



DuPont Engineering

March 12, 2004

Mr. Christopher Saari  
Hydrogeologist  
Northern Region Remediation and Redevelopment  
State of Wisconsin Department of Natural Resources (WDNR)  
Ashland Service Center  
2501 Golf Course Road  
Ashland, Wisconsin 54806



**TRIANNUAL OFF-SITE GROUNDWATER SAMPLING RESULTS**  
**DECEMBER 2003 EVENT**  
**Former DuPont Barksdale Works Site**  
**(BRRTS #02-04-000156)**  
**Barksdale, Wisconsin**

Dear Mr. Saari:

Attached to this letter report are the final analytical results from the last off-site well sampling event for 2003, which was conducted in the vicinity of the Former DuPont Barksdale Works Site in December 2003. The field work and sample analysis were performed in accordance with the WDNR approved *Private Well Monitoring Proposal*, dated November 6, 2002, and amended during telephone conversations in December 2002.

This program was initiated to determine and confirm the extent of known affected private water drinking wells in the vicinity of the site, confirm the effectiveness of the carbon treatment systems, and monitor unaffected wells in close proximity to the site that do not have carbon treatment systems. The purpose of this off-site well sampling event was to sample the homes in the vicinity of the site that do not have carbon treatment systems in place, as identified in the above proposal and as amended.

Under the current sampling program, eight unaffected wells that do not have carbon systems in place are to be sampled triannually for nitroaromatic and nitramine organic compounds. Out of those eight homes, only one location was unable to be sampled (FC No. 73300 of Bono Creek Rd.) in December 2003. In addition to those eight homes, two locations (FC Nos. 72790 and 73250 of Highway (HWY) 13) that were unable to be accessed during the annual broader sampling event (September 2003) were added to this sampling event. Out of those two locations, only FC No. 73250 on HWY 13 could be sampled. It should be noted that a carbon system is present at FC No. 73250 of HWY 13; therefore, two samples were collected. DuPont will attempt to sample FC. No. 72790 of HWY 13 during the next sampling event, which is scheduled for April 2004.

DuPont also expanded the scope of the sampling program during December 2003 to include volatile organic compound (VOC) analyses of samples obtained from the three new potable wells

installed in the fall of 2002. During previous sampling events, low-level detections of VOCs were reported in each of these new wells. As stated in previous reports, DuPont believes that these contaminants may have been introduced during laboratory handling and analysis. To verify this assumption, DuPont collected duplicate samples from the three wells (FC Nos. 29600 and 30900 of Nolander Rd. and PZ-16-POT) and submitted the samples for VOC analysis to both Severn Trent –Denver (STL) in Arvada, Colorado and Environmental Health Laboratories (EHL) in South Bend, Indiana. The results of the comparative sample analysis are discussed in the VOC section below. With these additional three locations, DuPont attempted to sample a total of 13 locations in December 2003, but as stated above, only two of those locations were able to accessed.

Samples were collected at the inflow port only (location closest to the well and before the carbon treatment system, if present) at these regularly scheduled homes. Both the inflow and effluent ports were sampled at FC No. 73250 on HWY 13. A total of 19 samples were collected during the December 2003 event, including Quality Assurance/Quality Control (QA/QC) samples. All samples were analyzed for nitroaromatic/nitramine organic compounds, and as discussed below, several locations were also analyzed for VOCs.

DuPont has reviewed all data generated during the sampling event. In addition to the in-house verification, the data were submitted for independent data validation by Environmental Standards, Inc., located in Valley Forge, Pennsylvania. Summaries of the December 2003 analytical results are presented in the attached tables. Figure 1 shows the detections of nitroaromatic/nitramine and VOCs. The full list of analytical results and the validation reports are included as an appendix to this letter report.

### Nitroaromatic/Nitramine Organic Compounds

The following locations were sampled for nitroaromatic/nitramine compounds during this event.

- Four residential wells on HWY 13 (FC Nos. 72730, 72860, 73250 and 73280).
- Six residential wells on Nolander Road (between FC Nos. 30300 and 30600).

Of the areas listed above, no residential wells had historical detections. Only one location (FC No. 73250 of HWY 13) had both the inflow and effluent ports sampled (Table 1) with non-detections reported from each port. During this sampling event, no new detections of nitroaromatic/nitramine organic compounds were found (Table 1).

### VOCs

As per the amended 2002 *Private Monitoring Well Proposal*, off-site monitoring wells that have historical detections of VOCs are required to be monitored. These wells were sampled for VOCs at the inflow port at the following locations:

- Two residential wells on Nolander Road (FC Nos. 29600 and 30900).
- One potable well at the site office trailer (PZ-16-POT).

Two VOCs (carbon disulfide at 0.47J ug/l and toluene at 0.32J ug/l) were detected by STL at one of the three wells sampled (PZ-16-POT). Carbon disulfide and toluene were qualified as

estimated concentrations (below the laboratory reporting limit), and both were below the Wisconsin Enforcement Standard at 1,000 ug/l and 100 ug/l, respectively. STL also detected trace concentrations of methylene and acetone in this well; however, because the compounds were also reported at similar levels in the trip blank and laboratory analysis blank, both results were qualified as "not detected" during data validation.

At FC Nos. 29600 and 30900 on Nolander Road, no VOCs were detected at the stated reporting limit (Table 2). STL also reported trace levels of methylene chloride in these samples, which were qualified as "not detected" during data validation. EHL reported no detections of volatiles in any of the samples submitted for this round (Appendix A).

Upon review of historical data, two of the compounds detected in these wells, carbon disulfide and toluene, have been detected within the last two years. However, because these compounds are common laboratory artifacts and frequently appear in the trip and laboratory blanks, the source of the contaminants remains unclear. Each of these wells will be monitored for VOCs during future sampling events. Figure 1 shows the extent of the VOC detections around the site.

### **Results Summary/Conclusions**

Results of the December 2003 off-site well sampling indicate no nitroaromatic/nitramine organic compounds were detected at the homes that were sampled. VOCs were limited to one of the three wells quantified for this parameter class and that well is located on the former Barksdale Works site. With no new detections identified in the wells that surround the site, the full extent of affected residential wells appears to have been identified. Further sampling of residential wells in 2004 will be conducted in accordance with the approved sampling plan.

If you have any questions regarding this data report, please call either me (502-569-2148) or Mr. Cary Pooler (502-569-2444).

Sincerely,



Bradley S. Nave  
Project Director  
DuPont Corporate Remediation Group

BSN:jhc

Enclosures:

Table 1	Summary of Nitroaromatic/Nitramine Organic Results – December 2003
Table 2	Summary of Wisconsin Regulated VOC Results – December 2003
Figure 1	December 2003 Nitroaromatic/Nitramine and Volatile Organics Sample Results
Appendix A	Barksdale Works – December 2003 Residential Well Sampling

cc: P. Bretting, C.G. Bretting Mfg., Inc.  
H. Nehls-Lowe, Wisconsin DHFS  
A. Lindsey, Bayfield County Health Dept.  
C. Pooler, URSD  
M. Turco, URSD  
File (paper): 7355  
File (electronic): Project CD 7355: Reports/BAR December 2003 Off-Site GW Sampling Results\_final.doc

## **TABLES**

Table 1  
Summary of Nitroaromatic/Nitramine Organic Results  
September 2003

Analyte	Wisconsin Enforcement Standard		Sample ID Date Duplicate #	30300N-INFLOW 12/16/2003 10:10	30380N-INFLOW 12/16/2003 10:00	30490N-INFLOW 12/16/2003 9:50	30600N-INFLOW 12/17/2003 12:55	72730H-INFLOW 12/16/2003 13:30
		units		1	1	1	1	1
1,3,5-TRINITROBENZENE	---	ug/l		<0.015	<0.015	<0.015	<0.015	<0.015
3-NITROTOLUENE	---	ug/l		<0.019	<0.019	<0.019	<0.019	<0.019
4-NITROTOLUENE	---	ug/l		<0.018	<0.018	<0.018	<0.018	<0.018
2,4,6-TRINITROTOLUENE	---	ug/l		<0.015	<0.015	<0.015	<0.015	<0.015
2,4-DINITROTOLUENE	0.05	ug/l		<0.019	<0.019	<0.019	<0.019	<0.019
2,6-DINITROTOLUENE	0.05	ug/l		<0.015	<0.015	<0.015	<0.015	<0.015
2-AMINO-4,6-DINITROTOLUENE	---	ug/l		<0.012	<0.012	<0.012	<0.012	<0.012
2-NITROTOLUENE	---	ug/l		<0.023	<0.023	<0.023	<0.023	<0.023
4-AMINO-2,6-DINITROTOLUENE	---	ug/l		<0.015	<0.015	<0.015	<0.015	<0.015
1,3-DINITROBENZENE	---	ug/l		<0.014	<0.014	<0.014	<0.014	<0.014
NITROBENZENE	---	ug/l		<0.020	<0.020	<0.020	<0.020	<0.020
NITROGLYCERIN	---	ug/l		<0.039	<0.039	<0.039	<0.039	<0.039
HMX	---	ug/l		<0.016	<0.016	<0.016	<0.016	<0.016
PETN	---	ug/l		<0.031	<0.031	<0.031	<0.031	<0.031
RDX	---	ug/l		<0.012	<0.012	<0.012	<0.012	<0.012
TETRYL	---	ug/l		<0.012	<0.012	<0.012	<0.012	<0.012

< and ND = Non detect at stated reporting limit

**Table 1**  
**Summary of Nitroaromatic/Nitramine Organic Results**  
**September 2003**

Analyte	Wisconsin Enforcement		Sample ID Date	72860H-INFLOW	73250H-INFLOW	73250H-EFFLUENT	73280H-INFLOW
	Standard	units		Duplicate #	12/16/2003 10:40	12/16/2003 11:03	12/16/2003 11:00
1,3,5-TRINITROBENZENE	---	ug/l		<0.015	<0.015	<0.015	<0.015
3-NITROTOLUENE	---	ug/l		<0.019	<0.019	<0.019	<0.019
4-NITROTOLUENE	---	ug/l		<0.018	<0.018	<0.018	<0.018
2,4,6-TRINITROTOLUENE	---	ug/l		<0.015	<0.015	<0.015	<0.015
2,4-DINITROTOLUENE	0.05	ug/l		<0.019	<0.019	<0.019	<0.019
2,6-DINITROTOLUENE	0.05	ug/l		<0.015	<0.015	<0.015	<0.015
2-AMINO-4,6-DINITROTOLUENE	---	ug/l		<0.012	<0.012	<0.012	<0.012
2-NITROTOLUENE	---	ug/l		<0.023	<0.023	<0.023	<0.023
4-AMINO-2,6-DINITROTOLUENE	---	ug/l		<0.015	<0.015	<0.015	<0.015
1,3-DINITROBENZENE	---	ug/l		<0.014	<0.014	<0.014	<0.014
NITROBENZENE	---	ug/l		<0.020	<0.020	<0.020	<0.020
NITROGLYCERIN	---	ug/l		<0.039	<0.039	<0.039	<0.039
HMX	---	ug/l		<0.016	<0.016	<0.016	<0.016
PETN	---	ug/l		<0.031	<0.031	<0.031	<0.031
RDX	---	ug/l		<0.012	<0.012	<0.012	<0.012
TETRYL	---	ug/l		<0.012	<0.012	<0.012	<0.012

< and ND = Non detect at stated reporting limit

Table 2  
Summary of Wisconsin Regulated VOC Results from STL  
December 2003

Analyte	Wisconsin Enforcement Standard		Sample ID Date Duplicate #	29600N-INFLOW	30900N-INFLOW	PZ16-POT-INFLOW	TBLK1
	units	Date		12/17/2003 12:40	12/17/2003 17:05	12/16/2003 14:30	12/16/2003 14:30
1,1,1,2-TETRACHLOROETHANE	70	ug/l		<0.21	<0.21	<0.21	<0.21
1,1,1-TRICHLOROETHANE	200	ug/l		<0.16	<0.16	<0.16	<0.16
1,1,2,2-TETRACHLOROETHANE	0.2	ug/l		<0.21	<0.21	<0.21	<0.21
1,1,2-TRICHLOROETHANE	5	ug/l		<0.27	<0.27	<0.27	<0.27
1,1-DICHLOROETHANE	850	ug/l		<0.22	<0.22	<0.22	<0.22
1,1-DICHLOROETHENE	---	ug/l		<0.23	<0.23	<0.23	<0.23
1,2,3-TRICHLOROPROPANE	60	ug/l		<0.33	<0.33	<0.33	<0.33
1,2,4-TRIMETHYLBENZENE	---	ug/l		<0.15	<0.15	<0.15	<0.15
1,2-DIBROMO-3-CHLOROPROPANE	0.2	ug/l		<0.47	<0.47	<0.47	<0.47
1,2-DICHLOROETHANE	5	ug/l		<0.26	<0.26	<0.26	<0.26
1,2-DICHLOROETHENE	---	ug/l		<0.24	<0.24	<0.24	<0.24
1,2-DICHLOROPROPANE	5	ug/l		<0.18	<0.18	<0.18	<0.18
1,3,5-TRIMETHYLBENZENE	---	ug/l		<0.16	<0.16	<0.16	<0.16
1,3-DICHLOROPROPANE	---	ug/l		<0.22	<0.22	<0.22	<0.22
ACETONE	100	ug/l		<2.5 R	<2.5 R	<10 U	3.0 J
BENZENE	5	ug/l		<0.17	<0.17	<0.17	<0.17
BROMODICHLOROMETHANE	0.6	ug/l		<0.20	<0.20	<0.20	<0.20
BROMOFORM	4.4	ug/l		<0.23	<0.23	<0.23	<0.23
CARBON DISULFIDE	1000	ug/l		<0.24 UJ	<0.24 UJ	0.47 J	<0.24 UJ
CARBON TETRACHLORIDE	5	ug/l		<0.20	<0.20	<0.20	<0.20
CHLOROBENZENE	---	ug/l		<0.13	<0.13	<0.13	<0.13
CHLORODIBROMOMETHANE	---	ug/l		<0.19	<0.19	<0.19	<0.19
CHLOROFORM	6	ug/l		<0.17	<0.17	<0.17	<0.17
DICHLORODIFLUOROMETHANE	1000	ug/l		<0.22 UJ	<0.22 UJ	<0.22 UJ	<0.22 UJ
ETHYL CHLORIDE	---	ug/l		<0.18	<0.18	<0.18	<0.18
ETHYLBENZENE	700	ug/l		<0.12	<0.12	<0.12	<0.12
ETHYLENE DIBROMIDE	---	ug/l		<0.18	<0.18	<0.18	<0.18
METHYL BROMIDE	600	ug/l		<0.22	<0.22	<0.22	<0.22
METHYL CHLORIDE	---	ug/l		<0.91	<0.91	<0.91	<0.91
METHYL ETHYL KETONE	5	ug/l		<2.0 R	<2.0 R	<2.0 R	<2.0 R
METHYL ISOBUTYL KETONE	460	ug/l		<0.98	<0.98	<0.98	<0.98
METHYL TERTIARY BUTYL ETHER	500	ug/l		<0.38	<0.38	<0.38	<0.38
METHYLENE CHLORIDE	60	ug/l		<1.0 U	<1.0 U	<1.0 U	0.50 J
STYRENE	---	ug/l		<0.14	<0.14	<0.14	<0.14
TETRACHLOROETHYLENE	40	ug/l		<0.26	<0.26	<0.26	<0.26
TOLUENE	100	ug/l		<0.15	<0.15	0.32 J	<0.15
TRICHLOROETHENE	5	ug/l		<0.16	<0.16	<0.16	<0.16
TRICHLOROFLUOROMETHANE	1000	ug/l		<0.24	<0.24	<0.24	<0.24
VINYL CHLORIDE	---	ug/l		<0.19	<0.19	<0.19	<0.19
XYLEMES	---	ug/l		<0.41	<0.41	<0.41	<0.41
1,2,4-TRICHLOROBENZENE	70	ug/l		<0.21	<0.21	<0.21	<0.21
1,2-DICHLOROBENZENE	600	ug/l		<0.15	<0.15	<0.15	<0.15
1,3-DICHLOROBENZENE	1250	ug/l		<0.13	<0.13	<0.13	<0.13
1,4-DICHLOROBENZENE	75	ug/l		<0.16	<0.16	<0.16	<0.16

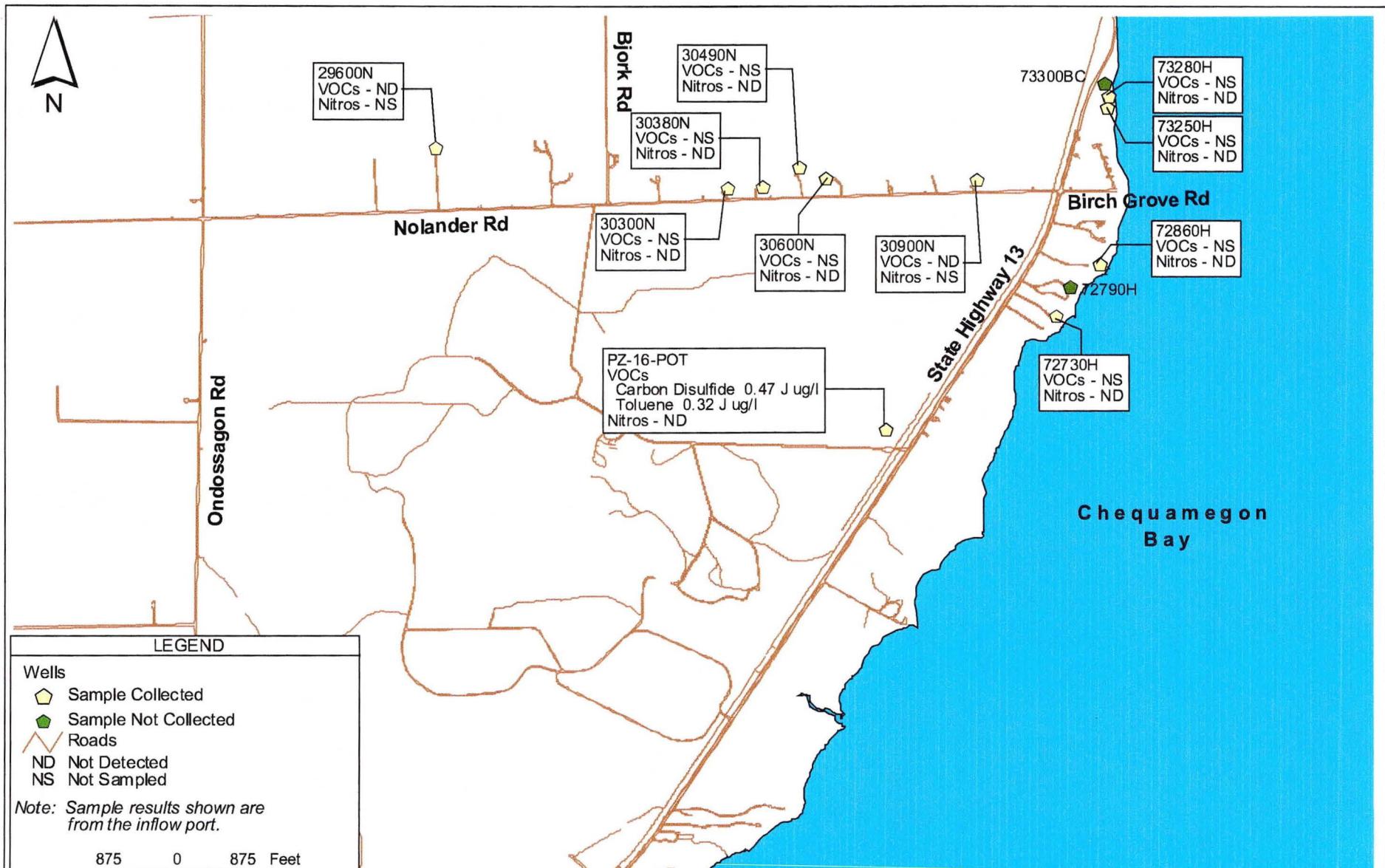
UJ = Non detect at estimated reporting limit

<, U and ND = Non detect at stated reporting limit

R = data rejected due to QC exceedences

J = Estimated Concentrations

## **FIGURES**



## **APPENDIX A**

# **Memorandum**

**DATE: MARCH 1, 2004**

**TO:** Cary A. Pooler, URS Diamond

**FROM:** Sharon A. Nordstrom

**RE: BARKSDALE RESIDENT WELL SAMPLING 12/03**

Enclosed is the data report for the residential well samples collected on December 16-17, 2003 for the analyses listed below. All samples were received at the laboratories in good condition and within temperature requirements.

<b>Matrix</b>	<b>Laboratory</b>	<b>Analysis</b>	<b>Analytical Method</b>
Groundwater	STL- Denver	Wisconsin- regulated Volatile Organics	SW846 8260B
Groundwater	STL- Denver	Nitroaromatic/nitramine organics	SW846 8321A
Groundwater ( split samples)	Environmental Health Laboratories (EHL)	Wisconsin-regulated Volatile organics	EPA 524.2

As indicated above, the samples were collected in duplicate and submitted to both STL-Denver and EHL for analysis for the Wisconsin-regulated volatile organics. The STL-Denver data deliverable included both a hard-copy report and an electronic data file, while the EHL data was reported in hard-copy only. A copy of the EHL data report has been included with the DuPont Corporate Environmental Database Report for the STL data.

All electronic data was reviewed via the automated DuPont Data Review (DDR) process. As noted on the DDR narrative report, several QC exceedances (primarily blank contamination) were identified and data qualifiers were applied to the reported results as applicable. In addition, all nitroaromatic/nitramine and volatile organics data was submitted to Environmental Standards, Inc. for independent, third-party validation. Data qualifiers applied during the validation process have also been added to the data, and copies of the Environmental Standards data evaluation reports are included herein.

No positive detections of nitroaromatic/nitramine compounds were reported in this sample group. Trace levels of methylene chloride were detected by STL-Denver in several samples, however, since methylene chloride was also detected in similar concentrations in the associated laboratory and/or trip blanks, the positive results for this compound in the samples were considered to be "non-detected" and qualified with a U flag on the data summaries.

Due to low relative response factors, all acetone "ND" results and all but one of the 2-butanone "ND" results reported by STL were considered by the validator to be unusable, and qualified with an R flag. In addition, the positive results reported for acetone in several samples were considered to be estimated concentrations and qualified with a J flag.

No volatile compounds were detected by EHL above the stated reporting limits, however the ND results for 2-butanone, 2-nitropropane, propionitrile, and nitrobenzene in all samples analyzed by EHL were qualified by the data validator as unusable (R) due to very low relative response factors in the associated calibration standards.

Please do not hesitate to contact me if you have any questions regarding this report.

**STL – DENVER DATA**

**BARKSDALE WORKS  
RESIDENT WELL SAMPLING 12/03**

**March 1, 2004**

*Prepared for*

Cary A. Pooler (URS Diamond-Louisville)

*Prepared by*

URS Diamond  
Laboratory Services – Sharon A. Nordstrom  
Barley Mill Plaza, Building 27  
Wilmington, DE 19805

## DuPont In-House Review (DDR)

The DDR is an automated internal review process used by the ADQM group to determine if the data is usable. The data is run through this automated program where a series of checks are performed on the data. The data is evaluated against hold time criteria, checked for blank contamination, assessed against matrix spike(MS)/matrix spike duplicate (MSD) recoveries, assessed against relative percent differences (RPDs) between these samples, assessed against laboratory control sample(LCS)/control sample duplicate (LCSD) recoveries, assessed against RPDs between these samples, assessed against RPDs between laboratory replicates, and assessed against surrogate spike recoveries. The DDR applies the following data qualifiers to analysis results, as warranted:

Qualifier	Definition
B	Not detected substantially above the level reported in the laboratory or field blanks.
R	Unusable result. Analyte may or may not be present in the sample.
J	Analyte present. Reported value may not be accurate or precise.
UJ	Not detected. Reporting limit may not be accurate or precise.

## Laboratory Qualifiers

The laboratory may have applied one or more of the following data qualifiers to analysis results, as warranted:

DIL	The concentration is estimated or not reported due to dilution or to the presence of interfering analytes.
NC	The recovery and or RPD were not calculated.
J	Estimated value; result falls between method detection limit (mdl) and practical quantitation limit (pql).
U	Analyte was not detected at the specified reporting limit
B	Analyte concentration is not significantly greater than that detected in an associated method blank.

J	Estimated value; result falls between method detection limit (mdl) and practical quantitation limit (pql).
*	Surrogate recovery is outside stated control limits.
J	Method blank contamination. The associated method blank contains the target analyte at a reportable level.
B	Estimated result. Result is less than reporting limit (RL)
Q	Elevated reporting limit. The reporting limit is elevated because sample dilution was required to bring target compounds within calibration range of the analytical system.
G	Elevated reporting limit. The reporting limit is elevated because sample dilution was required for analysis due to matrix interference.

These lab qualifiers are applied independent of DuPont In-House Data Review (DDR) qualifiers.

**Corporate Environmental Database  
DDR Narrative Report**

03/01/2004  
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Sitename: **BARKSDALE WORKS**

Project: **RESIDENT WELLS 12/03**

DDR Standard Used: **LABSTATS**

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**The reported result is greater than/equal to the MDL and less than the PQL; it should be considered an estimated value.**

Sampleno	Datesmpl	Lab Id	Method	Analyte	Rsltmod	Result	Unit	Mdl	Pql	Qual
BAR-G-PZ16-POT-INFLOW	12/16/03	F65491-AA FS	8260B	TOLUENE		0.32	UG/L	0.15	1.0	J
BAR-G-PZ16-POT-INFLOW	12/16/03	F65491-AA FS	8260B	CARBON DISULFIDE		0.47	UG/L	0.24	1.0	J
BAR-K-TBLK1	12/16/03	F654W1-AA TB	8260B	METHYLENE CHLORIDE		0.50	UG/L	0.21	1.0	J
BAR-K-TBLK1	12/16/03	F654W1-AA TB	8260B	ACETONE		3.0	UG/L	2.5	10	J

**Corporate Environmental Database  
Lab Analysis Report  
Summary of Positive Results  
with In-House Qualifier and Review**

**Site: BARKSDALE WORKS  
Project: RESIDENT WELLS 12/03  
Reporting Limit: MDL**

Mar 01, 2004  
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Analyte/Parameter	Result	Lab Qual	In-house Qual	Review	Unit	MDL	PQL	Method
Sampling Point: PZ16-POT-INFLOW								
Date sampled: Dec 16, 2003								
CARBON DISULFIDE	0.47	J	J	J	UG/L	0.24	1.0	8260B
TOLUENE	0.32	J	J	J	UG/L	0.15	1.0	8260B
Sampling Point: TBLK1								
Date sampled: Dec 16, 2003								
ACETONE	3.0	J B	J	J	UG/L	2.5	10	8260B
METHYLENE CHLORIDE	0.50	J B	J	J	UG/L	0.21	1.0	8260B

**Corporate Environmental Database  
Lab Analysis Report  
with Inhouse Qualifier and Review**

**Site: BARKSDALE WORKS  
Project: RESIDENT WELLS 12/03  
Reporting Limit: MDL**

03/01/2004  
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Sampling Point:	29600N-INFLOW	Sampleno:	BAR-G-29600N-INFLOW
Date Sampled:	12/17/03	Sample Type:	Groundwater
Lab Sample ID:	F65431-AA FS	Lab:	QES-DEN

Analyte/Parameter	Dilution	Result	Lab Qual	In-House Qual	Review	Unit	MDL	PQL	Date Analyzed
Method No: 8260B		Prep Method: 5030B							

**Analyses**

1,1,1,2-TETRACHLOROETHANE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003
1,1,1-TRICHLOROETHANE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
1,1,2,2-TETRACHLOROETHANE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003
1,1,2-TRICHLOROETHANE	1	<	0.27			UG/L	0.27	1.0	Dec 30, 2003
1,1-DICHLOROETHANE	1	<	0.22			UG/L	0.22	1.0	Dec 30, 2003
1,1-DICHLOROETHENE	1	<	0.23			UG/L	0.23	1.0	Dec 30, 2003
1,2,3-TRICHLOROPROPANE	1	<	0.33			UG/L	0.33	1.0	Dec 30, 2003
1,2,4-TRICHLOROBENZENE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003
1,2,4-TRIMETHYLBENZENE	1	<	0.15			UG/L	0.15	1.0	Dec 30, 2003
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	1	<	0.47			UG/L	0.47	2.0	Dec 30, 2003
1,2-DIBROMOETHANE (EDB)	1	<	0.18			UG/L	0.18	1.0	Dec 30, 2003
1,2-DICHLOROBENZENE	1	<	0.15			UG/L	0.15	1.0	Dec 30, 2003
1,2-DICHLOROETHANE	1	<	0.26			UG/L	0.26	1.0	Dec 30, 2003
1,2-DICHLOROETHENE (TOTAL)	1	<	0.24			UG/L	0.24	1.0	Dec 30, 2003
1,2-DICHLOROPROPANE	1	<	0.18			UG/L	0.18	1.0	Dec 30, 2003
1,3,5-TRIMETHYLBENZENE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
1,3-DICHLOROBENZENE	1	<	0.13			UG/L	0.13	1.0	Dec 30, 2003
1,3-DICHLOROPROPANE	1	<	0.22			UG/L	0.22	1.0	Dec 30, 2003
1,4-DICHLOROBENZENE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
2-BUTANONE (MEK)	1	<	2.0	R		UG/L	2.0	5.0	Dec 30, 2003
4-METHYL-2-PENTANONE	1	<	0.98			UG/L	0.98	5.0	Dec 30, 2003
ACETONE	1	<	2.5	R		UG/L	2.5	10	Dec 30, 2003
BENZENE	1	<	0.17			UG/L	0.17	1.0	Dec 30, 2003
BROMODICHLOROMETHANE	1	<	0.20			UG/L	0.20	1.0	Dec 30, 2003
BROMOFORM	1	<	0.23			UG/L	0.23	1.0	Dec 30, 2003
BROMOMETHANE	1	<	0.22			UG/L	0.22	2.0	Dec 30, 2003
CARBON DISULFIDE	1	<	0.24	UJ		UG/L	0.24	1.0	Dec 30, 2003
CARBON TETRACHLORIDE	1	<	0.20			UG/L	0.20	1.0	Dec 30, 2003
CHLOROBENZENE	1	<	0.13			UG/L	0.13	1.0	Dec 30, 2003
CHLOROETHANE	1	<	0.18			UG/L	0.18	2.0	Dec 30, 2003
CHLOROFORM	1	<	0.17			UG/L	0.17	1.0	Dec 30, 2003
CHLOROMETHANE	1	<	0.91			UG/L	0.91	2.0	Dec 30, 2003
DIBROMOCHLOROMETHANE	1	<	0.19			UG/L	0.19	1.0	Dec 30, 2003
DICHLORODIFLUOROMETHANE	1	<	0.22	UJ		UG/L	0.22	2.0	Dec 30, 2003
ETHYLBENZENE	1	<	0.12			UG/L	0.12	1.0	Dec 30, 2003
HEXANE	1	<	0.26			UG/L	0.26	1.0	Dec 30, 2003
METHYL TERT-BUTYL ETHER	1	<	0.38			UG/L	0.38	5.0	Dec 30, 2003
METHYLENE CHLORIDE	1	<	1.0	J B	U	UG/L	0.21	1.0	Dec 30, 2003
NAPHTHALENE	1	<	0.50			UG/L	0.50	1.0	Dec 30, 2003
STYRENE	1	<	0.14			UG/L	0.14	1.0	Dec 30, 2003
TETRACHLOROETHENE	1	<	0.26			UG/L	0.26	1.0	Dec 30, 2003

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Analyte/Parameter	Dilution	Result	Lab Qual	In-House Qual	Review	Unit	MDL	PQL	Date Analyzed
Method No: 8260B		Prep Method:	5030B						
<b>Analytics</b>									
TOLUENE	1	<	0.15			UG/L	0.15	1.0	Dec 30, 2003
TRICHLOROETHENE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
TRICHLOROFLUOROMETHANE	1	<	0.24			UG/L	0.24	2.0	Dec 30, 2003
VINYL CHLORIDE	1	<	0.19			UG/L	0.19	1.0	Dec 30, 2003
XYLEMES (TOTAL)	1	<	0.41			UG/L	0.41	2.0	Dec 30, 2003
<b>Surrogates</b>									
1,2-DICHLOROETHANE-D4	1		116 RPR			UG/L			Dec 30, 2003
4-BROMOFLUOROBENZENE	1		97 RPR			UG/L			Dec 30, 2003
DIBROMOFLUOROMETHANE	1		93 RPR			UG/L			Dec 30, 2003
TOLUENE-D8	1		94 RPR			UG/L			Dec 30, 2003

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Sampling Point: 30300N-INFLOW      Sampleno: BAR-G-30300N-INFLOW  
 Date Sampled: 12/16/03      Sample Type: Groundwater  
 Lab Sample ID: F653Q1-AA FS      Lab: QES-DEN

Analyte/Parameter	Dilution	Result	Lab Qual	In-House Qual	Review	Unit	MDL	PQL	Date Analyzed
Method No: 8321		Prep Method:	SW3535						
<b>Analytics</b>									
1,3,5-TRINITROBENZENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
1,3-DINITROBENZENE	1	<	0.014			UG/L	0.014	0.12	Dec 29, 2003
2,4,6-TRINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2,4-DINITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2-AMINO-4,6-DINITROTOLUENE	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
2-NITROTOLUENE	1	<	0.023			UG/L	0.023	0.12	Dec 29, 2003
3-NITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
4-AMINO-2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
4-NITROTOLUENE	1	<	0.018			UG/L	0.018	0.12	Dec 29, 2003
HMX	1	<	0.016			UG/L	0.016	0.12	Dec 29, 2003
NITROBENZENE	1	<	0.020			UG/L	0.020	0.12	Dec 29, 2003
NITROGLYCERIN	1	<	0.039			UG/L	0.039	0.12	Dec 29, 2003
PETN	1	<	0.031			UG/L	0.031	0.12	Dec 29, 2003
RDX	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
TETRYL	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
<b>Surrogates</b>									
NITROBENZENE-D5	1		77 RPR			UG/L			Dec 29, 2003

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Sampling Point: 30380N-INFLOW      Sampleno: BAR-G-30380N-INFLOW  
 Date Sampled: 12/16/03      Sample Type: Groundwater  
 Lab Sample ID: F654P1-AA FS      Lab: QES-DEN

Analyte/Parameter	Dilution	Result	In-House		Unit	MDL	PQL	Date Analyzed					
			Lab Qual	House Qual									
Method No: 8321	Prep Method:		SW3535										
<b>Analytes</b>													
1,3,5-TRINITROBENZENE	1	<	0.015		UG/L	0.015	0.12	Dec 29, 2003					
1,3-DINITROBENZENE	1	<	0.014		UG/L	0.014	0.12	Dec 29, 2003					
2,4,6-TRINITROTOLUENE	1	<	0.015		UG/L	0.015	0.12	Dec 29, 2003					
2,4-DINITROTOLUENE	1	<	0.019		UG/L	0.019	0.12	Dec 29, 2003					
2,6-DINITROTOLUENE	1	<	0.015		UG/L	0.015	0.12	Dec 29, 2003					
2-AMINO-4,6-DINITROTOLUENE	1	<	0.012		UG/L	0.012	0.12	Dec 29, 2003					
2-NITROTOLUENE	1	<	0.023		UG/L	0.023	0.12	Dec 29, 2003					
3-NITROTOLUENE	1	<	0.019		UG/L	0.019	0.12	Dec 29, 2003					
4-AMINO-2,6-DINITROTOLUENE	1	<	0.015		UG/L	0.015	0.12	Dec 29, 2003					
4-NITROTOLUENE	1	<	0.018		UG/L	0.018	0.12	Dec 29, 2003					
HMX	1	<	0.016		UG/L	0.016	0.12	Dec 29, 2003					
NITROBENZENE	1	<	0.020		UG/L	0.020	0.12	Dec 29, 2003					
NITROGLYCERIN	1	<	0.039		UG/L	0.039	0.12	Dec 29, 2003					
PETN	1	<	0.031		UG/L	0.031	0.12	Dec 29, 2003					
RDX	1	<	0.012		UG/L	0.012	0.12	Dec 29, 2003					
TETRYL	1	<	0.012		UG/L	0.012	0.12	Dec 29, 2003					
<b>Surrogates</b>													
NITROBENZENE-D5	1	82 RPR			UG/L	Dec 29, 2003							

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Sampling Point: 30490N-INFLOW      Sampleno: BAR-G-30490N-INFLOW  
 Date Sampled: 12/16/03      Sample Type: Groundwater  
 Lab Sample ID: F65321-AA FS      Lab: QES-DEN

Analyte/Parameter	Dilution	Result	Lab Qual	In-House Qual	Review	Unit	MDL	PQL	Date Analyzed
Method No: 8321		Prep Method:	SW3535						
<b>Analytics</b>									
1,3,5-TRINITROBENZENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
1,3-DINITROBENZENE	1	<	0.014			UG/L	0.014	0.12	Dec 29, 2003
2,4,6-TRINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2,4-DINITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2-AMINO-4,6-DINITROTOLUENE	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
2-NITROTOLUENE	1	<	0.023			UG/L	0.023	0.12	Dec 29, 2003
3-NITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
4-AMINO-2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
4-NITROTOLUENE	1	<	0.018			UG/L	0.018	0.12	Dec 29, 2003
HMX	1	<	0.016			UG/L	0.016	0.12	Dec 29, 2003
NITROBENZENE	1	<	0.020			UG/L	0.020	0.12	Dec 29, 2003
NITROGLYCERIN	1	<	0.039			UG/L	0.039	0.12	Dec 29, 2003
PETN	1	<	0.031			UG/L	0.031	0.12	Dec 29, 2003
RDX	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
TETRYL	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
<b>Surrogates</b>									
NITROBENZENE-D5	1		83 RPR			UG/L			Dec 29, 2003

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Sampling Point: 30600N-INFLOW      Sampleno: BAR-G-30600N-INFLOW  
 Date Sampled: 12/17/03      Sample Type: Groundwater  
 Lab Sample ID: F654T1-AA FS      Lab: QES-DEN

Analyte/Parameter	Dilution	Result	Lab	In-House	Review	Unit	MDL	PQL	Date Analyzed
			Qual	Qual					
Method No: 8321		Prep Method:	SW3535						
<b>Analyses</b>									
1,3,5-TRINITROBENZENE	1	<	0.015			UG/L	0.015	0.12	Dec 30, 2003
1,3-DINITROBENZENE	1	<	0.014			UG/L	0.014	0.12	Dec 30, 2003
2,4,6-TRINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 30, 2003
2,4-DINITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 30, 2003
2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 30, 2003
2-AMINO-4,6-DINITROTOLUENE	1	<	0.012			UG/L	0.012	0.12	Dec 30, 2003
2-NITROTOLUENE	1	<	0.023			UG/L	0.023	0.12	Dec 30, 2003
3-NITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 30, 2003
4-AMINO-2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 30, 2003
4-NITROTOLUENE	1	<	0.018			UG/L	0.018	0.12	Dec 30, 2003
HMX	1	<	0.016			UG/L	0.016	0.12	Dec 30, 2003
NITROBENZENE	1	<	0.020			UG/L	0.020	0.12	Dec 30, 2003
NITROGLYCERIN	1	<	0.039			UG/L	0.039	0.12	Dec 30, 2003
PETN	1	<	0.031			UG/L	0.031	0.12	Dec 30, 2003
RDX	1	<	0.012			UG/L	0.012	0.12	Dec 30, 2003
TETRYL	1	<	0.012			UG/L	0.012	0.12	Dec 30, 2003
<b>Surrogates</b>									
NITROBENZENE-D5	1		46 RPR			UG/L			Dec 30, 2003

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Sampling Point: 30900N-INFLOW      Sampleno: BAR-G-30900N-INFLOW  
Date Sampled: 12/17/03      Sample Type: Groundwater  
Lab Sample ID: F65471-AA FS      Lab: QES-DEN

Analyte/Parameter	Dilution	Result	Lab	In-House	Review	Unit	MDL	PQL	Date Analyzed
			Qual	Qual					
Method No: 8260B		Prep Method:	5030B						
<b>Analyses</b>									
1,1,1,2-TETRACHLOROETHANE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003
1,1,1-TRICHLOROETHANE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
1,1,2,2-TETRACHLOROETHANE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003
1,1,2-TRICHLOROETHANE	1	<	0.27			UG/L	0.27	1.0	Dec 30, 2003
1,1-DICHLOROETHANE	1	<	0.22			UG/L	0.22	1.0	Dec 30, 2003
1,1-DICHLOROETHENE	1	<	0.23			UG/L	0.23	1.0	Dec 30, 2003
1,2,3-TRICHLOROPROPANE	1	<	0.33			UG/L	0.33	1.0	Dec 30, 2003
1,2,4-TRICHLOROBENZENE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003
1,2,4-TRIMETHYLBENZENE	1	<	0.15			UG/L	0.15	1.0	Dec 30, 2003
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	1	<	0.47			UG/L	0.47	2.0	Dec 30, 2003
1,2-DIBROMOETHANE (EDB)	1	<	0.18			UG/L	0.18	1.0	Dec 30, 2003
1,2-DICHLOROBENZENE	1	<	0.15			UG/L	0.15	1.0	Dec 30, 2003
1,2-DICHLOROETHANE	1	<	0.26			UG/L	0.26	1.0	Dec 30, 2003
1,2-DICHLOROETHENE (TOTAL)	1	<	0.24			UG/L	0.24	1.0	Dec 30, 2003
1,2-DICHLOROPROPANE	1	<	0.18			UG/L	0.18	1.0	Dec 30, 2003
1,3,5-TRIMETHYLBENZENE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
1,3-DICHLOROBENZENE	1	<	0.13			UG/L	0.13	1.0	Dec 30, 2003
1,3-DICHLOROPROPANE	1	<	0.22			UG/L	0.22	1.0	Dec 30, 2003
1,4-DICHLOROBENZENE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
2-BUTANONE (MEK)	1	<	2.0		R	UG/L	2.0	5.0	Dec 30, 2003
4-METHYL-2-PENTANONE	1	<	0.98			UG/L	0.98	5.0	Dec 30, 2003
ACETONE	1	<	2.5		R	UG/L	2.5	10	Dec 30, 2003
BENZENE	1	<	0.17			UG/L	0.17	1.0	Dec 30, 2003
BROMODICHLOROMETHANE	1	<	0.20			UG/L	0.20	1.0	Dec 30, 2003
BROMOFORM	1	<	0.23			UG/L	0.23	1.0	Dec 30, 2003
BROMOMETHANE	1	<	0.22			UG/L	0.22	2.0	Dec 30, 2003
CARBON DISULFIDE	1	<	0.24		UJ	UG/L	0.24	1.0	Dec 30, 2003
CARBON TETRACHLORIDE	1	<	0.20			UG/L	0.20	1.0	Dec 30, 2003
CHLOROBENZENE	1	<	0.13			UG/L	0.13	1.0	Dec 30, 2003
CHLOROETHANE	1	<	0.18			UG/L	0.18	2.0	Dec 30, 2003
CHLOROFORM	1	<	0.17			UG/L	0.17	1.0	Dec 30, 2003
CHLOROMETHANE	1	<	0.91			UG/L	0.91	2.0	Dec 30, 2003
DIBROMOCHLOROMETHANE	1	<	0.19			UG/L	0.19	1.0	Dec 30, 2003
DICHLORODIFLUOROMETHANE	1	<	0.22		UJ	UG/L	0.22	2.0	Dec 30, 2003
ETHYLBENZENE	1	<	0.12			UG/L	0.12	1.0	Dec 30, 2003
HEXANE	1	<	0.26			UG/L	0.26	1.0	Dec 30, 2003
METHYL TERT-BUTYL ETHER	1	<	0.38			UG/L	0.38	5.0	Dec 30, 2003
METHYLENE CHLORIDE	1	<	1.0	JB	U	UG/L	0.21	1.0	Dec 30, 2003
NAPHTHALENE	1	<	0.50			UG/L	0.50	1.0	Dec 30, 2003
STYRENE	1	<	0.14			UG/L	0.14	1.0	Dec 30, 2003
TETRACHLOROETHENE	1	<	0.26			UG/L	0.26	1.0	Dec 30, 2003

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Analyte/Parameter	Dilution	Result	Lab Qual	In-House Qual	Review	Unit	MDL	PQL	Date Analyzed
Method No: 8260B		Prep Method:	5030B						
<b>Analyses</b>									
TOLUENE									
	1	<	0.15			UG/L	0.15	1.0	Dec 30, 2003
TRICHLOROETHENE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
TRICHLOROFLUOROMETHANE	1	<	0.24			UG/L	0.24	2.0	Dec 30, 2003
VINYL CHLORIDE	1	<	0.19			UG/L	0.19	1.0	Dec 30, 2003
XYLEMES (TOTAL)	1	<	0.41			UG/L	0.41	2.0	Dec 30, 2003
<b>Surrogates</b>									
1,2-DICHLOROETHANE-D4	1		126 RPR			UG/L			Dec 30, 2003
4-BROMOFLUOROBENZENE	1		98 RPR			UG/L			Dec 30, 2003
DIBROMOFLUOROMETHANE	1		96 RPR			UG/L			Dec 30, 2003
TOLUENE-D8	1		92 RPR			UG/L			Dec 30, 2003

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Sampling Point:	72730H-INFLOW	Sampleno:	BAR-G-72730H-INFLOW
Date Sampled:	12/16/03	Sample Type:	Groundwater
Lab Sample ID:	F654M1-AA FS	Lab:	QES-DEN

Analyte/Parameter	Dilution	Result	Lab	In-House	Review	Unit	MDL	PQL	Date Analyzed
			Qual	Qual					
Method No: 8321		Prep Method:	SW3535						
<b>Analytes</b>									
1,3,5-TRINITROBENZENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
1,3-DINITROBENZENE	1	<	0.014			UG/L	0.014	0.12	Dec 29, 2003
2,4,6-TRINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2,4-DINITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2-AMINO-4,6-DINITROTOLUENE	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
2-NITROTOLUENE	1	<	0.023			UG/L	0.023	0.12	Dec 29, 2003
3-NITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
4-AMINO-2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
4-NITROTOLUENE	1	<	0.018			UG/L	0.018	0.12	Dec 29, 2003
HMX	1	<	0.016			UG/L	0.016	0.12	Dec 29, 2003
NITROBENZENE	1	<	0.020			UG/L	0.020	0.12	Dec 29, 2003
NITROGLYCERIN	1	<	0.039			UG/L	0.039	0.12	Dec 29, 2003
PETN	1	<	0.031			UG/L	0.031	0.12	Dec 29, 2003
RDX	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
TETRYL	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
<b>Surrogates</b>									
NITROBENZENE-D5	1		67 RPR			UG/L			Dec 29, 2003

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**Site: BARKSDALE WORKS**  
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Sampling Point: 72860H-INFLOW      Sampleno: BAR-G-72860H-INFLOW  
 Date Sampled: 12/16/03      Sample Type: Groundwater  
 Lab Sample ID: F654L1-AA FS      Lab: QES-DEN

Analyte/Parameter	Dilution	Result	Lab	In-House	Review	Unit	MDL	PQL	Date Analyzed
			Qual	Qual					
Method No: 8321		Prep Method:	SW3535						
<b>Analytes</b>									
1,3,5-TRINITROBENZENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
1,3-DINITROBENZENE	1	<	0.014			UG/L	0.014	0.12	Dec 29, 2003
2,4,6-TRINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2,4-DINITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2-AMINO-4,6-DINITROTOLUENE	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
2-NITROTOLUENE	1	<	0.023			UG/L	0.023	0.12	Dec 29, 2003
3-NITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
4-AMINO-2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
4-NITROTOLUENE	1	<	0.018			UG/L	0.018	0.12	Dec 29, 2003
HMX	1	<	0.016			UG/L	0.016	0.12	Dec 29, 2003
NITROBENZENE	1	<	0.020			UG/L	0.020	0.12	Dec 29, 2003
NITROGLYCERIN	1	<	0.039			UG/L	0.039	0.12	Dec 29, 2003
PETN	1	<	0.031			UG/L	0.031	0.12	Dec 29, 2003
RDX	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
TETRYL	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
<b>Surrogates</b>									
NITROBENZENE-D5	1		88 RPR			UG/L			Dec 29, 2003

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Sampling Point:	73250H-EFFLUENT	Sampleno:	BAR-G-73250H-EFFLUENT
Date Sampled:	12/16/03	Sample Type:	Groundwater
Lab Sample ID:	F654J1-AA FS	Lab:	QES-DEN

Analyte/Parameter	Dilution	Result	Lab	In-House	Review	Unit	MDL	PQL	Date Analyzed
			Qual	Qual					
Method No: 8321	Prep Method:	SW3535							
<b>Analytes</b>									
1,3,5-TRINITROBENZENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
1,3-DINITROBENZENE	1	<	0.014			UG/L	0.014	0.12	Dec 29, 2003
2,4,6-TRINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2,4-DINITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2-AMINO-4,6-DINITROTOLUENE	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
2-NITROTOLUENE	1	<	0.023			UG/L	0.023	0.12	Dec 29, 2003
3-NITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
4-AMINO-2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
4-NITROTOLUENE	1	<	0.018			UG/L	0.018	0.12	Dec 29, 2003
HMX	1	<	0.016			UG/L	0.016	0.12	Dec 29, 2003
NITROBENZENE	1	<	0.020			UG/L	0.020	0.12	Dec 29, 2003
NITROGLYCERIN	1	<	0.039			UG/L	0.039	0.12	Dec 29, 2003
PETN	1	<	0.031			UG/L	0.031	0.12	Dec 29, 2003
RDX	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
TETRYL	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
<b>Surrogates</b>									
NITROBENZENE-D5	1		80 RPR			UG/L			Dec 29, 2003

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Sampling Point:	73250H-INFLOW	Sample no:	BAR-G-73250H-INFLOW
Date Sampled:	12/16/03	Sample Type:	Groundwater
Lab Sample ID:	F654E1-AA FS	Lab:	QES-DEN

Analyte/Parameter	Dilution	Result	Lab	In-House	Review	Unit	MDL	PQL	Date Analyzed
			Qual	Qual					
Method No: 353.2		Prep Method:	METHOD						

**Analytes**

NITRATE-NITRITE	1	<	0.021	MG/L	0.021	0.10	Dec 30, 2003
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Analyte/Parameter	Dilution	Result	Lab	In-House	Review	Unit	MDL	PQL	Date Analyzed
			Qual	Qual					
Method No: 8321		Prep Method:	SW3535						

**Analytes**

1,3,5-TRINITROBENZENE	1	<	0.015	UG/L	0.015	0.12	Dec 29, 2003
1,3-DINITROBENZENE	1	<	0.014	UG/L	0.014	0.12	Dec 29, 2003
2,4,6-TRINITROTOLUENE	1	<	0.015	UG/L	0.015	0.12	Dec 29, 2003
2,4-DINITROTOLUENE	1	<	0.019	UG/L	0.019	0.12	Dec 29, 2003
2,6-DINITROTOLUENE	1	<	0.015	UG/L	0.015	0.12	Dec 29, 2003
2-AMINO-4,6-DINITROTOLUENE	1	<	0.012	UG/L	0.012	0.12	Dec 29, 2003
2-NITROTOLUENE	1	<	0.023	UG/L	0.023	0.12	Dec 29, 2003
3-NITROTOLUENE	1	<	0.019	UG/L	0.019	0.12	Dec 29, 2003
4-AMINO-2,6-DINITROTOLUENE	1	<	0.015	UG/L	0.015	0.12	Dec 29, 2003
4-NITROTOLUENE	1	<	0.018	UG/L	0.018	0.12	Dec 29, 2003
HMX	1	<	0.016	UG/L	0.016	0.12	Dec 29, 2003
NITROBENZENE	1	<	0.020	UG/L	0.020	0.12	Dec 29, 2003
NITROGLYCERIN	1	<	0.039	UG/L	0.039	0.12	Dec 29, 2003
PETN	1	<	0.031	UG/L	0.031	0.12	Dec 29, 2003
RDX	1	<	0.012	UG/L	0.012	0.12	Dec 29, 2003
TETRYL	1	<	0.012	UG/L	0.012	0.12	Dec 29, 2003

**Surrogates**

NITROBENZENE-D5	1	93 RPR	UG/L	Dec 29, 2003
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Sampling Point:	73280H-INFLOW	Sample no:	BAR-G-73280H-INFLOW
Date Sampled:	12/16/03	Sample Type:	Groundwater
Lab Sample ID:	F65331-AA FS	Lab:	QES-DEN

Analyte/Parameter	Dilution	Result	Lab	In-House	Review	Unit	MDL	PQL	Date Analyzed
			Qual	Qual					
Method No: 8321		Prep Method:	SW3535						
<b>Analytes</b>									
1,3,5-TRINITROBENZENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
1,3-DINITROBENZENE	1	<	0.014			UG/L	0.014	0.12	Dec 29, 2003
2,4,6-TRINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2,4-DINITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
2-AMINO-4,6-DINITROTOLUENE	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
2-NITROTOLUENE	1	<	0.023			UG/L	0.023	0.12	Dec 29, 2003
3-NITROTOLUENE	1	<	0.019			UG/L	0.019	0.12	Dec 29, 2003
4-AMINO-2,6-DINITROTOLUENE	1	<	0.015			UG/L	0.015	0.12	Dec 29, 2003
4-NITROTOLUENE	1	<	0.018			UG/L	0.018	0.12	Dec 29, 2003
HMX	1	<	0.016			UG/L	0.016	0.12	Dec 29, 2003
NITROBENZENE	1	<	0.020			UG/L	0.020	0.12	Dec 29, 2003
NITROGLYCERIN	1	<	0.039			UG/L	0.039	0.12	Dec 29, 2003
PETN	1	<	0.031			UG/L	0.031	0.12	Dec 29, 2003
RDX	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
TETRYL	1	<	0.012			UG/L	0.012	0.12	Dec 29, 2003
<b>Surrogates</b>									
NITROBENZENE-D5	1		85 RPR			UG/L			Dec 29, 2003

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Sampling Point:	PZ16-POT-INFLOW	Sampleno:	BAR-G-PZ16-POT-INFLOW
Date Sampled:	12/16/03	Sample Type:	Groundwater
Lab Sample ID:	F65491-AA FS	Lab:	QES-DEN

Analyte/Parameter	Dilution	Result	Lab	In-House	Review	Unit	MDL	PQL	Date Analyzed
			Qual	Qual					
Method No: 8260B		Prep Method:	5030B						
<b>Analyses</b>									
1,1,1,2-TETRACHLOROETHANE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003
1,1,1-TRICHLOROETHANE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
1,1,2,2-TETRACHLOROETHANE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003
1,1,2-TRICHLOROETHANE	1	<	0.27			UG/L	0.27	1.0	Dec 30, 2003
1,1-DICHLOROETHANE	1	<	0.22			UG/L	0.22	1.0	Dec 30, 2003
1,1-DICHLOROETHENE	1	<	0.23			UG/L	0.23	1.0	Dec 30, 2003
1,2,3-TRICHLOROPROPANE	1	<	0.33			UG/L	0.33	1.0	Dec 30, 2003
1,2,4-TRICHLOROBENZENE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003
1,2,4-TRIMETHYLBENZENE	1	<	0.15			UG/L	0.15	1.0	Dec 30, 2003
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	1	<	0.47			UG/L	0.47	2.0	Dec 30, 2003
1,2-DIBROMOETHANE (EDB)	1	<	0.18			UG/L	0.18	1.0	Dec 30, 2003
1,2-DICHLOROBENZENE	1	<	0.15			UG/L	0.15	1.0	Dec 30, 2003
1,2-DICHLOROETHANE	1	<	0.26			UG/L	0.26	1.0	Dec 30, 2003
1,2-DICHLOROETHENE (TOTAL)	1	<	0.24			UG/L	0.24	1.0	Dec 30, 2003
1,2-DICHLOROPROPANE	1	<	0.18			UG/L	0.18	1.0	Dec 30, 2003
1,3,5-TRIMETHYLBENZENE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
1,3-DICHLOROBENZENE	1	<	0.13			UG/L	0.13	1.0	Dec 30, 2003
1,3-DICHLOROPROPANE	1	<	0.22			UG/L	0.22	1.0	Dec 30, 2003
1,4-DICHLOROBENZENE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
2-BUTANONE (MEK)	1	<	2.0	R		UG/L	2.0	5.0	Dec 30, 2003
4-METHYL-2-PENTANONE	1	<	0.98			UG/L	0.98	5.0	Dec 30, 2003
ACETONE	1	<	10	JB	U	UG/L	2.5	10	Dec 30, 2003
BENZENE	1	<	0.17			UG/L	0.17	1.0	Dec 30, 2003
BROMODICHLOROMETHANE	1	<	0.20			UG/L	0.20	1.0	Dec 30, 2003
BROMOFORM	1	<	0.23			UG/L	0.23	1.0	Dec 30, 2003
BROMOMETHANE	1	<	0.22			UG/L	0.22	2.0	Dec 30, 2003
CARBON DISULFIDE	1	0.47	J	J	J	UG/L	0.24	1.0	Dec 30, 2003
CARBON TETRACHLORIDE	1	<	0.20			UG/L	0.20	1.0	Dec 30, 2003
CHLOROBENZENE	1	<	0.13			UG/L	0.13	1.0	Dec 30, 2003
CHLOROETHANE	1	<	0.18			UG/L	0.18	2.0	Dec 30, 2003
CHLOROFORM	1	<	0.17			UG/L	0.17	1.0	Dec 30, 2003
CHLORMETHANE	1	<	0.91			UG/L	0.91	2.0	Dec 30, 2003
DIBROMOCHLOROMETHANE	1	<	0.19			UG/L	0.19	1.0	Dec 30, 2003
DICHLORODIFLUOROMETHANE	1	<	0.22		UJ	UG/L	0.22	2.0	Dec 30, 2003
ETHYLBENZENE	1	<	0.12			UG/L	0.12	1.0	Dec 30, 2003
HEXANE	1	<	0.26			UG/L	0.26	1.0	Dec 30, 2003
METHYL TERT-BUTYL ETHER	1	<	0.38			UG/L	0.38	5.0	Dec 30, 2003
METHYLENE CHLORIDE	1	<	1.0	JB	U	UG/L	0.21	1.0	Dec 30, 2003
NAPHTHALENE	1	<	0.50			UG/L	0.50	1.0	Dec 30, 2003
STYRENE	1	<	0.14			UG/L	0.14	1.0	Dec 30, 2003
TETRACHLOROETHENE	1	<	0.26			UG/L	0.26	1.0	Dec 30, 2003

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Analyte/Parameter	Dilution	Result	Lab Qual	In-House Qual	Review	Unit	MDL	PQL	Date Analyzed
Method No: 8260B	Prep Method:	5030B							
<b>Analytics</b>									
TOLUENE	1	0.32	J	J	J	UG/L	0.15	1.0	Dec 30, 2003
TRICHLOROETHENE	1	< 0.16				UG/L	0.16	1.0	Dec 30, 2003
TRICHLOROFLUOROMETHANE	1	< 0.24				UG/L	0.24	2.0	Dec 30, 2003
VINYL CHLORIDE	1	< 0.19				UG/L	0.19	1.0	Dec 30, 2003
XYLEMES (TOTAL)	1	< 0.41				UG/L	0.41	2.0	Dec 30, 2003
<b>Surrogates</b>									
1,2-DICHLOROETHANE-D4	1	115 RPR				UG/L			Dec 30, 2003
4-BROMOFLUOROBENZENE	1	95 RPR				UG/L			Dec 30, 2003
DIBROMOFLUOROMETHANE	1	92 RPR				UG/L			Dec 30, 2003
TOLUENE-D8	1	92 RPR				UG/L			Dec 30, 2003

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Sampling Point:	TBLK1	Sampleno:	BAR-K-TBLK1
Date Sampled:	12/16/03	Sample Type:	Blank Water
Lab Sample ID:	F654W1-AA TB	Lab:	QES-DEN

Analyte/Parameter	Dilution	Result	In-House			MDL	PQL	Date Analyzed
			Lab Qual	Qual	Review			
Method No: 8260B		Prep Method: 5030B						

**Analytes**

1,1,1,2-TETRACHLOROETHANE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003	
1,1,1-TRICHLOROETHANE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003	
1,1,2,2-TETRACHLOROETHANE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003	
1,1,2-TRICHLOROETHANE	1	<	0.27			UG/L	0.27	1.0	Dec 30, 2003	
1,1-DICHLOROETHANE	1	<	0.22			UG/L	0.22	1.0	Dec 30, 2003	
1,1-DICHLOROETHENE	1	<	0.23			UG/L	0.23	1.0	Dec 30, 2003	
1,2,3-TRICHLOROPROPANE	1	<	0.33			UG/L	0.33	1.0	Dec 30, 2003	
1,2,4-TRICHLOROBENZENE	1	<	0.21			UG/L	0.21	1.0	Dec 30, 2003	
1,2,4-TRIMETHYLBENZENE	1	<	0.15			UG/L	0.15	1.0	Dec 30, 2003	
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	1	<	0.47			UG/L	0.47	2.0	Dec 30, 2003	
1,2-DIBROMOETHANE (EDB)	1	<	0.18			UG/L	0.18	1.0	Dec 30, 2003	
1,2-DICHLOROBENZENE	1	<	0.15			UG/L	0.15	1.0	Dec 30, 2003	
1,2-DICHLOROETHANE	1	<	0.26			UG/L	0.26	1.0	Dec 30, 2003	
1,2-DICHLOROETHENE (TOTAL)	1	<	0.24			UG/L	0.24	1.0	Dec 30, 2003	
1,2-DICHLOROPROPANE	1	<	0.18			UG/L	0.18	1.0	Dec 30, 2003	
1,3,5-TRIMETHYLBENZENE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003	
1,3-DICHLOROBENZENE	1	<	0.13			UG/L	0.13	1.0	Dec 30, 2003	
1,3-DICHLOROPROPANE	1	<	0.22			UG/L	0.22	1.0	Dec 30, 2003	
1,4-DICHLOROBENZENE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003	
2-BUTANONE (MEK)	1	<	2.0	R		UG/L	2.0	5.0	Dec 30, 2003	
4-METHYL-2-PENTANONE	1	<	0.98			UG/L	0.98	5.0	Dec 30, 2003	
ACETONE	1		3.0	J B	J	J	UG/L	2.5	10	Dec 30, 2003
BENZENE	1	<	0.17				UG/L	0.17	1.0	Dec 30, 2003
BROMODICHLOROMETHANE	1	<	0.20				UG/L	0.20	1.0	Dec 30, 2003
BROMOFORM	1	<	0.23				UG/L	0.23	1.0	Dec 30, 2003
BROMOMETHANE	1	<	0.22				UG/L	0.22	2.0	Dec 30, 2003
CARBON DISULFIDE	1	<	0.24		UJ		UG/L	0.24	1.0	Dec 30, 2003
CARBON TETRACHLORIDE	1	<	0.20				UG/L	0.20	1.0	Dec 30, 2003
CHLOROBENZENE	1	<	0.13				UG/L	0.13	1.0	Dec 30, 2003
CHLOROETHANE	1	<	0.18				UG/L	0.18	2.0	Dec 30, 2003
CHLOROFORM	1	<	0.17				UG/L	0.17	1.0	Dec 30, 2003
CHLOROMETHANE	1	<	0.91				UG/L	0.91	2.0	Dec 30, 2003
DIBROMOCHLOROMETHANE	1	<	0.19				UG/L	0.19	1.0	Dec 30, 2003
DICHLORODIFLUOROMETHANE	1	<	0.22		UJ		UG/L	0.22	2.0	Dec 30, 2003
ETHYLBENZENE	1	<	0.12				UG/L	0.12	1.0	Dec 30, 2003
HEXANE	1	<	0.26				UG/L	0.26	1.0	Dec 30, 2003
METHYL TERT-BUTYL ETHER	1	<	0.38				UG/L	0.38	5.0	Dec 30, 2003
METHYLENE CHLORIDE	1		0.50	J B	J	J	UG/L	0.21	1.0	Dec 30, 2003
NAPHTHALENE	1	<	0.50				UG/L	0.50	1.0	Dec 30, 2003
STYRENE	1	<	0.14				UG/L	0.14	1.0	Dec 30, 2003
TETRACHLOROETHENE	1	<	0.26				UG/L	0.26	1.0	Dec 30, 2003

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Analyte/Parameter	Dilution	Result	Lab Qual	In-House Qual	Review	Unit	MDL	PQL	Date Analyzed
Method No: 8260B		Prep Method:	5030B						
<b>Analytics</b>									
TOLUENE	1	<	0.15			UG/L	0.15	1.0	Dec 30, 2003
TRICHLOROETHENE	1	<	0.16			UG/L	0.16	1.0	Dec 30, 2003
TRICHLOROFLUOROMETHANE	1	<	0.24			UG/L	0.24	2.0	Dec 30, 2003
VINYL CHLORIDE	1	<	0.19			UG/L	0.19	1.0	Dec 30, 2003
XYLENES (TOTAL)	1	<	0.41			UG/L	0.41	2.0	Dec 30, 2003
<b>Surrogates</b>									
1,2-DICHLOROETHANE-D4	1		116 RPR			UG/L			Dec 30, 2003
4-BROMOFLUOROBENZENE	1		94 RPR			UG/L			Dec 30, 2003
DIBROMOFLUOROMETHANE	1		90 RPR			UG/L			Dec 30, 2003
TOLUENE-D8	1		91 RPR			UG/L			Dec 30, 2003

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**Batch Identifier 121245      5030B 8260B 30-Dec-03 4007383 H**

Method Number: 8260B	Prep Method: 5030B	Pre-prep:
Batch Start Date: 12/30/2003	Intrument: H	Batch Number:

Analyte/Parameter	Result	Unit	MDL	PQL	RPR	RPR Limits		RPD	RPD Max
						Min	Max		
<b>Sample Type LCS</b>									
1,1-DICHLOROETHENE	8.67	UG/L	NS	NS	87	67	125		
BENZENE	10.0	UG/L	NS	NS	100	75	116		
CHLOROBENZENE	8.72	UG/L	NS	NS	87	77	117		
TOLUENE	8.55	UG/L	NS	NS	85	74	115		
TRICHLOROETHENE	8.45	UG/L	NS	NS	85	80	123		
1,2-DICHLOROETHANE-D4	110 RPR	UG/L	NS	NS	110	59	129		
4-BROMOFLUOROBENZENE	92 RPR	UG/L	NS	NS	92	74	114		
DIBROMOFLUOROMETHANE	87 RPR	UG/L	NS	NS	87	76	116		
TOLUENE-D8	93 RPR	UG/L	NS	NS	93	76	116		
<b>Sample Type LCSD</b>									
1,1-DICHLOROETHENE	8.47	UG/L	NS	NS	85	67	125	2.2	20
BENZENE	9.98	UG/L	NS	NS	100	75	116	0.47	20
CHLOROBENZENE	8.91	UG/L	NS	NS	89	77	117	2.3	20
TOLUENE	8.65	UG/L	NS	NS	87	74	115	1.2	20
TRICHLOROETHENE	8.27	UG/L	NS	NS	83	80	123	2.1	20
1,2-DICHLOROETHANE-D4	110 RPR	UG/L	NS	NS	110	59	129		
4-BROMOFLUOROBENZENE	95 RPR	UG/L	NS	NS	95	74	114		
DIBROMOFLUOROMETHANE	87 RPR	UG/L	NS	NS	87	76	116		
TOLUENE-D8	93 RPR	UG/L	NS	NS	93	76	116		
<b>Sample Type MB</b>									
1,1,1,2-TETRACHLOROETHANE	< 0.21	UG/L	0.21	1.0					
1,1,1-TRICHLOROETHANE	< 0.16	UG/L	0.16	1.0					
1,1,2,2-TETRACHLOROETHANE	< 0.21	UG/L	0.21	1.0					
1,1,2-TRICHLOROETHANE	< 0.27	UG/L	0.27	1.0					
1,1-DICHLOROETHANE	< 0.22	UG/L	0.22	1.0					
1,1-DICHLOROETHENE	< 0.23	UG/L	0.23	1.0					
1,2,3-TRICHLOROPROPANE	< 0.33	UG/L	0.33	1.0					
1,2,4-TRICHLOROBENZENE	< 0.21	UG/L	0.21	1.0					
1,2,4-TRIMETHYLBENZENE	< 0.15	UG/L	0.15	1.0					
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	< 0.47	UG/L	0.47	2.0					
1,2-DIBROMOETHANE (EDB)	< 0.18	UG/L	0.18	1.0					
1,2-DICHLOROBENZENE	< 0.15	UG/L	0.15	1.0					
1,2-DICHLOROETHANE	< 0.26	UG/L	0.26	1.0					
1,2-DICHLOROETHENE (TOTAL)	< 0.24	UG/L	0.24	1.0					
1,2-DICHLOROPROPANE	< 0.18	UG/L	0.18	1.0					
1,3,5-TRIMETHYLBENZENE	< 0.16	UG/L	0.16	1.0					
1,3-DICHLOROBENZENE	< 0.13	UG/L	0.13	1.0					
1,3-DICHLOROPROPANE	< 0.22	UG/L	0.22	1.0					
1,4-DICHLOROBENZENE	< 0.16	UG/L	0.16	1.0					
2-BUTANONE (MEK)	< 2.0	UG/L	2.0	5.0					
4-BROMOFLUOROBENZENE	94 RPR	UG/L			94	74	114		
4-METHYL-2-PENTANONE	< 0.98	UG/L	0.98	5.0					
ACETONE	2.5	UG/L	2.5	10					
BENZENE	< 0.17	UG/L	0.17	1.0					
BROMODICHLOROMETHANE	< 0.20	UG/L	0.20	1.0					
BROMOFORM	< 0.23	UG/L	0.23	1.0					
BROMOMETHANE	< 0.22	UG/L	0.22	2.0					
CARBON DISULFIDE	< 0.24	UG/L	0.24	1.0					
CARBON TETRACHLORIDE	< 0.20	UG/L	0.20	1.0					
CHLOROBENZENE	< 0.13	UG/L	0.13	1.0					
CHLOROETHANE	< 0.18	UG/L	0.18	2.0					
CHLOROFORM	< 0.17	UG/L	0.17	1.0					
CHLOROMETHANE	< 0.91	UG/L	0.91	2.0					
DIBROMOCHLOROMETHANE	< 0.19	UG/L	0.19	1.0					

**Corporate Environmental Database**  
**Lab Analysis QAQC Report**

**Site: BARKSDALE WORKS**  
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Analyte/Parameter	Result	Unit	MDL	PQL	RPR Limits			RPD	
					RPR	Min	Max	RPD	Max
<b>Sample Type MB</b>									
DIBROMOFLUOROMETHANE	87 RPR	UG/L				87	76	116	
DICHLORODIFLUOROMETHANE	< 0.22	UG/L	0.22	2.0					
ETHYLBENZENE	< 0.12	UG/L	0.12	1.0					
HEXANE	< 0.26	UG/L	0.26	1.0					
METHYL TERT-BUTYL ETHER	< 0.38	UG/L	0.38	5.0					
METHYLENE CHLORIDE	0.43	UG/L	0.21	1.0					
NAPHTHALENE	< 0.50	UG/L	0.50	1.0					
STYRENE	< 0.14	UG/L	0.14	1.0					
TETRACHLOROETHENE	< 0.26	UG/L	0.26	1.0					
TOLUENE	< 0.15	UG/L	0.15	1.0					
TOLUENE-D8	93 RPR	UG/L				93	76	116	
TRICHLOROETHENE	< 0.16	UG/L	0.16	1.0					
TRICHLOROFUOROMETHANE	< 0.24	UG/L	0.24	2.0					
VINYL CHLORIDE	< 0.19	UG/L	0.19	1.0					
XYLEMES (TOTAL)	< 0.41	UG/L	0.41	2.0					
1,2-DICHLOROETHANE-D4	113 RPR	UG/L				113	59	129	
<b>Sample Type MS</b>									
DICHLOROETHENE	8.66	UG/L	NS	NS		87	67	125	
BENZENE	10.3	UG/L	NS	NS		103	75	116	
CHLOROBENZENE	9.09	UG/L	NS	NS		91	77	117	
TOLUENE	9.18	UG/L	NS	NS		89	74	115	
TRICHLOROETHENE	8.70	UG/L	NS	NS		87	80	123	
1,2-DICHLOROETHANE-D4	111 RPR	UG/L	NS	NS		111	59	129	
4-BROMOFLUOROBENZENE	94 RPR	UG/L	NS	NS		94	74	114	
DIBROMOFLUOROMETHANE	92 RPR	UG/L	NS	NS		92	76	116	
TOLUENE-D8	95 RPR	UG/L	NS	NS		95	76	116	
<b>Sample Type MSD</b>									
DICHLOROETHENE	8.97	UG/L	NS	NS		90	67	125	3.4
BENZENE	10.5	UG/L	NS	NS		105	75	116	2.4
CHLOROBENZENE	9.40	UG/L	NS	NS		94	77	117	3.4
TOLUENE	9.42	UG/L	NS	NS		91	74	115	2.6
TRICHLOROETHENE	8.91	UG/L	NS	NS		89	80	123	2.4
1,2-DICHLOROETHANE-D4	113 RPR	UG/L	NS	NS		113	59	129	
4-BROMOFLUOROBENZENE	98 RPR	UG/L	NS	NS		98	74	114	
DIBROMOFLUOROMETHANE	93 RPR	UG/L	NS	NS		93	76	116	
TOLUENE-D8	98 RPR	UG/L	NS	NS		98	76	116	

The following field samples are included in this batch:

Sampleno	Datesmpl	Lab Id	Lab
BAR-G-29600N-INFLOW	12/17/2003	F65431-AA FS	QES-DEN
BAR-G-30900N-INFLOW	12/17/2003	F65471-AA FS	QES-DEN
BAR-G-PZ16-POT-INFLOW	12/16/2003	F65491-AA FS	QES-DEN
BAR-K-TBLK1	12/16/2003	F654W1-AA TB	QES-DEN

**Corporate Environmental Database**  
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**Batch Identifier 121247      METHOD 353.2 30-Dec-03 3364688 ALPK2**

Method Number: 353.2	Prep Method: METHOD	Pre-prep:
Batch Start Date: 12/30/2003	Instrument: ALPK2	Batch Number:

Analyte/Parameter	Result	Unit	MDL	PQL	RPR Limits			RPD	Max
					RPR	Min	Max		
Sample Type LCS									
NITRATE-NITRITE	4.27	MG/L	NS	Lab: QES-DEN	107	90	110		
Sample Type LCSD									
NITRATE-NITRITE	4.20	MG/L	NS	Lab: QES-DEN	105	90	110	1.6	10
Sample Type MB									
NITRATE-NITRITE	< 0.021	MG/L	0.021	Lab: QES-DEN					
Sample Type MS									
NITRATE-NITRITE	3.83	MG/L	NS	Lab: QES-DEN	96	62	119		
Sample Type MSD									
NITRATE-NITRITE	3.79	MG/L	NS	Lab: QES-DEN	95	62	119	1.1	30

The following field samples are included in this batch:

Sampleno	Datesmpl	Lab Id	Lab
BAR-G-73250H-INFLOW	12/16/2003	F654E1-AA FS	QES-DEN

**Corporate Environmental Database**  
**Lab Analysis QAQC Report**

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**Batch Identifier 121244      SW3535 8321 22-Dec-03 3356179 LCMS2**

Method Number: 8321	Prep Method: SW3535	Pre-prep:
Batch Start Date: 12/22/2003	Instrument: LCMS2	Batch Number:

Analyte/Parameter	Result	Unit	MDL	PQL	RPR Limits			RPD	Max
					RPR	Min	Max		
<b>Sample Type LCS</b>									
1,3,5-TRINITROBENZENE	0.486	UG/L	NS	NS	97	64	137		
1,3-DINITROBENZENE	0.507	UG/L	NS	NS	101	70	127		
2,4,6-TRINITROTOLUENE	0.479	UG/L	NS	NS	96	43	133		
2,4-DINITROTOLUENE	0.491	UG/L	NS	NS	98	65	129		
2,6-DINITROTOLUENE	0.488	UG/L	NS	NS	98	66	128		
2-AMINO-4,6-DINITROTOLUENE	0.493	UG/L	NS	NS	99	69	131		
2-NITROTOLUENE	0.483	UG/L	NS	NS	97	17	105		
3-NITROTOLUENE	0.473	UG/L	NS	NS	95	23	105		
4-AMINO-2,6-DINITROTOLUENE	0.480	UG/L	NS	NS	96	69	128		
4-NITROTOLUENE	0.482	UG/L	NS	NS	96	26	114		
HMX	0.567	UG/L	NS	NS	113	53	169		
NITROBENZENE	0.485	UG/L	NS	NS	97	27	120		
NITROGLYCERIN	0.371	UG/L	NS	NS	74	43	154		
PETN	0.357	UG/L	NS	NS	71	34	173		
RDX	0.498	UG/L	NS	NS	99	62	127		
TETRYL	0.571	UG/L	NS	NS	114	40	152		
NITROBENZENE-D5	89 RPR	UG/L	NS	NS	89	39	114		
<b>Sample Type MB</b>									
1,3,5-TRINITROBENZENE	< 0.015	UG/L	0.015	0.12					
1,3-DINITROBENZENE	< 0.014	UG/L	0.014	0.12					
2,4,6-TRINITROTOLUENE	< 0.015	UG/L	0.015	0.12					
2,4-DINITROTOLUENE	< 0.019	UG/L	0.019	0.12					
2,6-DINITROTOLUENE	< 0.015	UG/L	0.015	0.12					
2-AMINO-4,6-DINITROTOLUENE	< 0.012	UG/L	0.012	0.12					
2-NITROTOLUENE	< 0.023	UG/L	0.023	0.12					
3-NITROTOLUENE	< 0.019	UG/L	0.019	0.12					
4-AMINO-2,6-DINITROTOLUENE	< 0.015	UG/L	0.015	0.12					
4-NITROTOLUENE	< 0.018	UG/L	0.018	0.12					
HMX	< 0.016	UG/L	0.016	0.12					
NITROBENZENE	< 0.020	UG/L	0.020	0.12					
NITROGLYCERIN	< 0.039	UG/L	0.039	0.12					
PETN	< 0.031	UG/L	0.031	0.12					
RDX	< 0.012	UG/L	0.012	0.12					
TETRYL	< 0.012	UG/L	0.012	0.12					
NITROBENZENE-D5	89 RPR	UG/L			89	44	124		
<b>Sample Type MS</b>									
1,3,5-TRINITROBENZENE	0.423	UG/L	NS	NS	85	70	126		
1,3-DINITROBENZENE	0.461	UG/L	NS	NS	92	68	125		
2,4,6-TRINITROTOLUENE	0.436	UG/L	NS	NS	87	59	129		
2,4-DINITROTOLUENE	0.485	UG/L	NS	NS	97	64	124		
2,6-DINITROTOLUENE	0.411	UG/L	NS	NS	82	67	124		
2-AMINO-4,6-DINITROTOLUENE	0.418	UG/L	NS	NS	84	68	126		
2-NITROTOLUENE	0.413	UG/L	NS	NS	83	25	99		
3-NITROTOLUENE	0.423	UG/L	NS	NS	85	27	104		
4-AMINO-2,6-DINITROTOLUENE	0.406	UG/L	NS	NS	81	63	125		
4-NITROTOLUENE	0.415	UG/L	NS	NS	83	33	108		
HMX	0.470	UG/L	NS	NS	94	52	158		
NITROBENZENE	0.446	UG/L	NS	NS	89	40	110		
NITROGLYCERIN	0.419	UG/L	NS	NS	84	56	148		
PETN	0.291	UG/L	NS	NS	58	35	177		
RDX	0.443	UG/L	NS	NS	89	61	123		
TETRYL	0.538	UG/L	NS	NS	108	53	148		
NITROBENZENE-D5	82 RPR	UG/L	NS	NS	82	44	124		

**Corporate Environmental Database**  
**Lab Analysis QAQC Report**

**Site: BARKSDALE WORKS**  
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Analyte/Parameter	Result	Unit	MDL	PQL	RPR	<u>RPR Limits</u>		RPD	RPD Max
						Min	Max		
Sample Type MSD									
1,3,5-TRINITROBENZENE	0.461	UG/L	NS	NS	92	70	126	8.6	40
1,3-DINITROBENZENE	0.487	UG/L	NS	NS	97	68	125	5.5	40
2,4,6-TRINITROTOLUENE	0.441	UG/L	NS	NS	88	59	129	1.1	40
2,4-DINITROTOLUENE	0.472	UG/L	NS	NS	94	64	124	2.7	40
2,6-DINITROTOLUENE	0.473	UG/L	NS	NS	95	67	124	14	40
2-AMINO-4,6-DINITROTOLUENE	0.523	UG/L	NS	NS	105	68	126	22	40
2-NITROTOLUENE	0.411	UG/L	NS	NS	82	25	99	0.58	40
3-NITROTOLUENE	0.377	UG/L	NS	NS	75	27	104	11	40
4-AMINO-2,6-DINITROTOLUENE	0.478	UG/L	NS	NS	96	63	125	16	40
4-NITROTOLUENE	0.396	UG/L	NS	NS	79	33	108	4.7	40
HMX	0.547	UG/L	NS	NS	109	52	158	15	40
NITROBENZENE	0.422	UG/L	NS	NS	84	40	110	5.6	40
NITROGLYCERIN	0.459	UG/L	NS	NS	92	56	148	9.2	40
PETN	0.346	UG/L	NS	NS	69	35	177	17	40
RDX	0.520	UG/L	NS	NS	104	61	123	16	40
TETRYL	0.543	UG/L	NS	NS	109	53	148	0.95	40
NITROBENZENE-D5	80 RPR	UG/L	NS	NS	80	44	124		

The following field samples are included in this batch:

Sample No	Date Smpl	Lab Id	Lab
BAR-G-30300N-INFLOW	12/16/2003	F653Q1-AA FS	QES-DEN
BAR-G-30380N-INFLOW	12/16/2003	F654P1-AA FS	QES-DEN
BAR-G-30490N-INFLOW	12/16/2003	F65321-AA FS	QES-DEN
BAR-G-30600N-INFLOW	12/17/2003	F654T1-AA FS	QES-DEN
BAR-G-72730H-INFLOW	12/16/2003	F654M1-AA FS	QES-DEN
BAR-G-72860H-INFLOW	12/16/2003	F654L1-AA FS	QES-DEN
BAR-G-73250H-EFFLUENT	12/16/2003	F654J1-AA FS	QES-DEN
BAR-G-73250H-INFLOW	12/16/2003	F654E1-AC FS	QES-DEN
BAR-G-73280H-INFLOW	12/16/2003	F65331-AA FS	QES-DEN

**Chain of Custody  
Record**

STL Denver

STL4149 (1202)

**CHAIN OF CUSTODY NUMBER**

SEVERN  
TRENT

**Severn Trent Laboratories, Inc.**

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***Special Instructions***

Protocol 6

Possible Hazard Identification					Sample Disposal			(A fee may be assessed if samples are retained longer than 3 months)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months			
Turn Around Time Required					QC Level	Project Specific Requirements (Specify)				
<input type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Other _____	<input type="checkbox"/> I.	<input type="checkbox"/> II.	<input type="checkbox"/> III.					
1. Relinquished By <i>J. Overby</i>			Date 12/10/03	Time 1100		1. Received By <i>J. Overby</i>		Date 10/15/03	Time 1300	
2. Relinquished By <i>J. Overby</i>			Date 10/17/03	Time 1000		2. Received By <i>J. Overby</i>		Date 12/15/03	Time 0945	
3. Relinquished By			Date	Time		3. Received By		Date	Time	

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**Comments**

**DISTRIBUTION:** - WHITE - Stays with the Sample. CANARY - Returned to Client with Report. PINK - Field Copy.

**STL** **Chain of Custody  
Record**

STL Denver

STL4149 (1202)

110 <sup>12</sup> 12/18/02

SEVERN  
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**CHAIN OF CUSTODY NUMBER:**

A standard linear barcode is located at the bottom of the page, spanning most of the width.

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**Severn Trent Laboratories, Inc.**

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## **Analysis**

*Special Instructions*

Possible Hazard Identification					Sample Disposal			(A fee may be assessed if samples are retained longer than 3 months)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months			
Turn Around Time Required					QC Level	Project Specific Requirements (Specify)				
<input type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Other _____	<input type="checkbox"/> I.	<input type="checkbox"/> II.	<input type="checkbox"/> III.					
1. Relinquished By <i>J. O'Reilly</i>			Date 12/10/03	Time 1100		1. Received By <i>J. O'Reilly</i>	Date 10/15/03		Time 1300	
2. Relinquished By <i>J. O'Reilly</i>			Date 10/17/03	Time 1000		2. Received By <i>J. O'Reilly</i>	Date 12/05/03		Time 0915	
3. Relinquished By <i>J. O'Reilly</i>			Date	Time		3. Received By	Date		Time	

## Comments

**DISTRIBUTION:** WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy



**Chain of Custody  
Record**

TL4149 (1202)

**CHAIN OF CUSTODY NUMBER**

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**Special Instructions**

Possible Hazard Identification					Sample Disposal			(A fee may be assessed if samples are retained longer than 3 months)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For...	Months		
Turn Around Time Required					QC Level			Project Specific Requirements (Specify)		
<input type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Other	<input type="checkbox"/> I.		<input type="checkbox"/> II.	<input type="checkbox"/> III.				
1. Relinquished By <i>[Signature]</i>			Date	Time	1. Received By <i>[Signature]</i>		Date	Time		
2. Relinquished By <i>[Signature]</i>			Date	Time	2. Received By <i>[Signature]</i>		Date	Time		
3. Relinquished By <i>[Signature]</i>			Date	Time	3. Received By <i>[Signature]</i>		Date	Time		

### Comments

**DISTRIBUTION:** WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

**TSI** **Chain of Custody  
Record**

S.I.R. Denavit

TL4149 (1202)

**CHAIN OF CUSTODY NUMBER**



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TRENT**

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**Severn Trent Laboratories, Inc.**

**Special Instructions**

Protocol S

Possible Hazard Identification					Sample Disposal			(A fee may be assessed if samples are retained longer than 3 months)			
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months				
Turn Around Time Required					QC Level	Project Specific Requirements (Specify)					
<input type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Other _____	<input type="checkbox"/> I.		<input type="checkbox"/> II.	<input type="checkbox"/> III.					
1. Relinquished By <i>J. O'Driscoll</i>			Date 12/10/03	Time 100	1. Received By <i>J. O'Driscoll</i>		Date 12/15/03	Time 1300			
2. Relinquished By <i>J. O'Driscoll</i>			Date 12/17/03	Time 1130	2. Received By <i>J. O'Driscoll</i>		Date 12/18/03	Time 0915			
3. Relinquished By <i>J. O'Driscoll</i>			Date	Time	3. Received By		Date	Time			

### Comments

**DISTRIBUTION:** WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy





**Chain of Custody  
Record**

STL Denver

**CHAIN OF CUSTODY NUMBER**

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## **Severn Trent Laboratories, Inc.**

STL4149 (1202)

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Date 12/08/2003 Page 1 of 11

Client I. Dupont De Nemours			Project Manager Cary Pooler	Date 12/08/2003	Page <u>4</u> of <u>11</u>
Address Barley Mill Plaza Building 2 <sup>nd</sup>			Telephone Number (Area Code)/Fax Number (000) / (000)	Lab Location STL Denver	Analysis
City Baltimore	State DE	Zip Code 19805	Site Contact TIM RATSEP	B M N X S O P 8 3 R A Y	
Project Number/Name AP			Carrier/Waybill Number		

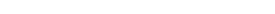
---

**Contract/Purchase Order/Quota Number:**

CONTRACT / PURCHASE ORDER #: 7035-507355-772000/LB10-64302

QUOTE: 3909?

**Special Instructions**

Possible Hazard Identification					Sample Disposal			(A fee may be assessed if samples are retained longer than 3 months)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____	Months		
Turn Around Time Required					QC Level	Project Specific Requirements (Specify)				
<input type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Other _____	<input type="checkbox"/> I.	<input type="checkbox"/> II.	<input type="checkbox"/> III.					
1. Relinquished By 			Date 12/14/03	Time 1100	1. Received By 	Date 12/15/03	Time 1300			
2. Relinquished By 			Date 12/18/03	Time 1000	2. Received By 	Date 12/19/03	Time 1100			
3. Relinquished By 			Date	Time	3. Received By 	Date	Time			

### Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

5



**STL** ***Chain of Custody  
Record***

STL Denver

STL4149 (1202)

**CHAIN OF CUSTODY NUMBER**



\* 9 1 9 4 2 5 - 9 1 0 \*

SEVERN  
TRENT

STL

013435

**Severn Trent Laboratories, Inc.**

**Special Instructions**

Possible Hazard Identification					Sample Disposal			(A fee may be assessed if samples are retained longer than 3 months)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months			
Turn Around Time Required					QC Level	Project Specific Requirements (Specify)				
<input type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Other _____	<input type="checkbox"/> I.	<input type="checkbox"/> II.	<input type="checkbox"/> III.					
1. Relinquished By <i>D. Drury</i>	Date 12/10/03	Time 1:00	1. Received By <i>J. Drury</i>	Date 12/15/03	Time 1:00					
2. Relinquished By <i>D. Drury</i>	Date 12/18/03	Time 1:00	2. Received By <i>J. Drury</i>	Date 12/18/03	Time 1:00					
3. Relinquished By <i>D. Drury</i>	Date	Time	3. Received By <i>J. Drury</i>	Date	Time					

### **Comments**

**DISTRIBUTION:** WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

**SITL** *Chain of Custody  
Record*

STL Denver

STL4149 (1202)

**CHAIN OF CUSTODY NUMBER**



\* 0 1 0 4 2 5 - 0 0 8 \*

SEVERN  
TRENT

STL

013433

**Severn Trent Laboratories, Inc.**

STL4149 (1202)			* 0 1 0 4 2 5 - 0 0 8 *				
Client I. Dupont De Nemours			Project Manager Cary Pooler		Date 12/08/2003		
Address Barley Mill Plaza Building 27			Telephone Number (Area Code)/Fax Number (000) / (000)		Lab Location STL Denver		
					Page <u>5</u> of <u>11</u>		
					Analysis		
City Baltimore	State DE	Zip Code 19805	Site Contact TIM RATSEP				
Project Number/Name AR			Carrier/Waybill Number				
Contract/Purchase Order/Quote Number CONTRACT / PURCHASE ORDER #: 7035-507355-772000/LBIO-64807 QUOTE: 39097							
Sample I.D. Number and Description	Date	Time	Sample Type	Containers		Preservative	Condition on Receipt/Comments
				Volume	Type		
BAR-G-72790H-INFLOW	<i>12/17/03</i>	<i>10:00</i>	WATER	1L	AMBER	2	None
BAR-G-72790H-INFLOW			WATER	40mL	VIAL	3	1:1 HCL
BAR-G-72790H-INFLOW			WATER	250mL	AMBER	1	Conc H <sub>2</sub> SO <sub>4</sub>
BAR-G-72790H-INFLOW-MS			WATER	1L	AMBER	2	None
BAR-G-72790H-INFLOW-MS			WATER	40mL	VIAL	3	1:1 HCL
BAR-G-72790H-INFLOW-MS			WATER	250mL	AMBER	1	Conc H <sub>2</sub> SO <sub>4</sub>
BAR-G-72790H-INFLOW-MSD			WATER	1L	AMBER	2	None
BAR-G-72790H-INFLOW-MSD			WATER	40mL	VIAL	3	1:1 HCL
BAR-G-72790H-INFLOW-MSD			WATER	250mL	AMBER	1	Conc H <sub>2</sub> SO <sub>4</sub>
BAR-G-72790H-EFFLUENT			WATER	1L	AMBER	2	None

**Special Instructions**

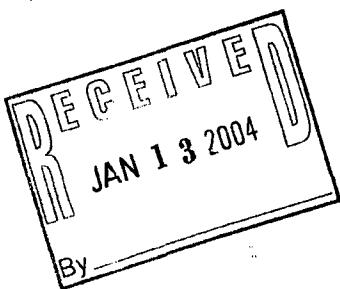
Protocol C

Possible Hazard Identification					Sample Disposal			(A fee may be assessed if samples are retained longer than 3 months)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months			
Turn Around Time Required					QC Level	Project Specific Requirements (Specify)				
<input type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Other _____	<input type="checkbox"/> I.	<input type="checkbox"/> II.	<input type="checkbox"/> III.					
1. Relinquished By <i>J. O'Leary</i>			Date 12/10/03	Time 1000		1. Received By <i>J. O'Leary</i>	Date 12/15/03		Time 1300	
4. Relinquished By <i>J. O'Leary</i>			Date 12/18/03	Time 1000		2. Received By <i>J. O'Leary</i>	Date 12/19/03		Time 1100	
3. Relinquished By			Date	Time		3. Received By <i>J. O'Leary</i>	Date		Time	

### Comments

**DISTRIBUTION:** WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

**EHL DATA**



**Environmental Health Laboratories**  
**The Nation's Drinking Water Laboratory**  
**Division of Underwriters Laboratories Inc.**

110 South Hill Street  
South Bend, IN 46617  
Phone: (574) 233-4777  
Fax: (574) 233-8207

**LABORATORY REPORT**

This report contains 98 pages.  
(including the cover page)

If you have any questions concerning this report, please do not hesitate to call us at 1-800-332-4345 or 574-233-4777.

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# Environmental Health Laboratories

The Nation's Drinking Water Laboratory

110 S. Hill Street  
South Bend, IN 46617  
574.233.4777  
800.332.4345  
Fax: 574.233.8207  
[www.ehl.cc](http://www.ehl.cc)

## LABORATORY REPORT

Client: URS Delaware Report : 982495-98(95)  
Attn: Sharon Nordstrom  
ADQM Services Barley Mill Plaza Building # 27 Priority: Standard Written  
4417 Lancaster Pike  
Wilmington, DE 19805 Status: Final

Sampling Point: Bar-G-29600 N - Inflow

Samples Submitted: One groundwater sample

Copies to: None

-----Collected-----  
Date: 12/17/03 Time: 12:40 By: Client

-----Received-----  
Date: 12/19/03 Time: 10:30

## REPORT SUMMARY

None of the VOCs included in the detailed parameter list were detected in the sample submitted for analysis.

Note: Sample containers were provided by the client.

Detailed quantitative results are presented on the following page.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call us at (574) 233-4777.

*Note: This report may not be reproduced, except in full, without written approval from Environmental Health Laboratories (EHL). EHL is accredited by the National Environmental Laboratory Accreditation Program (NELAP). This report satisfies the requirements of your project but has not been prepared to comply with NELAP reporting requirements.*

Reviewed By:

Sharon Nordstrom Reporter

Date: 11/9/04

Finalized By:

John Vass P.M.

Date: 1-9-04



Sampling Point: Bar-G-29600 N - Inflow

PARAMETER	Report Limit ** (ug/L)	Result (ug/L)	MCL (ug/L)	PARAMETER	Report Limit ** (ug/L)	Result (ug/L)
<b>Regulated Parameters</b>						
Benzene	0.5	< 0.5	5	2-Chlorotoluene (o-)	0.5	< 0.5
Bromodichloromethane	0.5	< 0.5	80 *	4-Chlorotoluene (p-)	0.5	< 0.5
Bromoform	0.5	< 0.5	80 *	Dibromomethane	0.5	< 0.5
Carbon tetrachloride	0.5	< 0.5	5	1,3-Dichlorobenzene	0.5	< 0.5
Chlorobenzene	0.5	< 0.5	100	trans-1,4-Dichloro-2-butylene	5.0	< 5.0
Chloroform	0.5	< 0.5	80 *	Dichlorodifluoromethane	0.5	< 0.5
Dibromochloromethane	0.5	< 0.5	80 *	1,1-Dichloroethane	0.5	< 0.5
1,2-Dibromo-3-Chloropropane	0.2	< 0.2	0.2 †	1,3-Dichloropropane	0.5	< 0.5
1,2-Dibromoethane(EDB)	0.2	< 0.2	0.05 †	2,2-Dichloropropane	0.5	< 0.5
1,2-Dichlorobenzene	0.5	< 0.5	600	1,1-Dichloropropanone	5.0	< 5.0
1,4-Dichlorobenzene	0.5	< 0.5	75	1,1-Dichloropropylene	0.5	< 0.5
1,2-Dichloroethane	0.5	< 0.5	5	cis-1,3-Dichloropropylene	0.5	< 0.5
1,1-Dichloroethylene	0.5	< 0.5	7	trans-1,3-Dichloropropylene	0.5	< 0.5
cis-1,2-Dichloroethylene	0.5	< 0.5	70	Diethyl ether	5.0	< 5.0
trans-1,2-Dichloroethylene	0.5	< 0.5	100	Ethyl methacrylate	1.0	< 1.0
Dichloromethane	0.5	< 0.5	5	Hexachlorobutadiene	0.5	< 0.5
1,2-Dichloropropane	0.5	< 0.5	5	Hexachloroethane	2.0	< 2.0
Ethylbenzene	0.5	< 0.5	700	2-Hexanone	5.0	< 5.0
Styrene	0.5	< 0.5	100	Isopropylbenzene	0.5	< 0.5
Tetrachloroethylene	0.5	< 0.5	5	4-Isopropyltoluene (p-)	0.5	< 0.5
Toluene	0.5	< 0.5	1000	Methacrylonitrile	5.0	< 5.0
1,2,4-Trichlorobenzene	0.5	< 0.5	70	Methylacrylate	1.0	< 1.0
1,1,1-Trichloroethane	0.5	< 0.5	200	Methyl iodide (Iodomethane)	2.0	< 2.0
1,1,2-Trichloroethylene	0.5	< 0.5	5	Methylmethacrylate	1.0	< 1.0
Trichloroethylene	0.5	< 0.5	5	4-Methyl-2-pantanone (MIBK)	2.0	< 2.0
Vinyl chloride	0.2	< 0.2	2	Methyl-t-butyl ether (MTBE)	0.5	< 0.5
Total Xylenes	0.2	< 0.2	10,000	Naphthalene	0.5	< 0.5
<b>Unregulated Parameters</b>						
Acetone	5.0	< 5.0		Nitrobenzene	5.0	< 5.0
Acrylonitrile	1.0	< 1.0		2-Nitropropane	2.0	< 2.0
Allyl chloride	5.0	< 5.0		Pentachloroethane	2.0	< 2.0
Bromobenzene	0.5	< 0.5		Propionitrile	5.0	< 5.0
Bromoform	0.5	< 0.5		n-Propylbenzene	0.5	< 0.5
Bromochloromethane	0.5	< 0.5		1,1,1,2-Tetrachloroethane	0.5	< 0.5
Bromomethane	0.5	< 0.5		1,1,2,2-Tetrachloroethane	0.5	< 0.5
2-Butanone (MEK)	5.0	< 5.0		1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	< 0.5
n-Butylbenzene	0.5	< 0.5		Tetrahydrofuran	5.0	< 5.0
sec-Butylbenzene	0.5	< 0.5		1,2,3-Trichlorobenzene	0.5	< 0.5
tert-Butylbenzene	0.5	< 0.5		Trichlorofluoromethane	0.5	< 0.5
Carbon disulfide	5.0	< 5.0		1,2,3-Trichloropropane	0.5	< 0.5
Chloroacetonitrile	5.0	< 5.0		1,2,3-Trimethylbenzene	0.5	< 0.5
1-Chlorobutane	5.0	< 5.0		1,2,4-Trimethylbenzene	0.5	< 0.5
Chloroethane	0.5	< 0.5		1,3,5-Trimethylbenzene	0.5	< 0.5
Chloromethane	0.5	< 0.5				

Method: 524.2

Analysis Date: 12/24/03

\* The MCL of 80 ug/L is for total trihalomethanes and compliance samples must be collected from the distribution system.

\*\* EHL has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

† Compliance monitoring for these parameters must be done using EPA method 504.1



# Environmental Health Laboratories

The Nation's Drinking Water Laboratory

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Fax: 574.233.8207  
[www.ehl.cc](http://www.ehl.cc)

## LABORATORY REPORT

Client: URS Delaware  
Attn: Sharon Nordstrom  
ADQM Services Barley Mill Plaza Building # 27  
4417 Lancaster Pike  
Wilmington, DE 19805

Report : 982495-98(96)  
Priority: Standard Written  
Status: Final

Sampling Point: Bar-G-30900 N - Inflow

Samples Submitted: One groundwater sample

Copies to: None

-----Collected-----  
Date: 12/17/03 Time: 17:05 By: Client

-----Received-----  
Date: 12/19/03 Time: 10:30

## REPORT SUMMARY

None of the VOCs included in the detailed parameter list were detected in the sample submitted for analysis.

Detailed quantitative results are presented on the following page.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call us at (574) 233-4777.

*Note: This report may not be reproduced, except in full, without written approval from Environmental Health Laboratories (EHL). EHL is accredited by the National Environmental Laboratory Accreditation Program (NELAP). This report satisfies the requirements of your project but has not been prepared to comply with NELAP reporting requirements.*

Reviewed By: Sharon Nordstrom Date: 1/9/04

Finalized By: P.M. Date: 1-9-04



Sampling Point: Bar-G-30900 N - Inflow

PARAMETER	Report Limit ** (ug/L)	Result (ug/L)	MCL (ug/L)	PARAMETER	Report Limit ** (ug/L)	Result (ug/L)
Regulated Parameters				Unregulated Parameters		
Benzene	0.5	< 0.5	5	2-Chlorotoluene (o-)	0.5	< 0.5
Bromodichloromethane	0.5	< 0.5	80 *	4-Chlorotoluene (p-)	0.5	< 0.5
Bromoform	0.5	< 0.5	80 *	Dibromomethane	0.5	< 0.5
Carbon tetrachloride	0.5	< 0.5	5	1,3-Dichlorobenzene	0.5	< 0.5
Chlorobenzene	0.5	< 0.5	100	trans-1,4-Dichloro-2-butylene	5.0	< 5.0
Chloroform	0.5	< 0.5	80 *	Dichlorodifluoromethane	0.5	< 0.5
Dibromochloromethane	0.5	< 0.5	80 *	1,1-Dichloroethane	0.5	< 0.5
1,2-Dibromo-3-Chloropropane	0.2	< 0.2	0.2 †	1,3-Dichloropropane	0.5	< 0.5
1,2-Dibromoethane(EDB)	0.2	< 0.2	0.05 †	2,2-Dichloropropane	0.5	< 0.5
1,2-Dichlorobenzene	0.5	< 0.5	600	1,1-Dichloropropanone	5.0	< 5.0
1,4-Dichlorobenzene	0.5	< 0.5	75	1,1-Dichloropropylene	0.5	< 0.5
1,2-Dichloroethane	0.5	< 0.5	5	cis-1,3-Dichloropropylene	0.5	< 0.5
1,1-Dichloroethylene	0.5	< 0.5	7	trans-1,3-Dichloropropylene	0.5	< 0.5
cis-1,2-Dichloroethylene	0.5	< 0.5	70	Diethyl ether	5.0	< 5.0
trans-1,2-Dichloroethylene	0.5	< 0.5	100	Ethyl methacrylate	1.0	< 1.0
Dichloromethane	0.5	< 0.5	5	Hexachlorobutadiene	0.5	< 0.5
1,2-Dichloropropane	0.5	< 0.5	5	Hexachloroethane	2.0	< 2.0
Ethylbenzene	0.5	< 0.5	700	2-Hexanone	5.0	< 5.0
Styrene	0.5	< 0.5	100	Isopropylbenzene	0.5	< 0.5
Tetrachloroethylene	0.5	< 0.5	5	4-Isopropyltoluene (p-)	0.5	< 0.5
Toluene	0.5	< 0.5	1000	Methacrylonitrile	5.0	< 5.0
1,2,4-Trichlorobenzene	0.5	< 0.5	70	Methylacrylate	1.0	< 1.0
1,1,1-Trichloroethane	0.5	< 0.5	200	Methyl iodide (Iodomethane)	2.0	< 2.0
1,1,2-Trichloroethane	0.5	< 0.5	5	Methylmethacrylate	1.0	< 1.0
Trichloroethylene	0.5	< 0.5	5	4-Methyl-2-pentanone (MIBK)	2.0	< 2.0
Vinyl chloride	0.2	< 0.2	2	Methyl-t-butyl ether (MTBE)	0.5	< 0.5
Total Xylenes	0.2	< 0.2	10,000	Naphthalene	0.5	< 0.5
Unregulated Parameters				Nitrobenzene	5.0	< 5.0
Acetone	5.0	< 5.0		2-Nitropropane	2.0	< 2.0
Acrylonitrile	1.0	< 1.0		Pentachloroethane	2.0	< 2.0
Allyl chloride	5.0	< 5.0		Propionitrile	5.0	< 5.0
Bromobenzene	0.5	< 0.5		n-Propylbenzene	0.5	< 0.5
Bromochloromethane	0.5	< 0.5		1,1,1,2-Tetrachloroethane	0.5	< 0.5
Bromomethane	0.5	< 0.5		1,1,2,2-Tetrachloroethane	0.5	< 0.5
2-Butanone (MEK)	5.0	< 5.0		1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	< 0.5
n-Butylbenzene	0.5	< 0.5		Tetrahydrofuran	5.0	< 5.0
sec-Butylbenzene	0.5	< 0.5		1,2,3-Trichlorobenzene	0.5	< 0.5
tert-Butylbenzene	0.5	< 0.5		Trichlorofluoromethane	0.5	< 0.5
Carbon disulfide	5.0	< 5.0		1,2,3-Trichloropropane	0.5	< 0.5
Chloroacetonitrile	5.0	< 5.0		1,2,3-Trimethylbenzene	0.5	< 0.5
1-Chlorobutane	5.0	< 5.0		1,2,4-Trimethylbenzene	0.5	< 0.5
Chloroethane	0.5	< 0.5		1,3,5-Trimethylbenzene	0.5	< 0.5
Chloromethane	0.5	< 0.5				

Method: 524.2

Analysis Date: 12/24/03

\* The MCL of 80 ug/L is for total trihalomethanes and compliance samples must be collected from the distribution system.

\*\* EHL has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

† Compliance monitoring for these parameters must be done using EPA method 504.1





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Fax: 574.233.8207  
[www.ehl.cc](http://www.ehl.cc)

## LABORATORY REPORT

Client: URS Delaware Report : 982495-98(97)  
Attn: Sharon Nordstrom  
ADQM Services Barley Mill Plaza Building # 27 Priority: Standard Written  
4417 Lancaster Pike  
Wilmington, DE 19805 Status: Final

Sampling Point: Bar-G-PZ16-POT - Inflow

Samples Submitted: One groundwater sample

Copies to: None

-----Collected----- Received-----  
Date: 12/16/03 Time: 14:30 By: Client Date: 12/19/03 Time: 10:30

## REPORT SUMMARY

None of the VOCs included in the detailed parameter list were detected in the sample submitted for analysis.

Note: The initial vial analyzed for this sample had a bad IS/SS injection. The second vial was added to the run but did not inject within 12 hours of the time. An additional vial was also analyzed outside the methods 14 day hold time. There were no detects in that sample vial. Results reported here are from the second vial.

Note: Sample containers were provided by the client.

Detailed quantitative results are presented on the following page.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call us at (574) 233-4777.

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Reviewed By: Sharon Nordstrom Report By: \_\_\_\_\_ Date: 11/9/04

Finalized By: Jeri V. P.O. Date: 1-9-04



Sampling Point: Bar-G-PZ16-POT - Inflow

PARAMETER	Report Limit ** (ug/L)	Result (ug/L)	MCL (ug/L)	PARAMETER	Report Limit ** (ug/L)	Result (ug/L)
<b>Regulated Parameters</b>						
Benzene	0.5	< 0.5	5	2-Chlorotoluene (o-)	0.5	< 0.5
Bromodichloromethane	0.5	< 0.5	80 *	4-Chlorotoluene (p-)	0.5	< 0.5
Bromoform	0.5	< 0.5	80 *	Dibromomethane	0.5	< 0.5
Carbon tetrachloride	0.5	< 0.5	5	1,3-Dichlorobenzene	0.5	< 0.5
Chlorobenzene	0.5	< 0.5	100	trans-1,4-Dichloro-2-butylene	5.0	< 5.0
Chloroform	0.5	< 0.5	80 *	Dichlorodifluoromethane	0.5	< 0.5
Dibromochloromethane	0.5	< 0.5	80 *	1,1-Dichloroethane	0.5	< 0.5
1,2-Dibromo-3-Chloropropane	0.2	< 0.2	0.2 †	1,3-Dibromo propane	0.5	< 0.5
1,2-Dibromoethane(EDB)	0.2	< 0.2	0.05 †	2,2-Dichloropropane	0.5	< 0.5
1,2-Dichlorobenzene	0.5	< 0.5	600	1,1-Dichloropropanone	5.0	< 5.0
1,4-Dichlorobenzene	0.5	< 0.5	75	1,1-Dichloropropylene	0.5	< 0.5
1,2-Dichloroethane	0.5	< 0.5	5	cis-1,3-Dichloropropylene	0.5	< 0.5
1,1-Dichloroethylene	0.5	< 0.5	7	trans-1,3-Dichloropropylene	0.5	< 0.5
cis-1,2-Dichloroethylene	0.5	< 0.5	70	Diethyl ether	5.0	< 5.0
trans-1,2-Dichloroethylene	0.5	< 0.5	100	Ethyl methacrylate	1.0	< 1.0
Dichloromethane	0.5	< 0.5	5	Hexachlorobutadiene	0.5	< 0.5
1,2-Dichloropropane	0.5	< 0.5	5	Hexachloroethane	2.0	< 2.0
Ethylbenzene	0.5	< 0.5	700	2-Hexanone	5.0	< 5.0
Styrene	0.5	< 0.5	100	Isopropylbenzene	0.5	< 0.5
Tetrachloroethylene	0.5	< 0.5	5	4-Isopropyltoluene (p-)	0.5	< 0.5
Toluene	0.5	< 0.5	1000	Methacrylonitrile	5.0	< 5.0
1,2,4-Trichlorobenzene	0.5	< 0.5	70	Methyl acrylate	1.0	< 1.0
1,1,1-Trichloroethane	0.5	< 0.5	200	Methyl iodide (iodomethane)	2.0	< 2.0
1,1,2-Trichloroethane	0.5	< 0.5	5	Methylmethacrylate	1.0	< 1.0
Trichloroethylene	0.5	< 0.5	5	4-Methyl-2-pentanone (MIBK)	2.0	< 2.0
Vinyl chloride	0.2	< 0.2	2	Methyl-t-butyl ether (MTBE)	0.5	< 0.5
Total Xylenes	0.2	< 0.2	10,000	Naphthalene	0.5	< 0.5
<b>Unregulated Parameters</b>						
Acetone	5.0	< 5.0		Nitrobenzene	5.0	< 5.0
Acrylonitrile	1.0	< 1.0		2-Nitropropane	2.0	< 2.0
Allyl chloride	5.0	< 5.0		Pentachloroethane	2.0	< 2.0
Bromobenzene	0.5	< 0.5		Propionitrile	5.0	< 5.0
Bromochloromethane	0.5	< 0.5		n-Propylbenzene	0.5	< 0.5
Bromomethane	0.5	< 0.5		1,1,1,2-Tetrachloroethane	0.5	< 0.5
2-Butanone (MEK)	5.0	< 5.0		1,1,2,2-Tetrachloroethane	0.5	< 0.5
n-Butylbenzene	0.5	< 0.5		1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	< 0.5
sec-Butylbenzene	0.5	< 0.5		Tetrahydrofuran	5.0	< 5.0
tert-Butylbenzene	0.5	< 0.5		1,2,3-Trichlorobenzene	0.5	< 0.5
Carbon disulfide	5.0	< 5.0		Trichlorofluoromethane	0.5	< 0.5
Chloroacetonitrile	5.0	< 5.0		1,2,3-Trichloropropane	0.5	< 0.5
1-Chlorobutane	5.0	< 5.0		1,2,3-Trimethylbenzene	0.5	< 0.5
Chloroethane	0.5	< 0.5		1,2,4-Trimethylbenzene	0.5	< 0.5
Chloromethane	0.5	< 0.5		1,3,5-Trimethylbenzene	0.5	< 0.5

Method: 524.2

Analysis Date: 12/24/03

\* The MCL of 80 ug/L is for total trihalomethanes and compliance samples must be collected from the distribution system.

\*\* EHL has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

† Compliance monitoring for these parameters must be done using EPA method 504.1





# Environmental Health Laboratories

The Nation's Drinking Water Laboratory

110 S. Hill Street  
South Bend, IN 46617  
574.233.4777  
800.332.4345  
Fax: 574.233.8207  
[www.ehl.cc](http://www.ehl.cc)

## LABORATORY REPORT

Client: URS Delaware  
Attn: Sharon Nordstrom  
ADQM Services Barley Mill Plaza Building # 27  
4417 Lancaster Pike  
Wilmington, DE 19805

Report : 982495-98(98)  
Priority: Standard Written  
Status: Final

Sampling Point: Laboratory Trip Blank

Samples Submitted: One reagent water sample

Copies to: None

-----Collected-----  
Date: 12/10/03 Time: 10:50 By: EHL

-----Received-----  
Date: 12/19/03 Time: 10:30

### REPORT SUMMARY

None of the VOCs included in the detailed parameter list were detected in the sample submitted for analysis.

Detailed quantitative results are presented on the following page.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call us at (574) 233-4777.

*Note: This report may not be reproduced, except in full, without written approval from Environmental Health Laboratories (EHL). EHL is accredited by the National Environmental Laboratory Accreditation Program (NELAP). This report satisfies the requirements of your project but has not been prepared to comply with NELAP reporting requirements.*

Reviewed By: Sharon Nordstrom Reporter Date: 11/9/04

Finalized By: P.M. Date: 1-9-04



## Sampling Point: Laboratory Trip Blank

PARAMETER	Report Limit ** (ug/L)	Result (ug/L)	MCL (ug/L)	PARAMETER	Report Limit ** (ug/L)	Result (ug/L)
<b>Regulated Parameters</b>						
Benzene	0.5	< 0.5	5	2-Chlorotoluene (o-)	0.5	< 0.5
Bromodichloromethane	0.5	< 0.5	80 *	4-Chlorotoluene (p-)	0.5	< 0.5
Bromoform	0.5	< 0.5	80 *	Dibromomethane	0.5	< 0.5
Carbon tetrachloride	0.5	< 0.5	5	1,3-Dichlorobenzene	0.5	< 0.5
Chlorobenzene	0.5	< 0.5	100	trans-1,4-Dichloro-2-butylene	5.0	< 5.0
Chloroform	0.5	< 0.5	80 *	Dichlorodifluoromethane	0.5	< 0.5
Dibromochloromethane	0.5	< 0.5	80 *	1,1-Dichloroethane	0.5	< 0.5
1,2-Dibromo-3-Chloropropane	0.2	< 0.2	0.2 †	1,3-Dichloropropane	0.5	< 0.5
1,2-Dibromoethane(EDB)	0.2	< 0.2	0.05 †	2,2-Dichloropropane	0.5	< 0.5
1,2-Dichlorobenzene	0.5	< 0.5	600	1,1-Dichloropropanone	5.0	< 5.0
1,4-Dichlorobenzene	0.5	< 0.5	75	1,1-Dichloropropylene	0.5	< 0.5
1,2-Dichloroethane	0.5	< 0.5	5	cis-1,3-Dichloropropylene	0.5	< 0.5
1,1-Dichloroethylene	0.5	< 0.5	7	trans-1,3-Dichloropropylene	0.5	< 0.5
cis-1,2-Dichloroethylene	0.5	< 0.5	70	Diethyl ether	5.0	< 5.0
trans-1,2-Dichloroethylene	0.5	< 0.5	100	Ethyl methacrylate	1.0	< 1.0
Dichloromethane	0.5	< 0.5	5	Hexachlorobutadiene	0.5	< 0.5
1,2-Dichloropropane	0.5	< 0.5	5	Hexachloroethane	2.0	< 2.0
Ethylbenzene	0.5	< 0.5	700	2-Hexanone	5.0	< 5.0
Styrene	0.5	< 0.5	100	Isopropylbenzene	0.5	< 0.5
Tetrachloroethylene	0.5	< 0.5	5	4-Isopropyltoluene (p-)	0.5	< 0.5
Toluene	0.5	< 0.5	1000	Methacrylonitrile	5.0	< 5.0
1,2,4-Trichlorobenzene	0.5	< 0.5	70	Methyl acrylate	1.0	< 1.0
1,1,1-Trichloroethane	0.5	< 0.5	200	Methyl iodide (Iodomethane)	2.0	< 2.0
1,1,2-Trichloroethane	0.5	< 0.5	5	Methylmethacrylate	1.0	< 1.0
Trichloroethylene	0.5	< 0.5	5	4-Methyl-2-pentanone (MIBK)	2.0	< 2.0
Vinyl chloride	0.2	< 0.2	2	Methyl-t-butyl ether (MTBE)	0.5	< 0.5
Total Xylenes	0.2	< 0.2	10,000	Naphthalene	0.5	< 0.5
<b>Unregulated Parameters</b>						
Acetone	5.0	< 5.0		Nitrobenzene	5.0	< 5.0
Acrylonitrile	1.0	< 1.0		2-Nitropropane	2.0	< 2.0
Allyl chloride	5.0	< 5.0		Pentachloroethane	2.0	< 2.0
Bromobenzene	0.5	< 0.5		Propionitrile	5.0	< 5.0
Bromochloromethane	0.5	< 0.5		n-Propylbenzene	0.5	< 0.5
Bromomethane	0.5	< 0.5		1,1,1,2-Tetrachloroethane	0.5	< 0.5
2-Butanone (MEK)	5.0	< 5.0		1,1,2,2-Tetrachloroethane	0.5	< 0.5
n-Butylbenzene	0.5	< 0.5		1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	< 0.5
sec-Butylbenzene	0.5	< 0.5		Tetrahydrofuran	5.0	< 5.0
tert-Butylbenzene	0.5	< 0.5		1,2,3-Trichlorobenzene	0.5	< 0.5
Carbon disulfide	5.0	< 5.0		Trichlorofluoromethane	0.5	< 0.5
Chloroacetonitrile	5.0	< 5.0		1,2,3-Trichloropropane	0.5	< 0.5
1-Chlorobutane	5.0	< 5.0		1,2,3-Trimethylbenzene	0.5	< 0.5
Chloroethane	0.5	< 0.5		1,2,4-Trimethylbenzene	0.5	< 0.5
Chloromethane	0.5	< 0.5		1,3,5-Trimethylbenzene	0.5	< 0.5

Method: 524.2

Analysis Date: 12/24/03

\* The MCL of 80 ug/L is for total trihalomethanes and compliance samples must be collected from the distribution system.

\*\* EHL has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

† Compliance monitoring for these parameters must be done using EPA method 504.1



# Environmental Health Laboratories

## Run Log

Run Id: 61275 Method: 524.2 Analyst: conn

Type	Sample Id	File Name	Sample Site	Matrix	Analysis Date	Analysis Time
LMB	983595	MB-524A	Not Available	RW	12/24/2003	08:57
LFB	983689	FB-524A	Not Available	RW	12/24/2003	09:51
CCC	983775	C-10-13A	Not Available	RW	12/24/2003	11:06
LTB	982498	L982498	LTB DK	RW	12/24/2003	19:24
FS	982495	982495	Bar-G-29600 N Inflow	DW	12/24/2003	19:58
FS	982496	982496	Bar-G-30600 N Inflow	DW	12/24/2003	20:31
FS	982497	982497	Bar-G-PZ16-POT N Inflow	DW	12/24/2003	21:05
QCS	984051	Q-524A	Not Available	RW	12/25/2003	07:11

## **QUALITY ASSURANCE REVIEW**



*Setting the Standards for Innovative Environmental Solutions*

**QUALITY ASSURANCE REVIEW OF THE  
AQUEOUS SAMPLES COLLECTED ON DECEMBER 16 AND 17, 2003  
FOR THE DUPONT CORPORATE REMEDIATION GROUP  
12/03 GROUNDWATER SAMPLING PROJECT  
AT THE BARKSDALE, WISCONSIN FACILITY**

February 10, 2004

Prepared for:

**DUPONT CORPORATE REMEDIATION GROUP**  
Barley Mill Plaza, Bldg. 27  
Rts. 141 and 48  
Wilmington, DE 19805

Prepared by:

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- B.      Run Number 61275

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- A.      Project Number D3L190442
- B.      Run Number 61275

**Section 4      Laboratory Project Narratives and Project Chain-of-Custody Records**

**Section 5      Project Correspondence**

## **Executive Summary**

An analytical quality assurance review was performed on data for the 18 aqueous samples (including quality control samples) collected in association with the DuPont Corporate Remediation Group 12/03 Groundwater Sampling Project at the Barksdale Facility in Barksdale, Wisconsin. The organic analyses were performed by SW-846 and US EPA methods. Comprehensive Contract Laboratory Program (CLP)-like raw data packages were prepared by the laboratories and were reviewed by Environmental Standards.

The "not-detected" results for 2-butanone, propionitrile, 2-nitropropane, and/or nitrobenzene in several samples were qualified as unusable due to very low relative response factors in the associated initial calibration and/or calibration verification standards. The quality of the remaining data is acceptable; however, the following qualifications were made.

- The positive results for methylene chloride in several samples and for acetone in one sample were qualified due to blank contamination.
- The positive results for acetone in several samples were qualified due to very low relative response factors in the associated initial calibration and calibration verification standards.
- The results for a few volatile compounds in several samples were qualified due to high percent drifts in the associated calibration verification standards.
- Based on standard project reporting requirements, the positive volatile organics results reported with concentrations between the laboratory's associated method detection limits and practical quantitation limits have been flagged "J" (unless previously flagged "U" due to blank contamination).

Any reporting errors identified during the quality assurance review were corrected by the data reviewer or the laboratories.

## **Introduction**

This quality assurance (QA) review is based upon a rigorous examination of data generated from the 18 aqueous samples (including quality control [QC] samples) that were collected on December 16 and 17, 2003, as part of the DuPont Corporate Remediation Group 12/03 Groundwater Sampling Project at the Barksdale Facility in Barksdale, Wisconsin. The samples that have undergone a QA review are listed on Table 1. Table 1 also presents the field sample number, laboratory sample number, laboratory project number/run number, collection date, and parameter analyzed and reviewed for each sample.

This review has been performed with guidance from the "National Functional Guidelines for Organic Data Review" (US EPA, 2/94).

The reported analytical results are presented on the laboratory analysis reports included in Section 2, "Target Analyte Summary." Data were examined to determine the usability of the analytical results and compliance relative to requirements specified by "Test Methods for Evaluating Solid Waste" (SW-846, Third Revision, 1986, and updates as applicable) and the applicable US EPA Method. In addition, the deliverables prepared according to a Contract Laboratory Program-like data package were evaluated. Details of this QA review are presented in Section 1 of this report.

This critical QA review identifies data quality issues for specific samples and specific evaluation criteria. Data not qualified in this report should be considered valid based on the QC criteria that have been reviewed.

**TABLE 1**  
**SUMMARY OF GROUNDWATER SAMPLE DATA REVIEWED**  
**DUPONT BARKSDALE, WISCONSIN FACILITY**

DuPont Corporate Remediation Group Sample Identification	Laboratory Sample Number	Project Number/ Run Number	Date of Sample Collection	Parameter Analyzed and Reviewed
BAR-G-30300N-INFLOW	F653Q	D3L190442	12/16/03	E
BAR-G-30490N-INFLOW	F6532	D3L190442	12/16/03	E
BAR-G-73280H-INFLOW	F6533	D3L190442	12/16/03	E
BAR-G-73280H-INFLOWMS (Matrix Spike)	F6533MS	D3L190442	12/16/03	E
BAR-G-73280H-INFLOWMSD (Matrix Spike Duplicate)	F6533MSD	D3L190442	12/16/03	E
BAR-G-73250H-INFLOW	F654E	D3L190442	12/16/03	E
BAR-G-73250H-EFFLUENT	F654J	D3L190442	12/16/03	E
BAR-G-72860H-INFLOW	F654L	D3L190442	12/16/03	E
BAR-G-72730H-INFLOW	F654M	D3L190442	12/16/03	E
BAR-G-30380N-INFLOW	F654P	D3L190442	12/16/03	E
BAR-G-30600N-INFLOW	F654T	D3L190442	12/17/03	E
BAR-K-TBLK1 (Trip Blank)	F654W	D3L190442	12/16/03	V
BAR-G-29600N-INFLOW	F6543 982495	D3L190442 61275	12/17/03	V
BAR-G-30900N-INFLOW	F6547 982496	D3L190442 61275	12/17/03	V*
BAR-G-PZ16-POT-INFLOW	F6549 982497	D3L190442 61275	12/16/03	V
BAR-G-PZ16-POT-INFLOWMS (Matrix Spike)	F6549MS	D3L190442	12/16/03	V
BAR-G-PZ16-POT-INFLOWMSD (Matrix Spike Duplicate)	F6549MSD	D3L190442	12/16/03	V
LTB DK (Trip Blank)	982498	61275	12/10/03**	V*

**TABLE 1 (Cont.)**

**NOTES:**

- E - Nitroaromatics and Nitroamines by SW-846 Method 8321A (Modified per STL SOP No. DEN-LC-0010, Revision No. 3). (11 analyses)
- V - Volatile Organic Compounds by SW-846 Method 8260B. (6 analyses)
- V\* - Volatile Organic Compounds by US EPA Method 524.2. (4 analyses)
- \*\* - The date of sample collection provided on Table 1 is the date of sample collection recorded on the Chain-of-Custody Record. For the trip blank, this date represents the date the trip blank was prepared at the laboratory. For the holding time evaluation, the data reviewer used the collection date of the samples associated with the trip blank for the trip blank date of sample collection. This date was used in order to reflect the usability of the trip blank data from the time the associated samples were collected.

## **Section 1      Quality Assurance Review**

### A. Organic Data

The organic analyses of 18 aqueous samples (including QC samples) collected as part of the DuPont Corporate Remediation Group (DuPont) 12/03 Groundwater Sampling Project at the Barksdale, Wisconsin, Facility on December 16 and 17, 2003, were performed by Severn Trent Laboratories, Inc. (STL) in Denver, Colorado, and by Environmental Health Laboratories in South Bend, Indiana. The samples were collectively analyzed for nitroaromatics and nitroamines according to SW-846 Method 8321A, as specified in "Test Methods for Evaluating Solid Waste" (SW-846, Third Edition, Final Update II, September, 1994) and modified as specified in STL proprietary Standard Operating Procedure (SOP) No. DEN-LC-0010 (Revision No. 3) [this modified method uses liquid chromatography with a thermospray interfaced to a mass spectrometer (LC/TSP/MS)] and for volatile organic compounds according to SW-846 Method 8260B, as specified in "Test Methods for Evaluating Solid Waste" (SW-846, Third Edition, Final Update II, September, 1994) and US EPA Method 524.2. These analyses are identified on Table 1. The data were presented in two Contract Laboratory Program (CLP)-like data packages.

The findings offered in this report are based upon a rigorous review of the following:

- sample holding times
- blank analysis results
- gas chromatogram/mass spectral (GC/MS) tuning and system performance
- surrogate recoveries
- matrix spike (MS) and MS duplicate (MSD) recoveries and precision
- quantitation of results
- sample condition upon laboratory receipt
- initial and continuing calibrations
- internal standard areas
- analytical sequence
- laboratory control sample (LCS) and LCS duplicate (LCSD) recoveries and precision
- qualitative identification

The analytical results for the organic compounds are provided as a summary of the data in Section 2 of this report.

### Data Package Deliverables

Overall, the organic data quality is good. The following analytical criteria and reporting requirements were not met for the original data packages received. Reporting errors identified during the quality assurance review were corrected by the data reviewer or the laboratories. Amended data package pages provided by the laboratories have been included in the Project Correspondence (Section 5). The following items do not affect data usability. Usability is addressed in the Data Evaluation section.

Noncorrectable Deficiencies

1. For the nitroaromatics and nitroamines fraction, the laboratory analyzed one continuing calibration verification (CCV) standard with a concentration of 50 µg/L. According to STL SOP No. DEN-LC-0010 (Section 10.6.1, pg. 14 of 33), the concentration of the CCV standards should be "100 µg/L." In the data reviewer's opinion, there was no impact on data quality due to this issue.
2. For the nitroaromatics and nitroamines fraction, the percent difference (%D) for nitroglycerine in CCV standard ex23l2924 was greater than the 30% criterion specified for valid CCV standards in STL SOP No. DEN-LC-0010 (Section 10.6.1, pg. 14 of 33). There was adequate instrument sensitivity to achieve the method detection limit (MDL) and practical quantitation limit (PQL) for nitroglycerine despite the non-compliant CCV %D because the %D nitroglycerine was in the direction of sensitivity increase. Positive results were not observed for nitroglycerine in the associated samples; therefore, qualification of data was not warranted due to this issue.
3. The volatile analysis of sample BAR-G-PZ16-POT-INFLOW in run number 61275 was performed 8 minutes beyond the 12-hour BFB tune period required by the analytical method (US EPA Method 524.2, Section 10.0). In the data reviewer's opinion, data qualification was not warranted because the 12-hour period was not exceeded significantly.

Comments

1. For the nitroaromatics and nitroamines fraction, the raw data for one CCV (file ex23l2938) and sample BAR-G-30600N-INFLOW were not included in the data package provided for project number D3L190442. In addition, the second page of the Extraction Bench Worksheet and the Quantify Compound Summary Report for several compounds [sequence ex23l29(2)] were not included in the data package provided for project number D3L190442. Upon the data reviewer's request, the laboratory submitted these data (see Section 5.)
2. Several calibration dates and times were incorrectly reported on the Initial Calibration Data and Continuing Calibration Compounds summary forms in the volatile fraction of project number D3L190442.
3. The raw data for the volatile initial calibration and the associated BFB tune and run log were not included in the data package provided for run number 61275. In addition, the raw data for the BFB tunes associated with the sample analyses were not included in the data package provided for run number 61275. Upon the data reviewer's request, the laboratory submitted these data (see Section 5.)
4. The data package for run number 61275 was not paginated.

5. The percent relative abundances reported on the Volatile Organics Instrument Performance Check Bromofluorobenzene (BFB) summary form and on the BFB report provided for the BFB tune (12/17/03 at 16:44) associated with the volatile initial calibration in the data package provided for run number 61275 do not match the percent relative abundances reported in the raw data. The percent relative abundances reported in the raw data as well as those reported on the QC forms meet the QC criteria.

#### Data Evaluation

With respect to data usability, the principal areas of concern are blank contamination, poor instrument sensitivity, high percent drifts in the calibration verification standards, and quantitation below the practical quantitation limit (PQL). Based on a rigorous review of the data provided, the following organic data qualifiers are offered. The following data usability issues represent an interpretation of the QC results obtained for the project samples. Quite often, data qualifications address issues relating to sample matrix problems. Similarly, the data validation guidelines routinely specify areas of the data that require qualification, yet the methods used for analysis may not require corrective action by the laboratory. Accordingly, the following data usability issues should not be construed as an indication of laboratory performance.

#### Organic Data Qualifiers

- Due to the trace-level presence of acetone and methylene chloride in the associated laboratory and trip blanks, the positive results for acetone and methylene chloride in the samples listed below should be considered "not-detected" and have been flagged "U" on the qualified analysis reports.

<u>Compound</u>	<u>Project Number</u>	<u>Sample(s) With Positive Results Qualified as "Not-Detected" ("U")</u>
acetone	D3L190442	BAR-G-PZ16-POT-INFLOW
methylene chloride	D3L190442	BAR-G-29600N-INFLOW, BAR-G-29600N-INFLOW, and BAR-G-PZ16-POT-INFLOW

- The analyses for 2-butanone in all samples in project number D3L190442 and for acetone in samples BAR-G-29600N-INFLOW and BAR-G-29600N-INFLOW in project number D3L190442 are unusable, and the "not-detected" results have been flagged "R" on the qualified analysis reports. In addition, the positive results for acetone in samples BAR-K-TBLK1 and BAR-G-PZ16-POT-INFLOW in project number D3L190442 should be considered estimated and have been flagged "J" (unless previously flagged "U" due to blank contamination) on the qualified analysis reports. Very low (<0.050) relative response factors (RRFs) were observed for acetone and 2-butanone in the associated initial calibration and calibration verification standards.

- The analyses for 2-butanone, propionitrile, 2-nitropropane, and nitrobenzene in all samples in run number 61275 are unusable, and the "not-detected" results have been flagged "R" on the qualified analysis reports. Very low (<0.05) RRFs were observed for these compounds in the associated initial calibration and/or calibration verification standards.
- The method detection limits (MDLs) and PQLs for dichlorodifluoromethane and carbon disulfide in all samples in project number D3L190442 may be higher than reported, and the "not-detected" results have been flagged "UJ" on the qualified analysis reports. In addition, the positive result for carbon disulfide in sample BAR-G-PZ16-POT-INFLOW in project number D3L190442 should be considered estimated and have been flagged "J" on the qualified analysis report. High percent drifts ( $20\% < \%D \leq 90\%$ ) in the direction of sensitivity decrease were observed for these compounds between the measured concentration and the true concentration in the associated calibration verification standards.
- The positive results for acetone in all samples in project number D3L190442 should be considered estimated and have been flagged "J" (unless previously flagged "U" due to blank contamination) on the qualified analysis reports. A high percent drift ( $20\% < \%D \leq 90\%$ ) in the direction of sensitivity increase was observed for acetone between the measured concentration and the true concentration in the associated calibration verification standard.
- Based on standard project reporting requirements, the positive results reported with concentrations between the laboratory's associated MDLs and PQLs have been flagged "J" by the laboratory. Environmental Standards concurs that these positive results should be considered quantitative estimates and has also flagged the results "J" (unless previously flagged "U" due to blank contamination) on the qualified analysis reports.

A complete support documentation of this organic QA review is provided in Section 3 of this report.

B. Conclusions

Based on this QA review, a few volatile organic compounds results were qualified due to blank contamination, poor instrument sensitivity, high percent drifts in the calibration verification standards, and quantitation below the PQL. In order to use any of the data, the data user should understand the qualifications and limitations as specified in this QA review. The Laboratory Project Narratives and Project Chain-of-Custody Records are presented in Section 4 of this report. The Project Correspondence is presented in Section 5 of this report.

Report prepared by:

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Report reviewed by:

  
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Date: 2/10/03

## **SECTION 2**

### **TARGET ANALYTE SUMMARY**

## **ORGANIC DATA QUALIFIERS**

- ND     The compound was not detected at or above the associated numerical value.
- U     This compound should be considered "not detected" because it was detected in a blank at a similar level.
- J     Quantitation is approximate due to limitations identified during the quality assurance review (data validation).
- R     Unusable result; compound may or may not be present in this sample.
- UJ    This compound was not detected, but the detection limit is probably higher due to a low bias identified during the quality assurance review.

A. PROJECT NUMBER D3L190442

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-30300N-INFLOW

## HPLC

Lot-Sample #....: D3L190442-001 Work Order #....: F653Q1AA Matrix.....: WATER  
 Date Sampled...: 12/16/03 10:10 Date Received...: 12/18/03  
 Prep Date.....: 12/22/03 Analysis Date...: 12/29/03  
 Prep Batch #....: 3356179 Analysis Time...: 18:00  
 Dilution Factor: 1

Method.....: SW846 8321A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.015
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.012
1,3-Dinitrobenzene	ND	0.12	ug/L	0.014
2,4-Dinitrotoluene	ND	0.12	ug/L	0.019
2,6-Dinitrotoluene	ND	0.12	ug/L	0.015
HMX	ND	0.12	ug/L	0.016
Nitrobenzene	ND	0.12	ug/L	0.020
Nitroglycerin	ND	0.12	ug/L	0.039
3-Nitrotoluene	ND	0.12	ug/L	0.019
2-Nitrotoluene	ND	0.12	ug/L	0.023
4-Nitrotoluene	ND	0.12	ug/L	0.018
PETN	ND	0.12	ug/L	0.031
RDX	ND	0.12	ug/L	0.012
Tetryl	ND	0.12	ug/L	0.012
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.015
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.015
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
Nitrobenzene-d5		77	LIMITS (44 - 124)	

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-30490N-INFLOW

## HPLC

Lot-Sample #...: D3L190442-002 Work Order #...: F65321AA Matrix.....: WATER  
 Date Sampled...: 12/16/03 09:50 Date Received...: 12/18/03  
 Prep Date.....: 12/22/03 Analysis Date...: 12/29/03  
 Prep Batch #...: 3356179 Analysis Time...: 18:32  
 Dilution Factor: 1

Method.....: SW846 8321A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.015
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.012
1,3-Dinitrobenzene	ND	0.12	ug/L	0.014
2,4-Dinitrotoluene	ND	0.12	ug/L	0.019
2,6-Dinitrotoluene	ND	0.12	ug/L	0.015
HMX	ND	0.12	ug/L	0.016
Nitrobenzene	ND	0.12	ug/L	0.020
Nitroglycerin	ND	0.12	ug/L	0.039
3-Nitrotoluene	ND	0.12	ug/L	0.019
2-Nitrotoluene	ND	0.12	ug/L	0.023
4-Nitrotoluene	ND	0.12	ug/L	0.018
PETN	ND	0.12	ug/L	0.031
RDX	ND	0.12	ug/L	0.012
Tetryl	ND	0.12	ug/L	0.012
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.015
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.015
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>	
Nitrobenzene-d5	83		(44 - 124)	

## B.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-73280H-INFLOW

## HPLC

Lot-Sample #....: D3L190442-003 Work Order #....: F65331AA Matrix.....: WATER  
 Date Sampled...: 12/16/03 10:25 Date Received...: 12/18/03  
 Prep Date.....: 12/22/03 Analysis Date...: 12/29/03  
 Prep Batch #...: 3356179 Analysis Time...: 19:04  
 Dilution Factor: 1

Method.....: SW846 8321A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.015
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.012
1,3-Dinitrobenzene	ND	0.12	ug/L	0.014
2,4-Dinitrotoluene	ND	0.12	ug/L	0.019
2,6-Dinitrotoluene	ND	0.12	ug/L	0.015
HMX	ND	0.12	ug/L	0.016
Nitrobenzene	ND	0.12	ug/L	0.020
Nitroglycerin	ND	0.12	ug/L	0.039
3-Nitrotoluene	ND	0.12	ug/L	0.019
2-Nitrotoluene	ND	0.12	ug/L	0.023
4-Nitrotoluene	ND	0.12	ug/L	0.018
PETN	ND	0.12	ug/L	0.031
RDX	ND	0.12	ug/L	0.012
Tetryl	ND	0.12	ug/L	0.012
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.015
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.015
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
Nitrobenzene-d5		85	LIMITS	
			(44 - 124)	

## E.I. DUPONT DE NIEMOURS AND CO

Client Sample ID: BAR-G-73250H-INFLOW

## HPLC

Lot-Sample #...: D3L190442-004 Work Order #...: F654E1AC Matrix.....: WATER  
 Date Sampled...: 12/16/03 11:03 Date Received...: 12/18/03  
 Prep Date.....: 12/22/03 Analysis Date...: 12/29/03  
 Prep Batch #...: 3356179 Analysis Time..: 20:39  
 Dilution Factor: 1

Method.....: SW846 8321A

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.015
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.012
1,3-Dinitrobenzene	ND	0.12	ug/L	0.014
2,4-Dinitrotoluene	ND	0.12	ug/L	0.019
2,6-Dinitrotoluene	ND	0.12	ug/L	0.015
HMX	ND	0.12	ug/L	0.016
Nitrobenzene	ND	0.12	ug/L	0.020
Nitroglycerin	ND	0.12	ug/L	0.039
3-Nitrotoluene	ND	0.12	ug/L	0.019
2-Nitrotoluene	ND	0.12	ug/L	0.023
4-Nitrotoluene	ND	0.12	ug/L	0.018
PETN	ND	0.12	ug/L	0.031
RDX	ND	0.12	ug/L	0.012
Tetryl	ND	0.12	ug/L	0.012
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.015
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.015
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
Nitrobenzene-d5		<u>RECOVERY</u>	<u>LIMITS</u>	
		93	(44 - 124)	

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-73250H-EFFLUENT

## HPLC

Lot-Sample #....: D3L190442-005 Work Order #....: F654J1AA Matrix.....: WATER  
 Date Sampled....: 12/16/03 11:00 Date Received...: 12/18/03  
 Prep Date.....: 12/22/03 Analysis Date...: 12/29/03  
 Prep Batch #....: 3356179 Analysis Time...: 21:11  
 Dilution Factor: 1

Method.....: SW846 8321A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.015
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.012
1,3-Dinitrobenzene	ND	0.12	ug/L	0.014
2,4-Dinitrotoluene	ND	0.12	ug/L	0.019
2,6-Dinitrotoluene	ND	0.12	ug/L	0.015
HMX	ND	0.12	ug/L	0.016
Nitrobenzene	ND	0.12	ug/L	0.020
Nitroglycerin	ND	0.12	ug/L	0.039
3-Nitrotoluene	ND	0.12	ug/L	0.019
2-Nitrotoluene	ND	0.12	ug/L	0.023
4-Nitrotoluene	ND	0.12	ug/L	0.018
PETN	ND	0.12	ug/L	0.031
RDX	ND	0.12	ug/L	0.012
Tetryl	ND	0.12	ug/L	0.012
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.015
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.015
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
Nitrobenzene-d5		80	LIMITS (44 - 124)	

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-72860H-INFLOW

## HPLC

Lot-Sample #....: D3L190442-006 Work Order #....: F654L1AA Matrix.....: WATER  
 Date Sampled...: 12/16/03 10:40 Date Received...: 12/18/03  
 Prep Date.....: 12/22/03 Analysis Date...: 12/29/03  
 Prep Batch #...: 3356179 Analysis Time...: 21:43  
 Dilution Factor: 1

Method.....: SW846 8321A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.015
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.012
1,3-Dinitrobenzene	ND	0.12	ug/L	0.014
2,4-Dinitrotoluene	ND	0.12	ug/L	0.019
2,6-Dinitrotoluene	ND	0.12	ug/L	0.015
HMX	ND	0.12	ug/L	0.016
Nitrobenzene	ND	0.12	ug/L	0.020
Nitroglycerin	ND	0.12	ug/L	0.039
3-Nitrotoluene	ND	0.12	ug/L	0.019
2-Nitrotoluene	ND	0.12	ug/L	0.023
4-Nitrotoluene	ND	0.12	ug/L	0.018
PETN	ND	0.12	ug/L	0.031
RDX	ND	0.12	ug/L	0.012
Tetryl	ND	0.12	ug/L	0.012
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.015
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.015
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
	<u>RECOVERY</u>	<u>LIMITS</u>		
Nitrobenzene-d5	88	(44 - 124)		

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-72730H-INFLOW

## HPLC

Lot-Sample #...: D3L190442-007 Work Order #...: F654M1AA Matrix.....: WATER  
 Date Sampled...: 12/16/03 13:30 Date Received...: 12/18/03  
 Prep Date.....: 12/22/03 Analysis Date...: 12/29/03  
 Prep Batch #...: 3356179 Analysis Time...: 22:47  
 Dilution Factor: 1

Method.....: SW846 8321A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.015
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.012
1,3-Dinitrobenzene	ND	0.12	ug/L	0.014
2,4-Dinitrotoluene	ND	0.12	ug/L	0.019
2,6-Dinitrotoluene	ND	0.12	ug/L	0.015
HMX	ND	0.12	ug/L	0.016
Nitrobenzene	ND	0.12	ug/L	0.020
Nitroglycerin	ND	0.12	ug/L	0.039
3-Nitrotoluene	ND	0.12	ug/L	0.019
2-Nitrotoluene	ND	0.12	ug/L	0.023
4-Nitrotoluene	ND	0.12	ug/L	0.018
PETN	ND	0.12	ug/L	0.031
RDX	ND	0.12	ug/L	0.012
Tetryl	ND	0.12	ug/L	0.012
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.015
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.015
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
Nitrobenzene-d5		RECOVERY	LIMITS	
		67	(44 - 124)	

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-30380N-INFLOW

## HPLC

Lot-Sample #...: D3L190442-008 Work Order #...: F654P1AA Matrix.....: WATER  
 Date Sampled...: 12/16/03 10:00 Date Received...: 12/18/03  
 Prep Date.....: 12/22/03 Analysis Date...: 12/29/03  
 Prep Batch #...: 3356179 Analysis Time...: 23:19  
 Dilution Factor: 1

Method.....: SW846 8321A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.015
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.012
1,3-Dinitrobenzene	ND	0.12	ug/L	0.014
2,4-Dinitrotoluene	ND	0.12	ug/L	0.019
2,6-Dinitrotoluene	ND	0.12	ug/L	0.015
HMX	ND	0.12	ug/L	0.016
Nitrobenzene	ND	0.12	ug/L	0.020
Nitroglycerin	ND	0.12	ug/L	0.039
3-Nitrotoluene	ND	0.12	ug/L	0.019
2-Nitrotoluene	ND	0.12	ug/L	0.023
4-Nitrotoluene	ND	0.12	ug/L	0.018
PETN	ND	0.12	ug/L	0.031
RDX	ND	0.12	ug/L	0.012
Tetryl	ND	0.12	ug/L	0.012
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.015
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.015
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
	<u>RECOVERY</u>	<u>LIMITS</u>		
Nitrobenzene-d5	82	(44 - 124)		

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-30600N-INFLOW

## HPLC

Lot-Sample #...: D3L190442-009 Work Order #...: F654T1AA Matrix.....: WATER  
 Date Sampled...: 12/17/03 12:55 Date Received...: 12/19/03  
 Prep Date.....: 12/22/03 Analysis Date...: 12/30/03  
 Prep Batch #...: 3356179 Analysis Time...: 07:16  
 Dilution Factor: 1

Method.....: SW846 8321A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.015
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.012
1,3-Dinitrobenzene	ND	0.12	ug/L	0.014
2,4-Dinitrotoluene	ND	0.12	ug/L	0.019
2,6-Dinitrotoluene	ND	0.12	ug/L	0.015
HMX	ND	0.12	ug/L	0.016
Nitrobenzene	ND	0.12	ug/L	0.020
Nitroglycerin	ND	0.12	ug/L	0.039
3-Nitrotoluene	ND	0.12	ug/L	0.019
2-Nitrotoluene	ND	0.12	ug/L	0.023
4-Nitrotoluene	ND	0.12	ug/L	0.018
PETN	ND	0.12	ug/L	0.031
RDX	ND	0.12	ug/L	0.012
Tetryl	ND	0.12	ug/L	0.012
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.015
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.015
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>	
		46	(44 - 124)	

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-K-TBLK1

## GC/MS Volatiles

Lot-Sample #....: D3L190442-010 Work Order #....: F654W1AA Matrix.....: WATER  
 Date Sampled...: 12/16/03 14:30 Date Received...: 12/19/03  
 Prep Date.....: 12/30/03 Analysis Date...: 12/30/03  
 Prep Batch #....: 4007383 Analysis Time...: 10:45  
 Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acetone	3.0 J,B	10	ug/L	2.5
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0 R	ug/L	2.0
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
1,3-Dichloropropane	ND	1.0	ug/L	0.22
Ethylbenzene	ND	1.0	ug/L	0.12
Hexane	ND	1.0	ug/L	0.26
Methylene chloride	0.50 J,B	1.0	ug/L	0.21
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
Naphthalene	ND	1.0	ug/L	0.50
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15

(Continued on next page)

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-K-TBLK1

## GC/MS Volatiles

Lot-Sample #....: D3L190442-010 Work Order #....: F654W1AA Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
Dibromofluoromethane	90	(76 - 116)		
1,2-Dichloroethane-d4	116	(59 - 129)		
4-Bromofluorobenzene	94	(74 - 114)		
Toluene-d8	91	(76 - 116)		

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-29600N-INFLOW

## GC/MS Volatiles

Lot-Sample #....: D3L190442-011 Work Order #....: F65431AA Matrix.....: WATER  
 Date Sampled...: 12/17/03 12:40 Date Received...: 12/19/03  
 Prep Date.....: 12/30/03 Analysis Date...: 12/30/03  
 Prep Batch #....: 4007383 Analysis Time...: 11:05  
 Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acetone	ND	10 R	ug/L	2.5
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0 R	ug/L	2.0
Carbon disulfide	ND	1.0 UJ	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0 UJ	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
1,3-Dichloropropane	ND	1.0	ug/L	0.22
Ethylbenzene	ND	1.0	ug/L	0.12
Hexane	ND	1.0	ug/L	0.26
Methylene chloride	0.39 J,B	1.0 U	ug/L	0.21
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
Naphthalene	ND	1.0	ug/L	0.50
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15

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## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-29600N-INFLOW

## GC/MS Volatiles

Lot-Sample #....: D3L190442-011 Work Order #....: F65431AA Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
Dibromofluoromethane	93	(76 - 116)		
1,2-Dichloroethane-d4	116	(59 - 129)		
4-Bromofluorobenzene	97	(74 - 114)		
Toluene-d8	94	(76 - 116)		

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-30900N-INFLOW

## GC/MS Volatiles

Lot-Sample #....: D3L190442-012 Work Order #....: F65471AA Matrix.....: WATER  
 Date Sampled...: 12/17/03 17:05 Date Received...: 12/19/03  
 Prep Date.....: 12/30/03 Analysis Date...: 12/30/03  
 Prep Batch #....: 4007383 Analysis Time...: 11:26  
 Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acetone	ND	10 R	ug/L	2.5
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0 R	ug/L	2.0
Carbon disulfide	ND	1.0 U,J	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0 U,J	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
1,3-Dichloropropane	ND	1.0	ug/L	0.22
Ethylbenzene	ND	1.0	ug/L	0.12
Hexane	ND	1.0	ug/L	0.26
Methylene chloride	0.70 J,B	1.0 U	ug/L	0.21
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
Naphthalene	ND	1.0	ug/L	0.50
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15

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## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-30900N-INFLOW

## GC/MS Volatiles

Lot-Sample #...: D3L190442-012 Work Order #...: F65471AA Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
Dibromofluoromethane	96	(76 - 116)		
1,2-Dichloroethane-d4	126	(59 - 129)		
4-Bromofluorobenzene	98	(74 - 114)		
Toluene-d8	92	(76 - 116)		

## NOTE(S) :

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## E.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-PZ16-POT-INFLOW

## GC/MS Volatiles

Lot-Sample #....: D3L190442-013 Work Order #....: F65491AA Matrix.....: WATER  
 Date Sampled...: 12/16/03 14:30 Date Received...: 12/19/03  
 Prep Date.....: 12/30/03 Analysis Date...: 12/30/03  
 Prep Batch #....: 4007383 Analysis Time...: 11:47  
 Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		MDL
		LIMIT	UNITS	
Acetone	3.9 J,B	10	ug/L	2.5
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0 R	ug/L	2.0
Carbon disulfide	0.47 J	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0 U	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
1,3-Dichloropropane	ND	1.0	ug/L	0.22
Ethylbenzene	ND	1.0	ug/L	0.12
Hexane	ND	1.0	ug/L	0.26
Methylene chloride	0.54 J,B	1.0 U	ug/L	0.21
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
Naphthalene	ND	1.0	ug/L	0.50
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	0.32 J	1.0	ug/L	0.15

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R.I. DUPONT DE NEMOURS AND CO

Client Sample ID: BAR-G-PZ16-POT-INFLOW

GC/MS Volatiles

Lot-Sample #...: D3L190442-013 Work Order #...: F65491AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Dibromofluoromethane	92	(76 - 116)		
1,2-Dichloroethane-d4	115	(59 - 129)		
4-Bromofluorobenzene	95	(74 - 114)		
Toluene-d8	92	(76 - 116)		

NOTE(S) :

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

**B. RUN NUMBER 61275**

**Environmental Health Laboratories**  
**Laboratory Trip Blank**

**Sample Matrix:** RW  
**Acquisition File:** Not Available  
**Data Directory:** 122403A  
**Instrument:** ITD - C  
**Extracted Date:** Not Available  
**Sample Number:** 982498  
**Dilution Factor:** 1  
**Sample Site:** LTB DK  
**Sample Location:** Not Available

**Method:** 524.2  
**Calibration File:** 524 2-121703c.mth  
**Analysis Date:** 12/24/2003  
**Analysis Time:** 19:24  
**Analyst:** conn  
**Results Submitted By:** miller  
**Run Number:** 61275

**Sample Quality Control**

Internal Standards <u>Parameter</u>	CCC						IC					
	Area	CCC Area	Area			Pass	Avg	Area	Area			/ Fail
			% Resp	Lwr Lwr	Upr Upr				Resp	Lwr	Upr	
IS-1,4-Difluorobenzene	287065	257698	111	70	130	PASS	Not Found	N/A	N/A	N/A	N/A	N/A
<b>Surrogate Standards</b>												
<u>Parameter</u>	<u>Amount</u>			<u>Units</u>			<u>Target</u>			<u>%Rec</u>		<u>Limits</u>
	SS-Toluene-d8	9.914	ug/L	10	99		70	130				PASS
	SS-1,2-Dichloroethane-d4	9.336	ug/L	10	93		70	130				PASS
	SS-1,2-Dichlorobenzene-d4	8.65	ug/L	10	86		70	130				PASS
	SS-Bromofluorobenzene	5.025	ug/L	5.0	100		70	130				PASS

**Ordered Parameter Results**

<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
1,1,1,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,1-Trichloroethane	< 0.5	0.5	ug/L
1,1,2,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.5	0.5	ug/L
1,1,2-Trichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethylene	< 0.5	0.5	ug/L
1,1-Dichloropropanone	< 5.0	5.0	ug/L
1,1-Dichloropropylene	< 0.5	0.5	ug/L
1,2,3-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,3-Trichloropropane	< 0.5	0.5	ug/L
1,2,3-Trimethylbenzene	< 0.5	0.5	ug/L
1,2,4-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,4-Trimethylbenzene	< 0.5	0.5	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/L
1,2-Dibromoethane (EDB)	< 0.2	0.2	ug/L
1,2-Dichlorobenzene	< 0.5	0.5	ug/L
1,2-Dichloroethane	< 0.5	0.5	ug/L
1,2-Dichloropropane	< 0.5	0.5	ug/L
1,2-Xylene	< 0.5	0.5	ug/L
1,3,5-Trimethylbenzene	< 0.5	0.5	ug/L
1,3-Dichlorobenzene	< 0.5	0.5	ug/L

1,3-Dichloropropane	< 0.5	0.5	ug/L	
1,3-Xylene	< 0.5	0.5	ug/L	
1,4-Dichlorobenzene	< 0.5	0.5	ug/L	
1,4-Xylene	< 0.5	0.5	ug/L	
1-Chlorobutane	< 5.0	5.0	ug/L	
2,2-Dichloropropane	< 0.5	0.5	ug/L	
2-Butanone (MEK)	< 5.0	R	5.0	ug/L
2-Chlorotoluene	< 0.5	0.5	ug/L	
2-Hexanone	< 5.0	5.0	ug/L	
2-Nitropropane	< 2.0	R	2.0	ug/L
4-Chlorotoluene	< 0.5	0.5	ug/L	
4-Isopropyltoluene	< 0.5	0.5	ug/L	
4-Methyl-2-pentanone (MIBK)	< 2.0	2.0	ug/L	
Acetone	< 5.0	5.0	ug/L	
Acrylonitrile	< 1.0	1.0	ug/L	
Allyl chloride	< 5.0	5.0	ug/L	
Benzene	< 0.5	0.5	ug/L	
Bromobenzene	< 0.5	0.5	ug/L	
Bromo(chloromethane)	< 0.5	0.5	ug/L	
Bromo(dichloromethane)	< 0.5	0.5	ug/L	
Bromoform	< 0.5	0.5	ug/L	
Bromomethane	< 0.5	0.5	ug/L	
Carbon disulfide	< 5.0	5.0	ug/L	
Carbon tetrachloride	< 0.5	0.5	ug/L	
Chloroacetonitrile	< 5.0	5.0	ug/L	
Chlorobenzene	< 0.5	0.5	ug/L	
Chloroethane	< 0.5	0.5	ug/L	
Chloroform	< 0.5	0.5	ug/L	
Chloromethane	< 0.5	0.5	ug/L	
Dibromochloromethane	< 0.5	0.5	ug/L	
Dibromomethane	< 0.5	0.5	ug/L	
Dichlorodifluoromethane	< 0.5	0.5	ug/L	
Dichloromethane	< 0.5	0.5	ug/L	
Ethyl Ether	< 2.0	2.0	ug/L	
Ethyl methacrylate	< 1.0	1.0	ug/L	
Ethylbenzene	< 0.5	0.5	ug/L	
Hexachlorobutadiene	< 0.5	0.5	ug/L	
Hexachloroethane	< 2.0	2.0	ug/L	
Isopropylbenzene	< 0.5	0.5	ug/L	
Methacrylonitrile	< 5.0	5.0	ug/L	
Methyl iodide	< 2.0	2.0	ug/L	
Methyl-t-butyl ether (MTBE)	< 0.5	0.5	ug/L	
Methylacrylate	< 1.0	1.0	ug/L	
Methylmethacrylate	< 1.0	1.0	ug/L	
Naphthalene	< 0.5	0.5	ug/L	
Nitrobenzene	< 5.0	R	5.0	ug/L
Pentachloroethane	< 2.0	2.0	ug/L	
Propionitrile	< 5.0	R	5.0	ug/L
Styrene	< 0.5	0.5	ug/L	
Tetrachloroethylene	< 0.5	0.5	ug/L	
Tetrahydrofuran	< 5.0	5.0	ug/L	
Toluene	< 0.5	0.5	ug/L	
Trichloroethylene	< 0.5	0.5	ug/L	
Trichlorofluoromethane	< 0.5	0.5	ug/L	
Vinyl chloride	< 0.2	0.2	ug/L	
Xylenes, Total	< 0.5	0.5	ug/L	
cis-1,2-Dichloroethylene	< 0.5	0.5	ug/L	
cis-1,3-Dichloropropylene	< 0.5	0.5	ug/L	
n-Butylbenzene	< 0.5	0.5	ug/L	

n-Propylbenzene	< 0.5	0.5	ug/L
sec-Butylbenzene	< 0.5	0.5	ug/L
tert-Butylbenzene	< 0.5	0.5	ug/L
trans-1,2-Dichloroethylene	< 0.5	0.5	ug/L
trans-1,3-Dichloropropylene	< 0.5	0.5	ug/L
trans-1,4-Dichloro-2-butylene	< 5.0	5.0	ug/L

### Additional Found Parameters

<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
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The symbol \* in the Amount column above indicates that the sample was re-analyzed for that parameter and the results are presented on another page.

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**Sample Matrix:** DW

**Acquisition File:** Not Available

**Data Directory:** 122403A

**Instrument:** ITD - C

**Extracted Date:** Not Available

**Sample Number:** 982495

**Dilution Factor:** 1

**Sample Site:** Bar-G-29600 N Inflow

**Sample Location:** Not Available

**Method:** 524.2

**Calibration File:** 524 2-121703c.mth

**Analysis Date:** 12/24/2003

**Analysis Time:** 19:58

**Analyst:** conn

**Results Submitted By:** miller

**Run Number:** 61275

**Sample Quality Control**

Parameter	CCC						IC					
	Area	Area			Limits			Avg	Area			Avg
		CCC	%	Pass	Resp	Lwr	Upr		Resp	Lwr	Upr	/ Fail
IS-1,4-Difluorobenzene	277837	257698	108	70	130	PASS	Not Found	N/A	N/A	N/A	N/A	N/A
<b>Surrogate Standards</b>												
SS-1,2-Dichlorobenzene-d4	8.798	ug/L	10	88	70	130	PASS					
SS-1,2-Dichloroethane-d4	9.17	ug/L	10	92	70	130	PASS					
SS-Bromofluorobenzene	4.82	ug/L	5.0	96	70	130	PASS					
SS-Toluene-d8	10.359	ug/L	10	104	70	130	PASS					

**Ordered Parameter Results**

Parameter	Amount	MRL	Units
1,1,1,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,1-Trichloroethane	< 0.5	0.5	ug/L
1,1,2,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.5	0.5	ug/L
1,1,2-Trichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethylene	< 0.5	0.5	ug/L
1,1-Dichloropropanone	< 5.0	5.0	ug/L
1,1-Dichloropropylene	< 0.5	0.5	ug/L
1,2,3-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,3-Trichloropropane	< 0.5	0.5	ug/L
1,2,3-Trimethylbenzene	< 0.5	0.5	ug/L
1,2,4-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,4-Trimethylbenzene	< 0.5	0.5	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/L
1,2-Dibromoethane (EDB)	< 0.2	0.2	ug/L
1,2-Dichlorobenzene	< 0.5	0.5	ug/L
1,2-Dichloroethane	< 0.5	0.5	ug/L
1,2-Dichloropropane	< 0.5	0.5	ug/L
1,2-Xylene	< 0.5	0.5	ug/L
1,3,5-Trimethylbenzene	< 0.5	0.5	ug/L
1,3-Dichlorobenzene	< 0.5	0.5	ug/L

1,3-Dichloropropane	< 0.5	0.5	ug/L
1,3-Xylene	< 0.5	0.5	ug/L
1,4-Dichlorobenzene	< 0.5	0.5	ug/L
1,4-Xylene	< 0.5	0.5	ug/L
1-Chlorobutane	< 5.0	5.0	ug/L
2,2-Dichloropropane	< 0.5	0.5	ug/L
2-Butanone (MEK)	< 5.0 R	5.0	ug/L
2-Chlorotoluene	< 0.5	0.5	ug/L
2-Hexanone	< 5.0	5.0	ug/L
2-Nitropropane	< 2.0 R	2.0	ug/L
4-Chlorotoluene	< 0.5	0.5	ug/L
4-Isopropyltoluene	< 0.5	0.5	ug/L
4-Methyl-2-pentanone (MIBK)	< 2.0	2.0	ug/L
Acetone	< 5.0	5.0	ug/L
Acrylonitrile	< 1.0	1.0	ug/L
Allyl chloride	< 5.0	5.0	ug/L
Benzene	< 0.5	0.5	ug/L
Bromobenzene	< 0.5	0.5	ug/L
Bromoform	< 0.5	0.5	ug/L
Bromochloromethane	< 0.5	0.5	ug/L
Bromodichloromethane	< 0.5	0.5	ug/L
Bromoform	< 0.5	0.5	ug/L
Bromomethane	< 0.5	0.5	ug/L
Carbon disulfide	< 5.0	5.0	ug/L
Carbon tetrachloride	< 0.5	0.5	ug/L
Chloroacetonitrile	< 5.0	5.0	ug/L
Chlorobenzene	< 0.5	0.5	ug/L
Chloroethane	< 0.5	0.5	ug/L
Chloroform	< 0.5	0.5	ug/L
Chloromethane	< 0.5	0.5	ug/L
Dibromochloromethane	< 0.5	0.5	ug/L
Dibromomethane	< 0.5	0.5	ug/L
Dichlorodifluoromethane	< 0.5	0.5	ug/L
Dichloromethane	< 0.5	0.5	ug/L
Ethyl Ether	< 2.0	2.0	ug/L
Ethyl methacrylate	< 1.0	1.0	ug/L
Ethylbenzene	< 0.5	0.5	ug/L
Hexachlorobutadiene	< 0.5	0.5	ug/L
Hexachloroethane	< 2.0	2.0	ug/L
Isopropylbenzene	< 0.5	0.5	ug/L
Methacrylonitrile	< 5.0	5.0	ug/L
Methyl iodide	< 2.0	2.0	ug/L
Methyl-t-butyl ether (MTBE)	< 0.5	0.5	ug/L
Methylacrylate	< 1.0	1.0	ug/L
Methylmethacrylate	< 1.0	1.0	ug/L
Naphthalene	< 0.5	0.5	ug/L
Nitrobenzene	< 5.0 R	5.0	ug/L
Pentachloroethane	< 2.0	2.0	ug/L
Propionitrile	< 5.0 R	5.0	ug/L
Styrene	< 0.5	0.5	ug/L
Tetrachloroethylene	< 0.5	0.5	ug/L
Tetrahydrofuran	< 0.5	0.5	ug/L
Toluene	< 5.0	5.0	ug/L
Trichloroethylene	< 0.5	0.5	ug/L
Trichlorofluoromethane	< 0.5	0.5	ug/L
Vinyl chloride	< 0.2	0.2	ug/L
Xylenes, Total	< 0.5	0.5	ug/L
cis-1,2-Dichloroethylene	< 0.5	0.5	ug/L
cis-1,3-Dichloropropylene	< 0.5	0.5	ug/L
n-Butylbenzene	< 0.5	0.5	ug/L

<i>n</i> -Propylbenzene	< 0.5	0.5	ug/L
<i>sec</i> -Butylbenzene	< 0.5	0.5	ug/L
<i>tert</i> -Butylbenzene	< 0.5	0.5	ug/L
trans-1,2-Dichloroethylene	< 0.5	0.5	ug/L
trans-1,3-Dichloropropylene	< 0.5	0.5	ug/L
trans-1,4-Dichloro-2-butylene	< 5.0	5.0	ug/L

### Additional Found Parameters

<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
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The symbol \* in the Amount column above indicates that the sample was re-analyzed for that parameter and the results are presented on another page.

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**Sample Matrix:** DW

**Acquisition File:** Not Available

**Data Directory:** 122403A

**Instrument:** ITD - C

**Extracted Date:** Not Available

**Sample Number:** 982496

**Dilution Factor:** 1

**Sample Site:** Bar-G-30600 N Inflow

**Sample Location:** Not Available

**Method:** 524.2

**Calibration File:** 524 2-121703c.mth

**Analysis Date:** 12/24/2003

**Analysis Time:** 20:31

**Analyst:** conn

**Results Submitted By:** miller

**Run Number:** 61275

**Sample Quality Control**

<b>Internal Standards</b>	CCC						IC					
	Area	CCC	Area	%	Area	IC	Area	%	Area	IC	Area	IC
<b>Parameter</b>		Area	Area	Resp Lwr	Upr	/ Fail	Avg	Area	Area	Resp Lwr	Upr	/ Fail
IS-1,4-Difluorobenzene	278244	257698	108	70	130	PASS	Not Found	N/A	N/A	N/A	N/A	N/A
<b>Surrogate Standards</b>												
<b>Parameter</b>		<b>Amount</b>	<b>Units</b>	<b>Target</b>	<b>%Rec</b>	<b>Limits</b>		<b>Lower</b>	<b>Upper</b>	<b>Pass/Fail</b>		
SS-1,2-Dichlorobenzene-d4	8.837	ug/L	10	88		70	130			PASS		
SS-1,2-Dichloroethane-d4	9.113	ug/L	10	91		70	130			PASS		
SS-Bromofluorobenzene	4.912	ug/L	5.0	98		70	130			PASS		
SS-Toluene-d8	10.345	ug/L	10	103		70	130			PASS		

**Ordered Parameter Results**

<b>Parameter</b>	<b>Amount</b>	<b>MRL</b>	<b>Units</b>
1,1,1,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,1-Trichloroethane	< 0.5	0.5	ug/L
1,1,2,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.5	0.5	ug/L
1,1,2-Trichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethylene	< 0.5	0.5	ug/L
1,1-Dichloropropanone	< 5.0	5.0	ug/L
1,1-Dichloropropylene	< 0.5	0.5	ug/L
1,2,3-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,3-Trichloropropane	< 0.5	0.5	ug/L
1,2,3-Trimethylbenzene	< 0.5	0.5	ug/L
1,2,4-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,4-Trimethylbenzene	< 0.5	0.5	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/L
1,2-Dibromoethane (EDB)	< 0.2	0.2	ug/L
1,2-Dichlorobenzene	< 0.5	0.5	ug/L
1,2-Dichloroethane	< 0.5	0.5	ug/L
1,2-Dichloropropane	< 0.5	0.5	ug/L
1,2-Xylene	< 0.5	0.5	ug/L
1,3,5-Trimethylbenzene	< 0.5	0.5	ug/L
1,3-Dichlorobenzene	< 0.5	0.5	ug/L

1,3-Dichloropropane	< 0.5	0.5	ug/L	
1,3-Xylene	< 0.5	0.5	ug/L	
1,4-Dichlorobenzene	< 0.5	0.5	ug/L	
1,4-Xylene	< 0.5	0.5	ug/L	
1-Chlorobutane	< 5.0	5.0	ug/L	
2,2-Dichloropropane	< 0.5	0.5	ug/L	
2-Butanone (MEK)	< 5.0	R	5.0	ug/L
2-Chlorotoluene	< 0.5	0.5	ug/L	
2-Hexanone	< 5.0	5.0	ug/L	
2-Nitropropane	< 2.0	R	2.0	ug/L
4-Chlorotoluene	< 0.5	0.5	ug/L	
4-Isopropyltoluene	< 0.5	0.5	ug/L	
4-Methyl-2-pentanone (MIBK)	< 2.0	2.0	ug/L	
Acetone	< 5.0	5.0	ug/L	
Acrylonitrile	< 1.0	1.0	ug/L	
Allyl chloride	< 5.0	5.0	ug/L	
Benzene	< 0.5	0.5	ug/L	
Bromobenzene	< 0.5	0.5	ug/L	
Bromo(chloromethane)	< 0.5	0.5	ug/L	
Bromo(dichloromethane)	< 0.5	0.5	ug/L	
Bromoform	< 0.5	0.5	ug/L	
Bromomethane	< 0.5	0.5	ug/L	
Carbon disulfide	< 5.0	5.0	ug/L	
Carbon tetrachloride	< 0.5	0.5	ug/L	
Chloroacetonitrile	< 5.0	5.0	ug/L	
Chlorobenzene	< 0.5	0.5	ug/L	
Chloroethane	< 0.5	0.5	ug/L	
Chloroform	< 0.5	0.5	ug/L	
Chloromethane	< 0.5	0.5	ug/L	
Dibromo(chloromethane)	< 0.5	0.5	ug/L	
Dibromomethane	< 0.5	0.5	ug/L	
Dichlorodifluoromethane	< 0.5	0.5	ug/L	
Dichloromethane	< 0.5	0.5	ug/L	
Ethyl Ether	< 2.0	2.0	ug/L	
Ethyl methacrylate	< 1.0	1.0	ug/L	
Ethylbenzene	< 0.5	0.5	ug/L	
Hexachlorobutadiene	< 0.5	0.5	ug/L	
Hexachloroethane	< 2.0	2.0	ug/L	
Isopropylbenzene	< 0.5	0.5	ug/L	
Methacrylonitrile	< 5.0	5.0	ug/L	
Methyl iodide	< 2.0	2.0	ug/L	
Methyl-t-butyl ether (MTBE)	< 0.5	0.5	ug/L	
Methylacrylate	< 1.0	1.0	ug/L	
Methylmethacrylate	< 1.0	1.0	ug/L	
Naphthalene	< 0.5	0.5	ug/L	
Nitrobenzene	< 5.0	R	5.0	ug/L
Pentachloroethane	< 2.0	2.0	ug/L	
Propionitrile	< 5.0	R	5.0	ug/L
Styrene	< 0.5	0.5	ug/L	
Tetrachloroethylene	< 0.5	0.5	ug/L	
Tetrahydrofuran	< 5.0	5.0	ug/L	
Toluene	< 0.5	0.5	ug/L	
Trichloroethylene	< 0.5	0.5	ug/L	
Trichlorofluoromethane	< 0.5	0.5	ug/L	
Vinyl chloride	< 0.2	0.2	ug/L	
Xylenes, Total	< 0.5	0.5	ug/L	
cis-1,2-Dichloroethylene	< 0.5	0.5	ug/L	
cis-1,3-Dichloropropylene	< 0.5	0.5	ug/L	
n-Butylbenzene	< 0.5	0.5	ug/L	

n-Propylbenzene	< 0.5	0.5	ug/L
sec-Butylbenzene	< 0.5	0.5	ug/L
tert-Butylbenzene	< 0.5	0.5	ug/L
trans-1,2-Dichloroethylene	< 0.5	0.5	ug/L
trans-1,3-Dichloropropylene	< 0.5	0.5	ug/L
trans-1,4-Dichloro-2-butylene	< 5.0	5.0	ug/L

### Additional Found Parameters

<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
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The symbol \* in the Amount column above indicates that the sample was re-analyzed for that parameter and the results are presented on another page.

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**Sample Matrix:** DW

**Acquisition File:** Not Available

**Data Directory:** 122403A

**Instrument:** ITD - C

**Extracted Date:** Not Available

**Sample Number:** 982497

**Dilution Factor:** 1

**Sample Site:** Bar-G-PZ16-POT N Inflow

**Sample Location:** Not Available

**Method:** 524.2

**Calibration File:** 524 2-121703c.mth

**Analysis Date:** 12/24/2003

**Analysis Time:** 21:05

**Analyst:** conn

**Results Submitted By:** conn

**Run Number:** 61275

**Sample Quality Control**

Internal Standards <u>Parameter</u>	CCC						IC					
	Area	CCC	Area			Pass	Avg	Area	Area			Pass
		Area	%	Limits	Pass				Resp	Lwr	Upr	
IS-1,4-Difluorobenzene	273814	257698	106	70	130	PASS	Not Found	N/A	N/A	N/A	N/A	N/A
<b>Surrogate Standards</b>												
SS-1,2-Dichlorobenzene-d4	Amount	Units	Target	%Rec	Limits			Lower	Upper	Pass/Fail		
	8.857	ug/L	10	89	70	130		PASS				
	8.894	ug/L	10	89	70	130		PASS				
	4.991	ug/L	5.0	100	70	130		PASS				
SS-1,2-Dichloroethane-d4	10.507	ug/L	10	105	70	130		PASS				
SS-Bromofluorobenzene												
SS-Toluene-d8												

**Ordered Parameter Results**

<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
1,1,1,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,1-Trichloroethane	< 0.5	0.5	ug/L
1,1,2,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.5	0.5	ug/L
1,1,2-Trichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethylene	< 0.5	0.5	ug/L
1,1-Dichloropropanone	< 5.0	5.0	ug/L
1,1-Dichloropropylene	< 0.5	0.5	ug/L
1,2,3-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,3-Trichloropropane	< 0.5	0.5	ug/L
1,2,3-Trimethylbenzene	< 0.5	0.5	ug/L
1,2,4-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,4-Trimethylbenzene	< 0.5	0.5	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/L
1,2-Dibromoethane (EDB)	< 0.2	0.2	ug/L
1,2-Dichlorobenzene	< 0.5	0.5	ug/L
1,2-Dichloroethane	< 0.5	0.5	ug/L
1,2-Dichloropropane	< 0.5	0.5	ug/L
1,2-Xylene	< 0.5	0.5	ug/L
1,3,5-Trimethylbenzene	< 0.5	0.5	ug/L
1,3-Dichlorobenzene	< 0.5	0.5	ug/L

1,3-Dichloropropane	< 0.5	0.5	ug/L	
1,3-Xylene	< 0.5	0.5	ug/L	
1,4-Dichlorobenzene	< 0.5	0.5	ug/L	
1,4-Xylene	< 0.5	0.5	ug/L	
1-Chlorobutane	< 5.0	5.0	ug/L	
2,2-Dichloropropane	< 0.5	0.5	ug/L	
2-Butanone (MEK)	< 5.0	R	5.0	ug/L
2-Chlorotoluene	< 0.5	0.5	ug/L	
2-Hexanone	< 5.0	5.0	ug/L	
2-Nitropropane	< 2.0	R	2.0	ug/L
4-Chlorotoluene	< 0.5	0.5	ug/L	
4-Isopropyltoluene	< 0.5	0.5	ug/L	
4-Methyl-2-pentanone (MIBK)	< 2.0	2.0	ug/L	
Acetone	< 5.0	5.0	ug/L	
Acrylonitrile	< 1.0	1.0	ug/L	
Allyl chloride	< 5.0	5.0	ug/L	
Benzene	< 0.5	0.5	ug/L	
Bromobenzene	< 0.5	0.5	ug/L	
Bromochloromethane	< 0.5	0.5	ug/L	
Bromodichloromethane	< 0.5	0.5	ug/L	
Bromoform	< 0.5	0.5	ug/L	
Bromomethane	< 0.5	0.5	ug/L	
Carbon disulfide	< 5.0	5.0	ug/L	
Carbon tetrachloride	< 0.5	0.5	ug/L	
Chloroacetonitrile	< 5.0	5.0	ug/L	
Chlorobenzene	< 0.5	0.5	ug/L	
Chloroethane	< 0.5	0.5	ug/L	
Chloroform	< 0.5	0.5	ug/L	
Chloromethane	< 0.5	0.5	ug/L	
Dibromochloromethane	< 0.5	0.5	ug/L	
Dibromomethane	< 0.5	0.5	ug/L	
Dichlorodifluoromethane	< 0.5	0.5	ug/L	
Dichloromethane	< 0.5	0.5	ug/L	
Ethyl Ether	< 2.0	2.0	ug/L	
Ethyl methacrylate	< 1.0	1.0	ug/L	
Ethylbenzene	< 0.5	0.5	ug/L	
Hexachlorobutadiene	< 0.5	0.5	ug/L	
Hexachloroethane	< 2.0	2.0	ug/L	
Isopropylbenzene	< 0.5	0.5	ug/L	
Methacrylonitrile	< 5.0	5.0	ug/L	
Methyl iodide	< 2.0	2.0	ug/L	
Methyl-t-butyl ether (MTBE)	< 0.5	0.5	ug/L	
Methylacrylate	< 1.0	1.0	ug/L	
Methylmethacrylate	< 1.0	1.0	ug/L	
Naphthalene	< 0.5	0.5	ug/L	
Nitrobenzene	< 5.0	R	5.0	ug/L
Pentachloroethane	< 2.0	2.0	ug/L	
Propionitrile	< 5.0	R	5.0	ug/L
Styrene	< 0.5	0.5	ug/L	
Tetrachloroethylene	< 0.5	0.5	ug/L	
Tetrahydrofuran	< 5.0	5.0	ug/L	
Toluene	< 0.5	0.5	ug/L	
Trichloroethylene	< 0.5	0.5	ug/L	
Trichlorofluoromethane	< 0.5	0.5	ug/L	
Vinyl chloride	< 0.2	0.2	ug/L	
Xylenes, Total	< 0.5	0.5	ug/L	
cis-1,2-Dichloroethylene	< 0.5	0.5	ug/L	
cis-1,3-Dichloropropylene	< 0.5	0.5	ug/L	
n-Butylbenzene	< 0.5	0.5	ug/L	

n-Propylbenzene	< 0.5	0.5	ug/L
sec-Butylbenzene	< 0.5	0.5	ug/L
tert-Butylbenzene	< 0.5	0.5	ug/L
trans-1,2-Dichloroethylene	< 0.5	0.5	ug/L
trans-1,3-Dichloropropylene	< 0.5	0.5	ug/L
trans-1,4-Dichloro-2-butylene	< 5.0	5.0	ug/L

### Additional Found Parameters

<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
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The symbol \* in the Amount column above indicates that the sample was re-analyzed for that parameter and the results are presented on another page.