

July 21, 2003

Mr. Walter Wintsch
New York State Department of Environmental Conservation
Office of Environmental Quality, Region 4
1150 North Wescott Road
Schenectady, New York 12306-2014

Subject: June 2003 Quarterly Sampling Results for Alexander Schmigel Site
Hoosick Falls, New York

Dear Mr. Wintsch:

On behalf of Honeywell, Parsons is pleased to present this letter report for the June 2003 groundwater sampling event at Honeywell's Alexander Schmigel site near Hoosick Falls, New York. Parsons conducted groundwater sampling on June 16, 2003. Groundwater samples were collected at monitoring wells OW-27, OW-28, OW-29 as well as the cistern located north of OW-29, CIS-01 (Figure 1). New York State Department of Environmental Conservation (NYSDEC) also collected samples from each location for external analysis.

The following sections describe the project approach and findings for the sampling effort. Attachment 1 presents a site plan and a summary table. Attachment 2 presents a copy of the laboratory analytical data.

Background

The site is located northeast of Hoosick Falls, New York. Background information indicates that the site was at one time a sand and gravel pit where various waste materials (i.e., construction and demolition debris), including approximately 165 partially full drums of waste products, were placed. Several rounds of groundwater sample results since 1986 have showed volatile organic compounds (VOCs) present in groundwater, with a general trend of decreasing concentrations over time. Quarterly groundwater sampling was last conducted in June 1999. In a letter dated May 17, 2002, the New York State Department of Environmental Conservation (NYSDEC) requested that Honeywell resume the quarterly monitoring program.

Groundwater Sampling

June, 2003

Parsons mobilized to the site on June 16, 2003 to purge and sample monitoring wells OW-27, OW-28 and OW-29 and the cistern. Parsons purged each well using a low-flow peristaltic pump. All associated tubing was dedicated to one well/cistern to prevent cross-contamination. Groundwater field parameters (pH, temperature, and specific conductance) were measured for OW-28 and the cistern during purging (Table 1). The wells were allowed to recharge before sampling occurred. Higher water levels produced greater recharge rates; therefore all samples



Mr. Walter Wintsch
Alexander Schmigel Site
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were collected on June 16, 2003. A minimum of three well volumes was purged prior to sampling. Field measurements were collected while purging for all the locations

Groundwater samples from the three monitoring wells and the cistern, as well as a duplicate sample from OW-28 (OW-20), were collected and submitted for analysis to Columbia Analytical Services (CAS) in Rochester, New York, (New York ID # 10145) using standard chain-of-custody procedures. Samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs) (EPA SW846 Method 8260B) and methyl cellosolve (EPA SW846 Method 8015). Laboratory data sheets are presented in Attachment 2.

Results and Conclusions

There were no detections of analyzed compounds during this sampling event, with the exception of methyl cellosolve, which was detected in the cistern at a concentration of 1900 ug/L. This concentration was near the instrument detection limit of 1000 ug/L and was significantly lower than the maximum peak historical concentration of 120,000 ug/L. Methyl cellosolve is not regulated by the NYSDEC Principal Organic Contaminant (POC) Groundwater Standard, therefore no standard or guidance value is available. The concentration of methyl cellosolve in recent sampling events was non-detect. It is possible that the detected concentration of methyl cellosolve may be related to laboratory error, and as a result is not a significant concern at this time. Future sampling results should be carefully monitored to ensure that elevated levels do not continue.

The next quarterly sampling event is scheduled for September 2003. Please feel free to contact me at (716) 633-7074 or, Ms. Maria Kaouris at (973) 455-3302 if you have any questions concerning the project or this report.

Sincerely,



Robert Kuberka
Project Manager

cc. Project File 742641
Deb Christian, NYSDEC
David Cooke, Honeywell
Maria Kaouris, Honeywell
Mark Van Valkenburg, NYDOH

ATTACHMENT 1
FIGURES AND TABLES

LEGEND:

- OW27 OBSERVATION WELL APPROXIMATE LOCATION
- RW-1 RESIDENTIAL WELL APPROXIMATE LOCATION
- > DRAINAGE SWALE
- APPROXIMATE LIMITS

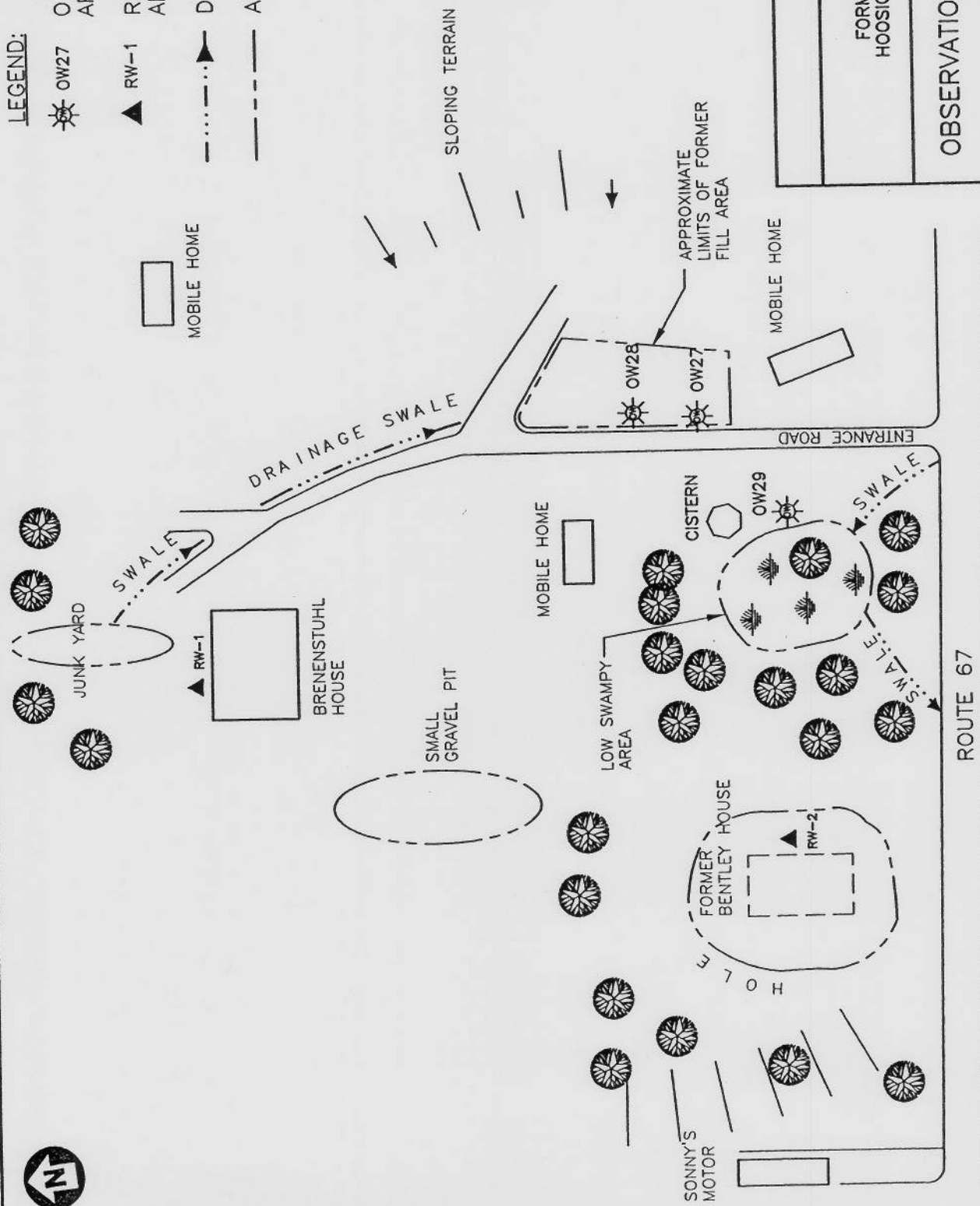


FIGURE 1

HONEYWELL
FORMER SCHMIGEL SITE
HOOSICK FALLS, NEW YORK

OBSERVATION WELL AND CISTERN
LOCATIONS

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

**ALEXANDER SCHMIGEL PROPERTY QUARTERLY GROUND WATER
MONITORING**

Table 1
Water Level Measurement and Groundwater Field Parameters
June 16, 2003

Monitoring Well	pH	Temp. (C)	Specific Conductance (mhos)	Volume Removed (gallons)	Depth to Water (ft)	Purge Rate (mL/min)
OW-27	6.39	53.7	0.15	1.5	9.46	<500
OW-28	6.05	55.8	0.11	2	7.4	<500
OW-29	6.33	57.1	0.19	0.5	3.87	<500
Cistern	5.48	61	0.19	12	0.75	<500

ATTACHMENT 2
LABORATORY ANALYSIS



A FULL SERVICE ENVIRONMENTAL LABORATORY

July 8, 2003

Mr. Rob Kuberka
Parsons Engineering Science
180 Lawrence Bell Drive
Suite 100
Amherst, NY 14221

JUL 12 2003

PROJECT: ALEXANDER SCHMIGEL
Submission #: R2317263

Dear Mr. Kuberka

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

A handwritten signature in black ink, appearing to read 'Mark Wilson', is written over the typed name.

Mark Wilson
Client Service Manager

Enc.



1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client : Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Lab Submission # : R2317263
Project Manager : Mark Wilson
Reported : 07/08/03

Report Contains a total of 23 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

A handwritten signature in dark ink, appearing to read 'Michael E. Perry', is written over the printed text of the QA review statement.



CASE NARRATIVE

This report contains analytical results for the following samples:

Submission #: R2317263

<u>Lab ID</u>	<u>Client ID</u>
649412	CIS-01
649413	OW-29
649414	OW-27
649415	OW-28
649416	OW-20
649417	TRIP BLANK

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by CAS personnel have been in accordance with "CAS Field Procedures and Measurements Manual" or by client specifications.



Effective 6/12/2003

ORGANIC QUALIFIERS

- U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.
- P - This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- X - As specified in Case Narrative.
- * - This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

CAS/Rochester Lab ID # for State Certifications

Army Corp of Engineers Validated
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved
Nebraska Accredited

NELAP Accredited
New York ID # 10145
New Jersey ID # NY004
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/08/03

Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : CIS-01

Date Sampled : 06/16/03 Order #: 649412 Sample Matrix: WATER
Date Received: 06/17/03 Submission #: R2317263 Analytical Run 92642

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/20/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	5.0	5.0 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	1.0	1.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	96	%
TOLUENE-D8	(91 - 113 %)	93	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	102	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8015B METHANOL
Reported: 07/08/03

Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : CIS-01

Date Sampled : 06/16/03 Order #: 649412 Sample Matrix: WATER
Date Received: 06/17/03 Submission #: R2317263 Analytical Run 92149

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/19/03			
ANALYTICAL DILUTION: 1.00			
METHYL CELLOSOLVE	1000	1900	UG/L
SURROGATE RECOVERIES		QC LIMITS	
1-PROPANOL	(50 - 150 %)	95	%

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/08/03Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : OW-29

Date Sampled : 06/16/03	Order #: 649413	Sample Matrix: WATER
Date Received: 06/17/03	Submission #: R2317263	Analytical Run 92642

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/21/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	5.0	5.0 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	1.0	1.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIESQC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	93	%
TOLUENE-D8	(91 - 113 %)	94	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	101	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8015B METHANOL
Reported: 07/08/03

Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : OW-29

Date Sampled : 06/16/03 Order #: 649413 Sample Matrix: WATER
Date Received: 06/17/03 Submission #: R2317263 Analytical Run 92149

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/19/03			
ANALYTICAL DILUTION: 1.00			
METHYL CELLOSOLVE	1000	1000 U	UG/L
<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
1-PROPANOL	(50 - 150 %)	88	%

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/08/03Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : OW-27

Date Sampled : 06/16/03	Order #: 649414	Sample Matrix: WATER
Date Received: 06/17/03	Submission #: R2317263	Analytical Run 92642

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/21/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	5.0	5.0 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	1.0	1.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	94	%
TOLUENE-D8	(91 - 113 %)	93	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	101	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8015B METHANOL
Reported: 07/08/03

Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : OW-27

Date Sampled : 06/16/03 Order #: 649414 Sample Matrix: WATER
Date Received: 06/17/03 Submission #: R2317263 Analytical Run 92149

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/19/03			
ANALYTICAL DILUTION: 1.00			
METHYL CELLOSOLVE	1000	1000 U	UG/L
<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
1-PROPANOL	(50 - 150 %)	98	%

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/08/03Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : OW-28

Date Sampled : 06/16/03	Order #: 649415	Sample Matrix: WATER
Date Received: 06/17/03	Submission #: R2317263	Analytical Run 92642

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/23/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	5.0	5.0 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	1.0	1.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIESQC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	98	%
TOLUENE-D8	(91 - 113 %)	95	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	103	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8015B METHANOL
Reported: 07/08/03

Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : OW-28

Date Sampled : 06/16/03 Order #: 649415 Sample Matrix: WATER
Date Received: 06/17/03 Submission #: R2317263 Analytical Run 92149

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/19/03			
ANALYTICAL DILUTION: 1.00			
METHYL CELLOSOLVE	1000	1000 U	UG/L
SURROGATE RECOVERIES		QC LIMITS	
1-PROPANOL	(50 - 150 %)	90	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/08/03

Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : OW-20

Date Sampled : 06/16/03 Order #: 649416 Sample Matrix: WATER
Date Received: 06/17/03 Submission #: R2317263 Analytical Run 92642

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/21/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	5.0	5.0 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	1.0	1.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	91	%
TOLUENE-D8	(91 - 113 %)	92	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	104	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8015B METHANOL
Reported: 07/08/03

Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : OW-20

Date Sampled : 06/16/03 Order #: 649416 Sample Matrix: WATER
Date Received: 06/17/03 Submission #: R2317263 Analytical Run 92149

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/19/03			
ANALYTICAL DILUTION: 1.00			
METHYL CELLOSOLVE	1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS		
1-PROPANOL	(50 - 150 %)	59	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/08/03Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : TRIP BLANKDate Sampled : 06/16/03 Order #: 649417 Sample Matrix: WATER
Date Received: 06/17/03 Submission #: R2317263 Analytical Run 92642

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/20/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	5.0	5.0 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	1.0	1.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	97	%
TOLUENE-D8	(91 - 113 %)	95	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	107	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8015B METHANOL
Reported: 07/08/03

Parsons Engineering Science
Project Reference: ALEXANDER SCHMIGEL
Client Sample ID : TRIP BLANK

Date Sampled : 06/16/03 Order #: 649417 Sample Matrix: WATER
Date Received: 06/17/03 Submission #: R2317263 Analytical Run 92149

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/19/03			
ANALYTICAL DILUTION: 1.00			
METHYL CELLOSOLVE	1000	1000 U	UG/L
<u>SURROGATE RECOVERIES</u>		<u>QC LIMITS</u>	
1-PROPANOL	(50 - 150 %)	74	%

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS
METHOD: 8260B TCLLABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 653591

ANALYTICAL RUN #: 92642

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 6/20/2003			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	109	50 - 150
BENZENE	20.0	100	70 - 130
BROMODICHLOROMETHANE	20.0	98	70 - 130
BROMOFORM	20.0	110	70 - 130
BROMOMETHANE	20.0	92	50 - 150
2-BUTANONE (MEK)	20.0	108	50 - 150
CARBON DISULFIDE	20.0	113	70 - 130
CARBON TETRACHLORIDE	20.0	92	70 - 130
CHLOROBENZENE	20.0	97	70 - 130
CHLOROETHANE	20.0	98	70 - 130
CHLOROFORM	20.0	90	70 - 130
CHLOROMETHANE	20.0	125	70 - 130
DIBROMOCHLOROMETHANE	20.0	99	70 - 130
1,1-DICHLOROETHANE	20.0	97	70 - 130
1,2-DICHLOROETHANE	20.0	95	70 - 130
1,1-DICHLOROETHENE	20.0	92	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	93	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	89	70 - 130
1,2-DICHLOROPROPANE	20.0	105	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	103	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	98	70 - 130
ETHYLBENZENE	20.0	96	70 - 130
2-HEXANONE	20.0	101	70 - 130
METHYLENE CHLORIDE	20.0	104	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	109	70 - 130
STYRENE	20.0	100	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	90	70 - 130
TETRACHLOROETHENE	20.0	97	70 - 130
TOLUENE	20.0	97	70 - 130
1,1,1-TRICHLOROETHANE	20.0	90	70 - 130
1,1,2-TRICHLOROETHANE	20.0	99	70 - 130
TRICHLOROETHENE	20.0	110	70 - 130
VINYL CHLORIDE	20.0	110	70 - 130
O-XYLENE	20.0	96	70 - 130
M+P-XYLENE	40.0	95	70 - 130

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS
METHOD: 8260B TCLLABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 653595

ANALYTICAL RUN # : 92642

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 6/23/2003			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	107	50 - 150
BENZENE	20.0	104	70 - 130
BROMODICHLOROMETHANE	20.0	99	70 - 130
BROMOFORM	20.0	105	70 - 130
BROMOMETHANE	20.0	86	50 - 150
2-BUTANONE (MEK)	20.0	115	50 - 150
CARBON DISULFIDE	20.0	101	70 - 130
CARBON TETRACHLORIDE	20.0	94	70 - 130
CHLOROBENZENE	20.0	97	70 - 130
CHLOROETHANE	20.0	94	70 - 130
CHLOROFORM	20.0	96	70 - 130
CHLOROMETHANE	20.0	127	70 - 130
DIBROMOCHLOROMETHANE	20.0	96	70 - 130
1,1-DICHLOROETHANE	20.0	104	70 - 130
1,2-DICHLOROETHANE	20.0	96	70 - 130
1,1-DICHLOROETHENE	20.0	100	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	100	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	96	70 - 130
1,2-DICHLOROPROPANE	20.0	108	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	106	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	101	70 - 130
ETHYLBENZENE	20.0	96	70 - 130
2-HEXANONE	20.0	105	70 - 130
METHYLENE CHLORIDE	20.0	108	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	113	70 - 130
STYRENE	20.0	99	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	105	70 - 130
TETRACHLOROETHENE	20.0	96	70 - 130
TOLUENE	20.0	101	70 - 130
1,1,1-TRICHLOROETHANE	20.0	91	70 - 130
1,1,2-TRICHLOROETHANE	20.0	105	70 - 130
TRICHLOROETHENE	20.0	98	70 - 130
VINYL CHLORIDE	20.0	100	70 - 130
O-XYLENE	20.0	92	70 - 130
M+P-XYLENE	40.0	95	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/08/03

Project Reference:

Client Sample ID : METHOD BLANK

Date Sampled :	Order #: 653590	Sample Matrix: WATER
Date Received:	Submission #:	Analytical Run 92642

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/20/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	5.0	5.0 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	1.0	1.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	96	%
TOLUENE-D8	(91 - 113 %)	95	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	105	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/08/03

Project Reference:

Client Sample ID : METHOD BLANK

Date Sampled :	Order #: 653593	Sample Matrix: WATER
Date Received:	Submission #:	Analytical Run 92642

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/23/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	5.0	5.0 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	1.0	1.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	100	%
TOLUENE-D8	(91 - 113 %)	93	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	105	%

COLUMBIA ANALYTICAL SERVICES

QUALITY CONTROL SUMMARY LABORATORY CONTROL SAMPLE
WATER

Spiked Order No. : 650022

Client ID:

Test: 8015B METHANOL

Analytical Units: UG/L

Run Number : 92149

ANALYTE	SPIKE ADDED	SAMPLE CONCENT.	BLANK SPIKE		QC LIMITS
			FOUND	% REC.	REC.
METHYL CELLOSOLVE	20000	0	15600	78	50 - 150

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8015B METHANOL
Reported: 07/08/03

Project Reference:

Client Sample ID : METHOD BLANK

Date Sampled :	Order #: 650021	Sample Matrix: WATER
Date Received:	Submission #:	Analytical Run 92149

ANALYTE	PQL	RESULT	UNITS
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DATE ANALYZED : 06/18/03
ANALYTICAL DILUTION: 1.00

METHYL CELLOSOLVE	1000	1000 U	UG/L
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<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
1-PROPANOL	(50 - 150 %)	76	%

Cooler Receipt And Preservation Check Form

Project/Client Parsons Submission Number 22-17203

Cooler received on 6-17-03 by: Ne COURIER: CAS UPS FEDEX CD&L CLIENT

1. Were custody seals on outside of cooler? YES NO
2. Were custody papers properly filled out (ink, signed, etc.)? YES NO
3. Did all bottles arrive in good condition (unbroken)? YES NO
4. Did any VOA vials have significant air bubbles? YES NO N/A
5. Were Ice or Ice packs present? YES NO
6. Where did the bottles originate? CAS/ROC CLIENT
7. Temperature of cooler(s) upon receipt: 40

Is the temperature within 0° - 6° C?: Yes Yes Yes Yes Yes

If No, Explain Below

No No No No No

Date/Time Temperatures Taken: 6-17-03 @ 8:32

Thermometer ID: 161 or IR GUN Reading From: Temp Blank or Sample Bottle

If out of Temperature, Client Approval to Run Samples _____

Cooler Breakdown: Date: 6/17/03 by: Ne

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies: _____

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO ₃					
2	H ₂ SO ₄					
Residual Chlorine (+/-)	for TCN & Phenol					
5-9**	P/PCBs (608 only)					

YES = All samples OK

NO = Samples were preserved at lab as listed

PC OK to adjust pH _____

**If pH adjustment is required, use NaOH and/or H₂SO₄

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

Other Comments: