.

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.003 Date Received: 09/17/98

Lab File ID: D4811 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (ug/L)	Q
1.				
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1LCB

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ3

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.004 Date Received: 09/17/98

Lab File ID: D4812 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ3

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.004 Date Received: 09/17/98

Lab File ID: D4812 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenz(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

EPA SAMPLE NO.

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ3

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.004 Date Received: 09/17/98

Lab File ID: D4812 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (ug/L)	Q
1.	UNKNOWN	11.98	10	J
2.				
3.				
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1LCB

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ4

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.005 Date Received: 09/17/98

Lab File ID: D4813 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ4

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.005 Date Received: 09/17/98

Lab File ID: D4813 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenz(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

EPA SAMPLE NO.

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EARZ4

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.005 Date Received: 09/17/98

Lab File ID: D4813 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (ug/L)	Q
1.				
2.				
3.				
4.				
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1LCB

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ5

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4917.001 Date Received: 09/18/98

Lab File ID: D4828 Date Extracted: 09/18/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	4	J
111-44-4	bis(2-Chloroethyl)ether	16	
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ5

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4917.001 Date Received: 09/18/98

Lab File ID: D4828 Date Extracted: 09/18/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenz(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EARZ5

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4917.001 Date Received: 09/18/98

Lab File ID: D4828 Date Extracted: 09/18/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

Number TICs found: 14

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (ug/L)	Q
1.		UNKNOWN	11.39	12	J
2.		UNKNOWN	12.26	74	J
3.		UNKNOWN	12.93	13	J
4.		UNKNOWN	13.65	18	J
5.	20324338	2-PROPANOL, 1-[2-(2-METHOXY-	15.60	35	NJ
6.		UNKNOWN	15.83	22	J
7.		UNKNOWN	18.01	22	J
8.		UNKNOWN	18.30	15	J
9.		UNKNOWN	18.55	20	J
10.		UNKNOWN	18.89	22	J
11.		UNKNOWN	19.18	31	J
12.	101100	PROPANOIC ACID, 2-(3-CHLOROP	20.22	31	NJ
13.		UNKNOWN	22.67	27	J
14.	88244	PHENOL, 2,2'-METHYLENEBIS[6-	26.06	20	NJ
15.					
16.					
17.					
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1LCB

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ6

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4913.004 Date Received: 09/16/98

Lab File ID: D4808 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ6

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4913.004 Date Received: 09/16/98

Lab File ID: D4808 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenz(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EARZ6

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4913.004 Date Received: 09/16/98

Lab File ID: D4808 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/21/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (ug/L)	Q
1.				
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1LCB

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ7

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.006 Date Received: 09/17/98

Lab File ID: D4814 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ7

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.006 Date Received: 09/17/98

Lab File ID: D4814 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	J
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenz(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC. WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EARZ7

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: SDG No.: EARY8

Lab Sample ID: 4915.006 Date Received: 09/17/98

Lab File ID: D4814 Date Extracted: 09/17/98

Sample Volume: 1000.00 (mL) Date Analyzed: 09/22/98

Concentrated Extract Volume: 1000(uL) Dilution Factor: 1.0

Injection Volume: 2 (uL)

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (ug/L)	Q
1.				
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LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

PLCS33 (1)

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: PESL139 Date Received:

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.08	
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.08	
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.18	
72-55-9	4,4'-DDE	0.17	
72-20-8	Endrin	0.19	
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.16	
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.09	
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

ECD

EPA SAMPLE NO.

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

PLCS33 (2)

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: PESL139 Date Received:

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.08	
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.08	
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.20	
72-55-9	4,4'-DDE	0.17	
72-20-8	Endrin	0.21	
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.16	
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.08	
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

EPA SAMPLE NO.

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EARY8

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.002 Date Received: 09/16/98

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.01	U
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.01	U
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.02	U
72-55-9	4,4'-DDE	0.02	U
72-20-8	Endrin	0.02	U
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.02	U
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.01	U
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

ILCD

EPA SAMPLE NO.

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EARY9

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.003 Date Received: 09/16/98

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.01	U
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.01	U
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.02	U
72-55-9	4,4'-DDE	0.02	U
72-20-8	Endrin	0.02	U
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.02	U
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.01	U
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EARZ0

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.002 Date Received: 09/17/98

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.01	U
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.01	U
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.02	U
72-55-9	4,4'-DDE	0.02	U
72-20-8	Endrin	0.02	U
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.02	U
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.01	U
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

ILCD

EPA SAMPLE NO.

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EARZ1

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.001 Date Received: 09/17/98

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.01	U
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.01	U
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.02	U
72-55-9	4,4'-DDE	0.02	U
72-20-8	Endrin	0.02	U
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.02	U
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.01	U
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EARZ2

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.003 Date Received: 09/17/98

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.01	U
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.01	U
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.02	U
72-55-9	4,4'-DDE	0.02	U
72-20-8	Endrin	0.02	U
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.02	U
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.01	U
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EARZ3

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.004 Date Received: 09/17/98

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.01	U
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.01	U
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.02	U
72-55-9	4,4'-DDE	0.02	U
72-20-8	Endrin	0.02	U
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.02	U
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.01	U
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EARZ4

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.005 Date Received: 09/17/98

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.01	U
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.01	U
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.02	U
72-55-9	4,4'-DDE	0.02	U
72-20-8	Endrin	0.02	U
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.02	U
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.01	U
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EARZ5

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4917.001 Date Received: 09/17/98

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.01	U
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.01	U
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.02	U
72-55-9	4,4'-DDE	0.02	U
72-20-8	Endrin	0.02	U
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.02	U
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.01	U
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

EPA SAMPLE NO.

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EARZ6

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4913.004 Date Received: 09/16/98

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.01	U
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.01	U
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.02	U
72-55-9	4,4'-DDE	0.02	U
72-20-8	Endrin	0.02	U
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.02	U
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.01	U
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

LOW CONC. WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EARZ7

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY8

Lab Sample ID: 4915.006 Date Received: 09/17/98

Sample Volume: 1000 (mL) Date Extracted: 09/18/98

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 09/25/98

Injection Volume: 2 (uL) Dilution Factor: 1

Sulfur Cleanup: (Y/N) N Extraction: (SepF/Cont) SepF

CAS NO.	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0.01	U
319-85-7	beta-BHC	0.01	U
319-86-8	delta-BHC	0.01	U
58-89-9	gamma-BHC (Lindane)	0.01	U
76-44-8	Heptachlor	0.01	U
309-00-2	Aldrin	0.01	U
1024-57-3	Heptachlor epoxide	0.01	U
959-98-8	Endosulfan I	0.01	U
60-57-1	Dieldrin	0.02	U
72-55-9	4,4'-DDE	0.02	U
72-20-8	Endrin	0.02	U
33213-65-9	Endosulfan II	0.02	U
72-54-8	4,4'-DDD	0.02	U
1031-07-8	Endosulfan sulfate	0.02	U
50-29-3	4,4'-DDT	0.02	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.02	U
7421-93-4	Endrin aldehyde	0.02	U
5103-71-9	alpha-Chlordane	0.01	U
5103-74-2	gamma-Chlordane	0.01	U
8001-35-2	Toxaphene	1.00	U
12674-11-2	Aroclor-1016	0.20	U
11104-28-2	Aroclor-1221	0.40	U
11141-16-5	Aroclor-1232	0.20	U
53469-21-9	Aroclor-1242	0.20	U
12672-29-6	Aroclor-1248	0.20	U
11097-69-1	Aroclor-1254	0.20	U
11096-82-5	Aroclor-1260	0.20	U

2LCC

LOW CONC. WATER PESTICIDE SURROGATE RECOVERY

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26483 SAS No.: _____ SDG No.: EARY 8

GC Column(1): DB-608 ID: 0.53 (mm) GC Column(2): RTX-1701 ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX(1) %REC #	TCX(2) %REC #	DCB(1) %REC #	DCB(2) %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK33	45	60	58	88			0
02	PLCS33	69	72	75	96			0
03	EARY8	57	35	62	43			0
04	EARY9	55	53	57	58			0
05	EARZ6	47	44	71	56			0
06	EARZ1	55	83	61	88			0
07	EARZ0	57	75	66	86			0
08	EARZ2	76	93	92	103			0
09	EARZ3	75	97	84	106			0
10	EARZ4	68	91	77	99			0
11	EARZ7	69	83	75	87			0
12	EARZ5	80	64	58	79			0
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

QC LIMITS

	%REC
TCX = Tetrachloro-m-xylene	(30-150)
DCB = Decachlorobiphenyl	(30-150)

Column to be used to flag recovery values.
* Values outside of contract required QC limits.
D Surrogate diluted out.

page 1 of 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: IN/05J7

Case No: 26483 Site Name Location: American Chem Servi

Contractor or EPA Lab: PDP Analytical Data User: B+V

No. of Samples: 13 Date Sampled or Data Received: 10-6-98

Have Chain-of-Custody records been received? Yes ✓ No ___
Have traffic reports or packing lists been received? Yes ✓ No ___
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No ___
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____

_____ _____ _____ _____

Are basic data forms in? Yes ✓ No ___
No of samples claimed: 13 No. of samples received: 13

Received by: Lynette Burnett Date: 10-6-98

Received by LSSS: Lynette Burnett Date: 10-6-98

Review started: 10-19-98 Reviewer Signature: M Kamf

Total time spent on review: 17.5 Date review completed: 10-20-98

Copied by: Lynette Burnett Date: 10-29-98

Mailed to user by: Lynette Burnett Date: 10-29-98

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffen, Data mgmt. Coordinator, Region V, 5SCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

_____

_____

Received by Data Mgmt. Coordinator for Files. Data: _____

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: NOV 20 1998

Subject: Review of Region 5 Data for **AMERICAN CHEMICAL SERVICES**

From: Charles T. Elly, Director
Region 5 Central Regional Laboratory

To:

Attached are the results for **AMERICAN CHEMICAL SERVICES**
CRL request number **980231**
for analyses for **Mercury** and **Cyanide**
Results are reported for sample designations: 98ZB06R01, 98ZB06S01, 98ZB06D01, 98ZB06S02, 98ZB06S03, 98ZB06S04, 98ZB06S05, 98ZB06S06, 98ZB06S07, and 98ZB06S08.
Results Status:

(X) Acceptable for Use: **Mercury** and **Cyanide**
( ) Data Qualified, but Acceptable for use:
( ) Data Unacceptable for Use:

( ) Sewer Disposal Criteria Met;

Comments on Data Quality by Reviewer:

All the water samples submitted for Mercury and Cyanide analysis were assayed and the results are attached. Required quality control criteria for the laboratory, method, and system performance audits were evaluated and determined to be within the limits.

Comments on Sample Results: All the mercury and cyanide results are acceptable for use.

Comments by Laboratory Director or Quality Control Coordinator:

Alida Robertson 11.16.98

Review and Date (X) Reviewed ( ) Unreviewed

19 Nov 98

Team Leader and Date (X) Reviewed ( ) Unreviewed

Nov. 19, 1998

QC Coordinator and Date (X) Reviewed ( ) Unreviewed

Sylvia Griffin NOV 20 1998

Data Management Coordinator and Date Received

Date Transmitted NOV 20 1998

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
SL - 10C

Received by and Date

Comments:

ENVIRONMENTAL PROTECTION AGENCY
REGION V
CENTRAL REGIONAL LABORATORY
FINAL RESULT REPORT FOR THE TEAM: MINERAL/NUTRIENTS

DIVISION/BRANCH: SUPERFUND **SAMPLING DATE:** 09/15/1998 **LAB ARRIVAL DATE:** 09/17/1998 **DUE DATE:** 10/08/98
DU NUMBER: TFA **DATASET NUMBER:** 980231 **STUDY:** AMERICAN CHEMICAL SERVICE **PRIORITY:** Routine **LABORATORY :** ESAT

	CRL LOG NUMBER	SAMPLE DESCRIPTION	SEDIMENT SOLIDS MERCURY (mg Hg/Kg)	WATER MERCURY (ugHg/L)			
1	98ZB06S01			0.1 U			
2	98ZB06D01			0.1 U			
3	98ZB06S02			0.1 U			
4	98ZB06S03			0.1 U			
5	98ZB06S04			0.1 U			
6	98ZB06S05			0.1 U			
7	98ZB06S06			0.1 U			
8	98ZB06S07			0.1 U			
9	98ZB06S08			0.1 U			
10	98ZB06R01			0.1 U			
11							
12							
DATE OF ANALYSIS				09/27/98			
ANALYST				L. Leonor			

Reviewed by: Alida Robermann Date: 11/~~18~~ 16 HR/98

ENVIRONMENTAL PROTECTION AGENCY
REGION V
CENTRAL REGIONAL LABORATORY
FINAL RESULT REPORT FOR THE TEAM: MINERAL/NUTRIENTS

DIVISION/BRANCH: SUPERFUND SAMPLING DATE: 09/15/98 LAB ARRIVAL DATE: 09/17/98 DUE DATE: 10/08/98
DU NUMBER: TFA DATASET NUMBER: 980231 STUDY: American Chemical Services PRIORITY: Routine LABORATORY : ESAT

	CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER CYANIDE (µg/L)			
1	98ZB06S01	ACS-GW01-001	8 U			
2	98ZB06R01	ACS-FB01-001	8 U			
3	98ZB06D01	ACS-GW07-101	8 U			
4	98ZB06S02	ACS-GW02-001	8 U			
5	98ZB06S03	ACS-GW03-001	8 U			
6	98ZB06S04	ACS-GW04-001	8 U			
7	98ZB06S05	ACS-GW05-001	8 U			
8	98ZB06S06	ACS-GW06-001	8 U			
9	98ZB06S07	ACS-GW07-001	8 U			
10	98ZB06S08	ACS-GW08-001	8 U			
11						
12						
DATE OF		9-24-98				
ANALYST		S. Tobin				

Reviewed by: Alida Roberman Date: 11/16/98

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: OCT 26 1998

Subject: Review of Region 5 Data for American Chemical Services Code:05J7

From: Charles T. Elly, Director Chuck Elly
Region 5 Central Regional Laboratory

To:

Attached are the results for American Chemical Services Code:05J7
CRL request number 980231
for analyses for Antimony, Arsenic, Cadmium, Lead, Selenium and Thallium
Results are reported for sample designations: 98ZB06S01, 98ZB06D01, 98ZB06S02, 98ZB06S03, 98ZB06S04, 98ZB06S05, 98ZB06S06, 98ZB06S07, 98ZB06S08 and 98ZB06R01

Results Status:
(x) Acceptable for Use
( ) Data Qualified, but Acceptable for use
( ) Data Unacceptable for Use

Comments on Data Quality by Reviewer

Field duplicate 98ZB06D01 is a duplicate of sample 98ZB06S07, per the station identifiers. For antimony, the matrix spike recovery was high for the initial measurement, and the laboratory check sample was also high. Upon rerunning, the matrix spike recovery was low, but the analyst reran the matrix spike solution immediately, and it was in control. Both measurements gave equivalent results, so the data are probably unaffected.

Comments by Laboratory Director or Quality Control Coordinator

Review Record for American Chemical Services Code:05J7

23 Oct 98

Peer/Task Monitor Review and Date (✓) Reviewed ( ) Unreviewed

23 Oct 98

Team Leader and Date (✓) Reviewed ( ) Unreviewed

Oct 26, 1998

QC Coordinator and Date (X) Reviewed ( ) Unreviewed

Sylvia Griffin OCT 26 1998

Data Management Coordinator and Date Received

Date Transmitted OCT 26 1998

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML - 10C

Received by and Date

Comments

Method: GFAA for Waters
Site: American Chemical Services
Date: October 13, 1998

TDF: 5104-189
PWO: ESE51112
WAD: 05-98-2-04

NARRATIVE

Ten water samples from American Chemical Services (data set 980231) were collected on September 15, 1998 and were received properly preserved by CRL on September 17, 1998. These samples were assigned to ESAT for the analysis of As, Cd, Pb, Se, and Tl by GFAA. All samples were digested using the beaker/hotplate method on September 25, 1998. The samples were analyzed for As and Se using the Perkin Elmer 6000 SIM AA; all other metals were assayed using the Perkin Elmer 5100 GFAA.

As and Se data are stored in instrument files ASSE1006 and ASSE1007; all other data are stored in the following .DAT files: PBJG1005, PBJG1006, CDJG1008, TLJG1006, and TLJG006A.

All QC audits were in control; all sample results are acceptable.

Since RLIMS was unavailable, the results are reported in a word-processing document only. Time will be necessary in the future to enter all results into RLIMS.

J. Harry
10-13-98

Method Number: 3114B
Date Generated: 10-05-98
TDF Number: 5104-186

SiteName: American Chemical Service
Charge Number: ESE-51-112
Work Assignment Number: 05-98-2-04

FIAS NARRATIVE for Data Set 980231

10 water samples from data set 980231 (98ZB06S01-S08, D01 and R01) were submitted for the analysis of total antimony by hydride AA. The samples from data set 980231 were collected on 09/15/98.

All samples, QC checks and standards were digested following standard CRL FIAS digestion protocols for waters on 09-30-98 and analyzed on 10-01-98. The data for samples from data set 980231 and all required QC were acceptable.

The hold time for metals is six months. All samples were analyzed within the six month hold time for metals. A spiked blank, used as a laboratory control sample (LFM), was digested and analyzed with the set of samples. Analytical results for 980231 were stored in .DAT file SBLL1001.DAT.

Narrative by: L. Lee ESAT
Date: 10/5/98

SAMPLE RESULTS (UG/L) FOR DATA SET 980231

Sample # 98ZB06	As	Pb	Cd	Se	Sb	Tl
S01	63	4	0.3	1.9	1.3	2 U
S02	10	2 U	0.2 U	1 U	1 U	2 U
S03	0.8 U	2 U	0.2 U	2 U	1 U	2 U
S04	0.8 U	2 U	0.2 U	2 U	1 U	2 U
S05	0.8 U	2 U	0.2 U	1 U	1 U	2 U
S06	0.8 U	2 U	0.2 U	1 U	1 U	2 U
S07	0.8 U	2	0.3	2 U	1 U	2 U
S08	1	2 U	0.2 U	1 U	1 U	4 U
R01	0.8 U	2 U	0.2 U	1 U	1 U	2 U
D01	0.8 U	2 U	0.2 U	1 U	1 U	2 U
Date of Analysis	10-6-98	10-6-98	10-8-98	10-6-98	10-1-98	10-6-98
Analyst	J. Garry	J. Garry	J. Garry	J. Garry	L. L	J. Garry
Date	10-13-98	10-13-98	10-13-98	10-13-98	10-15-98	10-13-98

JVM 23 Oct 98

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: OCT 26 1998

Subject: Review of Region 5 Data for American Chemical Services Code:05J7

From: Charles T. Elly, Director Chuck E Elly
Region 5 Central Regional Laboratory

To:

Attached are the results for American Chemical Services Code:05J7
CRL request number 980231
for analyses for ICP
Results are reported for sample designations: 98ZB06S01, 98ZB06D01, 98ZB06S02, 98ZB06S03, 98ZB06S04, 98ZB06S05, 98ZB06S06, 98ZB06S07, 98ZB06S08 and 98ZB06R01

Results Status:
(x) Acceptable for Use
( ) Data Qualified, but Acceptable for use
( ) Data Unacceptable for Use

Comments on Data Quality by Reviewer

Field duplicate 98ZB06D01 is a duplicate of sample 98ZB06S07, per the station identifiers. The matrix spike recovery for silver was 124%, outside CRL's 100±15% limit. Because the recovery was *high*, and no silver result was above the detection limit, the data are unaffected.

Comments by Laboratory Director or Quality Control Coordinator

Review Record for American Chemical Services Code:05J7

21 Oct 98

Peer/Task Monitor Review and Date (✓) Reviewed ( ) Unreviewed

29 Oct 98

Team Leader and Date (✓) Reviewed ( ) Unreviewed

Oct 26, 1998

QC Coordinator and Date (✓) Reviewed ( ) Unreviewed

OCT 26 1998

Data Management Coordinator and Date Received

Date Transmitted OCT 26 1998

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML - 10C

Received by and Date

Comments:

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON: 22 SEPTEMBER 98

SAMPLE OGANIZATION:B & V SAMPLE BATCH ID: 980231
SAMPLE REQUESTOR: STEVE MRKVICKA ACCOUNT NO: TFA301
LABORATORY: ESAT SAMPLE FACILITY: AMERICAN CHEMICAL SERVICES

SAMPLE: 98ZB06S01 FIELD: 98ZB06S01

COLLECTED: RECEIVED: 17 SEPTEMBER 98 ANALYZED: 22 SEPTEMBER 98

COMPOUND	AMOUNT	(Units)
Aluminum	1470	(ug/L)
Barium	145	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	93900	(ug/L)
Chromium	17.4	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	54100	(ug/L)
Magnesium	12100	(ug/L)
Manganese	1480	(ug/L)
Nickel	30.9	(ug/L)
Potassium	5210	(ug/L)
Silver	6 U	(ug/L)
Sodium	26500	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	53.6	(ug/L)

ANALYZED BY: 9-23-98

jm 26 Oct 98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON: 22 SEPTEMBER 98

SAMPLE OGANIZATION:B & V SAMPLE BATCH ID: 980231
SAMPLE REQUESTOR: STEVE MRKVICKA ACCOUNT NO: TFA301
LABORATORY: ESAT SAMPLE FACILITY: AMERICAN CHEMICAL SERVICES

SAMPLE: 98ZB06D01 FIELD: 98ZB06D01

COLLECTED: RECEIVED: 17 SEPTEMBER 98 ANALYZED: 22 SEPTEMBER 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	98.9	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	83200	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	2860	(ug/L)
Magnesium	38300	(ug/L)
Manganese	52.3	(ug/L)
Nickel	20 U	(ug/L)
Potassium	1490	(ug/L)
Silver	6 U	(ug/L)
Sodium	14300	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	118	(ug/L)

ANALYZED BY: 9-30-98

10/26/98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON: 22 SEPTEMBER 98

SAMPLE OGANIZATION:B & V SAMPLE BATCH ID: 980231
SAMPLE REQUESTOR: STEVE MRKVICKA ACCOUNT NO: TFA301
LABORATORY: ESAT SAMPLE FACILITY: AMERICAN CHEMICAL SERVICES

SAMPLE: 98ZB06S02 FIELD: 98ZB06S02

COLLECTED: RECEIVED: 17 SEPTEMBER 98 ANALYZED: 22 SEPTEMBER 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	89.2	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	97400	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	17200	(ug/L)
Magnesium	12500	(ug/L)
Manganese	388	(ug/L)
Nickel	20 U	(ug/L)
Potassium	5440	(ug/L)
Silver	6 U	(ug/L)
Sodium	33400	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	40 U	(ug/L)

ANALYZED BY: RD 9-23-98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON: 22 SEPTEMBER 98

SAMPLE OGANIZATION:B & V SAMPLE BATCH ID: 980231
SAMPLE REQUESTOR: STEVE MRKVICKA ACCOUNT NO: TFA301
LABORATORY: ESAT SAMPLE FACILITY: AMERICAN CHEMICAL SERVICES

SAMPLE: 98ZB06S03 FIELD: 98ZB06S03

COLLECTED: RECEIVED: 17 SEPTEMBER 98 ANALYZED: 22 SEPTEMBER 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	140	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	93000	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	2460	(ug/L)
Magnesium	47700	(ug/L)
Manganese	37.3	(ug/L)
Nickel	20 U	(ug/L)
Potassium	2160	(ug/L)
Silver	6 U	(ug/L)
Sodium	20300	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	40 U	(ug/L)

ANALYZED BY: RD 9-23-98

10/26/98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON: 22 SEPTEMBER 98

SAMPLE OGANIZATION:B & V SAMPLE BATCH ID: 980231
SAMPLE REQUESTOR: STEVE MRKVICKA ACCOUNT NO: TFA301
LABORATORY: ESAT SAMPLE FACILITY: AMERICAN CHEMICAL SERVICES

SAMPLE: 98ZB06S04 FIELD: 98ZB06S04

COLLECTED: RECEIVED: 17 SEPTEMBER 98 ANALYZED: 22 SEPTEMBER 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	152	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	87700	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	2760	(ug/L)
Magnesium	50000	(ug/L)
Manganese	37.7	(ug/L)
Nickel	20 U	(ug/L)
Potassium	2260	(ug/L)
Silver	6 U	(ug/L)
Sodium	24500	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	40 U	(ug/L)

ANALYZED BY: RD 9-23-98

JVM 26 Oct 98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON: 22 SEPTEMBER 98

SAMPLE OGANIZATION:B & V SAMPLE BATCH ID: 980231
SAMPLE REQUESTOR: STEVE MRKVICKA ACCOUNT NO: TFA301
LABORATORY: ESAT SAMPLE FACILITY: AMERICAN CHEMICAL SERVICES

SAMPLE: 98ZB06S05 FIELD: 98ZB06S05

COLLECTED: RECEIVED: 17 SEPTEMBER 98 ANALYZED: 22 SEPTEMBER 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	128	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	83500	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	3090	(ug/L)
Magnesium	43700	(ug/L)
Manganese	32.9	(ug/L)
Nickel	20 U	(ug/L)
Potassium	1990	(ug/L)
Silver	6 U	(ug/L)
Sodium	21000	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	40 U	(ug/L)

ANALYZED BY: QD 9-23-98

lm 26 oct 98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON: 22 SEPTEMBER 98

SAMPLE OGANIZATION:B & V
SAMPLE BATCH ID: 980231
SAMPLE REQUESTOR: STEVE MRKVICKA
ACCOUNT NO: TFA301
LABORATORY: ESAT
SAMPLE FACILITY: AMERICAN CHEMICAL SERVICES

SAMPLE: 98ZB06S06
FIELD: 98ZB06S06

COLLECTED:
RECEIVED: 17 SEPTEMBER 98
ANALYZED: 22 SEPTEMBER 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	115	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	88700	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	2970	(ug/L)
Magnesium	40900	(ug/L)
Manganese	59.6	(ug/L)
Nickel	20 U	(ug/L)
Potassium	1450	(ug/L)
Silver	6 U	(ug/L)
Sodium	13800	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	40 U	(ug/L)

ANALYZED BY: RD 9-23-98

lm 26 oct 98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON: 22 SEPTEMBER 98

SAMPLE OGANIZATION:B & V SAMPLE BATCH ID: 980231
SAMPLE REQUESTOR: STEVE MRKVICKA ACCOUNT NO: TFA301
LABORATORY: ESAT SAMPLE FACILITY: AMERICAN CHEMICAL SERVICES

SAMPLE: 98ZB06S07 FIELD: 98ZB06S07

COLLECTED: RECEIVED: 17 SEPTEMBER 98 ANALYZED: 22 SEPTEMBER 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	97.6	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	83300	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	2740	(ug/L)
Magnesium	38400	(ug/L)
Manganese	52.2	(ug/L)
Nickel	20 U	(ug/L)
Potassium	1510	(ug/L)
Silver	6 U	(ug/L)
Sodium	14300	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	105	(ug/L)

ANALYZED BY: 9-23-98

26 oct 98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON: 22 SEPTEMBER 98

SAMPLE OGANIZATION:B & V SAMPLE BATCH ID: 980231
SAMPLE REQUESTOR: STEVE MRKVICKA ACCOUNT NO: TFA301
LABORATORY: ESAT SAMPLE FACILITY: AMERICAN CHEMICAL SERVICES

SAMPLE: 98ZB06S08 FIELD: 98ZB06S08

COLLECTED: RECEIVED: 17 SEPTEMBER 98 ANALYZED: 22 SEPTEMBER 98

COMPOUND	AMOUNT	(Units)
Aluminum	105	(ug/L)
Barium	288	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	157000	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	13200	(ug/L)
Magnesium	27900	(ug/L)
Manganese	223	(ug/L)
Nickel	20 U	(ug/L)
Potassium	7490	(ug/L)
Silver	6 U	(ug/L)
Sodium	70100	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	40 U	(ug/L)

ANALYZED BY: RD 9-23-98

lum 26 oct 98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON: 22 SEPTEMBER 98

SAMPLE OGANIZATION:B & V SAMPLE BATCH ID: 980231
SAMPLE REQUESTOR: STEVE MRKVICKA ACCOUNT NO: TFA301
LABORATORY: ESAT SAMPLE FACILITY: AMERICAN CHEMICAL SERVICES

SAMPLE: 98ZB06R01 FIELD: 98ZB06R01

COLLECTED: RECEIVED: 17 SEPTEMBER 98 ANALYZED: 22 SEPTEMBER 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	6 U	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	500 U	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	80 U	(ug/L)
Magnesium	100 U	(ug/L)
Manganese	5 U	(ug/L)
Nickel	20 U	(ug/L)
Potassium	500 U	(ug/L)
Silver	6 U	(ug/L)
Sodium	1000 U	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	40 U	(ug/L)

ANALYZED BY: 9-23-98

JVM
26 Oct 98