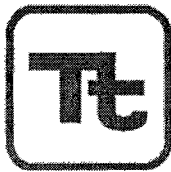


**ANNUAL EFFECTIVENESS MONITORING REPORT No. 8
VESTAL WELL 1-1 TREATMENT FACILITY
WORK ASSIGNMENT NUMBER: 109-RALR-0238**

**PUMPHOUSE ROAD
VESTAL, NEW YORK**

JANUARY 2006

Prepared By:



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LIST OF ACRONYMS

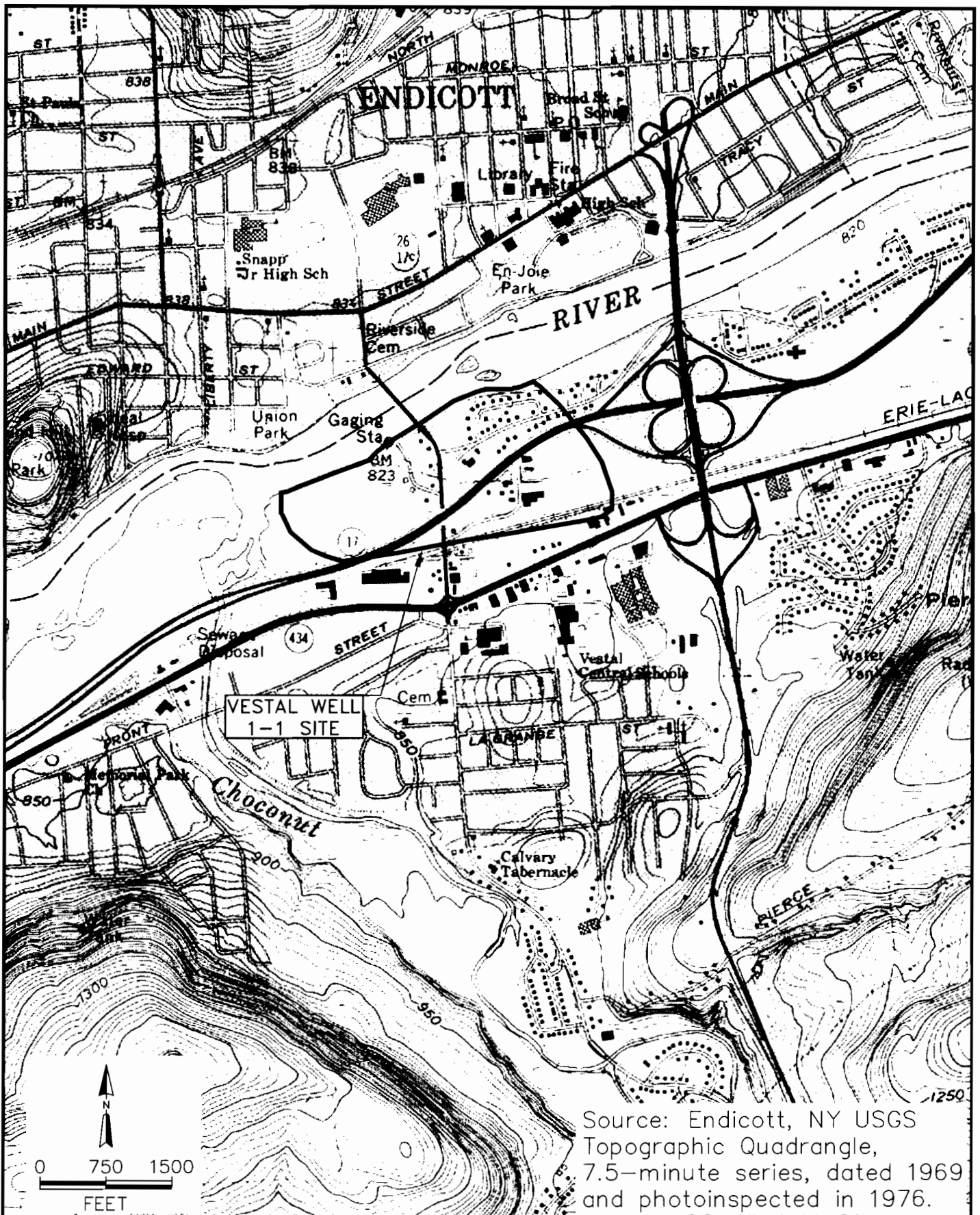
CI	Confidence Interval
COC	Contaminant of Concern
°C	degrees Celsius
DO	dissolved oxygen
gpm	gallons per minute
IAG	Interagency Agreement
LTR	Long-Term Response
MCL	Maximum Contaminant Level
msl	mean sea level
msl	milligrams per liter
ms/cm	millisiemens per centimeter
MV	millivolt
NTU	nephelometric turbidity unit
NYSDEC	New York State Department of Environmental Conservation
NYSGWQC	New York State Groundwater Quality Criteria
O&M	Operations and Maintenance
ORP	oxidation reduction potential
OU-1	First Operable Unit
OU-2	Second Operable Unit
RA	Remedial Action
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
SV	Standard units
SVE	Soil Vacuum Extraction
TAL	Target Analyte List
TCL VOCs	Target Compound List Volatile Organic Compounds
TtEC	Tetra Tech EC, Inc.
ug/l	Micrograms per liter
VOC	Volatile Organic Compound
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency

1.0 INTRODUCTION

The Town of Vestal is located in Broome County, New York, approximately five miles southwest of the City of Binghamton, on the south bank of the Susquehanna River. Figure 1-1 depicts the location of the Vestal Well 1-1 site. The Vestal Well 1-1 was one of three production wells (Wells 1-1, 1-2 and 1-3) providing drinking water to several water districts in the Vestal area. Well 1-1 was taken offline in 1980 because of contamination by volatile organic compounds (VOCs) (trichloroethene, 1,1-dichloroethene, 1,1-dichloroethane, 1,1,1-trichloroethane, and trans-1,2-dichloroethene). The construction of an air stripping facility for Well 1-1 was completed by the United States Environmental Protection Agency (USEPA) in early 1991 pursuant to the First Operable Unit (OU-1) Record of Decision (ROD) (USEPA, 1986). Due to problems with Well 1-1, the USEPA constructed a new (replacement) Well 1-1A to a depth of 135 feet below grade with a pumping capacity of 1,150 gallons per minute to ensure successful implementation of the remedy. In March 1995, the USEPA issued a Remedial Action Report, which determined Well 1-1A and the associated air stripping facility were fully functional and operational as a potable water supply. However, the New York State Department of Environmental Conservation (NYSDEC), which had previously agreed through a cooperative agreement with the USEPA to provide Long-Term Response (LTR) for this facility, was unable to secure a contract with the Town of Vestal. In May 1995, the NYSDEC informed the USEPA it no longer desired cooperative agreement funds to perform LTR. Therefore, the USEPA performs LTR to restore the groundwater aquifer and discharges the treated water to the Susquehanna River. The Town of Vestal does not use the treated water from Well 1-1A.

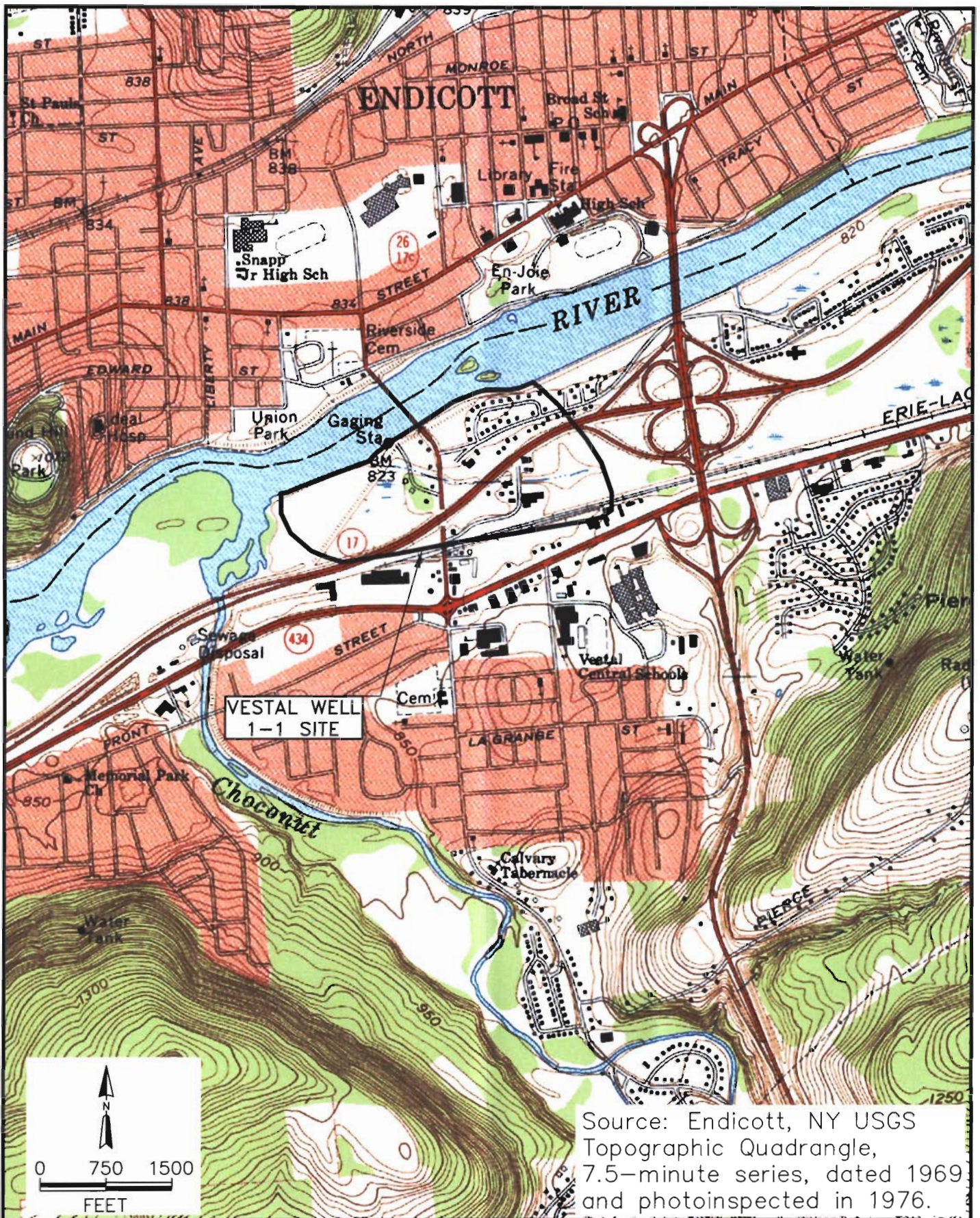
The OU-1 ROD also recommended a Second Operable Unit (OU-2) Remedial Investigation/Feasibility Study (RI/FS) be undertaken to evaluate suspected contaminant source areas upgradient of Well 1-1. The USEPA initiated this RI/FS in November 1988. A Second (OU-2) ROD was signed on 28 September 1990, selecting *in situ* vacuum extraction as the remedy for two discrete areas of soil contamination, i.e., Area 2 and Area 4, located in the Stage Road Industrial Park. These are the predominant sources of contamination of Well 1-1 (Figure 1-2).

USEPA completed remedial design activities for Area 2 in September 1994 and entered into an Interagency Agreement (IAG) with the United States Army Corps of Engineers (USACE) to implement the Area 2 remedial action (RA). The USACE started construction of the soil vacuum extraction (SVE) system in October 1996 and completed construction in January 1997. The Area 2 SVE system operation was terminated in November 2000, after the results of the Interim Soil Sampling Program confirmed the SVE successfully achieved ROD cleanup goals. Construction of a SVE system in Area 4 was initiated on 1 April 2003. This system started operation on 28 June 2003. As of 28 September 2005, 2,212 pounds of VOCs had been removed.



Source: Endicott, NY USGS Topographic Quadrangle, 7.5-minute series, dated 1969 and photoinspected in 1976.

TETRA TECH EC, INC.	TITLE:	DWN:	DES.:	PROJECT NO.:
	Site Map	LMB	CTS	1945.2109.0700
	Vestal Well 1-1 Site	CHKD:	APPD:	FIGURE NO.:
Vestal, New York	DATE:	REV.:	0	1-1
	10/17/2005			



Source: Endicott, NY USGS Topographic Quadrangle, 7.5-minute series, dated 1969 and photoinspected in 1976.

	TITLE:	DWN:	DES.:	PROJECT NO.:
	Site Map	LMB	CTS	1945.2109.0700
	Vestal Well 1-1 Site	CHKD:	APPD:	FIGURE NO.:
Vestal, New York	DATE:	REV.:	0	1-1

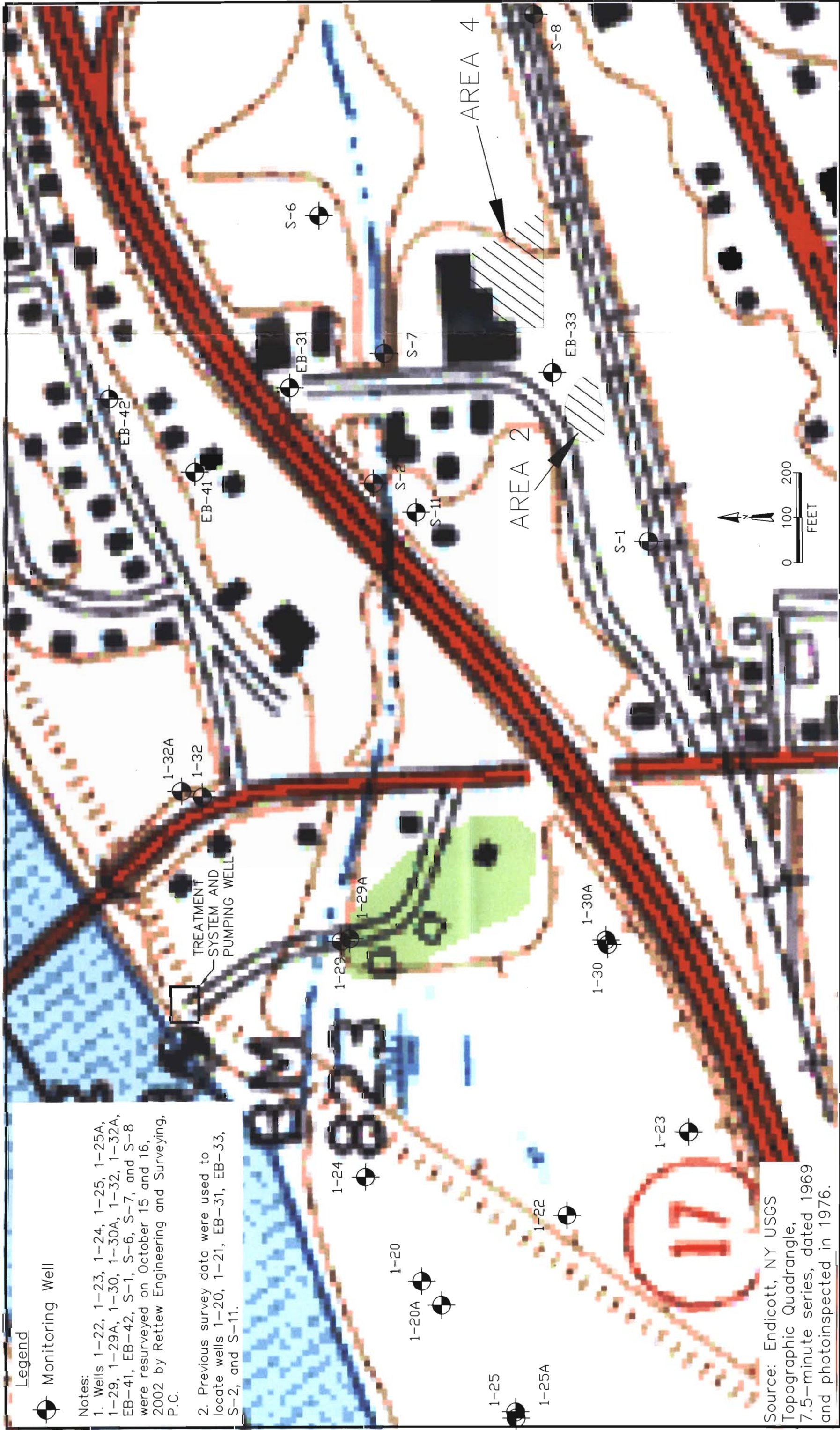
Legend

Monitoring Well

Notes:

1. Wells 1-22, 1-23, 1-24, 1-25, 1-25A, 1-29, 1-29A, 1-30, 1-30A, 1-32, 1-32A, EB-41, EB-42, S-1, S-6, S-7, and S-8 were resurveyed on October 15 and 16, 2002 by Rettew Engineering and Surveying, P.C.

2. Previous survey data were used to locate wells 1-20, 1-21, EB-31, EB-33, S-2, and S-11.



Source: Endicott, NY USGS Topographic Quadrangle, 7.5-minute series, dated 1969 and photoinspected in 1976.

TITLE:

Monitoring Well Locations
Vestal Well 1-1 Site
Vestal, New York



TETRA TECH EC, INC.

PROJECT NO.:

1945.2109.0700

DATE:

11/22/2005

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FIGURE NO.:

1-2

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The monitoring for OU-1 LTR consists of both monthly treatment system performance monitoring and annual groundwater effectiveness monitoring. The performance monitoring criteria are designed to evaluate the performance of the treatment system and determine whether the treated water meets the requirements for discharge to the Susquehanna River (New York State Freshwater Groundwater [Class GA] Effluent Limitations). The effectiveness monitoring criteria are designed to assess the effectiveness of groundwater contamination plume capture by Well 1-1A and determine the progress of groundwater restoration with respect to the New York State Groundwater Quality Criteria (NYSGWQC).

Table 1-1 highlights the New York State Class GA Groundwater Effluent Limitations and the New York State Class GA Groundwater Quality Criteria for the site contaminants of concern (COCs).

Table 1-1
NYS Groundwater Effluent Limitations and Groundwater Quality Criteria
For the Site Contaminants of Concern

Constituent	NYS GA Groundwater Effluent Limitations (µg/L)	NYS GA Groundwater Quality Criteria (µg/L)
Chloroform	7	7
1,1-dichloroethane	5	5
1,1-dichloroethene	5	5
Trans-1,2-dichloroethene	5	5
1,1,1-trichloroethane	5	5
Trichloroethene	5	5
Total Volatile Organics	100	100
Chromium	100	50
Copper	1,000	200
Lead	50	25
Mercury	1.4	0.7
Nickel	200	100
Zinc	5,000	2,000

µg/L - micrograms per liter

This report, Effectiveness Monitoring Report No. 8, presents the results of the effectiveness monitoring sampling conducted from 18 July through 22 July 2005.

2.0 TECHNICAL APPROACH

2.1 Description of Sampling and Analysis Program Plan

The wells selected for performing the effectiveness monitoring sampling, as presented in the original ROD, are Wells S-1, S-2, S-6, S-7, S-8, S-11, EB-1, EB-31, EB-33, EB-41, EB-42, 1-22, 1-24, 1-29, and 1-29A (15 wells). Monitoring well EB-1 could not be located and was replaced by monitoring well 1-32A. A deep monitoring well (1-32) was installed adjacent to 1-32A and has been included in the effectiveness monitoring sampling program. As of the 2004 effectiveness monitoring event, wells 1-25, 1-25A, 1-30, and 1-30A were added to the effectiveness monitoring sampling program to assist in delineation of the western margin of the plume. Monitoring well 1-22 was removed from the monitoring program as it became superfluous with the addition of well 1-30. Therefore, a total of 19 groundwater monitoring wells were sampled during the 2005 sampling event to evaluate the effectiveness of the remediation. Synoptic groundwater level measurements were collected from the 19 effectiveness monitoring sampling wells and monitoring wells 1-20, 1-20A, 1-22, and 1-23 prior to sampling activities. Monitoring well locations are shown on Figure 1-2.

Tetra Tech EC, Inc. (TtEC) conducted groundwater purging operations and subsequent groundwater sample collection in accordance with the USEPA Region 2 Low Stress Method using adjustable-rate stainless-steel submersible pumps equipped with dedicated tubing. The stainless steel submersible pump, with polyethylene tubing and safety line, was gently lowered into the well casing, to approximately the mid-point of the saturated screen level (target sampling zone). Following the installation of the pumping equipment, a water level measurement was recorded using an electronic water level indicator. These measurements were taken cautiously to the extent practicable, in order to cause minimum turbulence to the static water level. After the water level was recorded, groundwater in each monitoring well was purged. During the purging operations, the pump speed was adjusted to achieve minimal stabilized drawdown, to the extent practicable. If the drawdown could not be stabilized, the pumping rate was reduced to the minimum allowed by the equipment. The groundwater purging was accompanied by periodic (average of 3 to 6 minutes) measurements of field indicator parameters including pH, temperature, specific conductivity, dissolved oxygen, turbidity, and oxidation-reduction potential (ORP) using a Horiba U-22 meter. Once the field parameters were considered to be stabilized within the limits specified in the USEPA's Low Stress Method, groundwater samples were collected directly from the tubing into sample containers. A copy of the field logbook notes for this sampling round are provided in Appendix A. Low Flow Purge Data Sheets with field parameter results are provided in Appendix B.

Upon completion of sampling, the sample containers were placed in coolers with ice and maintained at 4° Celsius. Prior to overnight shipment of the sample to the analytical laboratory, sample labels were completed with sample identification number, project name/number, date, time and analytical parameters, and then placed on the sample containers. The samples were wrapped with bubble wrap and placed in the coolers with the completed chain of custody and secured with shipping tape and tamper-proof labels.

Groundwater samples were analyzed for Target Compound List volatile organic compounds (TCL VOCs). In addition, samples from wells 1-24, 1-29 and 1-29A and 1-30 were analyzed for Target Analyte List (TAL) metals to evaluate the effectiveness of groundwater cleanup. The sample

3.0 EVALUATION OF SAMPLING RESULTS

3.1 Groundwater Level Measurements

On 18 July 2005, TtEC personnel measured the depth to groundwater in 23 wells. Table 3-1 presents the depth to groundwater, well casing reference surveyed elevations, total depth of monitoring wells, and calculated groundwater elevations.

Figure 3-1 depicts the groundwater surface elevation map generated from the wells screened in the upper hydrostratigraphic unit (monitoring wells 1-25A, 1-29A, 1-30A, 1-32A, EB-31, EB-33, EB-41, EB-42, S-1, S-2, S-6, S-7, S-8, S-11). Mounded groundwater was observed in monitoring well 1-32A and the data for this well was excluded from Figure 3-1. The shallow groundwater flow is northwest toward the Susquehanna River.

A deep groundwater potentiometric surface map was created using monitoring wells 1-22, 1-23, 1-24, 1-25, 1-29, 1-30, and 1-32 (Figure 3-2). The deep groundwater direction is flowing to the north/northeast toward the Susquehanna River and pumping well, based on the limited data points in the deep monitoring well network.

Groundwater elevation measurements from the four well clusters (1-25/1-25A, 1-29/1-29A, 1-30/1-30A, and 1-32/1-32A) were evaluated. A large vertical hydraulic gradient was observed in cluster 1-32/1-32A; however, mounded groundwater observed in well 1-32A, makes the magnitude and direction of the gradient questionable. In the three remaining well clusters, vertical hydraulic gradients range from approximately 1.86×10^{-2} downward at the 1-30/1-30A cluster to approximately 1.97×10^{-4} downward at the 1-29/1-29A cluster to approximately 1.11×10^{-3} upward at the 1-25/1-25A cluster. Therefore the magnitude of the vertical hydraulic gradient increases in the upward direction with proximity to the Susquehanna River, which is expected at a regional groundwater discharge such as the Susquehanna River.

The spuriously high groundwater level observed in monitoring well 1-32A may be the result of water infiltration near the surface, such as a possible leaking water line. The fine-grained soils in which 1-32A is screened would inhibit infiltration and enhance the mounding effect observed.

3.2 Analytical Results

The groundwater sampling results from the 2005 sampling event indicate several COCs above NYSGWQC standards at the site. The COCs exceeding NYSGWQC include 1,1,1-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trichloroethene, vinyl chloride, and lead. Appendix C presents the analytical results and compares them to the NYSGWQC and USEPA MCLs. Table 3-2 presents a summary of Appendix C, displaying only the detected compounds and comparing them to the NYSGWQC and USEPA MCLs. Figure 3-3 presents the constituents detected above the NYSGWQC for each well sampled. The validated raw analytical data are presented in Appendix D.

As Figure 3-3 illustrates, the highest concentrations of VOCs were detected in groundwater samples collected from monitoring wells downgradient from Areas 2 and 4 (i.e., 1-29, EB-31, S-2, S-7, and S-11). This indicates Areas 2 and 4 were the source of the groundwater contamination.

The decreasing concentrations of chlorinated VOCs and distribution of trichloroethene and tetrachloroethene, 1,1,1-trichloroethane and 1,2-dichloroethane daughter products (dichloroethene, 1,1-dichloroethane, vinyl chloride, and chloroethane) indicate natural attenuation is occurring.

Table 3-2 shows inorganic site COCs (chromium, copper, mercury, nickel, and zinc) were detected at concentrations below the NYSGWQC. Lead was detected above the NYSGWQC in well 1-29. Iron and sodium concentrations exceeded the NYSGWQC in monitoring wells 1-24, 1-29, 1-29A, and 1-30. The manganese concentration exceeded the NYSGWQC in monitoring well 1-29A. The magnesium concentration exceeded the NYSGWQC for well 1-30. However, iron, magnesium, manganese, and sodium are not COCs. Turbidity could account for some elevated metals concentrations for monitoring wells 1-24, 1-29, and 1-30 (see Table 3-5).

Field Blanks

The laboratory analyzed two field blank samples (FB-072105 and FB-072205) for VOCs only, and two field blank samples (FB-071905 and FB-072005) for VOCs and dissolved metals. Laboratory analyses indicate concentrations of two VOCs (dibromochloromethane and methylene chloride) in three field blank samples (FB-071905, FB-072005, and FB-072105), and one VOC (chloroform) in one field blank sample (FB-072205) all below groundwater quality criteria. The VOCs detected in field blanks do not correlate to groundwater samples (i.e., chloroform and dibromochloromethane were not detected in any groundwater samples, and methylene chloride was not detected in groundwater samples on the same days as the field blanks in which it was detected). Arsenic, calcium, magnesium, nickel, sodium, and zinc were also detected in one of the field blank samples (FB-071905) at concentrations below groundwater quality criteria.

Trip Blanks

The laboratory analyzed four trip blank samples for VOCs. One trip blank was collected on each of the following days: 19 July 2005, 20 July 2005, 21 July 2005, and 22 July 2005. The laboratory analysis detected carbon disulfide, chloroform, dibromochloromethane, methylene chloride, and trichloroethene at concentrations below groundwater quality criteria in the samples.

3.3 Field Parameter Measurement Results

Table 3-5 presents the field parameters measured during groundwater sampling activities. The following discussion of natural attenuation field parameters pertains to monitoring wells S-1, S-2, S-6, S-7, S-11, EB-31, EB-33, and 1-29A, which are located within the plume as defined by Figure 3-4.

Dissolved oxygen readings ranged from 0.00 mg/L to 5.65 mg/L, generally within the range of concentrations at which anaerobic bacteria function. The preferred redox environment for degradation of most chlorinated VOCs is anaerobic.

ORP readings can be used to evaluate the redox process and confirm DO readings. ORP ranged from -197 mV to +87 mV. These readings are indicative of anaerobic conditions and generally are within the range at which denitrification or iron (III) reduction occurs. Tetrachloroethene and trichloroethene dechlorination may occur within this range.

Table 3-1
Groundwater and Well Elevation Data
18 July 2005

Monitoring Well Identification	Elevation of Monitoring Well Reference Point (feet msl)	Total Depth of Monitoring Well (feet)	Aquifer Screened	Depth to Groundwater (feet)	Groundwater Elevation (feet msl)
1-20	825.93	100	D	23.54	802.39
1-20A	826.32	34	S	23.68	802.64
1-22*	817.61	132	D	15.03	802.58
1-23	820.91	136	D	18.62	802.29
1-24*	826.76	129	D	24.69	802.07
1-25	827.02	155	D	24.72	802.30
1-25A	826.92	49	S	24.73	802.19
1-29*	823.55	119	D	21.82	801.73
1-29A*	824.03	64	S	22.29	801.74
1-30	816.54	114	D	15.49	801.05
1-30A	816.42	30	S	13.85	802.57
1-32**	831.08	152	D	29.98	801.10
1-32A**	830.86	35	S	17.97	812.89
EB-31*	825.77	53	S	20.97	804.80
EB-33*	828.59	35	S	19.25	809.34
EB-41*	825.38	28	S	22.39	802.99
EB-42*	831.54	29	S	28.31	803.23
S-1*	827.16	25	S	20.82	806.34
S-2*	824.73	32	S	20.68	804.05
S-6*	822.46	41	S	13.24	809.22
S-7*	823.72	32	S	18.19	805.53
S-8*	832.2	25	S	7.5	824.70
S-11*	822.78	40	S	19.3	803.48

Qualifiers:

* - Part of the original monitoring well network in the ROD

** - Replaced monitoring well

msl - Mean Sea Level

S - Shallow

D - Deep

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Microbes capable of degrading chlorinated aliphatic hydrocarbons generally function best in waters with pH ranging from 6 to 8 standard units (SU). At the Vestal site monitoring wells (excluding 1-30 which is not in the plume as defined by Figure 3-4), pH ranged from 5.41 SU to 8.51 SU.

3.4 Plant Operations and Sampling

Table 3-6 presents information on plant pumping rates and monthly influent sample results since the last Annual Effectiveness Monitoring performed in June 2004. Table 3-7 presents monthly sample data for the treatment system influent and effluent collected from July 2004 through June 2005. The influent concentrations are compared to the NYSGWQC and USEPA MCLs. The effluent data is compared to the New York State discharge to Surface Water Criteria.

Figure 3-4 depicts the isoconcentration contours for total VOCs detected in 2005 and the 100 ug/L total VOC isoconcentration contour from 2004. It should be noted that the groundwater mound observed in monitoring well 1-32A may be affecting the geometry of the isoconcentration contours in Figure 3-4. If the mound is being created by infiltration of water near the ground surface, the analytical results for 1-32 may not represent the actual shallow groundwater quality in this area of the site.

Figure 3-5 presents the individual VOCs detected in each well in 2005. Based on the 2005 groundwater sampling, the current areal extent of site COCs appears to originate in the vicinity of Areas 2 and 4, and continues to migrate northwest toward the treatment system. The data indicates contaminants have not impacted the monitoring wells adjacent to the Susquehanna River. Low concentrations of VOCs (below groundwater quality criteria) were detected in downgradient wells 1-24, 1-25 and 1-25A, which are closest to the current Vestal water supply wells.

The groundwater analytical results indicate nearly all of the wells in which COC concentrations were detected above the groundwater quality criteria (EB-31, EB-33, 1-29, 1-29A, S-2, S-6, S-7, and S-11) are installed in the shallow groundwater zone. Well 1-29 is the only deep monitoring well for which VOCs (1,1,1-trichloroethane, 1,1-dichloroethane, and cis-1,2-dichloroethene) were detected at concentrations exceeding the groundwater quality criteria.

A comparison of the total VOC concentrations at each monitoring well, with the results of the initial and first through eighth annual effectiveness monitoring events, is presented in Table 3-3. The total VOC concentrations at S-2, S-11, and EB-31 decreased from the previous year, total VOC concentrations at S-1, S-6, S-7, S-8, EB-33, EB-41, 1-25A, 1-29, 1-29A, 1-30, and 1-32A increased from the previous year, and the total VOC concentrations at EB-42, 1-29, 1-25, 1-30A, and 1-32 remained relatively the same.

Trend analyses were performed for the pumping well influent and monitoring wells EB-31, EB-33, EB-41, S-1, S-2, S-6, S-7, S-11, 1-29 and 1-29A. The chosen monitoring wells are wells within the groundwater plume for which there are at least four years of data from 1996 to the present. Trend analyses were performed using the Mann-Kendall Statistical Test at the 80% and 90% confidence interval (CI), with a test for stability at the 80% CI, if no statistically significant trend was identified. Appendix E presents tables and charts displaying the data used in, and results of, the Mann-Kendall Statistical Tests performed for selected chlorinated VOCs detected in the pumping well influent and monitoring wells mentioned above. Table 3-4 presents a summary of the Mann-Kendall Statistical Test results.

In general, for most chlorinated compounds tested, there is a statistically significant decreasing trend at the 80% and 90% CI or no trend and stable concentrations at the 80% CI. Notable exceptions are cis-1,2-dichloroethene concentrations increasing for monitoring well EB-41 at the 80% and 90% CI; cis 1,2-dichloroethene concentrations increasing for monitoring well S-6 at the 80% CI; 1,1-dichloroethane concentrations increasing for monitoring well S-11 at the 80% and 90% CI; trichloroethene concentrations increasing for monitoring well EB-31 at the 80% CI, and trichloroethene concentrations increasing for monitoring well 1-29A at the 80% and 90% CI. Significantly, at the most upgradient well, EB-33, located between Areas 2 and 4, concentrations of all chlorinated compounds statistically tested except vinyl chloride, were decreasing at the 80% CI. For EB-33, vinyl chloride concentrations showed no trend and were not stable at the 80% CI.

collection, handling, shipping and analytical protocols are presented in Appendix A of the Monitoring Plan of the O&M Manual (FWENC, February 1996).

2.2 Field Blank, Trip Blank and Duplicate Samples

Field blanks, trip blanks, and duplicate samples were used to establish quality assurance of sampling methodology and laboratory analyses. A field blank sample, consisting of distilled water poured through decontaminated field equipment, was collected daily.

A trip blank sample, supplied by the laboratory, accompanied each shipment of samples to the laboratory.

A duplicate groundwater sample was collected from monitoring well S-11 (Sample ID: S-21-072205). The duplicate sample from monitoring well S-11 was analyzed for TCL VOCs only. The analyte concentrations reported for the duplicates demonstrated acceptable levels of measurement precision.

2.3 Sample Analysis and Data Validation

Groundwater samples were collected from 19 groundwater monitoring wells (S-1, S-2, S-6, S-7, S-8, S-11, EB-31, EB-33, EB-41, EB-42, 1-24, 1-25, 1-25A, 1-29, 1-29A, 1-30, 1-30A, 1-32, and 1-32A). The samples were shipped to GPL Laboratories, LLLP for analysis. Data validation was performed by TtEC, and the validation reports are provided in Appendix C. The laboratory data were evaluated according to USEPA Region 2 Functional Guidelines (SOW HW-6, Rev 8, CLP Organics Data Review and Preliminary Review, January, 1992).

The validation determined the data in the report should be considered technically defensible and completely usable, except for those samples noted.

Table 3-2 (Sheet 1 of 2)

Comparison of Detected Compounds to NYS Class GA Groundwater Quality Criteria

Sample Location Sample ID Sample Date Units	New York Groundwater Quality Criteria	EPA Drinking Water Regulations (MCLs)	1-24 I-24-072005 07/20/2005 (ug/l)	1-25 I-25-072005 07/20/2005 (ug/l)	1-25A I-25A-072005 07/20/2005 (ug/l)	1-29 1-29-071905 07/19/2005 (ug/l)	1-29A 1-29A-071905 07/19/2005 (ug/l)	1-30 I-30-072005 07/20/2005 (ug/l)	1-30A 1-30A-071905 07/19/2005 (ug/l)	1-32 1-32-071905 07/19/2005 (ug/l)	1-32A 1-32A-071905 07/19/2005 (ug/l)	EB-31 EB-31-072105 07/21/2005 (ug/l)
CONSTITUENT												
1,1,1-Trichloroethane	5	200	3.1	0.5U	0.54	73D	10	0.5U	0.5U	0.5U	0.5U	0.5U
1,1-Dichloroethane	5	5	0.82	0.5U	0.5U	8.5	9.4	0.5U	0.5U	0.5U	0.5U	3.9
1,1-Dichloroethene	5	5	0.5U	0.5U	0.5U	5.4	2.1	0.5U	0.5U	0.5U	0.5U	2.2
trans-1,2-Dichloroethene	5	100	0.5U	0.5UJ	0.5UJ	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.67
Carbon disulfide	60	NS	0.5U	0.5U	0.5U	0.5U	0.5U	1.6	0.5U	0.5U	0.5U	0.5U
Chloroethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	NS	0.5U	0.5U	0.5U	4.6J	1.4J	0.5U	0.5UJ	0.5U	0.5U	0.5U
Isopropylbenzene	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Methyl t-butyl ether (MTBE)	10	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Methylene chloride	5	5	0.74U	0.98U	0.86U	0.62U	0.53U	0.87U	0.68U	0.62U	1.2U	0.5U
Tetrachloroethylene	5	5	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Trichloroethene	5	5	0.5U	0.5U	0.43J	33D	6.4	0.5U	0.5U	0.5U	1.7	62JD
Vinyl chloride	2	2	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.54
cis-1,2-Dichloroethene	5	70	1.1	0.5UJ	0.5UJ	46D	21	0.5U	0.5U	0.5U	0.5U	21D
Aluminum	NS	50	1050	NA	NA	330	200U	1340	NA	NA	NA	NA
Arsenic	25	10	10UJ	NA	NA	10UJ	10UJ	9J	NA	NA	NA	NA
Barium	1000	2000	21J	NA	NA	48.2J	50.4J	38.6J	NA	NA	NA	NA
Calcium	NS	NS	80000	NA	NA	109000	117000	25400	NA	NA	NA	NA
Chromium	50	100	9.9J	NA	NA	12.6J	2J	34.4J	NA	NA	NA	NA
Cobalt	NS	NS	10.1J	NA	NA	8.3J	50J	1.8J	NA	NA	NA	NA
Copper	200	1000	3.6J	NA	NA	3.2J	4.3J	6.2J	NA	NA	NA	NA
Iron	300	300	12500	NA	NA	7610	816	15100	NA	NA	NA	NA
Lead	25	15	1.7J	NA	NA	25.3	10U	2.6J	NA	NA	NA	NA
Magnesium	35000	NS	15800	NA	NA	20500	21400	47300	NA	NA	NA	NA
Manganese	300	50	114	NA	NA	94	309	219	NA	NA	NA	NA
Nickel	100	NS	9J	NA	NA	11.1J	2.1J	23.4J	NA	NA	NA	NA
Potassium	NS	NS	2100J	NA	NA	1850J	1940J	2520J	NA	NA	NA	NA
Selenium	10	50	35U	NA	NA	2.6J	35U	3.3J	NA	NA	NA	NA
Sodium	20000	NS	47100	NA	NA	79300	83800	74100	NA	NA	NA	NA
Zinc	2000	5000	48.8J	NA	NA	23.5J	17.4J	30.5J	NA	NA	NA	NA

U - Non-detect

NA - Not analyzed

NS - No standard

J- Estimated

B (organics) - Found in blank

B (inorganics) - Concentration is greater than the instrument detection limit but less than the contract required detection limit

D - Dilution

ug/l - Micrograms per liter

BOLD - Exceeds New York Groundwater Quality Criteria

Table 3-2 (Sheet 2 of 2)
Comparison of Detected Compounds to NYS Class GA Groundwater Quality Criteria

Sample Location Sample ID Sample Date Units	New York Groundwater Quality Criteria	EPA Drinking Water Regulations (MCLs)	EB-33 EB-33-072105 07/21/2005 (ug/l)	EB-41 EB-41-072105 07/21/2005 (ug/l)	EB-42 EB-42-072105 07/21/2005 (ug/l)	S-1 S-1-072005 07/20/2005 (ug/l)	S-11 S11-072205 07/22/2005 (ug/l)	S-11 (duplicate) S21-072205 07/22/2005 (ug/l)	S-2 S-2-072205 07/22/2005 (ug/l)	S-6 S-6-072205 07/22/2005 (ug/l)	S-7 S-7-072105 07/21/2005 (ug/l)	S-8 S-8-072205 07/22/2005 (ug/l)
CONSTITUENT												
1,1,1-Trichloroethane	5	200	0.5U	0.5U	0.76	0.5U	400JD	400JD	2.3B	0.5U	7.9B	3.1B
1,1-Dichloroethane	5	5	4	0.66	0.5U	0.5U	60JD	60JD	7.2	0.5U	16	6.5
1,1-Dichloroethene	5	5	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.7	0.5U	1.9	0.5U
trans-1,2-Dichloroethene	5	100	1.3	0.5U	0.5UJ	0.5U	3.4J	2.4J	1.2	0.5U	1.1	0.5U
Carbon disulfide	60	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.3	0.5U	0.5U
Chloroethane	5	NS	0.5U	0.5U	0.5U	0.5U	2	1.8	0.91	0.5U	0.5U	0.5U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	NS	8.1	0.5U	0.5U	0.5U	110JD	110JD	0.5U	0.5U	0.5U	0.5U
Isopropylbenzene	5	NS	0.48J	0.5U	0.5U	0.5U	0.5U	0.5U	0.77	0.5U	0.5U	0.5U
Methyl t-butyl ether (MTBE)	10	NS	0.5U	1.9	0.5U	3.1	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Methylene chloride	5	5	0.8U	0.7U	0.76B	1U	0.5U	1.2J	0.51J	0.5U	0.5U	0.5U
Tetrachloroethylene	5	5	0.56	0.5U	0.5U	0.5U	1.6	1.6	0.5U	0.5U	0.5U	0.5U
Trichloroethene	5	5	3.4	0.5U	0.5U	0.62	120JD	180JD	62JD	0.5U	0.5U	3.8
Vinyl chloride	2	2	8.5	0.5U	0.5U	0.5U	7.8	6.9	9J	0.5U	50JD	3.4J
cis-1,2-Dichloroethene	5	70	49D	12	0.5UJ	0.5U	410D	430D	100D	19	14J	0.5U
Aluminum	NS	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	1000	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	50	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	200	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	25	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	35000	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	300	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	10	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	20000	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

U - Non-detect

NA - Not analyzed

NS - No standard

J- Estimated

B (organics) - Found in blank

B (inorganics) - Concentration is greater than the instrument detection limit but less than the contract required detection limit

D - Dilution

ug/l - Micrograms per liter

BOLD - Exceeds New York Groundwater Quality Criteria

Table 3-3 (Sheet 1 of 1)
Total VOC Concentrations (ug/L)

Monitoring Well Identification	November 1996 (initial)	November 1997 (first)	June 1999 (second)	June 2000 (third)	June 2001 (fourth)	October 2002 (fifth)	May 2003 (sixth)	June/July 2004 (seventh)	July 2005 (eighth)
Well S-1	NS	NS	NS	NS	NS	22.26	2.9	3.19	3.72
Well S-2	1572.5	504.9*	994	1472	807	533.68	741	409.98	185.59
Well S-6	NS	NS	NS	NS	NS	55.35*	78	62.36	69.3
Well S-7	380	561.22	NS	NS	NS	1445.3	286	164.26	210.9
Well S-8	ND	NS	NS	NS	NS	35.5	0.1	2.57	19.7
Well S-11	5131	441.7	383	4154	417	467.9	394	2049.25	1172.35*
Well EB-31	128.5	106	67	79	81	97.62	62	119.9	90.31
Well EB-33	2384.4	1285.23	1321	833	552	355.35	176	70.55	75.34
Well EB-41	ND	4.6	6	6	8	31.2	8.4	9.69*	14.56
Well EB-42	2	1	ND	1	ND	ND	1.5	0.67	1.52
Well 1-22	NS	NS	NS	NS	NS	ND	1.8	NS	NS
Well 1-23	NS	1	ND	ND	ND	NS	NS	NS	NS
Well 1-24	3.6	8.33	4	9	5	ND	6.6	5.84	5.02
Well 1-25	NS	NS	NS	NS	NS	NS	NS	0.38	ND
Well 1-25A	NS	NS	NS	NS	NS	NS	NS	0.49	0.97
Well 1-28	NS	NS	NS	NS	ND	NS	NS	NS	NS
Well 1-28A	NS	NS	NS	NS	ND	NS	NS	NS	NS
Well 1-29	963	249.3	217*	58.5*	NS	175.7	200	125.5	170.5
Well 1-29A	30	97.4	69	NS	51	43.86	49	45.85	50.3
Well 1-30	ND	1	ND	ND	ND	NS	NS	ND	1.6
Well 1-30A	NS	NS	NS	NS	ND	NS	NS	ND	ND
Well 1-32	NS	NS	NS	NS	NS	ND	0.6	ND	ND
Well 1-32A	NS	NS	NS	NS	NS	ND	0.1	ND	1.7
Total VOCs	9222	2351.76	2775	6554	1870	1485.75	1389.5	2665.88	1544.69

(initial) - indicated annual effectiveness report

Total VOCs are calculated using the results of monitoring wells S-2, S-11, EB-31, EB-33, EB-41, EB-42, and 1-24.

NS - Not Sampled

* - Average of duplicate data

ND - Not Detected

Monitoring wells 1-23, 1-28, and 1-28A were not sampled in October 2002, May 2003, June/July 2004, and June 2005 because they were not required to be sampled by the ROD.
Monitoring well 1-30 was not sampled in October 2002 and May 2003 because it is not required to be sampled by the ROD.

Table 3-4

Summary of Mann-Kendall Statistical Tests Results

Well ID	1-29		1-29A		EB-31		EB-33		EB-41		S-1		S-2		S-6		S-7		S-11		Influent	
	80%	90%	80%	90%	80%	90%	80%	90%	80%	90%	80%	90%	80%	90%	80%	90%	80%	90%	80%	90%	80%	90%
1,1,1-Trichloroethane	-	0	-	-	-	-	-	-	-	0	0	0	-	-	0	0	-	-	0	0*	-	-
1,1-Dichloroethane	-	-	-	0	0	0	-	-	0*	0	0	0	-	-	0	0	-	-	0	+	-	-
1,1-Dichloroethene	-	-	0	0	-	0	-	-	-	-	0	0	-	-	0	0	-	0*	-	-	-	-
1,2-Dichloroethane	-	0	-	-	-	0	-	-	-	-	0	0	-	-	0	0	-	-	-	-	0	0
trans-1,2-Dichloroethene	0	0	-	0	-	-	-	-	-	-	0	0	0*	0	0	0	-	-	0	0	-	-
Chloroethane	-	0	-	-	-	-	-	0	-	-	0	0	0*	0	0	0	-	-	0	0*	0	0
Tetrachloroethene	-	-	-	-	0*	0	-	-	-	0	0*	0	-	-	0	0	-	-	-	-	0	0
Trichloroethene	0	0	+	+	+	0	-	-	0*	0	0	0	-	-	0	0	0	0	0	0	0	-
Vinyl Chloride	-	-	-	-	-	-	0*	0	-	0	0	0	-	-	0	0	-	-	0	0	0	0
cis-1,2-Dichloroethene	-	-	-	-	0	0	-	-	+	+	0*	0	-	-	+	0	0	0	0*	0	-	-
Total VOCs	0	0	0	0	0	0	-	-	+	+	0*	0	-	-	0	0	-	-	0*	0	-	-

Notes:

C.I.: Confidence Interval

+ Increasing

- Decreasing

0 No Trend

* Not Stable

NE Not Evaluated. Total VOC data for 4 years not readily available.

Table 3-5 (Sheet 1 of 1)
 Final Field Parameter Measurements
 July 2005

Monitoring Well ID	S-1	S-2	S-6	S-7	S-8	S-11	EB-31	EB-33	EB-41	EB-42	1-24	1-25	1-25A
Final Field Parameter Measurement													
Dissolved Oxygen (mg/L)	0.33	0	0	0	0	0.37	0.09	3.02	0	5.65	1.52	0.23	4.99
ORP (mv)	-60	-151	-106	-3	-87	-12	47	-42	21	87	-133	-197	38
pH (SU)	7.74	5.41	6.61	6.19	6.52	6.93	6.89	7.05	6.77	6.99	8.51	9.1	6.98
Temperature (°C)	16.7	18.1	13.2	20.8	18.6	14.4	15.8	20.4	17.3	20.4	13.4	14.5	15.5
Conductivity (mS/cm)	1.4	18.3	2.09	0.834	0.95	1.31	1.04	1.29	1.71	1.84	0.79	0.46	0.55
Turbidity (NTU)	18.6	60.1	5	212	163	14.2	46.5	11.3	289	153	58.5	170	62

Monitoring Well ID (cont'd)	1-29	1-29A	1-30	1-30A	1-32	1-32A
Final Field Parameter Measurement						
Dissolved Oxygen (mg/L)	3.34	2.6	0.5	3.03	2.05	3.16
ORP (mv)	-118	-188	-198	-27	-146	86
pH (SU)	8.33	8.35	10.19	7.95	8.51	6.81
Temperature (°C)	13.1	14	18.2	17.8	15.4	26.3
Conductivity (mS/cm)	1.11	1.15	0.91	1.38	1.48	0.98
Turbidity (NTU)	53.2	2.3	212	43	84.2	141

**Table 3-6
Plant Operation and Sampling Data**

	Pump Rate (gpm)	Operational Days	Gallons Treated (million gallons)	Total VOC Influent Concentration (ug/l)
July 2004	0	0	0	NS
August 2004	0	0	0	NS
September 2004	0	0	0	NS
October 2004	575	2	1.7	NS
November 2004	575	30	24.8	361.5
December 2004	575	27	22.4	250.2
January 2005	541	31	24.2	245.8
February 2005	529	28	21.3	246.3
March 2005	518	31	22.4	232.2
April 2005	552	17	13.5	288.23
May 2005	*	31	*	236.49
June 2005	*	30	*	240.54

NS: Not Sampled due to treatment system not operating

* The flow meter was not operating correctly

**Table 3-7
Summary of VOC Concentrations Detected
in Treatment Plant Influent and Effluent
July 2004 - June 2005**

Compound	New York Groundwater Quality Criteria (ug/L)	EPA MCLs	Influent Concentration (ug/L)											
			2004						2005					
			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Vinyl Chloride	2	2	*	*	*	*	10	4.1	3.5	3.9	3.4	4.4	4.1	3.7
Chloroethane	5	NS	*	*	*	*	1.2	0.6	0.5	0.6	0.5	0.73	0.59	0.54
1,1-Dichloroethene	5	S	*	*	*	*	18	12	13	9.3	8.4	11	12	9.5
1,1,2 Trichloro- 1,2,2-Trifluoroethane	5	NS	*	*	*	*	4.3	3.1	3.1	2.9	2.6	3.2	2.6	2.9
Acetone	5	100	*	*	*	*	1.0U	1.0U	1.0U	2.3	1.0 U	1.0U	1.0U	1.0 U
Trans 1,2-Dichloroethene	5	NS	*	*	*	*	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U
Methyl Tert-Butyl Ether	10	5	*	*	*	*	6.0	4.4	4.7	4.3	4.3	3.9	4.2	3.9
1,1-Dichloroethane	5	70	*	*	*	*	32	18	18	17	17	24	17	17
Cis-1,2-Dichloroethene	5	70	*	*	*	*	70	49	50	46	46	54	47	45
Chloroform	7	80	*	*	*	*	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U
1,1,1-Trichloroethane	5	200	*	*	*	*	170	120	110	120	110	140	110	120
Trichloroethene	5	5	*	*	*	*	50	39	43	40	40	47	39	38
Total Volatile Organics	NS	NS	*	*	*	*	361.5	250.2	245.8	246.3	232.2	288.23	236.49	240.54

Compound	Discharge Criteria (ug/L)	Effluent Concentration (ug/L)												
		2004						2005						
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Vinyl Chloride	2	*	*	*	*	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane		*	*	*	*	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	5	*	*	*	*	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2 Trichloro- 1,2,2-Trifluoroethane		*	*	*	*	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	5	*	*	*	*	1.0U	1.0U	1.0U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trans 1,2-Dichloroethene	5	*	*	*	*	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Tert-Butyl Ether		*	*	*	*	2.8	2.4	2.7	2.7	1.8	2.2	2.2	2.2	2.2
1,1-Dichloroethane	5	*	*	*	*	2.8	2.3	2.1	2.5	2.5	2.7	2.0	1.9	
Cis-1,2-Dichloroethene	5	*	*	*	*	8.1	7.3	7.0	7.3	7.3	8.1	6.6	5.9	
Chloroform	7	*	*	*	*	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	5	*	*	*	*	7.1	6.6	5.1	6.9	7.2	7.3	5.3	4.7	
Trichloroethene	5	*	*	*	*	3.1	3.4	3.3	3.8	4.0	4.0	3.1	2.6	
Total Volatile Organics	100	*	*	*	*	23.9	22	20.2	23.2	22.8	24.3	19.2	17.3	

Pumping Rate	gpm	0	0	0	575	575	575	541	529	518	552	**	**
Air Stripper Efficiency	%	*	*	*	*	93.4	91.2	91.8	90.6	90.2	91.6	91.9	92.8

Air Stripper Efficiency calculated using Total Volatile Organics

*Treatment Plant was not operating

** Flow meter was not reading correctly, therefore pumping rate not known

NS - No Standard

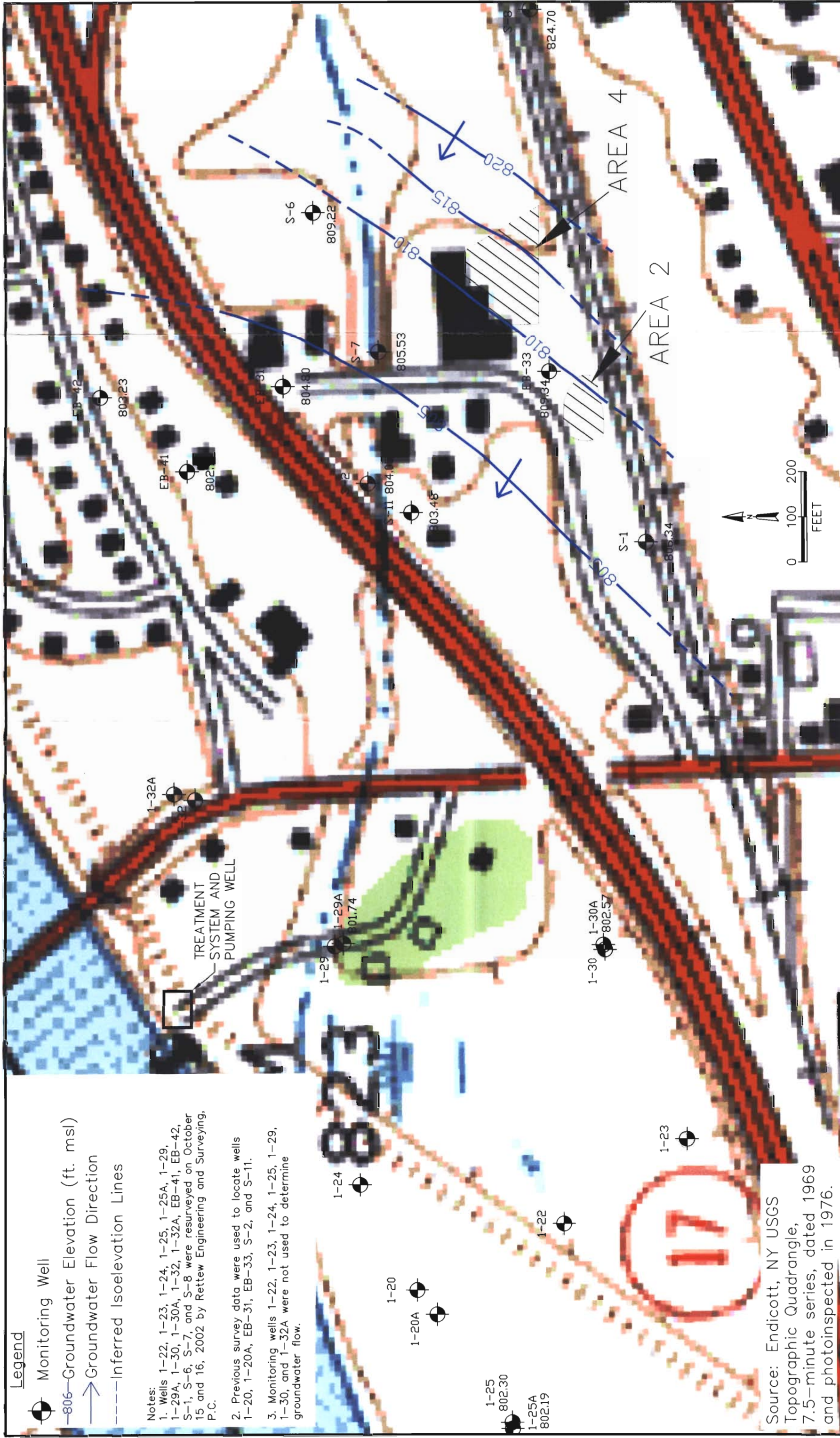
Legend

- Monitoring Well
- 806—Groundwater Elevation (ft. msl)
- Groundwater Flow Direction
- Inferred Isoelevation Lines

Notes:
 1. Wells 1-22, 1-23, 1-24, 1-25, 1-25A, 1-29, 1-29A, 1-30, 1-30A, 1-32, 1-32A, EB-41, EB-42, S-1, S-6, S-7, and S-8 were resurveyed on October 15 and 16, 2002 by Rettew Engineering and Surveying, P.C.

2. Previous survey data were used to locate wells 1-20, 1-20A, EB-31, EB-33, S-2, and S-11.

3. Monitoring wells 1-22, 1-23, 1-24, 1-25, 1-29, 1-30, and 1-32A were not used to determine groundwater flow.







Source: Endicott, NY USGS Topographic Quadrangle, 7.5-minute series, dated 1969 and photoinspected in 1976.

TETRA TECH EC, INC.

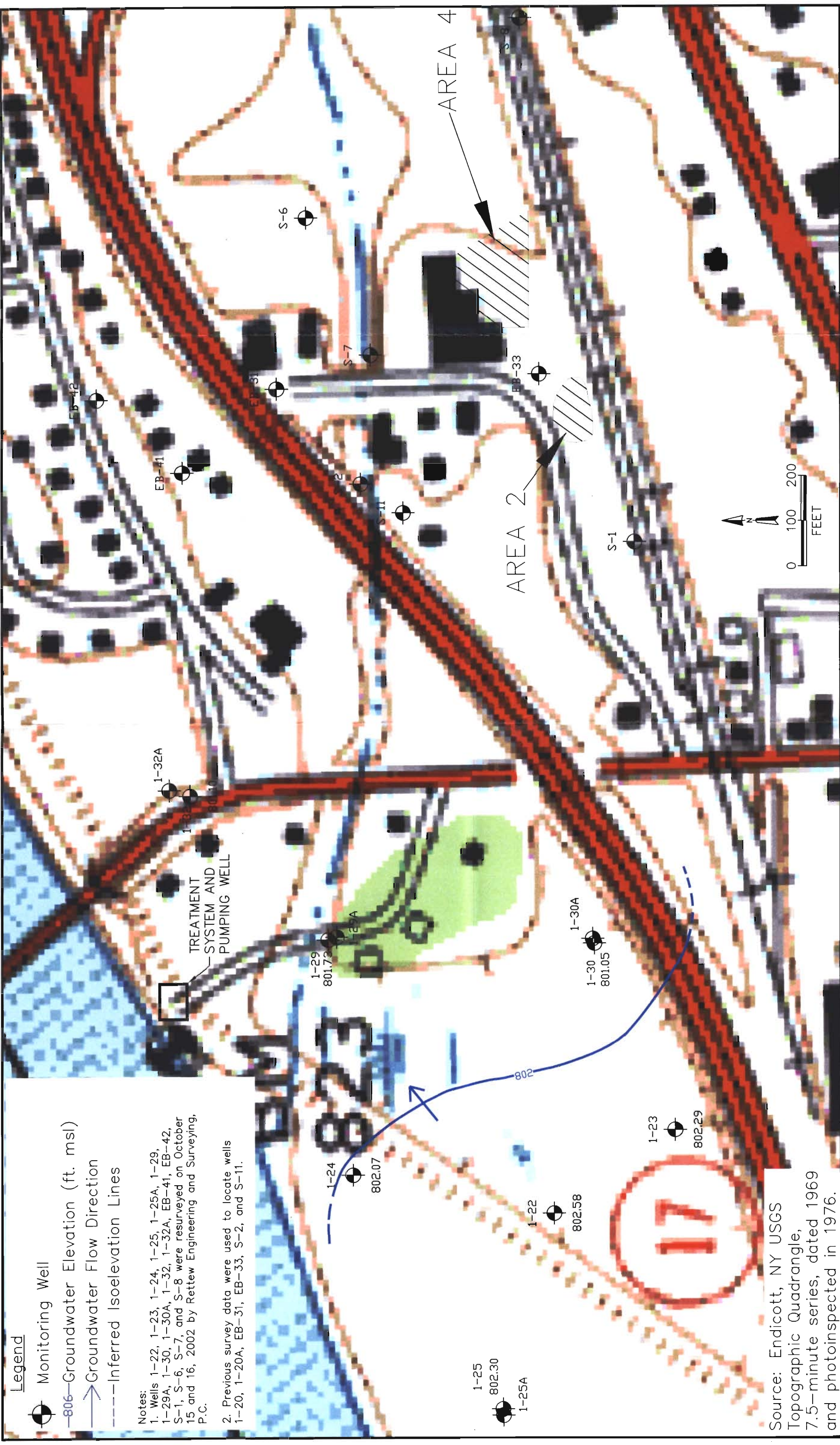
TITLE: Shallow Groundwater Surface Elevation Map
 Vestal Well 1-1 Site
 Vestal, NY

DWN:	LMB	DATE:	11/22/2005	PROJECT NO.:	1945.2109.0700
CHKD:	DC	REV.:	0	FIGURE NO.:	3-1
DES.:	CTS	APPD.:			

Legend

-  Monitoring Well
-  -806- Groundwater Elevation (ft. msl)
-  Groundwater Flow Direction
-  - - - - Inferred Isoelevation Lines

Notes:
 1. Wells 1-22, 1-23, 1-24, 1-25, 1-25A, 1-29, 1-29A, 1-30, 1-30A, 1-32, 1-32A, EB-41, EB-42, S-1, S-6, S-7, and S-8 were resurveyed on October 15 and 16, 2002 by Rettew Engineering and Surveying, P.C.
 2. Previous survey data were used to locate wells 1-20, 1-20A, EB-31, EB-33, S-2, and S-11.



Source: Endicott, NY USGS Topographic Quadrangle, 7.5-minute series, dated 1969 and photinspected in 1976.

TITLE: Deep Groundwater Surface Elevation Map Vestal Well 1-1 Site Vestal, New York		DWN: LMB	DATE: 11/22/2005	PROJECT NO.: 1945.2109.0700
		CHKD: DC	REV: 0	FIGURE NO.: 3-2
		DES.: CTS	APPD:	

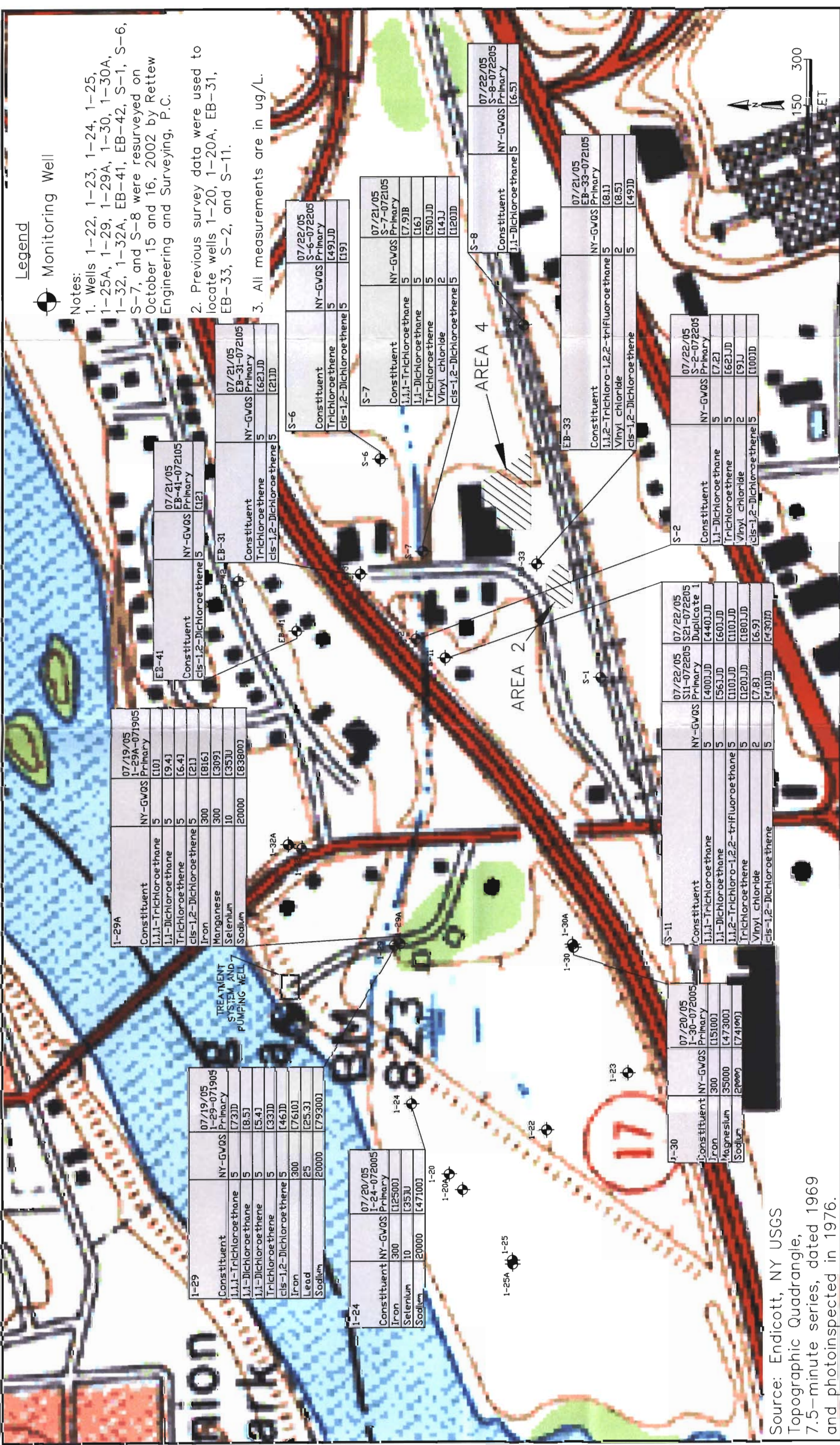
Legend
Monitoring Well

Notes:

1. Wells 1-22, 1-23, 1-24, 1-25, 1-25A, 1-29, 1-29A, 1-30, 1-30A, 1-32, 1-32A, EB-41, EB-42, S-1, S-6, S-7, and S-8 were resurveyed on October 15 and 16, 2002 by Rettew Engineering and Surveying, P.C.

2. Previous survey data were used to locate wells 1-20, 1-20A, EB-31, EB-33, S-2, and S-11.

3. All measurements are in ug/L.



Constituent	NY-GWQS	07/19/05 Primary
1,1,1-Trichloroethane	5	[10]
1,1-Dichloroethane	5	[9.4]
Trichloroethene	5	[6.4]
cis-1,2-Dichloroethene	5	[21]
Iron	300	[816]
Manganese	300	[309]
Selenium	10	[353U]
Sodium	20000	[838003]

Constituent	NY-GWQS	07/19/05 Primary
1,1,1-Trichloroethane	5	[733D]
1,1-Dichloroethane	5	[8.5]
1,1-Dichloroethene	5	[5.4]
Trichloroethene	5	[333D]
cis-1,2-Dichloroethene	5	[463D]
Iron	300	[7610]
Lead	25	[25.3]
Sodium	20000	[793003]

Constituent	NY-GWQS	07/20/05 Primary
Iron	300	[12500]
Selenium	10	[353U]
Sodium	20000	[47100]

Constituent	NY-GWQS	07/21/05 Primary
cis-1,2-Dichloroethene	5	[12]
Trichloroethene	5	[623JD]
cis-1,2-Dichloroethene	5	[213D]

Constituent	NY-GWQS	07/22/05 Primary
Trichloroethene	5	[493JD]
cis-1,2-Dichloroethene	5	[19]

Constituent	NY-GWQS	07/21/05 Primary
1,1,1-Trichloroethane	5	[7.93B]
1,1-Dichloroethane	5	[16]
Trichloroethene	5	[503JD]
Vinyl chloride	2	[143J]
cis-1,2-Dichloroethene	5	[1203D]

Constituent	NY-GWQS	07/22/05 Primary
1,1-Dichloroethane	5	[6.5]

Constituent	NY-GWQS	07/21/05 Primary
1,1,2-Trichloro-1,2,2-trifluoroethane	5	[8.1]
Vinyl chloride	2	[8.5]
cis-1,2-Dichloroethene	5	[493D]

Constituent	NY-GWQS	07/22/05 Primary
1,1,1-Trichloroethane	5	[4403JD]
1,1-Dichloroethane	5	[563JD]
1,1,2-Trichloro-1,2,2-trifluoroethane	5	[1103JD]
Trichloroethene	5	[1803JD]
Vinyl chloride	2	[7.8]
cis-1,2-Dichloroethene	5	[4103D]

Constituent	NY-GWQS	07/22/05 Primary
1,1-Dichloroethane	5	[7.2]
Trichloroethene	5	[623JD]
Vinyl chloride	2	[93J]
cis-1,2-Dichloroethene	5	[1003D]

Constituent	NY-GWQS	07/22/05 Primary
1,1,1-Trichloroethane	5	[4403JD]
1,1-Dichloroethane	5	[563JD]
1,1,2-Trichloro-1,2,2-trifluoroethane	5	[1103JD]
Trichloroethene	5	[1803JD]
Vinyl chloride	2	[7.8]
cis-1,2-Dichloroethene	5	[4103D]

Source: Endicott, NY USGS Topographic Quadrangle, 7.5-minute series, dated 1969 and photoinspired in 1976.

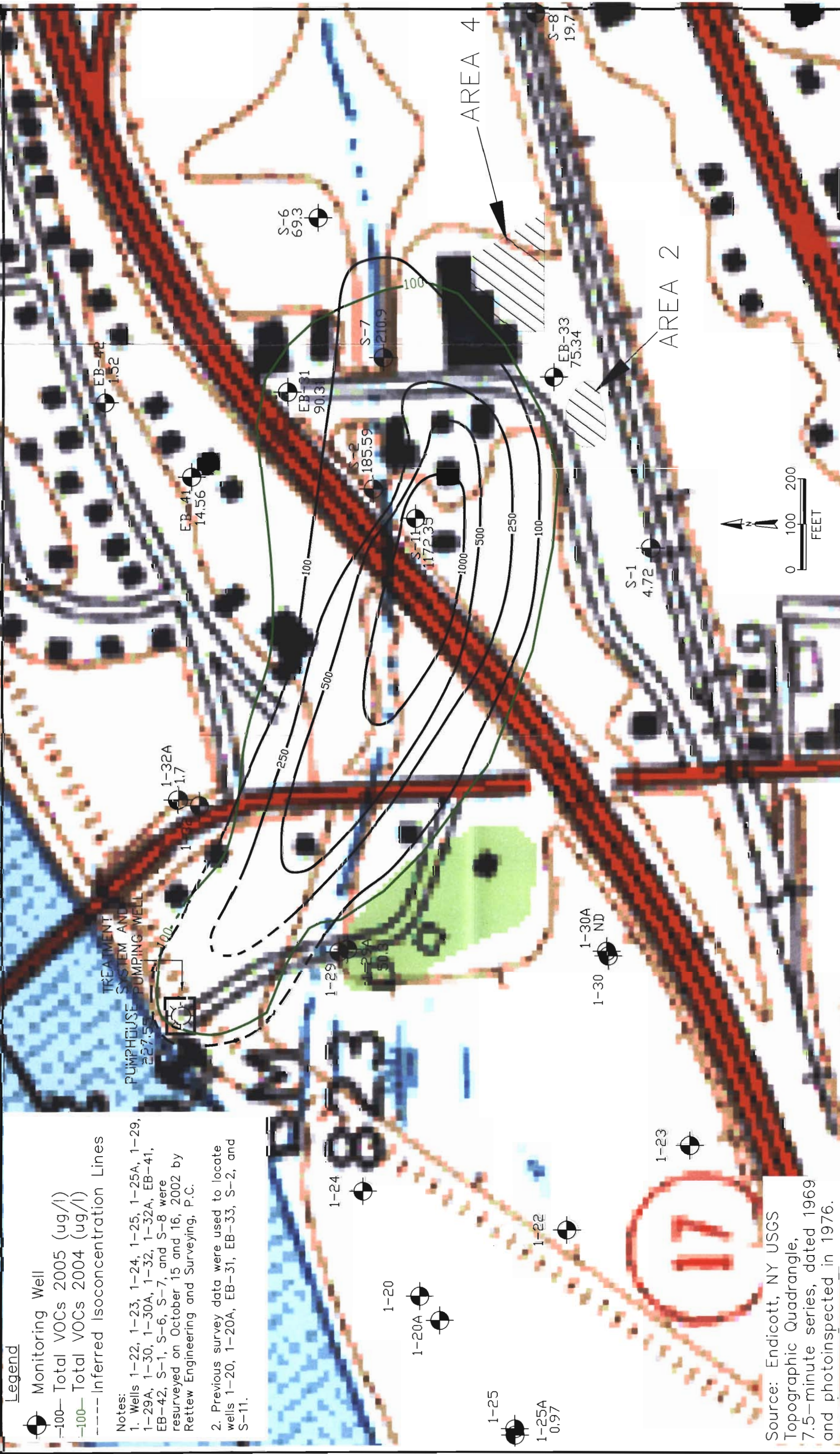


TITLE: Constituents Detected Above New York Groundwater Quality Standards (2005)
Vestal Well 1-1 Site
Vestal, New York

DWN: LMB	DATE: 01/03/2006	PROJECT NO: 1945.2109.0700
CHKD: DC	REV: 0	
DES: CTS	APPD:	FIGURE NO: 3-3

Legend

- Monitoring Well
 - 100- Total VOCs 2005 (ug/l)
 - 100- Total VOCs 2004 (ug/l)
 - Inferred Isoconcentration Lines
- Notes:
1. Wells 1-22, 1-23, 1-24, 1-25, 1-25A, 1-29, 1-29A, 1-30, 1-30A, 1-32, 1-32A, EB-41, EB-42, S-1, S-6, S-7, and S-8 were resurveyed on October 15 and 16, 2002 by Rettew Engineering and Surveying, P.C.
 2. Previous survey data were used to locate wells 1-20, 1-20A, EB-31, EB-33, S-2, and S-11.



Source: Endicott, NY USGS Topographic Quadrangle, 7.5-minute series, dated 1969 and photoinspected in 1976.

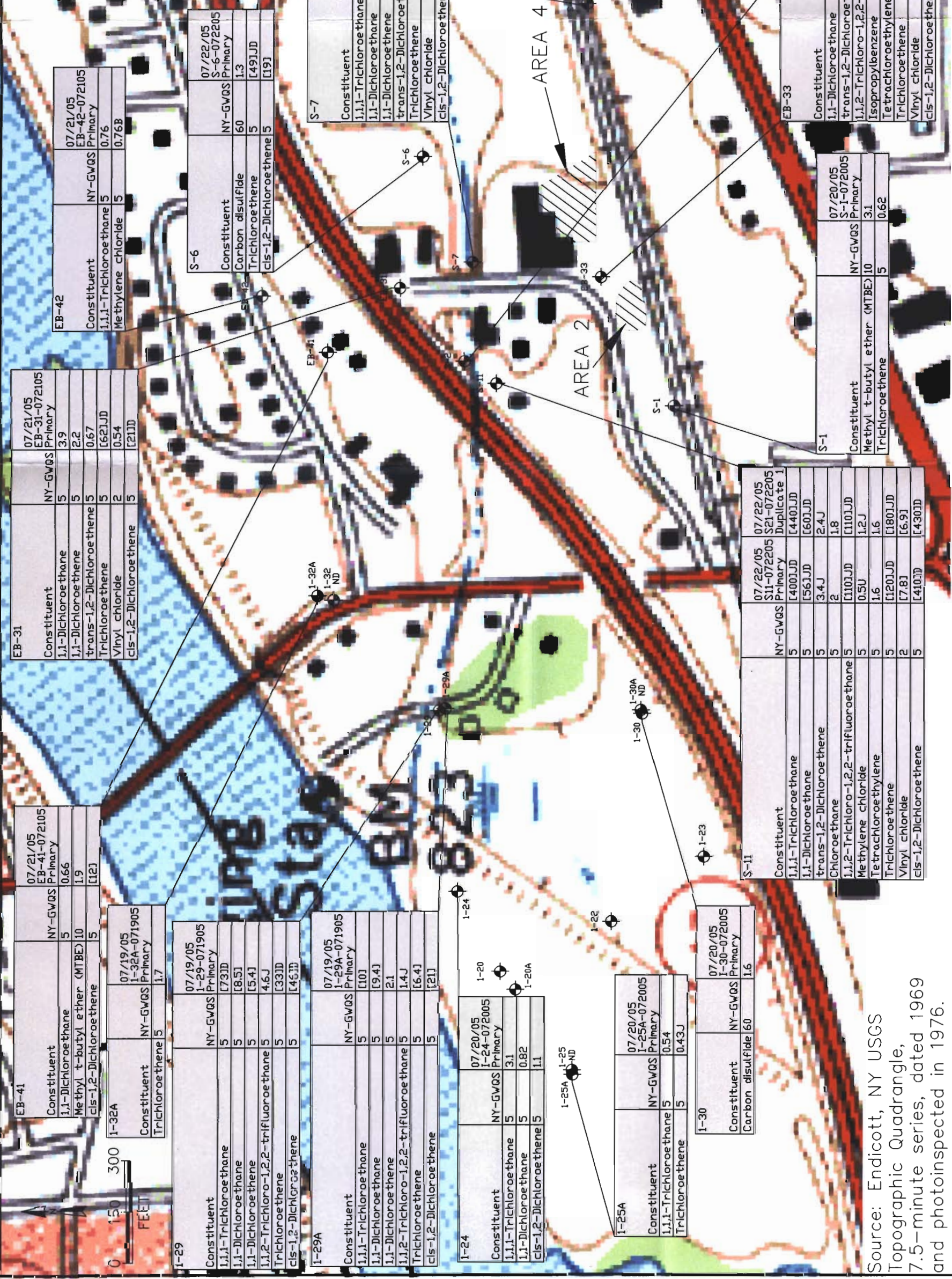
TITLE: Total Volatile Organic Compounds in Shallow Groundwater (2005) Vestal Well 1-1 Site Vestal, New York		DWN.: LMB CHKD.: DES.: CTS	DATE: 01/09/2006 REV.: 1 APPD.:	PROJECT NO.: 1945.2109.0700 FIGURE NO.: 3-4
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Legend
Monitoring Well

Notes:

1. Wells 1-22, 1-23, 1-24, 1-25, 1-25A, 1-29, 1-29A, 1-30, 1-30A, 1-32, 1-32A, EB-41, EB-42, S-1, S-6, S-7, and S-8 were resurveyed on October 15 and 16, 2002 by Rettew Engineering and Surveying, P.C.
2. Previous survey data were used to locate wells 1-20, 1-20A, EB-31, EB-33, S-2, and S-11.
3. [] - Indicates an exceedance of New York State Class GA Groundwater Quality Criteria.
4. All measurements are in ug/L.



Constituent	NY-GWQS	07/21/05 EB-31-072105 Primary
1,1-Dichloroethane	5	3.9
trans-1,2-Dichloroethene	5	2.2
Trichloroethene	5	0.67
Vinyl chloride	2	0.54
cis-1,2-Dichloroethene	5	0.21

Constituent	NY-GWQS	07/21/05 EB-41-072105 Primary
1,1-Dichloroethane	5	0.66
Methyl t-butyl ether (MTBE)	10	1.9
cis-1,2-Dichloroethene	5	0.12

Constituent	NY-GWQS	07/19/05 1-32A-071905 Primary
Trichloroethene	5	1.7

Constituent	NY-GWQS	07/19/05 1-29-071905 Primary
1,1,1-Trichloroethane	5	0.73
1,1-Dichloroethane	5	0.85
1,1-Dichloroethene	5	0.54
1,1,2-Trichloro-1,2,2-trifluoroethane	5	4.6J
Trichloroethene	5	0.33
cis-1,2-Dichloroethene	5	0.46

Constituent	NY-GWQS	07/19/05 1-29A-071905 Primary
1,1,1-Trichloroethane	5	0.10
1,1-Dichloroethane	5	0.94
1,1-Dichloroethene	5	2.1
1,1,2-Trichloro-1,2,2-trifluoroethane	5	1.4J
Trichloroethene	5	0.64
cis-1,2-Dichloroethene	5	0.21

Constituent	NY-GWQS	07/20/05 1-24-072005 Primary
1,1,1-Trichloroethane	5	3.1
1,1-Dichloroethane	5	0.82
cis-1,2-Dichloroethene	5	1.1

Constituent	NY-GWQS	07/20/05 1-25A-072005 Primary
1,1,1-Trichloroethane	5	0.54
Trichloroethane	5	0.43J

Constituent	NY-GWQS	07/20/05 1-30-072005 Primary
Carbon disulfide	60	1.6

Constituent	NY-GWQS	07/22/05 S11-072205 Primary	07/22/05 S21-072205 Duplicate 1
1,1,1-Trichloroethane	5	0.40	0.40
1,1-Dichloroethane	5	0.56	0.60
trans-1,2-Dichloroethene	5	3.4J	2.4J
Chloroethane	5	2	1.8
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.5U	1.2J
Methylene chloride	5	1.6	1.6
Tetrachloroethylene	5	0.20	0.18
Trichloroethene	2	0.78	0.69
Vinyl chloride	5	0.41	0.40

Constituent	NY-GWQS	07/21/05 EB-42-072105 Primary
1,1,1-Trichloroethane	5	0.76
Methylene chloride	5	0.76B

Constituent	NY-GWQS	07/22/05 S-6-072205 Primary
Carbon disulfide	60	1.3
Trichloroethene	5	0.49
cis-1,2-Dichloroethene	5	0.19

Constituent	NY-GWQS	07/21/05 S-7-072105 Primary
1,1,1-Trichloroethane	5	0.93
1,1-Dichloroethane	5	0.16
1,1-Dichloroethene	5	1.9
trans-1,2-Dichloroethene	5	1.1
Trichloroethene	5	0.50
Vinyl chloride	2	0.14
cis-1,2-Dichloroethene	5	0.20

Constituent	NY-GWQS	07/22/05 S-8-072205 Primary
1,1,1-Trichloroethane	5	3.1B
1,1-Dichloroethane	5	0.65
Tetrachloroethylene	5	3.8
Trichloroethene	5	3.4J
cis-1,2-Dichloroethene	5	2.9J

Constituent	NY-GWQS	07/22/05 S-2-072205 Primary
1,1,1-Trichloroethane	5	2.3B
1,1-Dichloroethane	5	0.72
1,1-Dichloroethene	5	1.7
trans-1,2-Dichloroethene	5	1.2
Chloroethane	5	0.91
Isopropylbenzene	5	0.77
Methylene chloride	5	0.51J
Trichloroethene	5	0.62
Vinyl chloride	2	0.91J
cis-1,2-Dichloroethene	5	0.10

Constituent	NY-GWQS	07/21/05 EB-33-072105 Primary
1,1-Dichloroethane	5	4
trans-1,2-Dichloroethene	5	1.3
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.81
Isopropylbenzene	5	0.48J
Tetrachloroethylene	5	0.56
Trichloroethene	5	3.4
Vinyl chloride	2	0.85
cis-1,2-Dichloroethene	5	0.49

Constituent	NY-GWQS	07/20/05 S-1-072005 Primary
Methyl t-butyl ether (MTBE)	10	3.1
Trichloroethene	5	0.62

Source: Endicott, NY USGS Topographic Quadrangle, 7.5-minute series, dated 1969 and photoinsected in 1976.

TETRA TECH EC, INC.

Volatile Organic Compounds Detected in Groundwater (2005)
Vestal Well 1-1 Site
Vestal, New York

DWN.: LMB
CHKD: DC
DES.: CTS

DATE: 01/03/2006
REV.: 0
APPD:

PROJECT NO.: 1945.2109.0700
FIGURE NO.: 3-5

4.0 CONCLUSIONS AND RECOMMENDATIONS

The groundwater elevation data collected on 18 July 2005 indicate shallow groundwater is flowing northwest toward the Susquehanna River. The deep groundwater direction is flowing to the north/northeast, toward the pumping well, based on the limited data points in the deep monitoring well network. The vertical groundwater flow becomes more upward with proximity to the Susquehanna River. After repairs were made to the treatment system in November 2002, the system has had a pumping rate (approximately 550 gpm) similar to the pump test results from 1994. Therefore, hydraulic control continues to be maintained, and based on the analytical results from monitoring well 1-25, contamination is not moving toward the Vestal Well 1-2 and Well 1-3 areas.

The analytical results from the last eight years indicate, in general, the concentrations of chlorinated VOCs are decreasing or stable, confirming aquifer restoration is on going. In particular, statistically analyzed chlorinated VOC concentrations have decreased at the 80% CI in monitoring well EB-33, located between Areas 2 and 4. The groundwater plume appears to be migrating northwest as a result of the groundwater extraction activities.

Site COCs chromium, copper, mercury, nickel, and zinc were detected at concentrations below the NYSGWQC. Site COC lead was detected at a concentration exceeding the NYSGWQC in monitoring well 1-29. Iron and sodium concentrations exceeded the NYSGWQC in monitoring wells 1-24, 1-29, 1-29A and 1-30. The concentrations exceeded NYSGWQC for manganese in monitoring well 1-29A and for magnesium in monitoring well 1-30. However, iron, manganese, magnesium, and sodium are not COCs.

The continuing presence of daughter products in the groundwater and decreasing concentrations of chlorinated VOCs in the nearby monitoring wells indicates natural attenuation is occurring. Site contaminants are migrating toward the extraction well and are thus being captured. Field parameters, such as dissolved oxygen, ORP, and pH, indicate that conditions within the aquifer are suitable for anaerobic reductive dechlorination. Based on these observations, it is recommended that annual effectiveness monitoring be continued, to evaluate VOC concentration trends and field parameters indicative of conditions conducive to natural attenuation. Beginning in June 2006, monitored natural attenuation (MNA) parameters will be included in the Sampling Program.

Location Vestal
Project / Client USEPA

Date 07/18/05

0850 C. Vicarone + C. Walker
on-site on pump-house
0905 Calibrate 5 gas monitor -
pump s/n 06166
Fresh Air Cal

CO = 0
VOC = 0
H₂S = 0
LEL = 0
O₂ = 20.4
Super Cal
CO = 50
H₂S = 24
LEL = 44
O₂ = 20.4
VOC =

0915 Begin Round at sample
gas levels
- wrench to open well cover
with wrench go to buy
socket & socket

0940 Return to GW level,
1020 completed GW levels -
return to pump-house

Location Vestal
Project / Client USEPA

Date 07/18/05

Well ID	Time	DFM	Comments
1-29A	9:40	22.27	PID = 0 ppm
1-29	09:48	21.82	PID = 0.0 ppm
1-32	10:10	29.98	PID = 0.0 ppm
1-32A	10:15	17.97	PID = 0.0 ppm
EB-41	10:30	22.39	PID = 0.0 ppm
EB-42	10:33	28.31	PID = 0.0 ppm
1-24	10:44	24.69	PID = 0.0 ppm
1-25	10:55	24.72	PID = 0.0 ppm
1-25A	10:56	24.73	PID = 0.0 ppm
1-22	11:11	15.03	PID = 3.7 ppm
1-23	11:39	18.62	PID = 0.0 ppm
EB-31	12:30	20.97	PID = 0.0 ppm
S-6	12:45	13.24	PID = 0.0 ppm
S-7	12:50	18.19	PID = 0.0 ppm
EB-33	12:55	19.25	PID = 0.0 ppm
S-1	13:00	20.82	PID = 0.0 ppm
S-8	13:13	7.50	PID = 0.0 ppm
S-11	13:25	19.30	PID = 0.0 ppm
S-2	13:30	30.68	PID = 0.0 ppm
1-30	14:00	15.19	PID = 0.0 ppm
1-30A	14:05	13.85	PID = 0.0 ppm
1-20A	17:10	23.68	PID: no headspace
1-20	17:15	23.54	PID: no headspace

4 Location Vestal Date 07/18/05
 Project / Client USEPA

to start pump down.
 → GW levels have been collected on all wells to be sampled - Spoke w/ Andy S. Miller, she is going to East figure with all wells to the hotel
 1530 Completed down of both pumps
 1550 Pick up figure at hotel
 1610 Return to site to search for remaining wells.
 1720 Still unable to locate several wells. → Spoke w/ windy Demario, will continue searching for the rest of the day, and begin sampling tomorrow
 1830 off-site

[Signature]
 07/18/05

5 Location Vestal Date 07/19/05
 Project / Client USEPA

0645 C. Crisamala + C. Walker on-site
 0700 Conduct H₂S Breathing
 0705 Load equipment used
 move to first well
 0745 Start purging well
 1-2 GA
 - Pump set at 56.5 ft below TIC.
 0745 collect daily Trip Blank
 TJ-071905
 → 4 VOA Vials
 0800 collect field Blank
 EB-071905
 → 4 VOA Vials
 1 - 1 Liter Poly for Metals
 collect GW Sample
 0825 1-29A-071905
 → 4 VOA Vials
 1 - 1 L Poly for Metals
 0835 Set up 2nd well 1-29
 0900 Start pump
 → set at 111.5 ft below TIC

Location Vestal
Project / Client USEPA

Date 07/14/05

0610 Decon second pump
→ Rinse 5 min in potable H₂O, Alconox, DI H₂O, and 5 min in clean DI H₂O

0640 collect Gw sample
1-29-071905

→ 4 - Von Vials
→ 1 - 1L poly for Metals
09.50 Move to next well location
12:30 Begin purging 1-22A pump set at 27.5'

1105 collect Gw sample
1-22A-071905

→ 4 - Von Vials
1135 Start purge 1-22 pump set at ~~47.5~~ 141.5'

1221 collect Gw sample
1-22-071905

→ 4 - Von Vials
1430 Set up at well 1-20 A

→ Begin purging well

Location Vestal
Project / Client USEPA

Date 07/14/05

1600 collect Gw sample
1-30A-071905

→ 4 - Von Vials
→ Tubing for well 1-30 is 1/2" diameter + does not fit on the Grundfos pump. Attempted to purchase larger hose clamps. Another solution worked.

→ Spike with Wanda Dennis, will have Pine sand at larger fitting tomorrow
1630 C Walker at pump base discussing pumps for tomorrow sampling

- C. Crews to purchase ice, pink samples + drop off at Fedex

1730 - Return to pump base
1800 - off - site
(Note: PID + Horiba were calibrated successfully in the morning before sampling.)

8 Location Vestal

Date 07/10/05

Project / Client USEPA

0700 Arrive on-site.
0710 Calibrate PID
Pine SW: 04302
Fresh Air cal:
0.0 - 0.0 - 20.9

Span Cal:
0.99 - 24.50 20.9
Calibrate Herb. Pine SW: 02936
3.95
4.49
0.9
1.37

0800 Start Pump well
1-24

→ pump at 112 ft below TIC
Total Depth = 116 ft

0800 collect Daily Trip Blank
JB-072005

→ 4 VOA Vials
0815 collect Daily Field Blank
ED-072005

→ 4 VOA Vials
→ 1 Poly Metals

[Signature] 07/10/05

9 Location Vestal

Date 07/10/05

Project / Client USEPA

0850 Collect GW sample
1-24-072005

→ 4 VOA Vials
→ 1 I L Poly for Metals

0915 set up to start
purging at wells 1-25
and 1-25A

0930 Start low-flow purging
at well 1-25A

1036 Collect GW sample
1-25A-072005

→ 4 VOA Vials
1045 Start purging well
1-25

1152 Collect GW Sample
1-25-072005

→ 4 VOA Vials
1215 Deamb + go to lunch

1245 Go to hotel to
pick up larger bomb

1315 Return to site,
set up on
well 1-70

Location Vestal Date 07/20/05
Project / Client USEPA

1330 Start low-flow purging of well 1-30

1425 collect Gw sample 1-30 - 072005

→ 4 VOA Vials
→ 1, 1L poly for Metals

1505 Start Low flow purge at well S-1

1555 collect Gw sample S1-072005

→ 4 VOA Vials
1615 Return to Pump House and Begin Decont procedure,
→ waiting for Dick Greene (pump house operator) to arrive to help collect Effluent & Effluent samples

1630 collect sample Effluent - 072005

1635 collect sample Effluent - 072005

1640 - c.w continuing Daily Decont Pumping Samples - Cl. Pumping Samples

Location Vestal Date 07/20/05
Project / Client USEPA

1700 C.C. curcio to fuel to ship samples
1730 Return to site to complete decont & decont
1805 det - site

~~Chita C~~
07/20/05

Location

Vestal

Date 27/1/05

Project / Client

USEPA

- 0645 Arrive on-site at pump house - begin loading truck
- 0700 Calibrate multi RAE plus Pico S/N: 04302
- zeroed successfully
- span cal successfully
- 0710 Calibrate Horiba U-22 Pico S/N: 06432
calibration - completed successfully
- 0730 Set up at well ED-41
- 0750 Begin purging well ED-41
- 0740 collect Trip Blank TB-0720.05
→ 4 VOA Vials
- 0750 collect Field Blank FB-0711.05
→ 4 VOA Vials
- * 0820 There is a hole 44 feet East from well ED-41, and a commercial (store) building 50 ft to the Southwest of the well.

Location

Vestal

Date 27/1/05

Project / Client

USEPA

- 0905 collect GW sample |
EB-41 Vials
- 4 VOA Vials
- * All parameters were stable, turbidity stopped dropping at around 300 NTU. Attempted to rise out flow through Cell and it did not help. Water had a very slight orange tint to it and did not appear to be clearing up.
- 0935 Set up and start purge at EB-42.
- 0940 Begin second purging
- 1025 collect GW sample |
EB-41-0711.05
- 4 VOA Vials
- 1055 Start purging well ED-33
- Well is located 24' from (pump house?) along petroleum pipeline next to park. No other buildings within 100 ft.

Location Vestal

Date 07/21/05

Project / Client USEPA

1140 Collect GW Sample
ES-33-072105

→ 4 VOA Vials

1255 Start Pump
well ES-31

* well is located approximately
40 ft from commercial/
industrial type building
w/ large liquid oxygen
tank next to it

1350 collect GW sample
ES-31-072105

→ 4 VOA Vials

1400 Start purging well

S-7

→ Small office building
located approximately
63 feet from well,
across the street.

15:15 collect GW sample
S-7-072105

→ 4 VOA Vials

1530 Return to pump house to
pull samples + decon pumps

Location Vestal

Date 07/21/05

Project / Client USEPA

1620 Samples are packed -
→ C. Ciccone to FedEx to
ship samples

→ C. Walker remains at
pump house to complete
shut down

1700 Return to pump house
to finish decon and
prepare for tomorrow's
sampling site

1800 Off-site

~~Check~~ **Check**
07/21/05

Location Vestal

Date 07/24/05

Project / Client USEPA

0615 CC + CW on-site
at pump house to
load truck

0720 Start low-flow purge
at well S-11

0725 collect daily field blank
FB-072205

→ 3 VOA Vials

0735 collect daily ~~field~~ blank
TB-072205

→ 3 VOA Vials

NOTE: - MultiRAE Plus, PINE S/N: 04702

was calibrated successfully
before leaving pump house.

- Horiba U-22, PINE S/N: 06432

was also calibrated
successfully before leaving
the pump house.

collected GW sample
S-11-072205

→ 3 VOA Vials

collected Duplicate sample
→ S-21-072205

→ 3 VOA Vials

Date 07/24/05

Project / Client USEPA

0907 Start Purge at well S-2
→ Well is located 55 feet
from storage tanks at
Asphalt Company

- There is water flowing
from the tank area part
the well on the surface.

- There is also some possible
soil staining and a stream
on the water near the
tanks (see sketch on
following page)

0945 Collected GW sample
S-2-072205

→ 3 VOA Vials

1030 Start Purge at
well S-3

1120 collect GW sample
S-8-072205

→ 3 VOA Vials

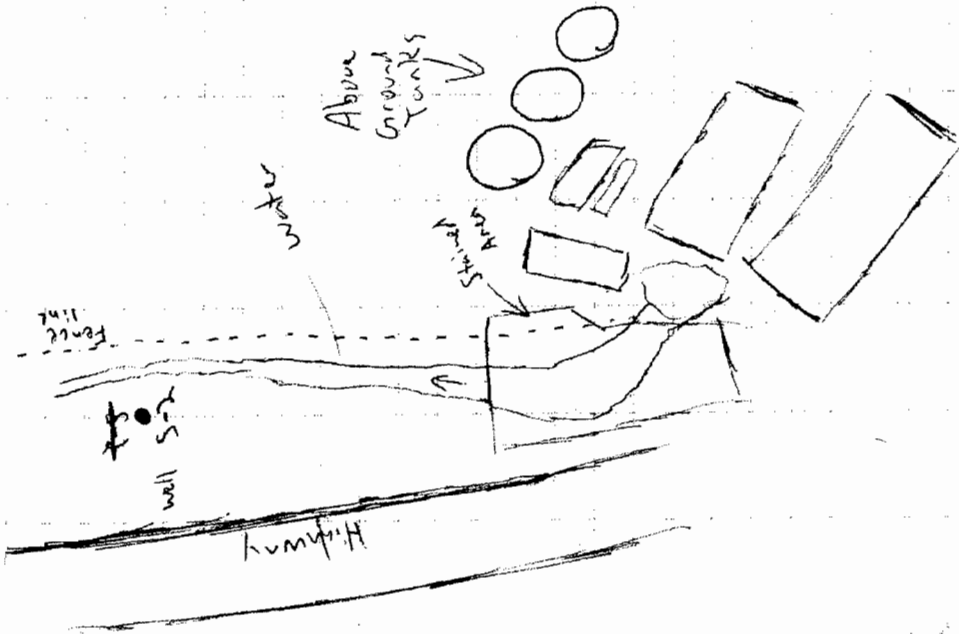
1150 Start Purge at
well S-6

low-flow method

Location Vestal

Date 07/22/01

Project / Client USEPA



Location Vestal

Date 07/22/01

Project / Client USEPA

→ well # S-6 is located at the rear corner (south) of a warehouse/office type building

12:30 Collect GW Sample

4 VOA Vials

1300 Return to pump house to Demos + Samples

1400 Bring Samples to feeder,

1500 off-site

~~Check~~ Cal
07/22/01



APPENDIX B
Low Flow Purge Data Sheets



LOW FLOW PURGE DATA SHEET

Well I.D. S-1
 Date 07/20/05

Project Name: Vestal
 Project No.: _____
 Samplers CW, CC

Screened Interval (ft below TIC): 15 - 30 ft
 Depth of Pump Screen (ft below TIC): 23 ft
 Static Water Level (ft below TIC): 20.79 ft
 Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

$$F = V/Q$$

Purge Method

Start purge @ 15:05 - low flow

Field Parameters

TIME	FLOW RATE <small>CW</small> (L/m) ml/m	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
15:10	200	21.79	7.77	1.39	188	7.80	14.7	40	cloudy
15:15	100	21.51	7.71	1.39	133	4.63	15.4	16	-
15:20	150	20.62	7.63	1.39	142	2.72	16.0	-85	-
15:25	-	21.64	7.67	1.40	94.3	1.93	15.9	-79	-
15:30	-	21.64	7.69	1.40	67.1	1.49	16.0	-75	-
15:35	-	21.64	7.70	1.41	54.3	1.18	16.0	-74	-
15:40	-	21.64	7.71	1.39	41.8	0.83	16.7	-71	-
15:43	-	21.64	7.72	1.40	35.1	0.75	16.3	-67	-
15:46	-	21.64	7.72	1.40	32.3	0.62	16.6	-68	-
15:49	-	21.84	7.73	1.40	27.9	0.55	16.9	-65	-
15:52	-	21.64	7.74	1.40	20.0	0.46	16.9	-62	-
15:55	-	21.64	7.74	1.40	18.6	0.33	16.7	-60	-

Total Volume Purged: 3.5 gal

Notes/Observations: Sample @ 16:00

LOW FLOW PURGE DATA SHEET

Well I.D. S2
 Date 07/22/05

Project Name: Vestal
 Project No.: _____
 Samplers CC

Screened Interval (ft below TIC): _____ ft
 Depth of Pump Screen (ft below TIC): 25' ft
 Static Water Level (ft below TIC): 20.96 ft
 Volume of Flow Through Cell: _____ L

Total Depth = 32'

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

F = V/Q

Purge Method

Start Purge 09:07 - low flow

Field Parameters

TIME	FLOW RATE (L/m)	DTW (ft TIC)	pH (SU)	SPEC. COND. (µS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
0910	250	21.31	9.74	7.61	59.0	0.78	14.0	-161	clear
0915	250	21.26	6.13	11.9	111.0	0.00	15.2	-105	cloudy
0920	200	21.22	5.38	17.4	126.0	0.00	16.1	-140	cloudy
0925	200	21.21	5.38	18.2	77.5	0.00	16.7	-150	clear
0930	200	21.20	5.39	18.4	58.2	0.00	16.9	-152	" "
0933	150	21.20	5.40	18.3	62.2	0.00	17.3	-152	" "
0936	100	21.20	5.40	18.3	61.5	0.00	17.4	-152	" "
0940	100	21.20	5.41	18.3	60.1	0.00	18.1	-151	" "

Total Volume Purged: 3 gallons

Notes/Observations: Sample Time - 0945

LOW FLOW PURGE DATA SHEET

Well I.D. S-6
 Date 07-22-05

Project Name: Vestat
 Project No.: _____
 Samplers _____

Screened Interval (ft below TIC): _____ ft
 Depth of Pump Screen (ft below TIC): 37 ft
 Static Water Level (ft below TIC): 13.61 ft
 Volume of Flow Through Cell: _____ L

Total Depth - 43.6'

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

$F = V/Q$

Purge Method

Start purge: 11:50 - low flow

Field Parameters

TIME	FLOW RATE <i>gal</i> (L/m)	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
11:50	150	13.53	7.22	1.07	934	5.24	12.6	-32	clear
11:55	-	13.62	6.48	1.16	920	0.00	13.3	-32	-
12:00	100	13.51	6.79	1.34	780	0.00	13.7	-39	clear
12:05	200	13.51	6.72	1.77	814	0.00	13.5	-68	clear
* → 12:10	150	13.52	6.78	2.00	767	0.00	13.2	-85	clear
12:15	150	13.51	6.55	2.04	910	0.00	13.2	-89	" "
12:20	150	13.51	6.57	2.07	3.7	0.00	13.0	-100	" "
12:25	150	13.51	6.60	2.09	4.6	0.00	13.1	-105	" "
12:30	150	13.51	6.61	2.09	5.0	0.00	13.2	-106	" "

Total Volume Purged: 3 gallons

Notes/Observations: * disconnected & emptied flow-thru cell, rinsed probe & reconnected to try to correct turbidity problem

Sample Time - 12:30

LOW FLOW PURGE DATA SHEET

Well I.D. S7
Date 07/21/05

Project Name: Vestal
Project No.: _____
Samplers CW, CC

Screened Interval (ft below TIC): 16.5-31.5 ft
Depth of Pump Screen (ft below TIC): 25 ft
Static Water Level (ft below TIC): 18.35 ft
Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
Pump Discharge Flow Rate = Q (L/m)
Frequency of Readings = F (m)

F = V/Q

Purge Method

Start purge @ 14:20 - low flow

Field Parameters

TIME	FLOW RATE <u>CW</u> (L/m) ⁴	DTW (ft TIC)	pH (SU)	SPEC. COND. (n.S/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
14:25	150	19.05	5.91	0.792	165	2.10	15.3	25	cloudy
14:30	100	18.49	5.79	0.798	118	0.00	17.8	27	-
14:35	100	18.64	5.81	0.793	124	0.00	18.6	26	-
* 14:42	→ pump	stopped	+ restricted						
14:45	250	18.62	6.15	0.791	262	0.29	18.9	15	cloudy
14:50	150	18.70	6.13	0.782	225	0.00	19.6	17	"
14:55	200	18.76	6.16	0.810	206	0.01	19.5	1	"
15:00	200	18.71	6.19	0.829	249	0.00	19.9	-3	clear
15:05	100	18.69	6.19	0.831	220	0.00	20.4	-3	"
15:08	250	18.71	6.20	0.876	224	0.00	20.6	-3	"
15:11	200	18.71	6.19	0.835	214	0.00	20.7	-3	"
15:14	200	18.70	6.19	0.834	212	0.00	20.8	-3	"

Total Volume Purged: 3 gallons

Notes/Observations: * Every approx. 5 min flow rate slows and starts pulsing out at the tubing. This is corrected by slowing down the pump speed + bringing it slowly back up. Although the water appears clear, it is causing fluctuating turbidity readings.

* Sample Time - 15:15

LOW FLOW PURGE DATA SHEET

Well I.D. S-8
 Date 07/22/05

Project Name: Vestal
 Project No.: _____
 Samplers: _____

Screened Interval (ft below TIC): _____ ft
 Depth of Pump Screen (ft below TIC): 14 ft

Total Dept 14.65

Static Water Level (ft below TIC): 7.54 ft
 Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

$F = V/Q$

Purge Method

start purge: 10:20 - low flow

Field Parameters

TIME	FLOW RATE <i>gal (l) / min (m)</i>	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
10:25	200	8.11	6.41	1.05	320	4.98	15.4	-48	Cloudy
10:30	-	8.11	6.13	1.01	273	0.00	15.9	-43	-
10:30	-	8.31	6.18	0.98	542	0.00	16.6	-43	-
10:35	150	8.22	6.21	0.97	453	0.00	17.3	-49	-
10:4	-	8:22	6.32	0.97	401	0.00	17.5	-51	-
10:45	-	8.21	6.43	0.97	320	0.00	17.8	-69	-
10:50	-	8.21	6.51	0.98	314	0.00	18.1	-78	-
10:55	-	8.21	6.51	0.97	308	0.00	18.3	-80	-
11:00	-	8.21	6.51	0.97	196	0.00	18.4	-82	-
11:05	-	8.21	6.56	0.98	159	0.00	18.4	-84	-
11:10	-	8.21	6.51	0.96	162	0.00	18.6	-85	-
11:13	-	8.21	6.52	0.95	163	0.00	18.7	-86	-
11:16	-	8.21	6.52	0.95	163	0.00	18.6	-87	-

Total Volume Purged: 2.5 gal

Notes/Observations: sampled at 11:20

LOW FLOW PURGE DATA SHEET

Well I.D. S-11
 Date 07/21/05

Project Name: Vestal
 Project No.: _____
 Samplers CW, CC

Screened Interval (ft below TIC): 25-410 ft
 Depth of Pump Screen (ft below TIC): 3 ft

Total Depth = 39.5

Static Water Level (ft below TIC): 19.65 ft
 Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

F = V/Q

Purge Method

Start purge = 7:20 - low flow

Field Parameters

TIME	FLOW RATE CW (L/m) ML/h	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
7:20	200	19.66	6.54	1.37	106	3.69	13.4	89	Cloudy
7:25	-	19.67	6.56	1.32	65.9	3.08	13.3	50	-
7:30	-	19.67	6.61	1.29	50.1	2.68	13.6	31	-
7:35	-	19.66	6.66	1.27	42.3	2.23	14.2	6	-
7:40	-	19.67	6.77	1.28	38.9	1.90	14.2	-3	-
7:45	-	19.67	6.87	1.29	23.8	1.58	14.2	-11	-
7:50	-	19.67	6.91	1.29	20.1	1.31	14.4	-13	-
7:55	-	19.67	6.92	1.29	20.7	1.16	14.5	-13	-
8:00	-	19.67	6.93	1.30	16.3	0.85	14.5	-12	-
08:05	200	19.67	6.93	1.30	15.6	0.65	14.5	-13	clear
08:10	" "	19.67	6.93	1.31	13.7	0.47	14.4	-12	" "
08:13	" "	19.67	6.93	1.31	13.6	0.41	14.4	-12	" "
08:16	" "	19.67	6.93	1.31	14.2	0.37	14.4	-12	" "

Total Volume Purged: 4 gallons

Notes/Observations: Sample Time 08:17
Duplicate Sample: S-21-072105
Time ~~08:00~~ 07:00

LOW FLOW PURGE DATA SHEET

Well I.D. EB-31 Project Name: Vestal
 Date 7/21/05 Project No.: _____
 Samplers CW, CC

Screened Interval (ft below TIC): 35-50 ft
 Depth of Pump Screen (ft below TIC): 40 ft

Static Water Level (ft below TIC): 20.59 ft
 Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

$$F = V/Q$$

Purge Method

start purge @ 12:55 - low flow

Field Parameters

TIME	FLOW RATE cm^3/min	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
13:00	100	21.25	6.66	1.04	116	0.69	15.9	104	clear
13:05	50	21.35	6.58	1.04	89.9	0.20	16.5	89	-
13:10	50	21.39	6.59	1.04	94.0	0.42	17.1	82	-
13:15	100	21.53	6.62	1.05	78.9	0.21	15.3	76	-
13:20	100	21.69	6.74	1.04	67.6	0.08	15.5	69	-
13:25	100	21.73	6.85	1.05	62.2	0.18	15.4	63	-
13:30	100	21.88	6.89	1.04	56.3	0.00	15.0	59	-
13:35	100	21.93	6.88	1.03	50.3	0.04	15.8	55	-
13:40	100	22.00	6.89	1.04	47.9	0.02	15.7	50	-
13:43	100	22.05	6.89	1.05	45.6	0.09	15.6	48	-
13:46	100	22.06	6.89	1.04	46.5	0.09	15.8	47	-

Total Volume Purged: 1.5 gal

Notes/Observations: sampled at 13:50

LOW FLOW PURGE DATA SHEET

Well I.D. EB-33
 Date 07/21/05

Project Name: Vestal
 Project No.: _____
 Samplers CW, CC

Screened Interval (ft below TIC): _____ ft
 Depth of Pump Screen (ft below TIC): 31 ft
 Static Water Level (ft below TIC): 19.04 ft
 Volume of Flow Through Cell: _____ L

Total Depth = 37.5'

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

$F = V/Q$

Purge Method

start purge 10:55 - low flow

Field Parameters

TIME	FLOW RATE <i>CW</i> (L/m)	DTW (ft TIC)	pH (SU)	SPEC. COND. (µS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
10:55	150	19.78	6.79	1.33	66.9	9.90	16.7	71	clear
11:00	-	19.74	6.81	1.29	45.9	7.43	19.1	63	-
11:05	-	19.71	6.82	1.30	45.4	6.53	20.0	57	-
11:10	-	19.70	6.89	1.30	31.3	5.85	20.6	36	-
11:15	-	19.76	7.00	1.31	18.4	5.56	19.3	9	-
11:20	-	19.77	7.04	1.30	16.5	4.69	19.8	-10	-
11:25	-	19.79	7.07	1.30	13.7	4.28	19.6	-22	-
11:30	-	19.79	7.06	1.30	12.7	3.68	19.5	-33	-
11:33	-	19.79	7.05	1.30	11.9	3.48	19.7	-35	-
11:36	-	19.79	7.05	1.29	12.3	3.21	20.0	-39	-
11:39	-	19.79	7.05	1.29	11.3	3.02	20.4	-42	-

Total Volume Purged: 2.5 gal

Notes/Observations: sampled at 11:40

LOW FLOW PURGE DATA SHEET

Well I.D. EB-41
 Date 07/21/05

Project Name: Vestal
 Project No.: _____
 Samplers cw, cc

Screened Interval (ft below TIC): 12.5 - 27.5 ft
 Depth of Pump Screen (ft below TIC): 23.0 ft

Static Water Level (ft below TIC): _____ ft
 Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

$$F = V/Q$$

Purge Method

Start purge: 7:50 - low flow

Field Parameters

TIME	FLOW RATE <i>cw (L/m)</i> ml/m	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
7:55	100	22.81	6.43	1.72	425	0.00	14.3	26	gray cloudy
8:00	-	22.74	6.49	1.69	354	0.00	15.2	21	-
8:05	-	22.72	6.54	1.68	322	0.00	15.7	22	-
8:10	-	22.77	6.62	1.70	315	0.00	15.7	21	-
8:15	-	22.82	6.75	1.69	363	0.00	15.7	21	-
8:20	-	22.80	6.77	1.69	420	0.00	15.8	21	-
8:25	-	22.74	6.77	1.66	380	0.00	16.9	19	-
8:30	-	22.72	6.79	1.67	294	0.00	17.2	17	-
08:35	150	22.65	6.79	1.67	249	0.00	17.7	19	light Brn. Cloudy
08:40	150	22.75	6.79	1.71	340	0.00	16.9	19	light Brn., Clear
08:45	100	22.66	6.77	1.67	299	0.00	17.9	23	" "
08:50	100	22.67	6.77	1.70	249	0.00	18.4	24	" "
08:55	200	22.70	6.78	1.73	290	0.00	17.2	20	clear
09:00	250	22.71	6.77	1.71	289	0.00	17.3	21	clear

Total Volume Purged: 3 gal

Notes/Observations: sampled at 9:05

LOW FLOW PURGE DATA SHEET

Well I.D. EB-42
 Date 7/21/05

Project Name: Vestal
 Project No.: _____
 Samplers CW, CC

Screened Interval (ft below TIC): 27.2 - 42.5 ft
 Depth of Pump Screen (ft below TIC): 37 ft

Total depth = 42.5'

Static Water Level (ft below TIC): 29.42 ft
 Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

F = V/Q

Purge Method

Start purge: 9:35 - low flow

Field Parameters

TIME	FLOW RATE (L/m)	DTW (ft TIC)	pH (SU)	SPEC. COND. (µS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
9:30	250	28.45	6.92	1.87	489	6.07	15.9	96	gray cloudy
9:35	-	28.45	6.74	1.82	412	5.69	15.9	98	-
9:40	-	28.45	6.78	1.82	316	5.70	16.8	98	-
9:45	-	28.45	6.89	1.85	264	5.64	17.4	94	-
9:50	-	28.45	6.78	1.85	249	5.58	17.8	90	-
9:55	-	28.45	6.99	1.85	244	5.53	17.9	89	-
10:00	-	28.45	6.99	1.85	232	5.52	18.0	88	-
10:05	-	28.45	6.99	1.86	225	5.44	18.2	88	-
10:10	-	28.45	6.97	1.83	190	5.45	16.7	90	-
10:15	-	28.45	6.96	1.82	166	5.57	19.7	88	-
10:20	-	28.45	6.99	1.84	154	5.71	20.3	86	-
10:23	-	28.45	6.99	1.84	153	5.65	20.4	87	-

Total Volume Purged: 3.5 gal

Notes/Observations: Sampled at 10:25
rinsed out Horiba at 10:06

LOW FLOW PURGE DATA SHEET

Well I.D. 1-24
 Date 07/20/05

Project Name: Vestal
 Project No.: _____
 Samplers CW, CC

Screened Interval (ft below TIC): 104-119 ft
 Depth of Pump Screen (ft below TIC): 112 ft

Static Water Level (ft below TIC): 25.11 ft
 Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

$$F = V/Q$$

Purge Method

start purge 8am - low flow

Field Parameters

TIME	FLOW RATE (L/m)	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
8:05	250	25.11	10.79	0.890	184	5.39	12.8	-135	gray cloudy
8:10	—	25.11	10.40	0.333	91.2	3.56	13.0	-147	—
8:15	—	25.11	9.84	0.450	69.0	3.05	13.1	-143	—
8:20	—	25.11	9.20	0.577	71.5	2.64	13.2	-160	—
8:25	—	25.11	8.84	0.657	74.6	2.44	13.2	-156	—
8:30	—	25.11	8.68	0.699	74.1	2.24	13.3	-151	—
8:35	—	25.11	8.61	0.730	68.7	2.01	13.4	-146	—
8:38	—	25.11	8.58	0.749	65.5	1.98	13.3	-142	—
8:41	—	25.11	8.55	0.763	56.7	1.88	13.4	-139	—
8:44	—	25.11	8.54	0.772	51.6	1.79	13.3	-137	—
8:47	—	25.11	8.52	0.781	53.2	1.62	13.3	-135	—
8:50	—	25.11	8.51	0.787	58.5	1.52	13.4	-133	—

Total Volume Purged: 5 gal

Notes/Observations: Sampled at 8:50

LOW FLOW PURGE DATA SHEET

Well I.D. 1-25
Date 07/20/05

Project Name: Vestal
Project No.: _____
Samplers CW, CC

Screened Interval (ft below TIC): 136-51 ft
Depth of Pump Screen (ft below TIC): 145 ft

Static Water Level (ft below TIC): 23.56 ft
Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
Pump Discharge Flow Rate = Q (L/m)
Frequency of Readings = F (m)

$$F = V/Q$$

Purge Method

start purge : 10:45

Field Parameters

TIME	FLOW RATE <i>CW</i> (ft ³ /m) ml/m	DTW (ft TIC)	pH (SU)	SPEC. COND. (µS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
10:55	225	26.04	12.81	0.306	74.0	4.64	14.3	-132	clear
11:00	100	25.95	12.58	0.291	83.5	3.59	15.0	-145	-
11:05	-	25.96	12.17	0.300	112	3.78	14.9	-147	-
11:10	-	25.95	11.93	0.308	123	2.20	14.7	-149	-
11:15	150	25.97	11.59	0.321	135	1.84	14.5	-146	-
11:20	100	26.11	10.94	0.355	203	1.44	14.0	-131	-
11:30	-	26.07	9.84	0.406	201	1.45	14.7	-195	-
11:35	-	26.05	9.68	0.415	169	0.92	14.6	-188	-
11:40	-	26.05	9.50	0.426	163	0.67	14.5	-193	-
11:43	-	26.05	9.40	0.431	168	0.53	14.6	-192	-
11:46	-	26.05	9.28	0.436	164	0.43	14.8	-198	-
11:49	-	26.05	9.17	0.449	165	0.34	14.5	-195	-
11:52	-	26.05	9.10	0.457	170	0.23	14.5	-197	-

Total Volume Purged: 3 gal

Notes/Observations: at 11:20 cleaned out Horiba
sampled at 11:52

LOW FLOW PURGE DATA SHEET

Well I.D. 1-25A
 Date 07/20/05

Project Name: Vestal
 Project No.: _____
 Samplers cw, cc

Screened Interval (ft below TIC): 35.2 - 50.2 ft
 Depth of Pump Screen (ft below TIC): 43 ft
 Static Water Level (ft below TIC): 25.10 ft
 Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

F = V/Q

Purge Method

start purge 9:30 - low flow

Field Parameters

TIME	FLOW RATE <small>m³/min (L/min)</small>	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
9:38	200	25.10	8.50	0.400	999	16.42	13.8	-48	black
9:45 ^{cc}	200	25.08	7.56	0.431	640	7.77	14.6	-26	brown
9:50	200	25.08	7.34	0.459	404	6.60	15.2	-15	brown/cloudy
9:55	-	25.08	7.17	0.484	327	5.81	15.3	-0	-
10:00	-	25.08	7.07	0.509	208	5.44	15.3	11	-
10:05	-	25.08	7.02	0.519	169	5.39	15.4	16	cloudy
10:10	-	25.08	6.99	0.523	159	5.26	15.4	21	-
10:15	-	25.05	6.96	0.534	115	5.17	15.6	34	-
10:20	-	25.05	6.96	0.538	91.3	5.10	15.6	35	-
10:27	-	25.05	6.97	0.544	77.4	5.03	15.4	35	clear
10:30	-	25.05	6.98	0.543	79.0	4.99	15.4	36	clear
10:33	-	25.05	6.98	0.546	70.0	4.99	15.5	37	clear
10:36	-	25.05	6.98	0.548	62.0	4.99	15.5	38	-

Total Volume Purged: 3.5 gal

Notes/Observations: sampled at 10:36

LOW FLOW PURGE DATA SHEET

Well I.D. 1-29
Date _____

Project Name: Vestal
Project No.: _____
Samplers CW, CC

Screened Interval (ft below TIC): 104 - 119 ft
Depth of Pump Screen (ft below TIC): 111.5 ~~10~~ ft
Static Water Level (ft below TIC): 21.99 ft
Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
Pump Discharge Flow Rate = Q (L/m)
Frequency of Readings = F (m)

F = V/Q

Purge Method

start time: 9:00 Low flow

Field Parameters

DTW
22.0

TIME	FLOW RATE <i>CW</i> (L/m) ^{1/2}	DTW (ft TIC)	pH (SU)	SPEC. COND. (µS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
9:00	200	22.0	8.73	0.822	136.0	19.99	14.0	-183	gray cloudy
9:05	-	22.0	8.55	0.875	90.7	8.37	13.9	-207	gray cloudy
9:10	-	22.0	8.56	0.923	78.6	4.66	13.8	-185	clear
9:15	-	22.0	8.53	0.955	68.2	3.75	13.8	-171	clear
9:20	-	22.0 ^{22.0}	8.46	0.996	56.1	3.27	13.8	-153	clear
9:25	-	^{22.0}	8.40	1.05	52.0	3.85	13.6	-136	clear
9:30	-	22.0	8.36	1.07	53.5	3.63	13.5	-126	clear
9:35	-	22.0	8.34	1.09	54.6	3.42	13.4	-121	clear
9:40	-	22.0	8.33	1.11	53.2	3.34	13.1	-118	clear

Total Volume Purged: ~ 3 gal

Notes/Observations: sampled at 9:40

LOW FLOW PURGE DATA SHEET

Well I.D. 1-29 A
Date _____

Project Name: Vestal
Project No.: _____
Samplers CW, CC

Screened Interval (ft below TIC): 49-64 ft
Depth of Pump Screen (ft below TIC): 56.5 ft

Static Water Level (ft below TIC): _____ ft
Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
Pump Discharge Flow Rate = Q (L/m)
Frequency of Readings = F (m)

F = V/Q

Purge Method

Start purge 7:45 - low flow

Field Parameters

TIME	FLOW RATE <i>CW</i> $\frac{L}{m}$	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
7:45	450	23.82	9.94	0.612	189.0	11.92	12.3	-210	black
7:50	200	23.69	8.89	0.624	51.8	5.98	13.5	-193	gray cloudy
7:55	200	23.71	8.57	0.89	18.8	4.72	13.3	-191	clear
8:00	-	23.71	8.43	0.986	8.6	3.29	13.7	-188	clear
8:05	-	23.72	8.38	1.08	4.8	3.68	13.8	-187	clear
8:10	-	23.72	8.36	1.11	3.0	3.15	14.0	-187	clear
8:15	-	23.72	8.36	1.13	2.0	2.81	14.1	-188	clear
8:20	-	23.72	8.35	1.15	2.3	2.60	14.0	-188	clear

Total Volume Purged: ~3 gal

Notes/Observations: Sample Time 08:25

LOW FLOW PURGE DATA SHEET

Well I.D. 1-30
 Date 7/10/05

Project Name: Vestal
 Project No.: _____
 Samplers cw, ce

Screened Interval (ft below TIC): 94-114 ft
 Depth of Pump Screen (ft below TIC): 107 ft
 Static Water Level (ft below TIC): 1219 ft
 Volume of Flow Through Cell: _____ L

Total Depth 113.9'

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
 Pump Discharge Flow Rate = Q (L/m)
 Frequency of Readings = F (m)

F = V/Q

Purge Method

start purge @ 13:30 - low flow

Field Parameters

TIME	FLOW RATE <small>cu ft (L/m) ML/M</small>	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
13:35	150	15.29	11.53	0.498	57.7	14.33	16.8	-160	gray cloudy
13:40	-	15.53	11.45	0.617	33.4	4.65	17.6	-222	cloudy
13:45	-	15.55	11.42	0.708	41.2	2.93	17.7	-230	-
13:50	-	15.58	11.35	0.717	67.3	1.92	18.6	-232	-
13:55	-	15.55	11.13	0.738	65.5	1.63	18.2	-225	-
14:00	-	15.52	10.83	0.779	96.8	1.42	18.4	-219	-
14:05	100	15.64	10.55	0.855	150	1.21	17.2	-211	-
14:10	-	15.64	10.35	0.879	154	0.99	16.7	-204	-
14:15	-	15.64	10.22	0.898	194	0.77	18.1	-201	-
14:18	-	15.64	10.17	0.899	211	0.72	18.6	-200	-
14:21	-	15.64	10.13	0.899	212	0.62	18.9	-201	-
14:24	-	15.64	10.17	0.905	212	0.50	18.2	-198	-

Total Volume Purged: 2 gal

Notes/Observations: sampled at 14.25

LOW FLOW PURGE DATA SHEET

Well I.D. 1-30 L
Date _____

Project Name: Vestal
Project No.: _____
Samplers CW, CC

Screened Interval (ft below TIC): 15-30 ft
Depth of Pump Screen (ft below TIC): 22.5 ft

Static Water Level (ft below TIC): 13.89 ft
Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
Pump Discharge Flow Rate = Q (L/m)
Frequency of Readings = F (m)

$$F = V/Q$$

Purge Method

Start pump test @ 15:15

Field Parameters

TIME	FLOW RATE <i>CW</i> (L/m) <i>CC</i> (L/m)	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
15:15	200	13.89	8.24	1.37	999.0	5.04	16.6	-151	<i>grey cloudy</i>
15:20	-	13.89	8.03	1.36	266	5.81	17.7	-95	-
15:25	-	13.89	8.01	1.37	210	5.41	17.7	-83	-
15:30	-	13.89	7.98	1.38	114	4.97	17.6	-63	-
15:35	-	13.89	7.95	1.38	79.5	4.83	17.4	-63 ^{<i>CW</i>}	-
15:40	-	13.89	7.94	1.38	56.8	4.40	17.4	-38	-
15:45	-	7.95	1.38						<i>CW</i> 7/19/05
15:45	-	13.89	7.95	1.38	49.6	4.05	17.6	-34	-
15:50	-	13.89	7.94	1.38	44.5	3.44	17.6	-29	-
15:53	-	13.89	7.95	1.38	44.1	3.07	17.6	-27	-
15:56	-	13.89	7.95	1.38	43.0	3.03	17.8	-27	-

Total Volume Purged: 3 gal

Notes/Observations: sampled at 16:00

LOW FLOW PURGE DATA SHEET

Well I.D. 1-32
Date _____

Project Name: Vestal
Project No.: _____
Samplers ew, cc

Screened Interval (ft below TIC): 137 - 152 ft
Depth of Pump Screen (ft below TIC): 144.5 ft
Static Water Level (ft below TIC): 29.20 ft
Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
Pump Discharge Flow Rate = Q (L/m)
Frequency of Readings = F (m)

$$F = V/Q$$

Purge Method

start purge: 11:35 low flow

Field Parameters

TIME	FLOW RATE <i>cc</i> $\frac{\text{L}}{\text{m}}$	DTW (ft TIC)	pH (SU)	SPEC. COND. ($\mu\text{S/cm}$)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
11:40	250	29.20	7.49	2.06	76.1	13.35	15.0	-189	cloudy
11:45	-	29.21	9.56	1.37	152	6.14	15.2	-220	-
11:50	-	29.20	8.76	1.44	78.8	3.62	16.3	-178	-
11:55	-	29.20	8.63	1.45	58.6	2.99	17.2	-165	-
12:00	-	29.20	8.54	1.49	90.8	1.74	16.2	-152	-
12:05	-	29.20	8.51	1.49	128.0	2.28	14.9	-146	-
12:10	-	29.20	8.54	1.46	78.3	2.27	15.8	-150	-
12:15	-	29.20	8.57	1.49	115.0	2.43	15.2	-152	-
12:18	-	29.20	8.54	1.49	129.0	2.14	14.9	-147	-
12:21	-	29.20	8.51	1.48	84.2	2.05	15.4	-146	-

Total Volume Purged: 2.5 gal

Notes/Observations: sampled at 12:21

LOW FLOW PURGE DATA SHEET

Well I.D. 1-32A
Date _____

Project Name: Vestal
Project No.: _____
Samplers: CW, CC

Screened Interval (ft below TIC): _____ ft
Depth of Pump Screen (ft below TIC): 27.5' ft

Static Water Level (ft below TIC): 17.1 ft
Volume of Flow Through Cell: _____ L

Frequency of Parameter reading Calculation

Volume of Flow Through Cell = V (L)
Pump Discharge Flow Rate = Q (L/m)
Frequency of Readings = F (m)

$$F = V/Q$$

Purge Method

10:30 start purge: low flow

Field Parameters

TIME	FLOW RATE ^{CW} (L/m) ^m	DTW (ft TIC)	pH (SU)	SPEC. COND. (mS/cm)	TURB (NTU)	DO (mg/l)	TEMP (°C)	ORP (mV)	APPEARANCE
10:35	150	18.86	6.88	1.07	169.0	7.90	19.0	84	cloudy
10:40	100	18.95	6.87	1.05	146.0	4.79	22.3	82	slightly cloudy
10:45	-	19.90	6.88	1.06	142.0	4.34	22.7	78	-
10:48	-	19.12	6.88	1.06	139.0	4.09	23.0	75	-
10:51	-	19.25	6.88	1.05	149.0	3.79	23.6	^{CW} 77	-
10:54	-	19.35	6.82	1.06	111.0	3.72	22.4	85	-
10:57	-	19.35	6.82	1.01	136.0	3.45	23.9	83	-
^{CW} 11:00	-	19.35	6.82	0.99	142	3.14	25.2	87	-
11:03	-	19.35	6.81	0.98	141	3.16	26.3	86	-

Total Volume Purged: 1.5 gal

Notes/Observations: sampled at 11:05

APPENDIX C
Analytical Results Compared to NYSGWQC and USEPA MCLs

Appendix C (Sheet 1 of 6)
 Comparison of Detected Compounds to NYS Class GA Groundwater Quality Criteria

Sample Location Sample ID Sample Date	New York Groundwater Quality Criteria	EPA Drinking Water Regulations (MCLs)	1-24 I-24-072005 07/20/2005 (ug/l)	1-25 I-25-072005 07/20/2005 (ug/l)	1-25A I-25A-072005 07/20/2005 (ug/l)	1-29 1-29-071905 07/19/2005 (ug/l)	1-29A 1-29A-071905 07/19/2005 (ug/l)	1-30 I-30-072005 07/20/2005 (ug/l)	1-30A 1-30A-071905 07/19/2005 (ug/l)	1-32 1-32-071905 07/19/2005 (ug/l)	1-32A 1-32A-071905 07/19/2005 (ug/l)
CONSTITUENT											
1,1,1-Trichloroethane	5	200	3.1	0.5U	0.54	73D	10	0.5U	0.5U	0.5U	0.5U
1,1,2,2-Tetrachloroethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,1,2-Trichloroethane	1	1	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,1-Dichloroethane	5	5	0.82	0.5U	0.5U	8.5	9.4	0.5U	0.5U	0.5U	0.5U
1,1-Dichloroethene	5	5	0.5U	0.5U	0.5U	5.4	2.1	0.5U	0.5U	0.5U	0.5U
1,2,3-Trichlorobenzene	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,2,4-Trichlorobenzene	5	70	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,2-Dibromo-3-chloropropane	0.04	0.2	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,2-Dibromoethane	NS	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,2-Dichlorobenzene	3	600	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,2-Dichloroethane	0.6	5	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,2-Dichloropropane	1	1	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,3-Dichlorobenzene	3	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,4-Dichlorobenzene	3	75	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
2-Butanone	50	NS	5U	5U	5U	5U	5U	5U	5U	5U	5U
2-Hexanone	50	NS	5U	5U	5U	5U	5U	5U	5U	5U	5U
4-Methyl-2-pentanone	NS	NS	5U	5U	5U	5U	5U	5U	5U	5U	5U
trans-1,2-Dichloroethene	5	100	0.5U	0.5UJ	0.5UJ	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Acetone	50	NS	5U	5U	5U	5U	5U	5U	5U	5U	5U
Benzene	1	5	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Bromochloromethane	5	80	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Bromodichloromethane	50	50	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Bromoform	50	80	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Bromomethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Carbon disulfide	60	NS	0.5U	0.5U	0.5U	0.5U	0.5U	1.6	0.5U	0.5U	0.5U
Carbon tetrachloride	5	5	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Chlorobenzene	5	100	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Chloroethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Chloroform	7	80	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Chloromethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Cyclohexane	NS	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Dibromochloromethane	50	80	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Dichlorodifluoromethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Ethylbenzene	5	700	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	NS	0.5U	0.5U	0.5U	4.6J	1.4J	0.5U	0.5UJ	0.5UJ	0.5U
Isopropylbenzene	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Methyl Acetate	NS	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Methyl t-butyl ether (MTBE)	10	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Methylcyclohexane	NS	NS	0.5UJ	0.5UJ	0.5UJ	0.5UJ	0.5UJ	0.5UJ	0.5UJ	0.5UJ	0.5UJ
Methylene chloride	5	5	0.74U	0.98U	0.86U	0.62U	0.53U	0.87U	0.68U	0.62U	1.2U
Styrene	5	100	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Tetrachloroethylene	5	5	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Toluene	5	1000	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Total xylenes	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Trichloroethene	5	5	0.5U	0.5U	0.43J	33D	6.4	0.5U	0.5U	0.5U	1.7

Comparison of Detected Compounds to NYS Class GA Groundwater Quality Criteria

Sample Location Sample ID Sample Date Units	New York Groundwater Quality Criteria	EPA Drinking Water Regulations (MCLs)	1-24 I-24-072005 07/20/2005 (ug/l)	1-25 I-25-072005 07/20/2005 (ug/l)	1-25A I-25A-072005 07/20/2005 (ug/l)	1-29 1-29-071905 07/19/2005 (ug/l)	1-29A 1-29A-071905 07/19/2005 (ug/l)	1-30 I-30-072005 07/20/2005 (ug/l)	1-30A 1-30A-071905 07/19/2005 (ug/l)	1-32 1-32-071905 07/19/2005 (ug/l)	1-32A 1-32A-071905 07/19/2005 (ug/l)
CONSTITUENT											
Trichlorofluoromethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Vinyl chloride	2	2	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
cis-1,2-Dichloroethene	5	70	1.1	0.5UJ	0.5UJ	46D	21	0.5U	0.5U	0.5U	0.5U
cis-1,3-Dichloropropene	0.4	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
trans-1,3-Dichloropropene	0.4	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Aluminum	NS	50	1050	NA	NA	330	200U	1340	NA	NA	NA
Antimony	3	6	60U	NA	NA	60U	60U	60U	NA	NA	NA
Arsenic	25	10	10UJ	NA	NA	10UJ	10UJ	9J	NA	NA	NA
Barium	1000	2000	21J	NA	NA	48.2J	50.4J	38.6J	NA	NA	NA
Beryllium	3	4	5U	NA	NA	5U	5U	5U	NA	NA	NA
Cadmium	5	5	5U	NA	NA	5U	5U	5U	NA	NA	NA
Calcium	NS	NS	80000	NA	NA	109000	117000	25400	NA	NA	NA
Chromium	50	100	9.9J	NA	NA	12.6J	2J	34.4J	NA	NA	NA
Cobalt	NS	NS	10.1J	NA	NA	8.3J	50U	1.8J	NA	NA	NA
Copper	200	1000	3.6J	NA	NA	3.2J	4.3J	6.2J	NA	NA	NA
Iron	300	300	12500	NA	NA	7610	816	15100	NA	NA	NA
Lead	25	15	1.7J	NA	NA	25.3	10U	2.6J	NA	NA	NA
Magnesium	35000	NS	15800	NA	NA	20500	21400	47300	NA	NA	NA
Manganese	300	50	114	NA	NA	94	309	219	NA	NA	NA
Mercury	0.7	2	0.2U	NA	NA	0.2U	0.2U	0.25	NA	NA	NA
Nickel	100	NS	9J	NA	NA	11.1J	2.1J	23.4J	NA	NA	NA
Potassium	NS	NS	2100J	NA	NA	1850J	1940J	2520J	NA	NA	NA
Selenium	10	50	35U	NA	NA	2.6J	35U	3.3J	NA	NA	NA
Silver	50	100	10U	NA	NA	10U	10U	10U	NA	NA	NA
Sodium	20000	NS	47100	NA	NA	79300	83800	74100	NA	NA	NA
Thallium	0.5	2	25U	NA	NA	25U	25U	25U	NA	NA	NA
Vanadium	NS	NS	50U	NA	NA	50U	50U	50U	NA	NA	NA
Zinc	2000	5000	48.8J	NA	NA	23.5J	17.4J	30.5J	NA	NA	NA

Notes:

- U - Non-detect
- NA - Not analyzed
- NS - No standard
- J- Estimated
- B (organics) Found in blank
- B (inorganics) Concentration is greater than the instrument detection limit but less than the contraction required detection limit
- D - Dilution
- ug/l - Micrograms per liter
- BOLD - Exceeds New York Groundwater Quality Criteria

Appendix C (Sheet 3 of 6)
Comparison of Detected Compounds to NYS Class GA Groundwater Quality Criteria

Sample Location Sample ID Sample Date Units	New York Groundwater Quality Criteria	EPA Drinking Water Regulations (MCLs)	EB-31-072105 07/21/2005 (ug/l)	EB-33-072105 07/21/2005 (ug/l)	EB-41-072105 07/21/2005 (ug/l)	EB-42-072105 07/21/2005 (ug/l)	S-1 S-1-072005 07/20/2005 (ug/l)	S-11 S11-072205 07/22/2005 (ug/l)	S-11 (duplicate) S21-072205 07/22/2005 (ug/l)	S-2 S-2-072205 07/22/2005 (ug/l)
CONSTITUENT										
1,1,1-Trichloroethane	5	200	0.5U	0.5U	0.5U	0.76	0.5U	400JD	400JD	2.3B
1,1,2,2-Tetrachloroethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,1,2-Trichloroethane	1	1	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,1-Dichloroethane	5	5	3.9	4	0.66	0.5U	0.5U	56JD	60JD	7.2
1,1-Dichloroethene	5	5	2.2	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.7
1,2,3-Trichlorobenzene	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,2,4-Trichlorobenzene	5	70	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,2-Dibromo-3-chloropropane	0.04	0.2	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,2-Dibromoethane	NS	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,2-Dichlorobenzene	3	600	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,2-Dichloroethane	0.6	5	0.5U	0.5U	0.5U	0.5U	0.5U	0.5UJ	0.5UJ	0.5UJ
1,2-Dichloropropane	1	1	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,3-Dichlorobenzene	3	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,4-Dichlorobenzene	3	75	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
2-Butanone	50	NS	5U	5U	5U	5U	5U	5U	5U	5U
2-Hexanone	50	NS	5U	5U	5U	5U	5U	5U	5U	5U
4-Methyl-2-pentanone	NS	NS	5U	5U	5U	5U	5U	5U	5U	5U
trans-1,2-Dichloroethene	5	100	0.67	1.3	0.5U	0.5UJ	0.5U	3.4J	2.4J	1.2
Acetone	50	NS	5U	5U	5U	5U	5U	5U	5U	5U
Benzene	1	5	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Bromochloromethane	5	80	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Bromodichloromethane	50	50	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Bromoform	50	80	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Bromomethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Carbon disulfide	60	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Carbon tetrachloride	5	5	0.5UJ	0.5U	0.5U	0.5U	0.5U	0.5UJ	0.5UJ	0.5UJ
Chlorobenzene	5	100	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Chloroethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Chloroform	7	80	0.5U	0.5U	0.5U	0.5U	0.5U	2	1.8	0.91
Chloromethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Cyclohexane	NS	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Dibromochloromethane	50	80	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Dichlorodifluoromethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Ethylbenzene	5	700	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	NS	0.5U	8.1	0.5U	0.5U	0.5U	110JD	110JD	0.5U
Isopropylbenzene	5	NS	0.5U	0.48J	0.5U	0.5U	0.5U	0.5U	0.5U	0.77
Methyl Acetate	NS	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Methyl t-butyl ether (MTBE)	10	NS	0.5U	0.5U	1.9	0.5U	3.1	0.5U	0.5U	0.5U
Methylcyclohexane	NS	NS	0.5U	0.5UJ	0.5UJ	0.5UJ	0.5UJ	0.5U	0.5U	0.5U
Methylene chloride	5	5	0.5U	0.8U	0.7U	0.76B	1U	0.5U	1.2J	0.51J
Styrene	5	100	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Tetrachloroethylene	5	5	0.5U	0.56	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Toluene	5	1000	0.5U	0.5U	0.5U	0.5U	0.5U	1.6	1.6	0.5U
Total xylenes	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Trichloroethene	5	5	62JD	3.4	0.5U	0.5U	0.62	120JD	180JD	62JD

Appendix C (Sheet 4 of 6)
 Comparison of Detected Compounds to NYS Class GA Groundwater Quality Criteria

Sample Location Sample ID Sample Date Units	New York Groundwater Quality Criteria	EPA Drinking Water Regulations (MCLs)	EB-31 EB-31-072105 07/21/2005 (ug/l)	EB-33 EB-33-072105 07/21/2005 (ug/l)	EB-41 EB-41-072105 07/21/2005 (ug/l)	EB-42 EB-42-072105 07/21/2005 (ug/l)	S-1 S-1-072005 07/20/2005 (ug/l)	S-11 S-11-072205 07/22/2005 (ug/l)	S-11 (duplicate) S-11-072205 07/22/2005 (ug/l)	S-2 S-2-072205 07/22/2005 (ug/l)
CONSTITUENT										
Trichlorofluoromethane	5	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Vinyl chloride	2	2	0.54	0.5U	0.5U	0.5U	0.5U	7.8	6.9	9J
cis-1,2-Dichloroethene	5	70	21D	49D	12	0.5UJ	0.5U	410D	430D	100D
cis-1,3-Dichloropropene	0.4	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
trans-1,3-Dichloropropene	0.4	NS	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Aluminum	NS	50	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	3	6	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	25	10	NA	NA	NA	NA	NA	NA	NA	NA
Barium	1000	2000	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	3	4	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	5	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	50	100	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Copper	200	1000	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	300	NA	NA	NA	NA	NA	NA	NA	NA
Lead	25	15	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	35000	NS	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	300	50	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.7	2	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NS	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	10	50	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	100	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	20000	NS	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	0.5	2	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	5000	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- U - Non-detect
- NA - Not analyzed
- NS - No standard
- J- Estimated
- B (organics) Found in blank
- B (inorganics) Concentration is greater than the instrument detection limit but less than the contraction required detection limit
- D - Dilution
- ug/l - Micrograms per liter
- BOLD** - Exceeds New York Groundwater Quality Criteria

Appendix C (Sheet 5 of 6)
 Comparison of Detected Compounds to NYS Class GA Groundwater Quality Criteria

Sample Location Sample ID Sample Date Units	New York Groundwater Quality Criteria	EPA Drinking Water Regulations (MCLs)	S-6 S-6-072205 07/22/2005 (ug/l)	S-7 S-7-072105 07/21/2005 (ug/l)	S-8 S-8-072205 07/22/2005 (ug/l)
CONSTITUENT					
1,1,1-Trichloroethane	5	200	0.5U	7.9B	3.1B
1,1,2,2-Tetrachloroethane	5	NS	0.5U	0.5U	0.5U
1,1,2-Trichloroethane	1	1	0.5U	0.5U	0.5U
1,1-Dichloroethane	5	5	0.5U	16	6.5
1,1-Dichloroethene	5	5	0.5U	1.9	0.5U
1,2,3-Trichlorobenzene	5	NS	0.5U	0.5U	0.5U
1,2,4-Trichlorobenzene	5	70	0.5U	0.5U	0.5U
1,2-Dibromo-3-chloropropane	0.04	0.2	0.5U	0.5U	0.5U
1,2-Dibromoethane	NS	NS	0.5U	0.5U	0.5U
1,2-Dichlorobenzene	3	600	0.5U	0.5U	0.5U
1,2-Dichloroethane	0.6	5	0.5UJ	0.5UJ	0.5UJ
1,2-Dichloropropane	1	1	0.5U	0.5U	0.5U
1,3-Dichlorobenzene	3	NS	0.5U	0.5U	0.5U
1,4-Dichlorobenzene	3	75	0.5U	0.5U	0.5U
2-Butanone	50	NS	5U	5U	5U
2-Hexanone	50	NS	5U	5U	5U
4-Methyl-2-pentanone	NS	NS	5U	5U	5U
trans-1,2-Dichloroethene	5	100	0.5U	1.1	0.5U
Acetone	50	NS	5U	5U	5U
Benzene	1	5	0.5U	0.5U	0.5U
Bromochloromethane	5	80	0.5U	0.5U	0.5U
Bromodichloromethane	50	50	0.5U	0.5U	0.5U
Bromoform	50	80	0.5U	0.5U	0.5U
Bromomethane	5	NS	0.5U	0.5U	0.5U
Carbon disulfide	60	NS	1.3	0.5U	0.5U
Carbon tetrachloride	5	5	0.5UJ	0.5UJ	0.5UJ
Chlorobenzene	5	100	0.5U	0.5U	0.5U
Chloroethane	5	NS	0.5U	0.5U	0.5U
Chloroform	7	80	0.5U	0.5U	0.5U
Chloromethane	5	NS	0.5U	0.5U	0.5U
Cyclohexane	NS	NS	0.5U	0.5U	0.5U
Dibromochloromethane	50	80	0.5U	0.5U	0.5U
Dichlorodifluoromethane	5	NS	0.5U	0.5U	0.5U
Ethylbenzene	5	700	0.5U	0.5U	0.5U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	NS	0.5U	0.5U	0.5U
Isopropylbenzene	5	NS	0.5U	0.5U	0.5U
Methyl Acetate	NS	NS	0.5U	0.5U	0.5U
Methyl t-butyl ether (MTBE)	10	NS	0.5U	0.5U	0.5U
Methylcyclohexane	NS	NS	0.5U	0.5U	0.5U
Methylene chloride	5	5	0.5U	0.5U	0.5U
Styrene	5	100	0.5U	0.5U	0.5U
Tetrachloroethylene	5	5	0.5U	0.5U	3.8
Toluene	5	1000	0.5U	0.5U	0.5U
Total xylenes	5	NS	0.5U	0.5U	0.5U
Trichloroethene	5	5	49JD	50JD	3.4J

Appendix C (Sheet 6 of 6)
 Comparison of Detected Compounds to NYS Class GA Groundwater Quality Criteria

Sample Location Sample ID Sample Date Units	New York Groundwater Quality Criteria	EPA Drinking Water Regulations (MCLs)	S-6 S-6-072205 07/22/2005 (ug/l)	S-7 S-7-072105 07/21/2005 (ug/l)	S-8 S-8-072205 07/22/2005 (ug/l)
CONSTITUENT					
Trichlorofluoromethane	5	NS	0.5U	0.5U	0.5U
Vinyl chloride	2	2	0.5U	14J	0.5U
cis-1,2-Dichloroethene	5	70	19	120D	2.9J
cis-1,3-Dichloropropene	0.4	NS	0.5U	0.5U	0.5U
trans-1,3-Dichloropropene	0.4	NS	0.5U	0.5U	0.5U
Aluminum	NS	50	NA	NA	NA
Antimony	3	6	NA	NA	NA
Arsenic	25	10	NA	NA	NA
Barium	1000	2000	NA	NA	NA
Beryllium	3	4	NA	NA	NA
Cadmium	5	5	NA	NA	NA
Calcium	NS	NS	NA	NA	NA
Chromium	50	100	NA	NA	NA
Cobalt	NS	NS	NA	NA	NA
Copper	200	1000	NA	NA	NA
Iron	300	300	NA	NA	NA
Lead	25	15	NA	NA	NA
Magnesium	35000	NS	NA	NA	NA
Manganese	300	50	NA	NA	NA
Mercury	0.7	2	NA	NA	NA
Nickel	100	NS	NA	NA	NA
Potassium	NS	NS	NA	NA	NA
Selenium	10	50	NA	NA	NA
Silver	50	100	NA	NA	NA
Sodium	20000	NS	NA	NA	NA
Thallium	0.5	2	NA	NA	NA
Vanadium	NS	NS	NA	NA	NA
Zinc	2000	5000	NA	NA	NA

Notes:

- U - Non-detect
- NA - Not analyzed
- NS - No standard
- J- Estimated
- B (organics) Found in blank
- B (inorganics) Concentration is greater than the instrument detection limit but less than the contraction required detection limit
- D - Dilution
- ug/l - Micrograms per liter
- BOLD** - Exceeds New York Groundwater Quality Criteria

APPENDIX D
Validation Reports and Laboratory Data

CLP DATA ASSESSMENT

Functional Guidelines for Evaluating Organic Analysis

PROJECT NO.: 507130

LABORATORY: GPL Laboratories

SITE: Vestal Well

DATA ASSESSMENT

The current SOP No. HW-13 (Revision 3), July 2001 for CLP Organics Review and Preliminary Review has been applied.

All data were found to be valid and acceptable except those analytes which have been rejected, "R" (unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's
Signature: *Deborah A. Fierch* Date: 9/12/05

Verified By: _____ Date: _____

CLP DATA ASSESSMENT

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

All samples were analyzed within specified holding times, therefore, no action was required.

2. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

Qualified as estimated (J) due to high %R of associated surrogate:
vinyl chloride: S2-072205
cis/trans-1,2-dichloroethene: S11-072205, S21-072205
1,1-dichloroethane: S11-072205DL
methylene chloride, freon 113: S11-072205DL, S21-072205DL

Qualified as estimated (J) due to low %R of associated surrogate:
cis/trans-1,2-dichloroethene: S6-072205DL, FB-072205, TB-072205

CLP DATA ASSESSMENT

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

Trichloroethene exhibited low recovery and exceeded precision criteria for the matrix spikes performed on sample S2-072205. No action was required. The high concentration of trichloroethene in the parent sample, which was not diluted for the MS/MSD, was most likely responsible for the poor performance. The associated blank spike was satisfactory.

The blank spike associated with the sample dilutions exceeded recovery of several compounds. Positive results for trichloroethene were subsequently estimated (J) in samples S2-072205DL, S6-072205DL, S11-072205DL, and S21-072205DL.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than the blank contaminant level (2 or 10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) Method blank contamination:

No qualifications were required.

B) Field or rinse blank contamination:

No qualifications were required.

C) Trip blank contamination:

No qualifications were required.

D) Storage Blank [sample concentration estimated (J)]:

methylene chloride: S11-072205DL, S21-072205, S21-072205DL,
S2-072205, S2-072205DL, S6-072205DL

CLP DATA ASSESSMENT

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenyl-phosphine (DFTPP).

If the mass calibration is in error, all associated data will be classified as unusable "R".

All criteria were met.

CLP DATA ASSESSMENT

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be ≥ 0.05 (≥ 0.01 for poor performers) in both initial and continuing calibrations. A value < 0.05 , < 0.01 for poor performers, indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

No qualifications were required.

CLP DATA ASSESSMENT

7. CALIBRATION:

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD and %D must be $\leq 30\%$, $\leq 50\%$ for the poor performers. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:

1,2,3-Trichlorobenzene exceeded %RSD criteria, but no qualifications were required.

Qualified as unusable (R) %D > 90%:

acetone: S11-072205DL, S21-072205DL, S2-072205DL, S6-072205DL

Qualified as estimated (J/UJ):

1,2-dichloroethane, carbon tetrachloride: S11-072205, S21-072205,
S2-072205, S6-072205, FB-072205, TB-072205, S8-072205

dichlorodifluoromethane, 1,1,1-trichloroethane, carbon tetrachloride,
methylcyclohexane: S11-072205DL, S21-072205DL, S2-072205DL,
S6-072205DL

CLP DATA ASSESSMENT

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must fall within the limits of $\pm 40\%$ of the associated continuing calibration standard. The retention time of the internal standard must not vary more than ± 0.33 minutes from the associated continuing calibration standard. If the area count is outside the ($\pm 40\%$) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 20 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction.

All internal standards were within limits.

CLP DATA ASSESSMENT

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

N/A

B) Pesticide Fraction:

The retention times of reported compounds must fall within the calculated retention time (RT) windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10 μ g/ml in the final sample extract.

N/A

CLP DATA ASSESSMENT

10. CONTRACT PROBLEMS NON-COMPLIANCE:

Trichloroethene and cis-1,2-dichloroethene were qualified "JN" in sample S8-072205 because they may be the result of instrument carry-over from the previous analysis. An instrument blank was not analyzed between samples.

11. FIELD DOCUMENTATION:

12. OTHER PROBLEMS:

The TICs at the following RT were qualified as unusable (R) in the samples indicated because they were common lab contaminants:

RT 3.2: S11-072205, S11-072205DL, S21-072205, S21-072205DL,
S2-072205

RT 19.9: S11-072205DL

RT 23.1: S11-072205DL, S2-072205DL, S6-072205DL

13. This package contains re-extractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified as not to be used.

S11-072205: E41930

S21-072205: E41931

S2-072205: E41932

S6-072205: E41933

DPO: ACTION FYI REGION II

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

Work Order No.: 507130

LABORATORY: GPL Laboratories DATA USER: EPA Region II

SOW: OLC03.2 REVIEW COMPLETION DATE: 9/12/05

NO. OF SAMPLES: 7 WATER SOIL OTHER

REVIEWER: ESD ESAT OTHER, CONTRACTOR TTECI

QC ITEM	VOA	BNA	PCB		
HOLDING TIMES	O				
GC-MS PERFORMANCE	O				
INITIAL CALIBRATIONS	O				
CONTINUING CALIBRATIONS	M				
FIELD BLANKS (F = N/A)	O				
LABORATORY BLANKS	O				
SURROGATES	X				
MATRIX SPIKE/DUPLICATES	O				
QC SAMPLES (LCS, PVS)	O				
INTERNAL STANDARDS	O				
COMPOUND IDENTIFICATION	O				
COMPOUND QUANTITATION	O				
SYSTEM PERFORMANCE	O				
OVERALL ASSESSMENT	Z				

O = No problems or minor problems that do not affect data usability.
 X = No more than about 5% of the data points are qualified as either estimated or unusable.
 M = More than about 5% of the data points are qualified as either estimated or unusable.
 Z = More than about 5% of the data points are qualified as unusable.

DPO ACTION ITEMS:

AREAS OF CONCERN:

DATA REJECTION SUMMARY

Type of Review: Level 4 Date: 9/12/05 Work Order No.: 507130

Site Name: Vestal Well Lab Name: GPL Laboratories

Reviewer's Initials: EN Number of Samples: 7W

Analytes Rejected Due to Exceeding Review Criteria For:

	No. of Compounds/No. of Fractions (Samples)						Total # Rejected/Total # in All Samples
	Surrogates	Holding Time	Calibration	Contamination	ID	Internal Standards	
VOA (50)	0	0	4	0	0	0	4 / 550 = 1 %
ACID (14)							/ = %
B/N (51)							/ = %
PEST (21)							/ = %
PCB (7)							/ = %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

Analytes Estimated Due to Exceeding Review Criteria For:

	No. of Compounds/No. of Fractions (Samples)						Total # Estimated/Total # in All Samples
	Surrogates	Holding Time	Calibration	Contamination	ID	Internal Standards (LCS)	
VOA (50)	16	0	30	6	0	0	4 / 550 = 10 %
ACID (14)							/ = %
B/N (51)							/ = %
PEST (21)							/ = %
PCB (7)							/ = %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

Subj: RE: Vestal Well 507130
Date: 9/9/05 10:20:26 AM Eastern Daylight Time
From: huebschman@ipass.net
To: Auseal@aol.com
File: 507130Responses.pdf (1622385 bytes) DL Time (33600 bps): < 13 minutes
Sent from the Internet (Details)

Celia

Attached are the responses for the below issues. Regarding #2, the peaks are laboratory artifact – low level by products formed during production of deuterated methanol solvent. Regarding #11, the true value for acetone is 25ppb.

I will be out of the office from 1:00 today until Tuesday morning. Any other issues you send me will be addressed when I return.

Pat Huebschman
Project Manager
GPL Laboratories
301-694-5310-Phone
301-620-0731-Fax
huebschman@gplab.com

-----Original Message-----

From: Auseal@aol.com [mailto:Auseal@aol.com]
Sent: Thursday, August 25, 2005 3:56 AM
To: huebschman@ipass.net
Subject: Vestal Well 507130

Pat,

The following issues require resolution before I can complete my review of the Vestal Well data package identified below:

507130

Volatiles

- ✓1. Resubmit Form 8 with correct limits identified (+ 40% and + .3 minutes).
- ✓2. Why were TICs not reported for peaks at RT 2.0, 9.7, 17.0, and 19.2 in any of the samples or blanks? Submit any necessary deliverables.
- ✓3. Submit spectra and revised Form 1E for the previously unreported TIC at RT 23.08 in files E41932, -33, and -34
- ✓4. Submit revised Form 1E for the previously unreported TIC at RT 18.39 in file E41932.
- ✓5. Submit revised Form 1E for the previously unreported TIC at RT 3.26 in file E41909.
- ✓6. Submit spectra and revised Form 1E for the previously unreported TICs at RT 19.91 and 23.08 in file E41930.
- ✓7. Submit revised Form 1E with concentrations less than 1.0 entered for TICs reported in file E41910.
- ✓8. The Form 1 for E41903 is missing 1,2,3-trichlorobenzene as a target compound. A positive result was reported in the quant report. Resubmit revised Form 1.
- ✓9. Submit spectra and revised Form 1E for file E41903 including the previously unreported TICs at RT 16.83 and 19.93.
- ✓10. Submit spectra and revised Form 1E for the previously unreported TICs at RT 16.81, 19.91 and 23.07 in file E41924.
- ✓11. What is the true value for acetone in the CCV? The %D value is excessive in file E41923.

Please forward a hardcopy of all resubmittals to my attention at the address below by 8/31/05.

America Online: Auseal



Cambridge Isotope Laboratories, Inc.

ES-5038

50 Frontage Road, Andover, MA 01810-5413 USA
PH: 800.322.1174 (N. AMERICA) PH: 978.749.8000
FAX: 978.749.2768 WEB: www.isotope.com

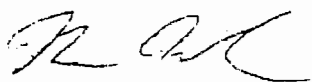
MEMORANDUM

TO: CLP Low Concentration Organics Laboratories
FROM: Cambridge Isotope Laboratories
SUBJECT: Volatiles DMC Standards
DATE: April 22, 2004

I would like to take this opportunity to clarify several issues regarding the Deuterated Monitoring Compound (DMC) standards used for EPA CLP SOW OLC03 2

- 1 CIL uses deuterated Methanol (CD_3OD) as the solvent for the Volatiles secondary stock solutions used in EPA OLC03 2 This is done to reduce the amount of deuterium back-exchange that may occur when exposed to unlabeled Methanol (CH_3OH). This will however result in a peak at m/z 36, which can be identified as a "laboratory artifact".
- 2 The Bromoform-d standard that is stabilized in deuterated methanol will, when diluted to working concentrations in unlabeled methanol, undergo a slow back-exchange. Therefore, while the initial analysis using fresh standard will have no native Bromoform contribution, over time, a small amount of native contribution may be observed.
- 3 1,3-dichloropropene is manufactured only as a mix of *cis*- and *trans*- isomers that cannot be isolated. Our standard contains approximately 70:30 *cis*:*trans*- isomers. The *cis*- isomer is not relevant to this method and may be considered a "laboratory artifact" as defined by the method.
- 4 Two unknown peaks have been found in the Volatiles DMC standard solutions. These peaks are low-level byproducts formed during production of deuterated methanol solvent, and may be detected during sample analysis. These peaks generally elute just after 1,1,2,2-Tetrachloroethane-d2 and just prior to 1,2-Dichlorobenzene-d4, depending on chromatographic conditions. These deuterated compounds, if detected, may also be considered as laboratory artifacts.
- 5 An unidentified contaminant has been found in CIL product ES-5038-1-10x. The contaminant elutes at, or slightly before Chloromethane, and may in fact be mis-identified as chloromethane. However, the secondary ions that confirm chloromethane are not found in the contaminant. While the concentration cannot be determined without knowing the identity of this contaminant, it calculates at approximately 0.4-0.6 ug/L as chloromethane. This peak may be considered a laboratory artifact.

Please feel free to contact CIL to discuss any of these issues


Kevin Millis
Regulatory Affairs Mgr.

4/22/04
Date

Analytical Report For 507130

for

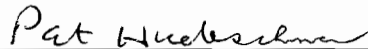
Tetra Tech EC, Inc.

Project Manager: Wendy DeMaio

Project Name: Vestal Well 1-1 Site

GPL
Laboratories

GPL Laboratories, LLLP certifies that the test results meet all requirements of the
NELAC Standards unless otherwise noted



Reviewed By,
Project Manager



Approved By,
Laboratory Director



Case Narrative
Tetra Tech EC, Inc.
Vestal Well 1-1 Site
Work Order: 507130

Reviewed by Patricia Huebschman on 08-16-

The Case Narrative, Chain of Custody, Sample Receipt Checklist, and the cover page of the Sample Analysis Report, are integral parts of GPL Laboratories' report package. If you did not receive all of these documents, please contact GPL immediately.

Sample Receipt

Eight water samples were received on 07/23/2005. The samples were delivered by Federal Express. Sample receipt conditions and temperatures are documented on the Sample Receipt checklist.

Sample Analysis

Samples were prepared and analyzed by GPL using the analytical methodologies indicated on the Sample Analysis Summary Report. In some chromatographic analyses, manual integration is used instead of automated integration because it produces more accurate results. All manual integrations are denoted on the sample quantitation report. Analysis results and limits for soil are reported on a dry weight basis unless otherwise specified on the report.

Volatiles

Seven water samples were analyzed for volatile organic compounds using EPA CLP method rev.OLC03.2.

All samples were analyzed within holding time.

All internal standard responses, and retention times were within QC limits.

All surrogate recoveries met QC requirements. In the case of sample S-2-072205, target analyte vinyl chloride interfered with its associated deuterated surrogate resulting in a very high recovery for vinyl chloride-d4.

Samples S11-072205, S21-072205, S-2-072205, and S-6-072205 were all reanalyzed at a dilution. Reanalysis was reported within calibration limits.

Matrix spike and matrix spike duplicate analyses were performed on sample S-2-072205. Recovery of trichloroethene was outside QC limits on both MS/MSD analysis. RPD was outside QC limits as well.

Two laboratory control samples were analyzed along with the sample batches. All recoveries were within QC limits on BKS77036. Seven compounds were outside QC limits on BKS77037.

A holding blank was prepared at samples receipt and stored with the samples. The holding blank was analyzed after all the samples were analyzed and results were reported as final.

TIC lists of all samples, method blanks and the holding blanks are enclosed with this package.

The following gas chromatography along with specifications was used to analyze the samples. Restek crossbonded-phase silicon coated fused silica capillary, Length = 60m ID = 0.53mm Film Thickness = 2.0 microns.

Manual integration was performed on several peaks improperly integrated by the software. The manually integrated compounds are designated by an "m" next to the area of the quantitation report, and chromatograms for these compounds were submitted with this package.

Pat Hueschman

Reviewed By,
Project Manager

Pat Hueschman

Approved By,
Laboratory Director

GPL Laboratories, LLLP

Sample Summary Report

Tetra Tech EC, Inc.

Work Order: 507130

Client Sample ID	Lab Sample ID	Analytical Method	Matrix	Date Sampled	Date Recieved
FB-072205	507130-001-001-1/3	CLP_OLC03.2	WATER	07/22/2005	07/23/2005
HOLDING BLANK	507130-008-030-1/2	CLP_OLC03.2	WATER	07/25/2005	07/23/2005
S-2-072205	507130-005-019-1/9	CLP_OLC03.2	WATER	07/22/2005	07/23/2005
S-2-072205 DL	507130-005-020-2/9 DL	CLP_OLC03.2	WATER	07/22/2005	07/23/2005
S-6-072205	507130-007-016-1/3	CLP_OLC03.2	WATER	07/22/2005	07/23/2005
S-6-072205 DL	507130-007-017-2/3 DL	CLP_OLC03.2	WATER	07/22/2005	07/23/2005
S-8-072205	507130-006-013-1/3	CLP_OLC03.2	WATER	07/22/2005	07/23/2005
S11-072205	507130-003-007-1/3	CLP_OLC03.2	WATER	07/22/2005	07/23/2005
S11-072205 DL	507130-003-008-2/3 DL	CLP_OLC03.2	WATER	07/22/2005	07/23/2005
S21-072205	507130-004-010-1/3	CLP_OLC03.2	WATER	07/22/2005	07/23/2005
S21-072205 DL	507130-004-011-2/3 DL	CLP_OLC03.2	WATER	07/22/2005	07/23/2005
TB-072205	507130-002-004-1/3	CLP_OLC03.2	WATER	07/22/2005	07/23/2005

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-072205	Lab Sample ID:	507130-001-001-1/3
Sample Date/Time:	07/22/2005 07:25	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/29/05 18:51
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/29/05 18:51
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/29/05 18:51
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/29/05 18:51
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/29/05 18:51
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 18:51
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 18:51
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/29/05 18:51
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 18:51
10)	1,2-Dichloroethane	BQL	U ^J	0.50	1	ug/L	07/29/05 18:51
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/29/05 18:51
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 18:51
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 18:51
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/29/05 18:51
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/29/05 18:51
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/29/05 18:51
17)	Acetone	BQL	U	5.0	1	ug/L	07/29/05 18:51
18)	Benzene	BQL	U	0.50	1	ug/L	07/29/05 18:51
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/29/05 18:51
20)	Bromodichloromethane	1.2		0.50	1	ug/L	07/29/05 18:51
21)	Bromoform	BQL	U	0.50	1	ug/L	07/29/05 18:51
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/29/05 18:51
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/29/05 18:51
24)	Carbon Tetrachloride	BQL	U ^J	0.50	1	ug/L	07/29/05 18:51
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 18:51
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/29/05 18:51
27)	Chloroform	1.9		0.50	1	ug/L	07/29/05 18:51
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/29/05 18:51

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-072205	Lab Sample ID:	507130-001-001-1/3
Sample Date/Time:	07/22/2005 07:25	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/29/05	18:51
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/29/05	18:51
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/29/05	18:51
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/29/05	18:51
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/29/05	18:51
34) Freon 113	BQL U	0.50	1	ug/L	07/29/05	18:51
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/29/05	18:51
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/29/05	18:51
37) Methylcyclohexane	BQL U	0.50	1	ug/L	07/29/05	18:51
38) Methylene Chloride	BQL U	0.50	1	ug/L	07/29/05	18:51
39) Styrene	BQL U	0.50	1	ug/L	07/29/05	18:51
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/29/05	18:51
41) Toluene	BQL U	0.50	1	ug/L	07/29/05	18:51
42) Total Xylenes	BQL U	0.50	1	ug/L	07/29/05	18:51
43) Trichloroethene	BQL U	0.50	1	ug/L	07/29/05	18:51
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/29/05	18:51
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/29/05	18:51
46) cis-1,2-Dichloroethene	BQL U J	0.50	1	ug/L	07/29/05	18:51
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/29/05	18:51
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/29/05	18:51
49) trans-1,2-dichloroethene	BQL U J	0.50	1	ug/L	07/29/05	18:51
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/29/05	18:51

CM 9/12/05

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	97 %	75 - 131	1	07/29/05 18:51
52)	1,1-Dichloroethene-d2	60 %	65 - 130	1	07/29/05 18:51
53)	1,2-Dichlorobenzene-d4	107 %	50 - 150	1	07/29/05 18:51
54)	1,2-Dichloroethane-d4	97 %	78 - 129	1	07/29/05 18:51
55)	1,2-Dichloropropane-d6	89 %	84 - 123	1	07/29/05 18:51
56)	2-Butanone-d5	96 %	42 - 171	1	07/29/05 18:51

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-072205	Lab Sample ID:	507130-001-001-1/3
Sample Date/Time:	07/22/2005 07:25	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	98 %	37 - 169	1	07/29/05	18:51
58) Benzene-d6	99 %	78 - 121	1	07/29/05	18:51
59) Bromoform-d	95 %	76 - 135	1	07/29/05	18:51
60) Chloroethane-d5	94 %	60 - 126	1	07/29/05	18:51
61) Chloroform-d	94 %	80 - 123	1	07/29/05	18:51
62) Toluene-D8	95 %	77 - 120	1	07/29/05	18:51
63) Vinyl Chloride-d3	100 %	49 - 138	1	07/29/05	18:51
64) trans-1,3-Dichloropropene-d4	89 %	80 - 128	1	07/29/05	18:51

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-072205	Lab Sample ID:	507130-002-004-1/3
Sample Date/Time:	07/22/2005 07:35	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/29/05	19:24
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/29/05	19:24
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/29/05	19:24
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/29/05	19:24
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/29/05	19:24
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	19:24
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	19:24
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/29/05	19:24
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	19:24
10)	1,2-Dichloroethane	BQL	U <i>J</i>	0.50	1	ug/L	07/29/05	19:24
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/29/05	19:24
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	19:24
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	19:24
14)	2-Butanone	<i>0.4/2/05</i>	BQL	U	5.0	1	ug/L	07/29/05 19:24
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/29/05	19:24
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/29/05	19:24
17)	Acetone	BQL	U	5.0	1	ug/L	07/29/05	19:24
18)	Benzene	BQL	U	0.50	1	ug/L	07/29/05	19:24
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/29/05	19:24
20)	Bromodichloromethane	1.4		0.50	1	ug/L	07/29/05	19:24
21)	Bromoform	BQL	U	0.50	1	ug/L	07/29/05	19:24
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/29/05	19:24
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/29/05	19:24
24)	Carbon Tetrachloride	BQL	U <i>J</i>	0.50	1	ug/L	07/29/05	19:24
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	19:24
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/29/05	19:24
27)	Chloroform	2.2		0.50	1	ug/L	07/29/05	19:24
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/29/05	19:24

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-072205	Lab Sample ID:	507130-002-004-1/3
Sample Date/Time:	07/22/2005 07:35	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/29/05	19:24
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/29/05	19:24
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/29/05	19:24
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/29/05	19:24
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/29/05	19:24
34) Freon 113	BQL U	0.50	1	ug/L	07/29/05	19:24
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/29/05	19:24
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/29/05	19:24
37) Methylcyclohexane	BQL U	0.50	1	ug/L	07/29/05	19:24
38) Methylene Chloride	BQL U	0.50	1	ug/L	07/29/05	19:24
39) Styrene	BQL U	0.50	1	ug/L	07/29/05	19:24
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/29/05	19:24
41) Toluene	BQL U	0.50	1	ug/L	07/29/05	19:24
42) Total Xylenes	BQL U	0.50	1	ug/L	07/29/05	19:24
43) Trichloroethene	BQL U	0.50	1	ug/L	07/29/05	19:24
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/29/05	19:24
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/29/05	19:24
46) cis-1,2-Dichloroethene	BQL U J	0.50	1	ug/L	07/29/05	19:24
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/29/05	19:24
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/29/05	19:24
49) trans-1,2-dichloroethene	BQL U J	0.50	1	ug/L	07/29/05	19:24
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/29/05	19:24

CP 7/2/05

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	103 %	75 - 131	1	07/29/05 19:24
52)	1,1-Dichloroethene-d2	58 %	65 - 130	1	07/29/05 19:24
53)	1,2-Dichlorobenzene-d4	107 %	50 - 150	1	07/29/05 19:24
54)	1,2-Dichloroethane-d4	101 %	78 - 129	1	07/29/05 19:24
55)	1,2-Dichloropropane-d6	92 %	84 - 123	1	07/29/05 19:24
56)	2-Butanone-d5	105 %	42 - 171	1	07/29/05 19:24

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-072205	Lab Sample ID:	507130-002-004-1/3
Sample Date/Time:	07/22/2005 07:35	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	96 %	37 - 169	1	07/29/05	19:24
58) Benzene-d6	102 %	78 - 121	1	07/29/05	19:24
59) Bromoform-d	99 %	76 - 135	1	07/29/05	19:24
60) Chloroethane-d5	98 %	60 - 126	1	07/29/05	19:24
61) Chloroform-d	104 %	80 - 123	1	07/29/05	19:24
62) Toluene-D8	100 %	77 - 120	1	07/29/05	19:24
63) Vinyl Chloride-d3	104 %	49 - 138	1	07/29/05	19:24
64) trans-1,3-Dichloropropene-d4	88 %	80 - 128	1	07/29/05	19:24

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S11-072205	Lab Sample ID:	507130-003-007-1/3
Sample Date/Time:	07/22/2005 08:17 <i>USE</i>	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

** FROM DILUTION*

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	<i>400*</i>	370 -BE	J	0.50	1 ug/L	07/29/05 19:57
2)	1,1,2,2-Tetrachloroethane	BQL	U		0.50	1 ug/L	07/29/05 19:57
3)	1,1,2-Trichloroethane	BQL	U		0.50	1 ug/L	07/29/05 19:57
4)	1,1-Dichloroethane	<i>56*</i>	44 -E	J	0.50	1 ug/L	07/29/05 19:57
5)	1,1-Dichloroethene	BQL	U		0.50	1 ug/L	07/29/05 19:57
6)	1,2,3-Trichlorobenzene	BQL	U		0.50	1 ug/L	07/29/05 19:57
7)	1,2,4-Trichlorobenzene	BQL	U		0.50	1 ug/L	07/29/05 19:57
8)	1,2-Dibromo-3-Chloropropane	BQL	U		0.50	1 ug/L	07/29/05 19:57
9)	1,2-Dichlorobenzene	BQL	U		0.50	1 ug/L	07/29/05 19:57
10)	1,2-Dichloroethane	BQL	U	J	0.50	1 ug/L	07/29/05 19:57
11)	1,2-Dichloropropane	BQL	U		0.50	1 ug/L	07/29/05 19:57
12)	1,3-Dichlorobenzene	BQL	U		0.50	1 ug/L	07/29/05 19:57
13)	1,4-Dichlorobenzene	BQL	U		0.50	1 ug/L	07/29/05 19:57
14)	2-Butanone	BQL	U		5.0	1 ug/L	07/29/05 19:57
15)	2-Hexanone	BQL	U		5.0	1 ug/L	07/29/05 19:57
16)	4-Methyl-2-Pentanone	BQL	U		5.0	1 ug/L	07/29/05 19:57
17)	Acetone	BQL	U		5.0	1 ug/L	07/29/05 19:57
18)	Benzene	BQL	U		0.50	1 ug/L	07/29/05 19:57
19)	Bromochloromethane	BQL	U		0.50	1 ug/L	07/29/05 19:57
20)	Bromodichloromethane	BQL	U		0.50	1 ug/L	07/29/05 19:57
21)	Bromoform	BQL	U		0.50	1 ug/L	07/29/05 19:57
22)	Bromomethane	BQL	U		0.50	1 ug/L	07/29/05 19:57
23)	Carbon Disulfide	BQL	U		0.50	1 ug/L	07/29/05 19:57
24)	Carbon Tetrachloride	BQL	U	J	0.50	1 ug/L	07/29/05 19:57
25)	Chlorobenzene	BQL	U		0.50	1 ug/L	07/29/05 19:57
26)	Chloroethane	2.0			0.50	1 ug/L	07/29/05 19:57
27)	Chloroform	BQL	U		0.50	1 ug/L	07/29/05 19:57
28)	Chloromethane	BQL	U		0.50	1 ug/L	07/29/05 19:57

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S11-072205	Lab Sample ID:	507130-003-007-1/3
Sample Date/Time:	07/22/2005 08:17	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

CA 4/2/05

USE

29) Cyclohexane	BQL U	0.50	1	ug/L	07/29/05	19:57
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/29/05	19:57
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/29/05	19:57
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/29/05	19:57
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/29/05	19:57
34) Freon 113	<i>110*</i> 82-E <i>J</i>	0.50	1	ug/L	07/29/05	19:57
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/29/05	19:57
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/29/05	19:57
37) Methylcyclohexane	BQL U	0.50	1	ug/L	07/29/05	19:57
38) Methylene Chloride	BQL U	0.50	1	ug/L	07/29/05	19:57
39) Styrene	BQL U	0.50	1	ug/L	07/29/05	19:57
40) Tetrachloroethylene	1.6	0.50	1	ug/L	07/29/05	19:57
41) Toluene	BQL U	0.50	1	ug/L	07/29/05	19:57
42) Total Xylenes	BQL U	0.50	1	ug/L	07/29/05	19:57
43) Trichloroethene	<i>120*</i> 110-E <i>J</i>	0.50	1	ug/L	07/29/05	19:57
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/29/05	19:57
45) Vinyl Chloride	7.8	0.50	1	ug/L	07/29/05	19:57
46) cis-1,2-Dichloroethene	<i>410*</i> 280-E <i>J</i>	0.50	1	ug/L	07/29/05	19:57
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/29/05	19:57
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/29/05	19:57
49) trans-1,2-dichloroethene	3.4 <i>J</i>	0.50	1	ug/L	07/29/05	19:57
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/29/05	19:57

** FROM DILUTION*

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	94 %	75 - 131	1	07/29/05 19:57
52)	1,1-Dichloroethene-d2	175 %	65 - 130	1	07/29/05 19:57
53)	1,2-Dichlorobenzene-d4	112 %	50 - 150	1	07/29/05 19:57
54)	1,2-Dichloroethane-d4	100 %	78 - 129	1	07/29/05 19:57
55)	1,2-Dichloropropane-d6	101 %	84 - 123	1	07/29/05 19:57
56)	2-Butanone-d5	98 %	42 - 171	1	07/29/05 19:57

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S11-072205	Lab Sample ID:	507130-003-007-1/3
Sample Date/Time:	07/22/2005 08:17	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	90 %	37 - 169	1	07/29/05	19:57
58) Benzene-d6	99 %	78 - 121	1	07/29/05	19:57
59) Bromoform-d	91 %	76 - 135	1	07/29/05	19:57
60) Chloroethane-d5	103 %	60 - 126	1	07/29/05	19:57
61) Chloroform-d	99 %	80 - 123	1	07/29/05	19:57
62) Toluene-D8	102 %	77 - 120	1	07/29/05	19:57
63) Vinyl Chloride-d3	137 %	49 - 138	1	07/29/05	19:57
64) trans-1,3-Dichloropropene-d4	95 %	80 - 128	1	07/29/05	19:57

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S11-072205 DL	Lab Sample ID:	507130-003-008-2/3 DL
Sample Date/Time:	07/22/2005 08:17	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

CR 9/12/05

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	400	J	25	50	ug/L	08/01/05 16:54
2)	1,1,2,2-Tetrachloroethane	BQL	U	25	50	ug/L	08/01/05 16:54
3)	1,1,2-Trichloroethane	BQL	U	25	50	ug/L	08/01/05 16:54
4)	1,1-Dichloroethane	56	J	25	50	ug/L	08/01/05 16:54
5)	1,1-Dichloroethene	BQL	U	25	50	ug/L	08/01/05 16:54
6)	1,2,3-Trichlorobenzene	BQL	U	25	50	ug/L	08/01/05 16:54
7)	1,2,4-Trichlorobenzene	BQL	U	25	50	ug/L	08/01/05 16:54
8)	1,2-Dibromo-3-Chloropropane	BQL	U	25	50	ug/L	08/01/05 16:54
9)	1,2-Dichlorobenzene	BQL	U	25	50	ug/L	08/01/05 16:54
10)	1,2-Dichloroethane	BQL	U	25	50	ug/L	08/01/05 16:54
11)	1,2-Dichloropropane	BQL	U	25	50	ug/L	08/01/05 16:54
12)	1,3-Dichlorobenzene	BQL	U	25	50	ug/L	08/01/05 16:54
13)	1,4-Dichlorobenzene	BQL	U	25	50	ug/L	08/01/05 16:54
14)	2-Butanone	BQL	U	250	50	ug/L	08/01/05 16:54
15)	2-Hexanone	BQL	U	250	50	ug/L	08/01/05 16:54
16)	4-Methyl-2-Pentanone	BQL	U	250	50	ug/L	08/01/05 16:54
17)	Acetone	BQL	U R	250	50	ug/L	08/01/05 16:54
18)	Benzene	BQL	U	25	50	ug/L	08/01/05 16:54
19)	Bromochloromethane	BQL	U	25	50	ug/L	08/01/05 16:54
20)	Bromodichloromethane	BQL	U	25	50	ug/L	08/01/05 16:54
21)	Bromoform	BQL	U	25	50	ug/L	08/01/05 16:54
22)	Bromomethane	BQL	U	25	50	ug/L	08/01/05 16:54
23)	Carbon Disulfide	BQL	U	25	50	ug/L	08/01/05 16:54
24)	Carbon Tetrachloride	BQL	U J	25	50	ug/L	08/01/05 16:54
25)	Chlorobenzene	BQL	U	25	50	ug/L	08/01/05 16:54
26)	Chloroethane	BQL	U	25	50	ug/L	08/01/05 16:54
27)	Chloroform	BQL	U	25	50	ug/L	08/01/05 16:54
28)	Chloromethane	BQL	U	25	50	ug/L	08/01/05 16:54

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S11-072205 DL	Lab Sample ID:	507130-003-008-2/3 DL
Sample Date/Time:	07/22/2005 08:17	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	25	50	ug/L	08/01/05	16:54
30) Dibromochloromethane	BQL U	25	50	ug/L	08/01/05	16:54
31) Dichlorodifluoromethane	BQL U J	25	50	ug/L	08/01/05	16:54
32) Ethylbenzene	BQL U	25	50	ug/L	08/01/05	16:54
33) Ethylene Dibromide	BQL U	25	50	ug/L	08/01/05	16:54
34) Freon 113	110 J	25	50	ug/L	08/01/05	16:54
35) Isopropylbenzene	BQL U	25	50	ug/L	08/01/05	16:54
36) Methyl Acetate	BQL U	25	50	ug/L	08/01/05	16:54
37) Methylcyclohexane	BQL U J	25	50	ug/L	08/01/05	16:54
38) Methylene Chloride	50 J	25	50	ug/L	08/01/05	16:54
39) Styrene	BQL U	25	50	ug/L	08/01/05	16:54
40) Tetrachloroethylene	BQL U	25	50	ug/L	08/01/05	16:54
41) Toluene	BQL U	25	50	ug/L	08/01/05	16:54
42) Total Xylenes	BQL U	25	50	ug/L	08/01/05	16:54
43) Trichloroethene	120 J	25	50	ug/L	08/01/05	16:54
44) Trichlorofluoromethane	BQL U	25	50	ug/L	08/01/05	16:54
45) Vinyl Chloride	BQL U	25	50	ug/L	08/01/05	16:54
46) cis-1,2-Dichloroethene	410	25	50	ug/L	08/01/05	16:54
47) cis-1,3-Dichloropropene	BQL U	25	50	ug/L	08/01/05	16:54
48) tert-butyl methyl ether	BQL U	25	50	ug/L	08/01/05	16:54
49) trans-1,2-dichloroethene	BQL U	25	50	ug/L	08/01/05	16:54
50) trans-1,3-dichloropropene	BQL U	25	50	ug/L	08/01/05	16:54

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	116 %	75 - 131	50	08/01/05 16:54
52)	1,1-Dichloroethene-d2	76 %	65 - 130	50	08/01/05 16:54
53)	1,2-Dichlorobenzene-d4	125 %	50 - 150	50	08/01/05 16:54
54)	1,2-Dichloroethane-d4	146 %	78 - 129	50	08/01/05 16:54
55)	1,2-Dichloropropane-d6	102 %	84 - 123	50	08/01/05 16:54
56)	2-Butanone-d5	143 %	42 - 171	50	08/01/05 16:54

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S11-072205 DL	Lab Sample ID:	507130-003-008-2/3 DL
Sample Date/Time:	07/22/2005 08:17	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	129 %	37 - 169	50	08/01/05	16:54
58) Benzene-d6	105 %	78 - 121	50	08/01/05	16:54
59) Bromoform-d	110 %	76 - 135	50	08/01/05	16:54
60) Chloroethane-d5	104 %	60 - 126	50	08/01/05	16:54
61) Chloroform-d	126 %	80 - 123	50	08/01/05	16:54
62) Toluene-D8	98 %	77 - 120	50	08/01/05	16:54
63) Vinyl Chloride-d3	107 %	49 - 138	50	08/01/05	16:54
64) trans-1,3-Dichloropropene-d4	102 %	80 - 128	50	08/01/05	16:54

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	<i>USE</i>	Sample Matrix:	WATER
Client Sample ID:	S21-072205		Lab Sample ID:	507130-004-010-1/3
Sample Date/Time:	07/22/2005 07:00	<i>9/1/05</i>	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19		Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20		Analytical Method:	CLP_OLC03.2

** FROM DILUTION*

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	<i>440*</i> 390 -BE	J	0.50	1	ug/L	07/29/05 20:30
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/29/05 20:30
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/29/05 20:30
4)	1,1-Dichloroethane	<i>60*</i> 39 -E		0.50	1	ug/L	07/29/05 20:30
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/29/05 20:30
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 20:30
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 20:30
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/29/05 20:30
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 20:30
10)	1,2-Dichloroethane	BQL	U J	0.50	1	ug/L	07/29/05 20:30
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/29/05 20:30
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 20:30
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 20:30
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/29/05 20:30
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/29/05 20:30
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/29/05 20:30
17)	Acetone	BQL	U	5.0	1	ug/L	07/29/05 20:30
18)	Benzene	BQL	U	0.50	1	ug/L	07/29/05 20:30
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/29/05 20:30
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/29/05 20:30
21)	Bromoform	BQL	U	0.50	1	ug/L	07/29/05 20:30
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/29/05 20:30
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/29/05 20:30
24)	Carbon Tetrachloride	BQL	U J	0.50	1	ug/L	07/29/05 20:30
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 20:30
26)	Chloroethane	1.8		0.50	1	ug/L	07/29/05 20:30
27)	Chloroform	BQL	U	0.50	1	ug/L	07/29/05 20:30
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/29/05 20:30

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S21-072205	Lab Sample ID:	507130-004-010-1/3
Sample Date/Time:	07/22/2005 07:00	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

USE
@ 9/2/05

29) Cyclohexane	BQL U	0.50	1	ug/L	07/29/05	20:30
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/29/05	20:30
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/29/05	20:30
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/29/05	20:30
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/29/05	20:30
34) Freon 113	<i>110*</i> 45-E <i>J</i>	0.50	1	ug/L	07/29/05	20:30
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/29/05	20:30
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/29/05	20:30
37) Methylcyclohexane	BQL U	0.50	1	ug/L	07/29/05	20:30
38) Methylene Chloride	1.2 <i>J</i>	0.50	1	ug/L	07/29/05	20:30
39) Styrene	BQL U	0.50	1	ug/L	07/29/05	20:30
40) Tetrachloroethylene	1.6	0.50	1	ug/L	07/29/05	20:30
41) Toluene	BQL U	0.50	1	ug/L	07/29/05	20:30
42) Total Xylenes	BQL U	0.50	1	ug/L	07/29/05	20:30
43) Trichloroethene	<i>180*</i> 120-E <i>J</i>	0.50	1	ug/L	07/29/05	20:30
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/29/05	20:30
45) Vinyl Chloride	6.9	0.50	1	ug/L	07/29/05	20:30
46) cis-1,2-Dichloroethene	<i>430*</i> 270-E <i>J</i>	0.50	1	ug/L	07/29/05	20:30
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/29/05	20:30
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/29/05	20:30
49) trans-1,2-dichloroethene	2.4 <i>J</i>	0.50	1	ug/L	07/29/05	20:30
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/29/05	20:30

** FROM DILUTION*

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	102 %	75 - 131	1	07/29/05 20:30
52)	1,1-Dichloroethene-d2	167 %	65 - 130	1	07/29/05 20:30
53)	1,2-Dichlorobenzene-d4	125 %	50 - 150	1	07/29/05 20:30
54)	1,2-Dichloroethane-d4	94 %	78 - 129	1	07/29/05 20:30
55)	1,2-Dichloropropane-d6	110 %	84 - 123	1	07/29/05 20:30
56)	2-Butanone-d5	94 %	42 - 171	1	07/29/05 20:30

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S21-072205	Lab Sample ID:	507130-004-010-1/3
Sample Date/Time:	07/22/2005 07:00	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	100 %	37 - 169	1	07/29/05	20:30
58) Benzene-d6	107 %	78 - 121	1	07/29/05	20:30
59) Bromoform-d	104 %	76 - 135	1	07/29/05	20:30
60) Chloroethane-d5	92 %	60 - 126	1	07/29/05	20:30
61) Chloroform-d	96 %	80 - 123	1	07/29/05	20:30
62) Toluene-D8	115 %	77 - 120	1	07/29/05	20:30
63) Vinyl Chloride-d3	133 %	49 - 138	1	07/29/05	20:30
64) trans-1,3-Dichloropropene-d4	93 %	80 - 128	1	07/29/05	20:30

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S21-072205 DL	Lab Sample ID:	507130-004-011-2/3 DL
Sample Date/Time:	07/22/2005 07:00 <i>07/22/05</i>	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	440	J	25	50	ug/L	08/01/05	17:28
2)	1,1,2,2-Tetrachloroethane	BQL	U	25	50	ug/L	08/01/05	17:28
3)	1,1,2-Trichloroethane	BQL	U	25	50	ug/L	08/01/05	17:28
4)	1,1-Dichloroethane	60		25	50	ug/L	08/01/05	17:28
5)	1,1-Dichloroethene	BQL	U	25	50	ug/L	08/01/05	17:28
6)	1,2,3-Trichlorobenzene	BQL	U	25	50	ug/L	08/01/05	17:28
7)	1,2,4-Trichlorobenzene	BQL	U	25	50	ug/L	08/01/05	17:28
8)	1,2-Dibromo-3-Chloropropane	BQL	U	25	50	ug/L	08/01/05	17:28
9)	1,2-Dichlorobenzene	BQL	U	25	50	ug/L	08/01/05	17:28
10)	1,2-Dichloroethane	BQL	U	25	50	ug/L	08/01/05	17:28
11)	1,2-Dichloropropane	BQL	U	25	50	ug/L	08/01/05	17:28
12)	1,3-Dichlorobenzene	BQL	U	25	50	ug/L	08/01/05	17:28
13)	1,4-Dichlorobenzene	BQL	U	25	50	ug/L	08/01/05	17:28
14)	2-Butanone	BQL	U	250	50	ug/L	08/01/05	17:28
15)	2-Hexanone	BQL	U	250	50	ug/L	08/01/05	17:28
16)	4-Methyl-2-Pentanone	BQL	U	250	50	ug/L	08/01/05	17:28
17)	Acetone	BQL	U	250	50	ug/L	08/01/05	17:28
18)	Benzene	BQL	U	25	50	ug/L	08/01/05	17:28
19)	Bromochloromethane	BQL	U	25	50	ug/L	08/01/05	17:28
20)	Bromodichloromethane	BQL	U	25	50	ug/L	08/01/05	17:28
21)	Bromoform	BQL	U	25	50	ug/L	08/01/05	17:28
22)	Bromomethane	BQL	U	25	50	ug/L	08/01/05	17:28
23)	Carbon Disulfide	BQL	U	25	50	ug/L	08/01/05	17:28
24)	Carbon Tetrachloride	BQL	U	25	50	ug/L	08/01/05	17:28
25)	Chlorobenzene	BQL	U	25	50	ug/L	08/01/05	17:28
26)	Chloroethane	BQL	U	25	50	ug/L	08/01/05	17:28
27)	Chloroform	BQL	U	25	50	ug/L	08/01/05	17:28
28)	Chloromethane	BQL	U	25	50	ug/L	08/01/05	17:28

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S21-072205 DL	Lab Sample ID:	507130-004-011-2/3 DL
Sample Date/Time:	07/22/2005 07:00	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19 <i>CM 9/12/05</i>	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U		25	50	ug/L	08/01/05	17:28
30) Dibromochloromethane	BQL U		25	50	ug/L	08/01/05	17:28
31) Dichlorodifluoromethane	BQL U	J	25	50	ug/L	08/01/05	17:28
32) Ethylbenzene	BQL U		25	50	ug/L	08/01/05	17:28
33) Ethylene Dibromide	BQL U		25	50	ug/L	08/01/05	17:28
34) Freon 113	110	J	25	50	ug/L	08/01/05	17:28
35) Isopropylbenzene	BQL U		25	50	ug/L	08/01/05	17:28
36) Methyl Acetate	BQL U		25	50	ug/L	08/01/05	17:28
37) Methylcyclohexane	BQL U	J	25	50	ug/L	08/01/05	17:28
38) Methylene Chloride	46	J	25	50	ug/L	08/01/05	17:28
39) Styrene	BQL U		25	50	ug/L	08/01/05	17:28
40) Tetrachloroethylene	BQL U		25	50	ug/L	08/01/05	17:28
41) Toluene	BQL U		25	50	ug/L	08/01/05	17:28
42) Total Xylenes	BQL U		25	50	ug/L	08/01/05	17:28
43) Trichloroethene	180	J	25	50	ug/L	08/01/05	17:28
44) Trichlorofluoromethane	BQL U		25	50	ug/L	08/01/05	17:28
45) Vinyl Chloride	BQL U		25	50	ug/L	08/01/05	17:28
46) cis-1,2-Dichloroethene	430		25	50	ug/L	08/01/05	17:28
47) cis-1,3-Dichloropropene	BQL U		25	50	ug/L	08/01/05	17:28
48) tert-butyl methyl ether	BQL U		25	50	ug/L	08/01/05	17:28
49) trans-1,2-dichloroethene	BQL U		25	50	ug/L	08/01/05	17:28
50) trans-1,3-dichloropropene	BQL U		25	50	ug/L	08/01/05	17:28

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	125 %	75 - 131	50	08/01/05 17:28
52)	1,1-Dichloroethene-d2	74 %	65 - 130	50	08/01/05 17:28
53)	1,2-Dichlorobenzene-d4	117 %	50 - 150	50	08/01/05 17:28
54)	1,2-Dichloroethane-d4	132 %	78 - 129	50	08/01/05 17:28
55)	1,2-Dichloropropane-d6	98 %	84 - 123	50	08/01/05 17:28
56)	2-Butanone-d5	140 %	42 - 171	50	08/01/05 17:28

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S21-072205 DL	Lab Sample ID:	507130-004-011-2/3 DL
Sample Date/Time:	07/22/2005 07:00	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	130 %	37 - 169	50	08/01/05	17:28
58) Benzene-d6	109 %	78 - 121	50	08/01/05	17:28
59) Bromoform-d	117 %	76 - 135	50	08/01/05	17:28
60) Chloroethane-d5	92 %	60 - 126	50	08/01/05	17:28
61) Chloroform-d	122 %	80 - 123	50	08/01/05	17:28
62) Toluene-D8	101 %	77 - 120	50	08/01/05	17:28
63) Vinyl Chloride-d3	103 %	49 - 138	50	08/01/05	17:28
64) trans-1,3-Dichloropropene-d4	103 %	80 - 128	50	08/01/05	17:28

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-2-072205	Lab Sample ID:	507130-005-019-1/9
Sample Date/Time:	07/22/2005 09:45	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

USE

07/29/05

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	2.3	B	0.50	1	ug/L	07/29/05 21:03
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/29/05 21:03
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/29/05 21:03
4)	1,1-Dichloroethane	7.2		0.50	1	ug/L	07/29/05 21:03
5)	1,1-Dichloroethene	1.7		0.50	1	ug/L	07/29/05 21:03
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 21:03
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 21:03
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/29/05 21:03
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 21:03
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/29/05 21:03
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/29/05 21:03
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 21:03
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 21:03
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/29/05 21:03
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/29/05 21:03
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/29/05 21:03
17)	Acetone	BQL	U	5.0	1	ug/L	07/29/05 21:03
18)	Benzene	BQL	U	0.50	1	ug/L	07/29/05 21:03
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/29/05 21:03
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/29/05 21:03
21)	Bromoform	BQL	U	0.50	1	ug/L	07/29/05 21:03
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/29/05 21:03
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/29/05 21:03
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/29/05 21:03
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/29/05 21:03
26)	Chloroethane	0.91		0.50	1	ug/L	07/29/05 21:03
27)	Chloroform	BQL	U	0.50	1	ug/L	07/29/05 21:03
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/29/05 21:03

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-2-072205	Lab Sample ID:	507130-005-019-1/9
Sample Date/Time:	07/22/2005 09:45	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

USE
CW 9/16/05

29) Cyclohexane	BQL U	0.50	1	ug/L	07/29/05	21:03
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/29/05	21:03
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/29/05	21:03
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/29/05	21:03
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/29/05	21:03
34) Freon 113	BQL U	0.50	1	ug/L	07/29/05	21:03
35) Isopropylbenzene	0.77	0.50	1	ug/L	07/29/05	21:03
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/29/05	21:03
37) Methylcyclohexane	BQL U	0.50	1	ug/L	07/29/05	21:03
38) Methylene Chloride	0.51	0.50	1	ug/L	07/29/05	21:03
39) Styrene	BQL U	0.50	1	ug/L	07/29/05	21:03
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/29/05	21:03
41) Toluene	BQL U	0.50	1	ug/L	07/29/05	21:03
42) Total Xylenes	BQL U	0.50	1	ug/L	07/29/05	21:03
43) Trichloroethene	6.2*	0.50	1	ug/L	07/29/05	21:03
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/29/05	21:03
45) Vinyl Chloride	9.0	0.50	1	ug/L	07/29/05	21:03
46) cis-1,2-Dichloroethene	100*	0.50	1	ug/L	07/29/05	21:03
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/29/05	21:03
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/29/05	21:03
49) trans-1,2-dichloroethene	1.2	0.50	1	ug/L	07/29/05	21:03
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/29/05	21:03

** FROM DILUTION*

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	105 %	75 - 131	1	07/29/05 21:03
52)	1,1-Dichloroethene-d2	83 %	65 - 130	1	07/29/05 21:03
53)	1,2-Dichlorobenzene-d4	103 %	50 - 150	1	07/29/05 21:03
54)	1,2-Dichloroethane-d4	101 %	78 - 129	1	07/29/05 21:03
55)	1,2-Dichloropropane-d6	105 %	84 - 123	1	07/29/05 21:03
56)	2-Butanone-d5	102 %	42 - 171	1	07/29/05 21:03

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-2-072205	Lab Sample ID:	507130-005-019-1/9
Sample Date/Time:	07/22/2005 09:45	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	113 %	37 - 169	1	07/29/05	21:03
58) Benzene-d6	101 %	78 - 121	1	07/29/05	21:03
59) Bromoform-d	96 %	76 - 135	1	07/29/05	21:03
60) Chloroethane-d5	91 %	60 - 126	1	07/29/05	21:03
61) Chloroform-d	101 %	80 - 123	1	07/29/05	21:03
62) Toluene-D8	102 %	77 - 120	1	07/29/05	21:03
63) Vinyl Chloride-d3	223 %	49 - 138	1	07/29/05	21:03
64) trans-1,3-Dichloropropene-d4	96 %	80 - 128	1	07/29/05	21:03

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-2-072205 DL	Lab Sample ID:	507130-005-020-2/9 DL
Sample Date/Time:	07/22/2005 09:45	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	2.2	J J	2.5	5	ug/L	08/01/05 18:01
2)	1,1,2,2-Tetrachloroethane	BQL	U	2.5	5	ug/L	08/01/05 18:01
3)	1,1,2-Trichloroethane	BQL	U	2.5	5	ug/L	08/01/05 18:01
4)	1,1-Dichloroethane	7.9		2.5	5	ug/L	08/01/05 18:01
5)	1,1-Dichloroethene	2.4	J	2.5	5	ug/L	08/01/05 18:01
6)	1,2,3-Trichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:01
7)	1,2,4-Trichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:01
8)	1,2-Dibromo-3-Chloropropane	BQL	U	2.5	5	ug/L	08/01/05 18:01
9)	1,2-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:01
10)	1,2-Dichloroethane	BQL	U	2.5	5	ug/L	08/01/05 18:01
11)	1,2-Dichloropropane	BQL	U	2.5	5	ug/L	08/01/05 18:01
12)	1,3-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:01
13)	1,4-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:01
14)	2-Butanone	BQL	U	25	5	ug/L	08/01/05 18:01
15)	2-Hexanone	BQL	U	25	5	ug/L	08/01/05 18:01
16)	4-Methyl-2-Pentanone	BQL	U	25	5	ug/L	08/01/05 18:01
17)	Acetone	BQL	U R	25	5	ug/L	08/01/05 18:01
18)	Benzene	BQL	U	2.5	5	ug/L	08/01/05 18:01
19)	Bromochloromethane	BQL	U	2.5	5	ug/L	08/01/05 18:01
20)	Bromodichloromethane	BQL	U	2.5	5	ug/L	08/01/05 18:01
21)	Bromoform	BQL	U	2.5	5	ug/L	08/01/05 18:01
22)	Bromomethane	BQL	U	2.5	5	ug/L	08/01/05 18:01
23)	Carbon Disulfide	BQL	U	2.5	5	ug/L	08/01/05 18:01
24)	Carbon Tetrachloride	BQL	U J	2.5	5	ug/L	08/01/05 18:01
25)	Chlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:01
26)	Chloroethane	BQL	U	2.5	5	ug/L	08/01/05 18:01
27)	Chloroform	BQL	U	2.5	5	ug/L	08/01/05 18:01
28)	Chloromethane	BQL	U	2.5	5	ug/L	08/01/05 18:01

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-2-072205 DL	Lab Sample ID:	507130-005-020-2/9 DL
Sample Date/Time:	07/22/2005 09:45	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U		2.5	5	ug/L	08/01/05	18:01
30) Dibromochloromethane	BQL U		2.5	5	ug/L	08/01/05	18:01
31) Dichlorodifluoromethane	BQL U	J	2.5	5	ug/L	08/01/05	18:01
32) Ethylbenzene	BQL U		2.5	5	ug/L	08/01/05	18:01
33) Ethylene Dibromide	BQL U		2.5	5	ug/L	08/01/05	18:01
34) Freon 113	BQL U		2.5	5	ug/L	08/01/05	18:01
35) Isopropylbenzene	BQL U		2.5	5	ug/L	08/01/05	18:01
36) Methyl Acetate	BQL U		2.5	5	ug/L	08/01/05	18:01
37) Methylcyclohexane	BQL U	J	2.5	5	ug/L	08/01/05	18:01
38) Methylene Chloride	4.4	J	2.5	5	ug/L	08/01/05	18:01
39) Styrene	BQL U		2.5	5	ug/L	08/01/05	18:01
40) Tetrachloroethylene	BQL U		2.5	5	ug/L	08/01/05	18:01
41) Toluene	BQL U		2.5	5	ug/L	08/01/05	18:01
42) Total Xylenes	BQL U		2.5	5	ug/L	08/01/05	18:01
43) Trichloroethene	62	J	2.5	5	ug/L	08/01/05	18:01
44) Trichlorofluoromethane	BQL U		2.5	5	ug/L	08/01/05	18:01
45) Vinyl Chloride	11		2.5	5	ug/L	08/01/05	18:01
46) cis-1,2-Dichloroethene	100		2.5	5	ug/L	08/01/05	18:01
47) cis-1,3-Dichloropropene	BQL U		2.5	5	ug/L	08/01/05	18:01
48) tert-butyl methyl ether	BQL U		2.5	5	ug/L	08/01/05	18:01
49) trans-1,2-dichloroethene	BQL U		2.5	5	ug/L	08/01/05	18:01
50) trans-1,3-dichloropropene	BQL U		2.5	5	ug/L	08/01/05	18:01

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	112 %	75 - 131	5	08/01/05 18:01
52)	1,1-Dichloroethene-d2	65 %	65 - 130	5	08/01/05 18:01
53)	1,2-Dichlorobenzene-d4	111 %	50 - 150	5	08/01/05 18:01
54)	1,2-Dichloroethane-d4	118 %	78 - 129	5	08/01/05 18:01
55)	1,2-Dichloropropane-d6	97 %	84 - 123	5	08/01/05 18:01
56)	2-Butanone-d5	129 %	42 - 171	5	08/01/05 18:01

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-2-072205 DL	Lab Sample ID:	507130-005-020-2/9 DL
Sample Date/Time:	07/22/2005 09:45	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	129 %	37 - 169	5	08/01/05	18:01
58) Benzene-d6	98 %	78 - 121	5	08/01/05	18:01
59) Bromoform-d	102 %	76 - 135	5	08/01/05	18:01
60) Chloroethane-d5	82 %	60 - 126	5	08/01/05	18:01
61) Chloroform-d	109 %	80 - 123	5	08/01/05	18:01
62) Toluene-D8	96 %	77 - 120	5	08/01/05	18:01
63) Vinyl Chloride-d3	112 %	49 - 138	5	08/01/05	18:01
64) trans-1,3-Dichloropropene-d4	95 %	80 - 128	5	08/01/05	18:01

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-8-072205	Lab Sample ID:	507130-006-013-1/3
Sample Date/Time:	07/22/2005 11:20	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	3.1	B	0.50	1	ug/L	07/29/05	21:36
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/29/05	21:36
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/29/05	21:36
4)	1,1-Dichloroethane	6.5		0.50	1	ug/L	07/29/05	21:36
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/29/05	21:36
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	21:36
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	21:36
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/29/05	21:36
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	21:36
10)	1,2-Dichloroethane	BQL	U J	0.50	1	ug/L	07/29/05	21:36
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/29/05	21:36
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	21:36
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	21:36
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/29/05	21:36
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/29/05	21:36
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/29/05	21:36
17)	Acetone	BQL	U	5.0	1	ug/L	07/29/05	21:36
18)	Benzene	BQL	U	0.50	1	ug/L	07/29/05	21:36
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/29/05	21:36
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/29/05	21:36
21)	Bromoform	BQL	U	0.50	1	ug/L	07/29/05	21:36
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/29/05	21:36
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/29/05	21:36
24)	Carbon Tetrachloride	BQL	U J	0.50	1	ug/L	07/29/05	21:36
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	21:36
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/29/05	21:36
27)	Chloroform	BQL	U	0.50	1	ug/L	07/29/05	21:36
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/29/05	21:36

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-8-072205	Lab Sample ID:	507130-006-013-1/3
Sample Date/Time:	07/22/2005 11:20	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

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29) Cyclohexane	BQL	U	0.50	1	ug/L	07/29/05	21:36
30) Dibromochloromethane	BQL	U	0.50	1	ug/L	07/29/05	21:36
31) Dichlorodifluoromethane	BQL	U	0.50	1	ug/L	07/29/05	21:36
32) Ethylbenzene	BQL	U	0.50	1	ug/L	07/29/05	21:36
33) Ethylene Dibromide	BQL	U	0.50	1	ug/L	07/29/05	21:36
34) Freon 113	BQL	U	0.50	1	ug/L	07/29/05	21:36
35) Isopropylbenzene	BQL	U	0.50	1	ug/L	07/29/05	21:36
36) Methyl Acetate	BQL	U	0.50	1	ug/L	07/29/05	21:36
37) Methylcyclohexane	BQL	U	0.50	1	ug/L	07/29/05	21:36
38) Methylene Chloride	BQL	U	0.50	1	ug/L	07/29/05	21:36
39) Styrene	BQL	U	0.50	1	ug/L	07/29/05	21:36
40) Tetrachloroethylene	3.8		0.50	1	ug/L	07/29/05	21:36
41) Toluene	BQL	U	0.50	1	ug/L	07/29/05	21:36
42) Total Xylenes	BQL	U	0.50	1	ug/L	07/29/05	21:36
43) Trichloroethene	3.4	J	0.50	1	ug/L	07/29/05	21:36
44) Trichlorofluoromethane	BQL	U	0.50	1	ug/L	07/29/05	21:36
45) Vinyl Chloride	BQL	U	0.50	1	ug/L	07/29/05	21:36
46) cis-1,2-Dichloroethene	2.9	J	0.50	1	ug/L	07/29/05	21:36
47) cis-1,3-Dichloropropene	BQL	U	0.50	1	ug/L	07/29/05	21:36
48) tert-butyl methyl ether	BQL	U	0.50	1	ug/L	07/29/05	21:36
49) trans-1,2-dichloroethene	BQL	U	0.50	1	ug/L	07/29/05	21:36
50) trans-1,3-dichloropropene	BQL	U	0.50	1	ug/L	07/29/05	21:36

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	98 %	75 - 131	1	07/29/05 21:36
52)	1,1-Dichloroethene-d2	69 %	65 - 130	1	07/29/05 21:36
53)	1,2-Dichlorobenzene-d4	104 %	50 - 150	1	07/29/05 21:36
54)	1,2-Dichloroethane-d4	93 %	78 - 129	1	07/29/05 21:36
55)	1,2-Dichloropropane-d6	95 %	84 - 123	1	07/29/05 21:36
56)	2-Butanone-d5	92 %	42 - 171	1	07/29/05 21:36

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-8-072205	Lab Sample ID:	507130-006-013-1/3
Sample Date/Time:	07/22/2005 11:20	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	91 %	37 - 169	1	07/29/05	21:36
58) Benzene-d6	101 %	78 - 121	1	07/29/05	21:36
59) Bromoform-d	86 %	76 - 135	1	07/29/05	21:36
60) Chloroethane-d5	103 %	60 - 126	1	07/29/05	21:36
61) Chloroform-d	93 %	80 - 123	1	07/29/05	21:36
62) Toluene-D8	101 %	77 - 120	1	07/29/05	21:36
63) Vinyl Chloride-d3	114 %	49 - 138	1	07/29/05	21:36
64) trans-1,3-Dichloropropene-d4	86 %	80 - 128	1	07/29/05	21:36

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	<i>USE</i>	Sample Matrix:	WATER
Client Sample ID:	S-6-072205		Lab Sample ID:	507130-007-016-1/3
Sample Date/Time:	07/22/2005 12:30	<i>07/22/05</i>	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19		Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20		Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/29/05	22:09
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/29/05	22:09
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/29/05	22:09
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/29/05	22:09
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/29/05	22:09
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	22:09
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	22:09
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/29/05	22:09
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	22:09
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/29/05	22:09
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/29/05	22:09
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	22:09
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	22:09
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/29/05	22:09
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/29/05	22:09
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/29/05	22:09
17)	Acetone	BQL	U	5.0	1	ug/L	07/29/05	22:09
18)	Benzene	BQL	U	0.50	1	ug/L	07/29/05	22:09
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/29/05	22:09
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/29/05	22:09
21)	Bromoform	BQL	U	0.50	1	ug/L	07/29/05	22:09
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/29/05	22:09
23)	Carbon Disulfide	1.3		0.50	1	ug/L	07/29/05	22:09
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/29/05	22:09
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	22:09
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/29/05	22:09
27)	Chloroform	BQL	U	0.50	1	ug/L	07/29/05	22:09
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/29/05	22:09

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-6-072205	Lab Sample ID:	507130-007-016-1/3
Sample Date/Time:	07/22/2005 12:30	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

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29) Cyclohexane	BQL U	0.50	1	ug/L	07/29/05	22:09
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/29/05	22:09
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/29/05	22:09
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/29/05	22:09
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/29/05	22:09
34) Freon 113	BQL U	0.50	1	ug/L	07/29/05	22:09
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/29/05	22:09
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/29/05	22:09
37) Methylcyclohexane	BQL U	0.50	1	ug/L	07/29/05	22:09
38) Methylene Chloride	BQL U	0.50	1	ug/L	07/29/05	22:09
39) Styrene	BQL U	0.50	1	ug/L	07/29/05	22:09
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/29/05	22:09
41) Toluene	BQL U	0.50	1	ug/L	07/29/05	22:09
42) Total Xylenes	BQL U	0.50	1	ug/L	07/29/05	22:09
43) Trichloroethene	49* 45-E J	0.50	1	ug/L	07/29/05	22:09
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/29/05	22:09
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/29/05	22:09
46) cis-1,2-Dichloroethene	19	0.50	1	ug/L	07/29/05	22:09
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/29/05	22:09
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/29/05	22:09
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/29/05	22:09
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/29/05	22:09

** FROM DILUTION*

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	95 %	75 - 131	1	07/29/05 22:09
52)	1,1-Dichloroethene-d2	65 %	65 - 130	1	07/29/05 22:09
53)	1,2-Dichlorobenzene-d4	115 %	50 - 150	1	07/29/05 22:09
54)	1,2-Dichloroethane-d4	97 %	78 - 129	1	07/29/05 22:09
55)	1,2-Dichloropropane-d6	97 %	84 - 123	1	07/29/05 22:09
56)	2-Butanone-d5	97 %	42 - 171	1	07/29/05 22:09

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-6-072205	Lab Sample ID:	507130-007-016-1/3
Sample Date/Time:	07/22/2005 12:30	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	89 %	37 - 169	1	07/29/05	22:09
58) Benzene-d6	101 %	78 - 121	1	07/29/05	22:09
59) Bromoform-d	85 %	76 - 135	1	07/29/05	22:09
60) Chloroethane-d5	91 %	60 - 126	1	07/29/05	22:09
61) Chloroform-d	89 %	80 - 123	1	07/29/05	22:09
62) Toluene-D8	100 %	77 - 120	1	07/29/05	22:09
63) Vinyl Chloride-d3	108 %	49 - 138	1	07/29/05	22:09
64) trans-1,3-Dichloropropene-d4	80 %	80 - 128	1	07/29/05	22:09

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-6-072205 DL	Lab Sample ID:	507130-007-017-2/3 DL
Sample Date/Time:	07/22/2005 12:30	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

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#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	BQL	U <i>J</i>	2.5	5	ug/L	08/01/05 18:34
2)	1,1,2,2-Tetrachloroethane	BQL	U	2.5	5	ug/L	08/01/05 18:34
3)	1,1,2-Trichloroethane	BQL	U	2.5	5	ug/L	08/01/05 18:34
4)	1,1-Dichloroethane	BQL	U	2.5	5	ug/L	08/01/05 18:34
5)	1,1-Dichloroethene	BQL	U	2.5	5	ug/L	08/01/05 18:34
6)	1,2,3-Trichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:34
7)	1,2,4-Trichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:34
8)	1,2-Dibromo-3-Chloropropane	BQL	U	2.5	5	ug/L	08/01/05 18:34
9)	1,2-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:34
10)	1,2-Dichloroethane	BQL	U	2.5	5	ug/L	08/01/05 18:34
11)	1,2-Dichloropropane	BQL	U	2.5	5	ug/L	08/01/05 18:34
12)	1,3-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:34
13)	1,4-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:34
14)	2-Butanone	BQL	U	25	5	ug/L	08/01/05 18:34
15)	2-Hexanone	BQL	U	25	5	ug/L	08/01/05 18:34
16)	4-Methyl-2-Pentanone	BQL	U	25	5	ug/L	08/01/05 18:34
17)	Acetone	BQL	U <i>R</i>	25	5	ug/L	08/01/05 18:34
18)	Benzene	BQL	U	2.5	5	ug/L	08/01/05 18:34
19)	Bromochloromethane	BQL	U	2.5	5	ug/L	08/01/05 18:34
20)	Bromodichloromethane	BQL	U	2.5	5	ug/L	08/01/05 18:34
21)	Bromoform	BQL	U	2.5	5	ug/L	08/01/05 18:34
22)	Bromomethane	BQL	U	2.5	5	ug/L	08/01/05 18:34
23)	Carbon Disulfide	BQL	U	2.5	5	ug/L	08/01/05 18:34
24)	Carbon Tetrachloride	BQL	U <i>J</i>	2.5	5	ug/L	08/01/05 18:34
25)	Chlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 18:34
26)	Chloroethane	BQL	U	2.5	5	ug/L	08/01/05 18:34
27)	Chloroform	BQL	U	2.5	5	ug/L	08/01/05 18:34
28)	Chloromethane	BQL	U	2.5	5	ug/L	08/01/05 18:34

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-6-072205 DL <i>CP 9/2/05</i>	Lab Sample ID:	507130-007-017-2/3 DL
Sample Date/Time:	07/22/2005 12:30	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U		2.5	5	ug/L	08/01/05	18:34
30) Dibromochloromethane	BQL U		2.5	5	ug/L	08/01/05	18:34
31) Dichlorodifluoromethane	BQL U	J	2.5	5	ug/L	08/01/05	18:34
32) Ethylbenzene	BQL U		2.5	5	ug/L	08/01/05	18:34
33) Ethylene Dibromide	BQL U		2.5	5	ug/L	08/01/05	18:34
34) Freon 113	BQL U		2.5	5	ug/L	08/01/05	18:34
35) Isopropylbenzene	BQL U		2.5	5	ug/L	08/01/05	18:34
36) Methyl Acetate	BQL U		2.5	5	ug/L	08/01/05	18:34
37) Methylcyclohexane	BQL U	J	2.5	5	ug/L	08/01/05	18:34
38) Methylene Chloride	4.2	J	2.5	5	ug/L	08/01/05	18:34
39) Styrene	BQL U		2.5	5	ug/L	08/01/05	18:34
40) Tetrachloroethylene	BQL U		2.5	5	ug/L	08/01/05	18:34
41) Toluene	BQL U		2.5	5	ug/L	08/01/05	18:34
42) Total Xylenes	BQL U		2.5	5	ug/L	08/01/05	18:34
43) Trichloroethene	49	J	2.5	5	ug/L	08/01/05	18:34
44) Trichlorofluoromethane	BQL U		2.5	5	ug/L	08/01/05	18:34
45) Vinyl Chloride	BQL U		2.5	5	ug/L	08/01/05	18:34
46) cis-1,2-Dichloroethene	26	J	2.5	5	ug/L	08/01/05	18:34
47) cis-1,3-Dichloropropene	BQL U		2.5	5	ug/L	08/01/05	18:34
48) tert-butyl methyl ether	BQL U		2.5	5	ug/L	08/01/05	18:34
49) trans-1,2-dichloroethene	BQL U	J	2.5	5	ug/L	08/01/05	18:34
50) trans-1,3-dichloropropene	BQL U		2.5	5	ug/L	08/01/05	18:34

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	111 %	75 - 131	5	08/01/05 18:34
52)	1,1-Dichloroethene-d2	55 %	65 - 130	5	08/01/05 18:34
53)	1,2-Dichlorobenzene-d4	53 %	50 - 150	5	08/01/05 18:34
54)	1,2-Dichloroethane-d4	118 %	78 - 129	5	08/01/05 18:34
55)	1,2-Dichloropropane-d6	90 %	84 - 123	5	08/01/05 18:34
56)	2-Butanone-d5	132 %	42 - 171	5	08/01/05 18:34

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-6-072205 DL	Lab Sample ID:	507130-007-017-2/3 DL
Sample Date/Time:	07/22/2005 12:30	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	113 %	37 - 169	5	08/01/05	18:34
58) Benzene-d6	91 %	78 - 121	5	08/01/05	18:34
59) Bromoform-d	108 %	76 - 135	5	08/01/05	18:34
60) Chloroethane-d5	75 %	60 - 126	5	08/01/05	18:34
61) Chloroform-d	109 %	80 - 123	5	08/01/05	18:34
62) Toluene-D8	86 %	77 - 120	5	08/01/05	18:34
63) Vinyl Chloride-d3	70 %	49 - 138	5	08/01/05	18:34
64) trans-1,3-Dichloropropene-d4	82 %	80 - 128	5	08/01/05	18:34

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507130-008-030-1/2
Sample Date/Time:	07/25/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	08/01/05 19:07
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	08/01/05 19:07
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	08/01/05 19:07
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	08/01/05 19:07
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	08/01/05 19:07
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	08/01/05 19:07
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	08/01/05 19:07
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	08/01/05 19:07
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	08/01/05 19:07
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	08/01/05 19:07
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	08/01/05 19:07
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	08/01/05 19:07
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	08/01/05 19:07
14)	2-Butanone	BQL	U	5.0	1	ug/L	08/01/05 19:07
15)	2-Hexanone	BQL	U	5.0	1	ug/L	08/01/05 19:07
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	08/01/05 19:07
17)	Acetone	BQL	U	5.0	1	ug/L	08/01/05 19:07
18)	Benzene	BQL	U	0.50	1	ug/L	08/01/05 19:07
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	08/01/05 19:07
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	08/01/05 19:07
21)	Bromoform	BQL	U	0.50	1	ug/L	08/01/05 19:07
22)	Bromomethane	BQL	U	0.50	1	ug/L	08/01/05 19:07
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	08/01/05 19:07
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	08/01/05 19:07
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	08/01/05 19:07
26)	Chloroethane	BQL	U	0.50	1	ug/L	08/01/05 19:07
27)	Chloroform	BQL	U	0.50	1	ug/L	08/01/05 19:07
28)	Chloromethane	BQL	U	0.50	1	ug/L	08/01/05 19:07

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507130-008-030-1/2
Sample Date/Time:	07/25/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	08/01/05	19:07
30) Dibromochloromethane	BQL U	0.50	1	ug/L	08/01/05	19:07
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	08/01/05	19:07
32) Ethylbenzene	BQL U	0.50	1	ug/L	08/01/05	19:07
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	08/01/05	19:07
34) Freon 113	BQL U	0.50	1	ug/L	08/01/05	19:07
35) Isopropylbenzene	BQL U	0.50	1	ug/L	08/01/05	19:07
36) Methyl Acetate	BQL U	0.50	1	ug/L	08/01/05	19:07
37) Methylcyclohexane	BQL U	0.50	1	ug/L	08/01/05	19:07
38) Methylene Chloride	0.82	0.50	1	ug/L	08/01/05	19:07
39) Styrene	BQL U	0.50	1	ug/L	08/01/05	19:07
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	08/01/05	19:07
41) Toluene	BQL U	0.50	1	ug/L	08/01/05	19:07
42) Total Xylenes	BQL U	0.50	1	ug/L	08/01/05	19:07
43) Trichloroethene	BQL U	0.50	1	ug/L	08/01/05	19:07
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	08/01/05	19:07
45) Vinyl Chloride	BQL U	0.50	1	ug/L	08/01/05	19:07
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	08/01/05	19:07
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	08/01/05	19:07
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	08/01/05	19:07
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	08/01/05	19:07
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	08/01/05	19:07

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	122 %	75 - 131	1	08/01/05 19:07
52)	1,1-Dichloroethene-d2	63 %	65 - 130	1	08/01/05 19:07
53)	1,2-Dichlorobenzene-d4	132 %	50 - 150	1	08/01/05 19:07
54)	1,2-Dichloroethane-d4	142 %	78 - 129	1	08/01/05 19:07
55)	1,2-Dichloropropane-d6	101 %	84 - 123	1	08/01/05 19:07
56)	2-Butanone-d5	133 %	42 - 171	1	08/01/05 19:07

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507130-008-030-1/2
Sample Date/Time:	07/25/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/23/2005 08:19	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	124 %	37 - 169	1	08/01/05	19:07
58) Benzene-d6	103 %	78 - 121	1	08/01/05	19:07
59) Bromoform-d	114 %	76 - 135	1	08/01/05	19:07
60) Chloroethane-d5	79 %	60 - 126	1	08/01/05	19:07
61) Chloroform-d	121 %	80 - 123	1	08/01/05	19:07
62) Toluene-D8	99 %	77 - 120	1	08/01/05	19:07
63) Vinyl Chloride-d3	79 %	49 - 138	1	08/01/05	19:07
64) trans-1,3-Dichloropropene-d4	101 %	80 - 128	1	08/01/05	19:07

GPL Laboratories, LLLP

Qualifier Definitions

Terra Tech EC, Inc.

Work Order: 507130

All Departments

U Indicates that the compound was analyzed for but not detected

BQL Below Quantitation Limit

Organics

B Indicates that the analyte was found in the associated blank as well as in the sample

D Indicates that the analyte was reported from a diluted analysis

E Indicates that the concentration detected exceeded the calibration range of the instrument

J Value is less than the reporting limit but greater than the MDL

P Indicates that there is greater than 25% difference for detected pesticide/Arochlor results between the two GC columns

Metals

J Indicates that the reported value was less than the reporting limit but greater than or equal to the IDL/MDL

E Indicates that the reported value is estimated because of the possible presence of interference (i.e. the serial dilution not within control limits)

H Indicates that the element was found in the associated blank as well as in the sample and the value is greater than or equal to the reporting limit

D Indicates that the analyte was reported from a diluted analysis

N Spiked sample recovery not within control limits

* Duplicate analysis not within control limits

GPL Laboratories, LLLP

Chain of Custody

Tetra Tech EC, Inc.

SDG: 507130

GPL LABORATORIES, LLLP

7210A Corporate Court
Frederick, MD 21703
(301) 694-5310
Fax (301) 620-0731

Contract #/Billing Reference

Pg.

Project:	Turnaround Time			# of Containers	Container Type	Preservative Used	Type of Analysis	
Client: Tetra Tech - USEPA				3	40 mL	HCl	Low Concentration VOC's	
Send Results To: Wendy DeMato								
Address: 100 The American Road								
Phone: 973-630-8000								
Morris Plains NJ 07952								
Sample ID#	Date Sampled	Time Sampled	Sample Matrix	Sampler's Initials	CLIENT COMMENTS Lab Cooler No.			
FS-072205	07/10/05	07:35	Water	CC				
TR-072205		07:35		CC				
SI-072205		08:17		CC				
SAI-072205		07:06		CC				
S-2-072205		09:45		CC				
S-8-072205		11:20		CW				
S-6-072205		12:30		CC				
Relinquished By: <i>[Signature]</i>	Date/Time: 07/14/05	Received By:	Date/Time:	Relinquished By:	Date/Time:	Shipper:	Received for Laboratory By: Bonnie	Date/Time: 7/13 10:13
Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Shipper:	Received for Laboratory By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Shipper:	Received for Laboratory By:	Date/Time:
Lab Comments:				Temp: 20				

G.P. W.O. 507130

GPL Laboratories, LLLP

Chain of Custody

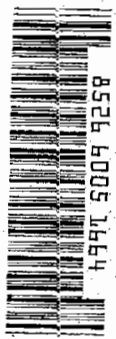
Tera Tech EC, Inc.

SDG: 507130

NO POUCH NEEDED. See back for peel and stick application instructions.

300 344
FedEx Express
US Airbill
Tracking Number: 8526 6005 1664

1 From This portion can be removed for recipient's records.
Sender's Name: GPL Labs
Sender's Address: 1776 1st St NW
City: Washington DC
State: DC ZIP: 20004
Phone: 202-638-2000
Recipient's Name: GPL Laboratories
Recipient's Address: 7210 L Corporate Ct
City: Frederick MD 21703
Phone: 301-827-7141



SDR

2 Your Internal Billing Reference: 1015 2106 10700 050000
3 To: Sender's Name: GPL Laboratories, Phone: 301-827-7141
4 Express Package Service: FedEx Priority Overnight, FedEx Standard Overnight, FedEx 2Day, FedEx Express Saver
5 Packaging: FedEx, FedEx Priority Mail, FedEx Priority Mail Express, FedEx Envelope, FedEx Box, FedEx Tube, Other
6 Special Handling: Saturday Delivery, Hold Weekly, Hold Saturday, Signature Required, Signature Restricted, Signature Adult, Signature Restricted Adult, Signature Restricted Adult (over 21)
7 Payment: Sender, Recipient, Third Party, Cash/Check, Credit Card, Other
8 Sign to Authorize Delivery Without a Signature: [Signature]



FedEx
emp# 55253 22JUL05
TRK# 8526 6005 1664
21703 -NO JS
XO FDKA
IAD
Deliver By: 23JUL05
A2

ALIGN OPEN END OF FEDEX AIRBILL POUCH HERE

GPL Laboratories, LLLP

Chain of Custody

Tetra Tech EC, Inc.

SDG: 507130

GPL Laboratories, LLLP

Figure 1
SAMPLE RECEIPT CHECKLIST

W.O. No: <u>507130</u>	Carrier Name: <u>Fedex</u>	
Client Name: <u>Tetra Tech - USEPA</u>	Prepared (Logged In) By: <u>[Signature]</u>	Initials Date: <u>7/23/05</u>
Date Received: <u>7/23/05</u>	Project: _____	
Time Received: <u>10:23</u>	Site: _____	
Received By: <u>[Signature]</u>	VOA Holding Blank I.D. No: _____	

<p>Airbill/Manifest Present? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>No. _____</p> <p>Shipping Container in Good Condition? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Custody Seals Present on Shipping Container? Condition: Broken _____ Intact-not dated or signed _____ Intact-dated and signed <input checked="" type="checkbox"/></p> <p>Usage of Tamper Evident Type <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Chain-of-Custody Present? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Chain-of-Custody Agrees with Sample Labels? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Chain-of-Custody Signed? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Packing Present in Shipping Container? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Type of Packing: <u>Bubble wrap</u></p> <p>Custody seals on Sample Bottles? Condition: Good _____ Broken _____</p> <p>Total Number of Sample Bottles <u>29</u></p> <p>Total Number of Samples <u>7</u></p> <p>Samples Intact? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Sufficient Sample Volume for Indicated Test? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p>Trip Blanks: No. of Sets _____</p> <p>Field Blanks: No. of Sets _____</p> <p>Equip. Blank: No. of Sets _____</p> <p>Field Duplicate: No. of Sets _____</p> <p>MS/MSD: No of Sets _____</p> <p>VOA Vials Have Zero Headspace? If yes, smaller or greater than a Green Pea (see comments) _____</p> <p>Preservatives Added to Sample? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>pH Check Required? Performed By? _____</p> <p>Ice Present in Shipping Container? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">Container #</td> <td style="text-align: center;">Temp.</td> <td style="text-align: center;">Container #</td> <td style="text-align: center;">Temp.</td> </tr> <tr> <td style="text-align: center;"><u>1</u></td> <td style="text-align: center;"><u>2.0</u></td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> </table> <p>Project Manager Contacted? Name: <u>[Signature]</u> Date Contacted: <u>7/23/05</u></p>	Container #	Temp.	Container #	Temp.	<u>1</u>	<u>2.0</u>	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Container #	Temp.	Container #	Temp.														
<u>1</u>	<u>2.0</u>	_____	_____														
_____	_____	_____	_____														
_____	_____	_____	_____														

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A

COMMENTS: _____

Checklist Completed By: [Signature]
 Date: 7/23/05

SOP No: F.2V14

CLP DATA ASSESSMENT

Functional Guidelines for Evaluating Organic Analysis

PROJECT NO.: 507116

LABORATORY: GPL Laboratories

SITE: Vestal Well

DATA ASSESSMENT

The current SOP No. HW-13 (Revision 3), July 2001 for CLP Organics Review and Preliminary Review has been applied.

All data were found to be valid and acceptable except those analytes which have been rejected, "R" (unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's
Signature: *Cecilia A. March* Date: 9/12/05

Verified By: _____ Date: _____

CLP DATA ASSESSMENT

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

All samples were analyzed within specified holding times, therefore, no action was required.

2. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

All surrogates were within limits.

CLP DATA ASSESSMENT

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

Trichloroethene exhibited low recovery and exceeded precision criteria for the matrix spikes performed on sample 1-32A-071905. No action was required. The associated blank spike was satisfactory.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than the blank contaminant level (2 or 10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) Method blank contamination:

No qualifications were required.

B) Field or rinse blank contamination:

methylene chloride: 1-29A-071905, 1-29-071905, 1-32A-071905,
1-32-071905, 1-30A-071905, 1-29-071905DL

C) Trip blank contamination:

No qualifications were required.

CLP DATA ASSESSMENT

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenylphosphine (DFTPP).

If the mass calibration is in error, all associated data will be classified as unusable "R".

All criteria were met.

CLP DATA ASSESSMENT

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be ≥ 0.05 (≥ 0.01 for poor performers) in both initial and continuing calibrations. A value < 0.05 , < 0.01 for poor performers, indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

No qualifications were required.

CLP DATA ASSESSMENT

7. CALIBRATION:

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD and %D must be $\leq 30\%$, $\leq 50\%$ for the poor performers. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "C" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:

1,2,3-Trichlorobenzene exceeded %RSD criteria, but no qualifications were required.

Qualified as estimated (C/UJ):
methylcyclohexane: all samples

freon 113: 1-29A-071905, 1-29-071905, 1-32-071905, 1-30A-071905,
TB-071905, FB-071905

CLP DATA ASSESSMENT

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must fall within the limits of $\pm 40\%$ of the associated continuing calibration standard. The retention time of the internal standard must not vary more than ± 0.33 minutes from the associated continuing calibration standard. If the area count is outside the ($\pm 40\%$) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 20 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction.

All internal standards were within limits.

CLP DATA ASSESSMENT

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

N/A

B) Pesticide Fraction:

The retention times of reported compounds must fall within the calculated retention time (RT) windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10 μ g/ml in the final sample extract.

N/A

CLP DATA ASSESSMENT

10. CONTRACT PROBLEMS NON-COMPLIANCE:

11. FIELD DOCUMENTATION:

12. OTHER PROBLEMS:

13. This package contains re-extractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified as not to be used.

1-29-071905: E41872

DPO: [] ACTION [] FYI REGION II

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

Work Order No.: 507116

LABORATORY: GPL Laboratories DATA USER: EPA Region II

SOW: OLC03.2 REVIEW COMPLETION DATE: 9/12/05

NO. OF SAMPLES: 7 WATER SOIL OTHER

REVIEWER: [] ESD [] ESAT [] OTHER, CONTRACTOR TTECI

QC ITEM	VOA	BNA	PCB		
HOLDING TIMES	O				
GC-MS PERFORMANCE	O				
INITIAL CALIBRATIONS	O				
CONTINUING CALIBRATIONS	X				
FIELD BLANKS (F = N/A)	O				
LABORATORY BLANKS	O				
SURROGATES	O				
MATRIX SPIKE/DUPLICATES	O				
QC SAMPLES (LCS, PVS)	O				
INTERNAL STANDARDS	O				
COMPOUND IDENTIFICATION	O				
COMPOUND QUANTITATION	O				
SYSTEM PERFORMANCE	O				
OVERALL ASSESSMENT	X				

O = No problems or minor problems that do not affect data usability.
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as either estimated or unusable.
Z = More than about 5% of the data points are qualified as unusable.

DPO ACTION ITEMS:

AREAS OF CONCERN:

DATA REJECTION SUMMARY

Type of Review: Level 4 Date: 9/12/05 Work Order No.: 507116

Site Name: Vestal Well Lab Name: GPL Laboratories

Reviewer's Initials: PM Number of Samples: 7W

Analytes Rejected Due to Exceeding Review Criteria For:

	No. of Compounds/No. of Fractions (Samples)										
	Surrogates	Holding Time	Calibration	Contamination	ID	Internal Standards	Other	Total # of Samples	Total # Rejected	Total # in All Samples	Total %
VOA (50)	0	0	0	0	0	0		8	0	/ 400	= 0 %
ACID (14)										/	= %
B/N (51)										/	= %
PEST (21)										/	= %
PCB (7)										/	= %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

Analytes Estimated Due to Exceeding Review Criteria For:

	No. of Compounds/No. of Fractions (Samples)										
	Surrogates	Holding Time	Calibration	Contamination	ID	Internal Standards	Other	Total # of Samples	Total # Estimated	Total # in All Samples	Total %
VOA (50)	0	0	8	5	0	0		8	13	/ 400	= 3 %
ACID (14)										/	= %
B/N (51)										/	= %
PEST (21)										/	= %
PCB (7)										/	= %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

STANDARD OPERATING PROCEDURE

Page 1 of 5

Title: Evaluation of Metals Data for the
Contract Laboratory Program
Appendix A.2: Data Assessment Narrative

Date: Jan. 1992
Number: HW-2
Revision: 11

Project # 507116 **Matrix:** **Soil** _____

Site Vestal Well **Lab** GPL Laboratories **Water** 3

Contractor TTECI **Reviewer** C. Minch **Other** _____

A.2.1 **Validation Flags-** The following flags have been applied in red by the data validator and must be considered by the data user.

J- This flag indicates the result qualified as **estimated**

Red- Line- A red-line drawn through a sample result indicates **unusable** value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

Fully Usable Data- The results that do not carry "J" or "red-line" are fully **usable**.

Contractual Qualifiers- The legend of contractual qualifiers applied by the lab on Form I's is found on page B-20 of SOW ILM01.0.

A.2.2 The data assessment is given below and on the attached sheets.

Arsenic exhibited low CRI recovery and was subsequently qualified as estimated (UJ) in 1-29-071905, 1-29A-071905, and FB-071905.

Chromium was estimated in 1-29-071905 because the serial dilution exceeded criteria.

Title: Evaluation of Metals Data for the
Contract Laboratory Program
Appendix A.2: Data Assessment Narrative

Date: Jan. 1992
Number: HW-2
Revision: 11

A.2.3 Contract-Problem/Non-Compliance

Arsenic failed CRI criteria.
Chromium exceeded serial dilution criteria.

MMB/ESAT Reviewer: _____
Signature

Date: _____

Contractor Reviewer: Cecilia N. March
Signature

Date: 9/12/05

Verified by: _____

Date: _____

Title: Evaluation of Metals Data for the
Contract Laboratory Program
Appendix A.3: Contract Non-Compliance
(SMO Report)

Date: Jan. 1992
Number: HW-2
Revision: 11

CONTRACT NON-COMPLIANCE
(SMO REPORT)

Regional Review of Uncontrolled Hazardous Waste
Site Contract Laboratory Data Package

PROJECT NO. 507116

The hardcopied (laboratory name) GFL Laboratories
Inorganic data package received at Region III has been reviewed and the quality assurance and performance data
summarized. The data reviewed included:
Sample No: FB-071905, 1-29-071905, 1-29A-071905

Conc. & Matrix: 3 water

Contract No. () requires that specific analytical work be done and that associated reports be provided by the
contractor to the Regions, EMSL-LV, and SMO. The general criteria used to determine the performance were based on
an examination of:

- Data Completeness
- Matrix Spike Results
- Calibration Standards Results
- Laboratory Control Sample
- Duplicate Analysis Results
- Blank Analysis Results
- MSA Results

Items of non-compliance with the above contract are described below.

Comments:

Arsenic failed CRI criteria.
Chromium exceeded serial dilution criteria.

 CW
Reviewer's Initials

 9/12/05
Date

Title: Evaluation of Metals Data for the
Contract Laboratory Program
Appendix A.5: CLP Data Assessment
Summary Form (Inorganics)

Date: Jan. 1992
Number: HW-2
Revision: 11

CLP DATA ASSESSMENT SUMMARY FORM (INORGANICS)

Type of Review: Level 4 Date: 9/12/05 Project No.: 507116

Site: Vestal Well Lab Name: GPL Laboratories

Reviewer's Initials: CW Number of Samples: 3W

Analytes Rejected Due to Exceeding Review Criteria

	Holding Time	CRDL/CRI Calibration	Prep Blank	Field Blank	Interference	Matrix Spike	Duplicates		Detection Limits	LCS	Serial Dilution	Other	Total Analytes	Rejected
							Lab	Field						
ICP													66	0
Flame AA														
Furnace AA														
Mercury													3	0
Gen. Chem.														
Total													69	0

Analytes Flagged as Estimated (J) Due to Exceeding Criteria For:

	Holding Time	CRDL/CRI Calibration	Prep Blank	Field Blank	Interference	Matrix Spike	Duplicates		Detection Limits	LCS	Serial Dilution	Other	Total Analytes	Estimated
							Lab	Field						
ICP		3									1		66	4
Flame AA														
Furnace AA														
Mercury													3	0
Gen. Chem.														
Total		3									1		4	4

Note:

Asterisk (*) indicates additional exceedances of review criteria.

Subj: **Vestal Well 507116**
Date: 8/22/05 1:47:45 PM Eastern Daylight Time
From: Auseal
To: huebschman@gplab.com

Pat,

The following issues require resolution before I can complete my review of the Vestal Well data package identified below:

507116

Volatiles

- ✓1. Analyses were performed past the 7-day hold time for unpreserved samples. Provide list of sample pH values.
- ✓2. Submit page 1 of quant report for file E4184() (CCV 7/25).
- ✓3. Why were TICs not reported for peaks at RT, 2.0, 9.7, 17.0, and 19.2 in any of the samples or blanks? Submit any necessary deliverables.
- ✓4. Delete carbon tetrachloride false positive in file E41872. Resubmit revised quant report and 2 copies of Form 1.

Metals

- ✓1. Resubmit Form 8 with %D entered for all positive results.
- ✓2. Resubmit mercury raw data with absorbance values for all samples and QC.

Please forward a hardcopy of all resubmittals to my attention at the address below by 8/29/05.

Thank you.

Celia Minch

873 Chivas Dr.

Toms River, NJ 08753

732-270-0988

Subj: **Re: Vestal Well 507116**
Date: 8/24/05 4:20:19 PM Eastern Daylight Time
From: Auseal
To: huebschman@ipass.net

pat,

Vestal Well 507116

✓ thanks for the resubs. regarding the volatiles, could you please have have the lab also reprocess Form 8s. OLCO3.2 limits are $\pm 40\%$ and ± 0.3 minutes.

thanks.

celia



Cambridge Isotope Laboratories, Inc.

ES-5038

50 Frontage Road, Andover, MA 01810-5413 USA
PH: 800.322.1174 (N. AMERICA) PH: 978.749.8000
FAX: 978.749.2768 WEB: www.isotope.com

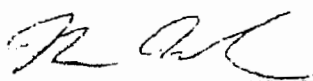
MEMORANDUM

TO: CLP Low Concentration Organics Laboratories
FROM: Cambridge Isotope Laboratories
SUBJECT: Volatiles DMC Standards
DATE: April 22, 2004

I would like to take this opportunity to clarify several issues regarding the Deuterated Monitoring Compound (DMC) standards used for EPA CLP SOW O_C03 2

1. CIL uses deuterated Methanol (CD_3OD) as the solvent for the Volatiles secondary stock solutions used in EPA OLC03 2. This is done to reduce the amount of deuterium back-exchange that may occur when exposed to unlabeled Methanol (CH_3OH). This will however result in a peak at m/z 36, which can be identified as a "laboratory artifact"
2. The Bromoform-d standard that is stabilized in deuterated methanol will, when diluted to working concentrations in unlabeled methanol, undergo a slow back-exchange. Therefore, while the initial analysis using fresh standard will have no native Bromoform contribution, over time, a small amount of native contribution may be observed
3. 1,3-dichloropropene is manufactured only as a mix of *cis*- and *trans*- isomers that cannot be isolated. Our standard contains approximately 70:30 *cis*-/*trans*- isomers. The *cis*- isomer is not relevant to this method and may be considered a "laboratory artifact" as defined by the method
4. Two unknown peaks have been found in the Volatiles DMC standard solutions. These peaks are low-level byproducts formed during production of deuterated methanol solvent, and may be detected during sample analysis. These peaks generally elute just after 1,1,2,2-Tetrachloroethane- d_2 and just prior to 1,2-Dichlorobenzene- d_4 , depending on chromatographic conditions. These deuterated compounds, if detected, may also be considered as laboratory artifacts
5. An unidentified contaminant has been found in CIL product ES-5038-1-10x. The contaminant elutes at, or slightly before Chloromethane, and may in fact be mis-identified as chloromethane. However, the secondary ions that confirm chloromethane are not found in the contaminant. While the concentration cannot be determined without knowing the identity of this contaminant, it calculates at approximately 0.4-0.6 $\mu g/L$ as chloromethane. This peak may be considered a laboratory artifact

Please feel free to contact CIL to discuss any of these issues


Kevin Millis
Regulatory Affairs Mgr.

4/22/04
Date

The form eight is required to calculate the % D only if the sample result is fifty times the mdl according to ILM05.3.

The mercury raw data results are resubmitted with the absorbance results.

Subj: **Re: Vestal Well 507116 Metals**
Date: 8/24/05 8:12:35 PM Eastern Daylight Time
From: Auseal
To: huebschman@ipass.net

Pat,
regarding the Form 8 as specified in ILMO5.3:

Under "% Difference", enter the absolute value (to the nearest whole number) of the percent difference in concentration of required analytes, between the original sample and the diluted sample (adjusted for dilution) according to the following formula:

EQ. 13 Serial Dilution Percent Difference

$$\% \text{Difference} = \frac{|I - S|}{I} \times 100$$

The values for "I" and "S" used to calculate percent difference in EQ. 13 shall be exactly those reported on this form. A value of zero shall be substituted for "S" if the analyte concentration is less than the MDL. **If the analyte concentration in (I) is less than the MDL concentration, leave the "% Difference" field empty.**

3.4.11.2.5 Under "Q", enter "E" if the percent difference is greater than 10% and the original sample concentration (reported on Form IAIN) is greater than 50 times the MDL reported on Form IX-IN.

According to the SOW then, a %D is required for all positive results (see underlined statement above). Why else would it state that an "E" flag is entered if the %D > 10% and the initial value of "I" is greater than 50 times the MDL. Also, a %D of 100% would result if the S value is reported at the MDL.
Please resubmit Form 8.

Celia

TV
3/17

Analytical Report For 507116

for


Tetra Tech EC, Inc.

Project Manager: Wendy DeMaio

Project Name: Vestal Well 1-1 Site

GPL **Laboratories**

GPL Laboratories, LLLP certifies that the test results meet all requirements of the NELAC Standards unless otherwise noted



Reviewed By,
Project Manager



Approved By,
Laboratory Director



Case Narrative
Tetra Tech EC, Inc.
Vestal Well 1-1 Site
Work Order: 507116

Reviewed by Patricia Huebschman on 08-16-

The Case Narrative, Chain of Custody, Sample Receipt Checklist, and the cover page of the Sample Analysis Report, are integral parts of GPL Laboratories' report package. If you did not receive all of these documents, please contact GPL immediately.

Sample Receipt

Eight water samples were received on 07/21/2005. The samples were delivered by Federal Express. Sample receipt conditions and temperatures are documented on the Sample Receipt checklist.

Sample Analysis

Samples were prepared and analyzed by GPL using the analytical methodologies indicated on the Sample Analysis Summary Report. In some chromatographic analyses, manual integration is used instead of automated integration because it produces more accurate results. All manual integrations are denoted on the sample quantitation report. Analysis results and limits for soil are reported on a dry weight basis unless otherwise specified on the report.

Volatiles

Seven water samples were analyzed for volatile organic compounds using EPA CLP method rev. OLC03.2.

All samples were analyzed within holding time.

All internal standard responses, and retention times were within QC limits.

All surrogate recoveries met QC requirements.

Sample 1-29-071905 was reanalyzed at 5 times dilution due to high concentration of three target analytes in the initial analysis. The three target analytes are reported within calibration limits in the reanalysis.

Matrix spike and matrix spike duplicate analyses were performed on sample 1-32A-071905. Recovery of trichloroethene was outside QC limits in the MS analysis. RPD was outside GC limits as well.

Two laboratory control samples were analyzed along with the sample batches. All recoveries were within QC limits.

A holding blank was prepared at samples receipt and stored with the samples. The holding blank was analyzed after all the samples were analyzed and results were reported as final.

TIC lists of all samples, method blanks and the holding blanks are enclosed with this package.

The following gas chromatography along with specifications was used to analyze the samples. Restek crossbonded-phase silicon coated fused silica capillary, Length = 60m ID = 0.53mm Film Thickness = 2.0 microns.

Manual integration was performed on several peaks improperly integrated by the software. The manually integrated compounds are designated by an "m" next to the area of the quantitation report, and chromatograms for these compounds were submitted with this package.

Semivolatiles

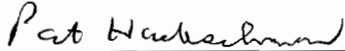
Metals

Three water samples were analyzed for HSL metals by CLP_ILM05.3 methods.

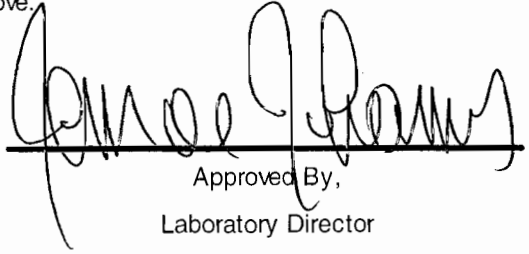
A matrix spike, and duplicate were performed on the water batch sample 507118-003 for all required analytes. A serial dilution was performed also for the ICP analytes. The duplicate was outside of the control limits for manganese; all associated data were flagged with an "**".

Calibration standards are verified against independent check standards purchased from a commercial vendor of environmental standards.

All GPL QA/QC criteria were met with the exceptions of those mentioned above.



Reviewed By,
Project Manager



Approved By,
Laboratory Director

GPL Laboratories, LLLP

Sample Summary Report

Tetra Tech EC, Inc.

Work Order: 507116

Client Sample ID	Lab Sample ID	Analytical Method	Matrix	Date Sampled	Date Recieved
1-29-071905	507116-004-013-1/4	CLP_OLC03.2	WATER	07/19/2005	07/21/2005
	507116-004-03-1/1	CLP_ILM05.3			
	507116-004-03-1/1	CLP_ILM05.3HG			
1-29-071905 DL	507116-004-014-2/4 DL	CLP_OLC03.2	WATER	07/19/2005	07/21/2005
1-29A-071905	507116-003-009-1/4	CLP_OLC03.2	WATER	07/19/2005	07/21/2005
	507116-003-030-1/1	CLP_ILM05.3			
	507116-003-030-1/1	CLP_ILM05.3HG			
1-30A-071905	507116-007-025-1/4	CLP_OLC03.2	WATER	07/19/2005	07/21/2005
1-32-071905	507116-006-02-1/4	CLP_OLC03.2	WATER	07/19/2005	07/21/2005
1-32A-071905	507116-005-017-1/4	CLP_OLC03.2	WATER	07/19/2005	07/21/2005
FB-071905	507116-002-005-1/4	CLP_OLC03.2	WATER	07/19/2005	07/21/2005
	507116-002-029-1/1	CLP_ILM05.3			
	507116-002-029-1/1	CLP_ILM05.3HG			
HOLDING BLANK	507116-008-032-1/2	CLP_OLC03.2	WATER	07/21/2005	07/21/2005
TB-071905	507116-001-00-1/4	CLP_OLC03.2	WATER	07/19/2005	07/21/2005

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-071905	Lab Sample ID:	507116-001-001-1/4
Sample Date/Time:	07/19/2005 07:45	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/25/05	18:04
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/25/05	18:04
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/25/05	18:04
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/25/05	18:04
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/25/05	18:04
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	18:04
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	18:04
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/25/05	18:04
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	18:04
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/25/05	18:04
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/25/05	18:04
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	18:04
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	18:04
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/25/05	18:04
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/25/05	18:04
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/25/05	18:04
17)	Acetone	BQL	U	5.0	1	ug/L	07/25/05	18:04
18)	Benzene	BQL	U	0.50	1	ug/L	07/25/05	18:04
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/25/05	18:04
20)	Bromodichloromethane	6.9		0.50	1	ug/L	07/25/05	18:04
21)	Bromoform	BQL	U	0.50	1	ug/L	07/25/05	18:04
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/25/05	18:04
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/25/05	18:04
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/25/05	18:04
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	18:04
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/25/05	18:04
27)	Chloroform	9.9		0.50	1	ug/L	07/25/05	18:04
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/25/05	18:04

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-071905	Lab Sample ID:	507116-001-001-1/4
Sample Date/Time:	07/19/2005 07:45	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/25/05	18:04
30) Dibromochloromethane	2.2	0.50	1	ug/L	07/25/05	18:04
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/25/05	18:04
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/25/05	18:04
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/25/05	18:04
34) Freon 113	BQL U J	0.50	1	ug/L	07/25/05	18:04
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/25/05	18:04
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/25/05	18:04
37) Methylcyclohexane	BQL U J	0.50	1	ug/L	07/25/05	18:04
38) Methylene Chloride	0.52	0.50	1	ug/L	07/25/05	18:04
39) Styrene	BQL U	0.50	1	ug/L	07/25/05	18:04
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/25/05	18:04
41) Toluene	BQL U	0.50	1	ug/L	07/25/05	18:04
42) Total Xylenes	BQL U	0.50	1	ug/L	07/25/05	18:04
43) Trichloroethene	0.49 J	0.50	1	ug/L	07/25/05	18:04
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/25/05	18:04
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/25/05	18:04
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	07/25/05	18:04
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/25/05	18:04
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/25/05	18:04
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/25/05	18:04
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/25/05	18:04

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	94 %	75 - 131	1	07/25/05 18:04
52)	1,1-Dichloroethene-d2	70 %	65 - 130	1	07/25/05 18:04
53)	1,2-Dichlorobenzene-d4	108 %	50 - 150	1	07/25/05 18:04
54)	1,2-Dichloroethane-d4	112 %	78 - 129	1	07/25/05 18:04
55)	1,2-Dichloropropane-d6	92 %	84 - 123	1	07/25/05 18:04
56)	2-Butanone-d5	105 %	42 - 171	1	07/25/05 18:04

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-071905	Lab Sample ID:	507116-001-001-1/4
Sample Date/Time:	07/19/2005 07:45	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	92 %	37 - 169	1	07/25/05	18:04
58) Benzene-d6	111 %	78 - 121	1	07/25/05	18:04
59) Bromoform-d	89 %	76 - 135	1	07/25/05	18:04
60) Chloroethane-d5	101 %	60 - 126	1	07/25/05	18:04
61) Chloroform-d	118 %	80 - 123	1	07/25/05	18:04
62) Toluene-D8	101 %	77 - 120	1	07/25/05	18:04
63) Vinyl Chloride-d3	101 %	49 - 138	1	07/25/05	18:04
64) trans-1,3-Dichloropropene-d4	96 %	80 - 128	1	07/25/05	18:04

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-071905	Lab Sample ID:	507116-002-005-1/4
Sample Date/Time:	07/19/2005 08:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/25/05 18:37
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/25/05 18:37
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/25/05 18:37
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/25/05 18:37
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/25/05 18:37
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 18:37
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 18:37
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/25/05 18:37
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 18:37
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/25/05 18:37
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/25/05 18:37
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 18:37
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 18:37
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/25/05 18:37
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/25/05 18:37
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/25/05 18:37
17)	Acetone	BQL	U	5.0	1	ug/L	07/25/05 18:37
18)	Benzene	BQL	U	0.50	1	ug/L	07/25/05 18:37
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/25/05 18:37
20)	Bromodichloromethane	7.2		0.50	1	ug/L	07/25/05 18:37
21)	Bromoform	BQL	U	0.50	1	ug/L	07/25/05 18:37
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/25/05 18:37
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/25/05 18:37
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/25/05 18:37
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 18:37
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/25/05 18:37
27)	Chloroform	10		0.50	1	ug/L	07/25/05 18:37
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/25/05 18:37

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-071905	Lab Sample ID:	507116-002-005-1/4
Sample Date/Time:	07/19/2005 08:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

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29) Cyclohexane	BQL U	0.50	1	ug/L	07/25/05	18:37
30) Dibromochloromethane	2.4	0.50	1	ug/L	07/25/05	18:37
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/25/05	18:37
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/25/05	18:37
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/25/05	18:37
34) Freon 113	BQL U J	0.50	1	ug/L	07/25/05	18:37
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/25/05	18:37
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/25/05	18:37
37) Methylcyclohexane	BQL U J	0.50	1	ug/L	07/25/05	18:37
38) Methylene Chloride	0.55	0.50	1	ug/L	07/25/05	18:37
39) Styrene	BQL U	0.50	1	ug/L	07/25/05	18:37
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/25/05	18:37
41) Toluene	BQL U	0.50	1	ug/L	07/25/05	18:37
42) Total Xylenes	BQL U	0.50	1	ug/L	07/25/05	18:37
43) Trichloroethene	BQL U	0.50	1	ug/L	07/25/05	18:37
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/25/05	18:37
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/25/05	18:37
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	07/25/05	18:37
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/25/05	18:37
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/25/05	18:37
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/25/05	18:37
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/25/05	18:37

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	98 %	75 - 131	1	07/25/05 18:37
52)	1,1-Dichloroethene-d2	62 %	65 - 130	1	07/25/05 18:37
53)	1,2-Dichlorobenzene-d4	107 %	50 - 150	1	07/25/05 18:37
54)	1,2-Dichloroethane-d4	114 %	78 - 129	1	07/25/05 18:37
55)	1,2-Dichloropropane-d6	107 %	84 - 123	1	07/25/05 18:37
56)	2-Butanone-d5	114 %	42 - 171	1	07/25/05 18:37

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-071905	Lab Sample ID:	507116-002-005-1/4
Sample Date/Time:	07/19/2005 08:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	104 %	37 - 169	1	07/25/05	18:37
58) Benzene-d6	109 %	78 - 121	1	07/25/05	18:37
59) Bromoform-d	90 %	76 - 135	1	07/25/05	18:37
60) Chloroethane-d5	108 %	60 - 126	1	07/25/05	18:37
61) Chloroform-d	119 %	80 - 123	1	07/25/05	18:37
62) Toluene-D8	101 %	77 - 120	1	07/25/05	18:37
63) Vinyl Chloride-d3	102 %	49 - 138	1	07/25/05	18:37
64) trans-1,3-Dichloropropene-d4	96 %	80 - 128	1	07/25/05	18:37

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-071905	Lab Sample ID:	507116-002-029-1/1
Sample Date/Time:	07/19/2005 08:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	ILMO5.2_HW2
Prepared Date/Time:	07/26/2005 00:00	Analytical Method:	CLP_ILM05.3

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#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Aluminum	38.8	J	200	1	ug/L	07/28/05 18:08
2)	Antimony	BQL	U	60	1	ug/L	07/28/05 18:08
3)	Arsenic	BQL	U J	10	1	ug/L	07/28/05 18:08
4)	Barium	0.82	J	200	1	ug/L	07/28/05 18:08
5)	Beryllium	BQL	U	5	1	ug/L	07/28/05 18:08
6)	Cadmium	BQL	U	5	1	ug/L	07/28/05 18:08
7)	Calcium	136	J	5000	1	ug/L	07/28/05 18:08
8)	Chromium	BQL	U	10	1	ug/L	07/28/05 18:08
9)	Cobalt	BQL	U	50	1	ug/L	07/28/05 18:08
10)	Copper	BQL	U	25	1	ug/L	07/28/05 18:08
11)	Iron	BQL	U	100	1	ug/L	07/28/05 18:08
12)	Lead	BQL	U	10	1	ug/L	07/28/05 18:08
13)	Magnesium	BQL	U	5000	1	ug/L	07/28/05 18:08
14)	Manganese	1.2	J*	15	1	ug/L	07/28/05 18:08
15)	Nickel	BQL	U	40	1	ug/L	07/28/05 18:08
16)	Potassium	38.9	J	5000	1	ug/L	07/28/05 18:08
17)	Selenium	BQL	U	35	1	ug/L	07/28/05 18:08
18)	Silver	BQL	U	10	1	ug/L	07/28/05 18:08
19)	Sodium	1060	J	5000	1	ug/L	07/28/05 18:08
20)	Thallium	BQL	U	25	1	ug/L	07/28/05 18:08
21)	Vanadium	BQL	U	50	1	ug/L	07/28/05 18:08
22)	Zinc	10.1	J	60	1	ug/L	07/28/05 18:08

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-071905	Lab Sample ID:	507116-002-029-1/1
Sample Date/Time:	07/19/2005 08:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	ILMO5.2_HG_CW1
Prepared Date/Time:	07/28/2005 13:25	Analytical Method:	CLP_ILM05.3HG

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Mercury	BQL	U	0.2	1	ug/L	07/29/05 12:51

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-29A-071905	Lab Sample ID:	507116-003-009-1/4
Sample Date/Time:	07/19/2005 08:25	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	10		0.50	1	ug/L	07/25/05	19:10
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/25/05	19:10
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/25/05	19:10
4)	1,1-Dichloroethane	9.4		0.50	1	ug/L	07/25/05	19:10
5)	1,1-Dichloroethene	2.1		0.50	1	ug/L	07/25/05	19:10
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	19:10
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	19:10
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/25/05	19:10
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	19:10
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/25/05	19:10
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/25/05	19:10
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	19:10
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	19:10
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/25/05	19:10
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/25/05	19:10
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/25/05	19:10
17)	Acetone	BQL	U	5.0	1	ug/L	07/25/05	19:10
18)	Benzene	BQL	U	0.50	1	ug/L	07/25/05	19:10
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/25/05	19:10
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/25/05	19:10
21)	Bromoform	BQL	U	0.50	1	ug/L	07/25/05	19:10
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/25/05	19:10
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/25/05	19:10
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/25/05	19:10
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	19:10
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/25/05	19:10
27)	Chloroform	BQL	U	0.50	1	ug/L	07/25/05	19:10
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/25/05	19:10

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-29A-071905	Lab Sample ID:	507116-003-009-1/4
Sample Date/Time:	07/19/2005 08:25	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/25/05	19:10
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/25/05	19:10
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/25/05	19:10
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/25/05	19:10
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/25/05	19:10
34) Freon 113	1.4	0.50	1	ug/L	07/25/05	19:10
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/25/05	19:10
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/25/05	19:10
37) Methylcyclohexane	BQL U	0.50	1	ug/L	07/25/05	19:10
38) Methylene Chloride	0.53	0.50	1	ug/L	07/25/05	19:10
39) Styrene	BQL U	0.50	1	ug/L	07/25/05	19:10
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/25/05	19:10
41) Toluene	BQL U	0.50	1	ug/L	07/25/05	19:10
42) Total Xylenes	BQL U	0.50	1	ug/L	07/25/05	19:10
43) Trichloroethene	6.4	0.50	1	ug/L	07/25/05	19:10
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/25/05	19:10
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/25/05	19:10
46) cis-1,2-Dichloroethene	21	0.50	1	ug/L	07/25/05	19:10
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/25/05	19:10
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/25/05	19:10
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/25/05	19:10
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/25/05	19:10

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	108 %	75 - 131	1	07/25/05 19:10
52)	1,1-Dichloroethene-d2	79 %	65 - 130	1	07/25/05 19:10
53)	1,2-Dichlorobenzene-d4	107 %	50 - 150	1	07/25/05 19:10
54)	1,2-Dichloroethane-d4	119 %	78 - 129	1	07/25/05 19:10
55)	1,2-Dichloropropane-d6	103 %	84 - 123	1	07/25/05 19:10
56)	2-Butanone-d5	120 %	42 - 171	1	07/25/05 19:10

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-29A-071905	Lab Sample ID:	507116-003-009-1/4
Sample Date/Time:	07/19/2005 08:25	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	108 %	37 - 169	1	07/25/05	19:10
58) Benzene-d6	105 %	78 - 121	1	07/25/05	19:10
59) Bromoform-d	87 %	76 - 135	1	07/25/05	19:10
60) Chloroethane-d5	100 %	60 - 126	1	07/25/05	19:10
61) Chloroform-d	107 %	80 - 123	1	07/25/05	19:10
62) Toluene-D8	104 %	77 - 120	1	07/25/05	19:10
63) Vinyl Chloride-d3	89 %	49 - 138	1	07/25/05	19:10
64) trans-1,3-Dichloropropene-d4	93 %	80 - 128	1	07/25/05	19:10

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-29A-071905	Lab Sample ID:	507116-003-030-1/1
Sample Date/Time:	07/19/2005 08:25	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	ILMO5.2_HW2
Prepared Date/Time:	07/26/2005 00:00	Analytical Method:	CLP_ILM05.3

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9/2/05*

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Aluminum	BQL	U	200	1	ug/L	07/28/05 18:16
2)	Antimony	BQL	U	60	1	ug/L	07/28/05 18:16
3)	Arsenic	BQL	U <i>J</i>	10	1	ug/L	07/28/05 18:16
4)	Barium	50.4	J	200	1	ug/L	07/28/05 18:16
5)	Beryllium	BQL	U	5	1	ug/L	07/28/05 18:16
6)	Cadmium	BQL	U	5	1	ug/L	07/28/05 18:16
7)	Calcium	117000		5000	1	ug/L	07/28/05 18:16
8)	Chromium	2.0	J	10	1	ug/L	07/28/05 18:16
9)	Cobalt	BQL	U	50	1	ug/L	07/28/05 18:16
10)	Copper	4.3	J	25	1	ug/L	07/28/05 18:16
11)	Iron	816		100	1	ug/L	07/28/05 18:16
12)	Lead	BQL	U	10	1	ug/L	07/28/05 18:16
13)	Magnesium	21400		5000	1	ug/L	07/28/05 18:16
14)	Manganese	309	*	15	1	ug/L	07/28/05 18:16
15)	Nickel	2.1	J	40	1	ug/L	07/28/05 18:16
16)	Potassium	1940	J	5000	1	ug/L	07/28/05 18:16
17)	Selenium	BQL	U	35	1	ug/L	07/28/05 18:16
18)	Silver	BQL	U	10	1	ug/L	07/28/05 18:16
19)	Sodium	83800		5000	1	ug/L	07/28/05 18:16
20)	Thallium	BQL	U	25	1	ug/L	07/28/05 18:16
21)	Vanadium	BQL	U	50	1	ug/L	07/28/05 18:16
22)	Zinc	17.4	J	60	1	ug/L	07/28/05 18:16

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-29A-071905	Lab Sample ID:	507116-003-030-1/1
Sample Date/Time:	07/19/2005 08:25	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	ILMO5.2_HG_CW1
Prepared Date/Time:	07/28/2005 13:25	Analytical Method:	CLP_ILM05.3HG

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Mercury	BQL	U	0.2	1	ug/L	07/29/05 12:53

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	USE	Sample Matrix:	WATER
Client Sample ID:	1-29-071905		Lab Sample ID:	507116-004-013-1/4
Sample Date/Time:	07/19/2005 09:40		Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	(20) 9/12/05	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53		Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	7.3 *	6.0 E	0.50	1	ug/L	07/25/05 19:43
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/25/05 19:43
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/25/05 19:43
4)	1,1-Dichloroethane	8.5		0.50	1	ug/L	07/25/05 19:43
5)	1,1-Dichloroethene	5.4		0.50	1	ug/L	07/25/05 19:43
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 19:43
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 19:43
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/25/05 19:43
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 19:43
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/25/05 19:43
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/25/05 19:43
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 19:43
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 19:43
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/25/05 19:43
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/25/05 19:43
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/25/05 19:43
17)	Acetone	BQL	U	5.0	1	ug/L	07/25/05 19:43
18)	Benzene	BQL	U	0.50	1	ug/L	07/25/05 19:43
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/25/05 19:43
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/25/05 19:43
21)	Bromoform	BQL	U	0.50	1	ug/L	07/25/05 19:43
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/25/05 19:43
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/25/05 19:43
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/25/05 19:43
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 19:43
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/25/05 19:43
27)	Chloroform	BQL	U	0.50	1	ug/L	07/25/05 19:43
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/25/05 19:43

* FROM DILUTION

Analytical Summary Report

Client Name: Tetra Tech EC, Inc. *USE* Sample Matrix: WATER
 Client Sample ID: 1-29-071905 Lab Sample ID: 507116-004-013-1/4
 Sample Date/Time: 07/19/2005 09:40 *Cⁿ 9/12/05* Percent Moisture: NA
 Receipt Date/Time: 07/21/2005 12:25 Preparation Method: SW5030LL
 Prepared Date/Time: 07/25/2005 12:53 Analytical Method: CLP_OLC03.2

29) Cyclohexane	BQL	U	0.50	1	ug/L	07/25/05	19:43
30) Dibromochloromethane	BQL	U	0.50	1	ug/L	07/25/05	19:43
31) Dichlorodifluoromethane	BQL	U	0.50	1	ug/L	07/25/05	19:43
32) Ethylbenzene	BQL	U	0.50	1	ug/L	07/25/05	19:43
33) Ethylene Dibromide	BQL	U	0.50	1	ug/L	07/25/05	19:43
34) Freon 113	4.6	J	0.50	1	ug/L	07/25/05	19:43
35) Isopropylbenzene	BQL	U	0.50	1	ug/L	07/25/05	19:43
36) Methyl Acetate	BQL	U	0.50	1	ug/L	07/25/05	19:43
37) Methylcyclohexane	BQL	U	0.50	1	ug/L	07/25/05	19:43
38) Methylene Chloride	0.62	U	0.50	1	ug/L	07/25/05	19:43
39) Styrene	BQL	U	0.50	1	ug/L	07/25/05	19:43
40) Tetrachloroethylene	BQL	U	0.50	1	ug/L	07/25/05	19:43
41) Toluene	BQL	U	0.50	1	ug/L	07/25/05	19:43
42) Total Xylenes	BQL	U	0.50	1	ug/L	07/25/05	19:43
43) Trichloroethene	<i>33 *</i>	-25-E-	0.50	1	ug/L	07/25/05	19:43
44) Trichlorofluoromethane	BQL	U	0.50	1	ug/L	07/25/05	19:43
45) Vinyl Chloride	BQL	U	0.50	1	ug/L	07/25/05	19:43
46) cis-1,2-Dichloroethene	<i>46 *</i>	-48-E-	0.50	1	ug/L	07/25/05	19:43
47) cis-1,3-Dichloropropene	BQL	U	0.50	1	ug/L	07/25/05	19:43
48) tert-butyl methyl ether	BQL	U	0.50	1	ug/L	07/25/05	19:43
49) trans-1,2-dichloroethene	BQL	U	0.50	1	ug/L	07/25/05	19:43
50) trans-1,3-dichloropropene	BQL	U	0.50	1	ug/L	07/25/05	19:43

** FROM DILUTION*

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	93 %	75 - 131	1	07/25/05 19:43
52)	1,1-Dichloroethene-d2	107 %	65 - 130	1	07/25/05 19:43
53)	1,2-Dichlorobenzene-d4	99 %	50 - 150	1	07/25/05 19:43
54)	1,2-Dichloroethane-d4	126 %	78 - 129	1	07/25/05 19:43
55)	1,2-Dichloropropane-d6	95 %	84 - 123	1	07/25/05 19:43
56)	2-Butanone-d5	123 %	42 - 171	1	07/25/05 19:43

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-29-071905	Lab Sample ID:	507116-004-013-1/4
Sample Date/Time:	07/19/2005 09:40	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	100 %	37 - 169	1	07/25/05	19:43
58) Benzene-d6	102 %	78 - 121	1	07/25/05	19:43
59) Bromoform-d	79 %	76 - 135	1	07/25/05	19:43
60) Chloroethane-d5	109 %	60 - 126	1	07/25/05	19:43
61) Chloroform-d	119 %	80 - 123	1	07/25/05	19:43
62) Toluene-D8	93 %	77 - 120	1	07/25/05	19:43
63) Vinyl Chloride-d3	100 %	49 - 138	1	07/25/05	19:43
64) trans-1,3-Dichloropropene-d4	89 %	80 - 128	1	07/25/05	19:43

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-29-071905 DL	Lab Sample ID:	507116-004-014-2/4 DL
Sample Date/Time:	07/19/2005 09:40	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	73		2.5	5	ug/L	07/27/05	14:47
2)	1,1,2,2-Tetrachloroethane	BQL	U	2.5	5	ug/L	07/27/05	14:47
3)	1,1,2-Trichloroethane	BQL	U	2.5	5	ug/L	07/27/05	14:47
4)	1,1-Dichloroethane	7.6		2.5	5	ug/L	07/27/05	14:47
5)	1,1-Dichloroethene	6.0		2.5	5	ug/L	07/27/05	14:47
6)	1,2,3-Trichlorobenzene	BQL	U	2.5	5	ug/L	07/27/05	14:47
7)	1,2,4-Trichlorobenzene	BQL	U	2.5	5	ug/L	07/27/05	14:47
8)	1,2-Dibromo-3-Chloropropane	BQL	U	2.5	5	ug/L	07/27/05	14:47
9)	1,2-Dichlorobenzene	BQL	U	2.5	5	ug/L	07/27/05	14:47
10)	1,2-Dichloroethane	BQL	U	2.5	5	ug/L	07/27/05	14:47
11)	1,2-Dichloropropane	BQL	U	2.5	5	ug/L	07/27/05	14:47
12)	1,3-Dichlorobenzene	BQL	U	2.5	5	ug/L	07/27/05	14:47
13)	1,4-Dichlorobenzene	BQL	U	2.5	5	ug/L	07/27/05	14:47
14)	2-Butanone	BQL	U	25	5	ug/L	07/27/05	14:47
15)	2-Hexanone	BQL	U	25	5	ug/L	07/27/05	14:47
16)	4-Methyl-2-Pentanone	BQL	U	25	5	ug/L	07/27/05	14:47
17)	Acetone	BQL	U	25	5	ug/L	07/27/05	14:47
18)	Benzene	BQL	U	2.5	5	ug/L	07/27/05	14:47
19)	Bromochloromethane	BQL	U	2.5	5	ug/L	07/27/05	14:47
20)	Bromodichloromethane	BQL	U	2.5	5	ug/L	07/27/05	14:47
21)	Bromoform	BQL	U	2.5	5	ug/L	07/27/05	14:47
22)	Bromomethane	BQL	U	2.5	5	ug/L	07/27/05	14:47
23)	Carbon Disulfide	BQL	U	2.5	5	ug/L	07/27/05	14:47
24)	Carbon Tetrachloride	8.4	BQL U	2.5	5	ug/L	07/27/05	14:47
25)	Chlorobenzene	BQL	U	2.5	5	ug/L	07/27/05	14:47
26)	Chloroethane	BQL	U	2.5	5	ug/L	07/27/05	14:47
27)	Chloroform	BQL	U	2.5	5	ug/L	07/27/05	14:47
28)	Chloromethane	BQL	U	2.5	5	ug/L	07/27/05	14:47

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-29-071905 DL	Lab Sample ID:	507116-004-014-2/4 DL
Sample Date/Time:	07/19/2005 09:40	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	2.5	5	ug/L	07/27/05	14:47
30) Dibromochloromethane	BQL U	2.5	5	ug/L	07/27/05	14:47
31) Dichlorodifluoromethane	BQL U	2.5	5	ug/L	07/27/05	14:47
32) Ethylbenzene	BQL U	2.5	5	ug/L	07/27/05	14:47
33) Ethylene Dibromide	BQL U	2.5	5	ug/L	07/27/05	14:47
34) Freon 113	BQL U	2.5	5	ug/L	07/27/05	14:47
35) Isopropylbenzene	BQL U	2.5	5	ug/L	07/27/05	14:47
36) Methyl Acetate	BQL U	2.5	5	ug/L	07/27/05	14:47
37) Methylcyclohexane	BQL U	2.5	5	ug/L	07/27/05	14:47
38) Methylene Chloride	7.4	2.5	5	ug/L	07/27/05	14:47
39) Styrene	BQL U	2.5	5	ug/L	07/27/05	14:47
40) Tetrachloroethylene	BQL U	2.5	5	ug/L	07/27/05	14:47
41) Toluene	BQL U	2.5	5	ug/L	07/27/05	14:47
42) Total Xylenes	BQL U	2.5	5	ug/L	07/27/05	14:47
43) Trichloroethene	33	2.5	5	ug/L	07/27/05	14:47
44) Trichlorofluoromethane	BQL U	2.5	5	ug/L	07/27/05	14:47
45) Vinyl Chloride	BQL U	2.5	5	ug/L	07/27/05	14:47
46) cis-1,2-Dichloroethene	46	2.5	5	ug/L	07/27/05	14:47
47) cis-1,3-Dichloropropene	BQL U	2.5	5	ug/L	07/27/05	14:47
48) tert-butyl methyl ether	BQL U	2.5	5	ug/L	07/27/05	14:47
49) trans-1,2-dichloroethene	BQL U	2.5	5	ug/L	07/27/05	14:47
50) trans-1,3-dichloropropene	BQL U	2.5	5	ug/L	07/27/05	14:47

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	94 %	75 - 131	5	07/27/05 14:47
52)	1,1-Dichloroethene-d2	74 %	65 - 130	5	07/27/05 14:47
53)	1,2-Dichlorobenzene-d4	111 %	50 - 150	5	07/27/05 14:47
54)	1,2-Dichloroethane-d4	100 %	78 - 129	5	07/27/05 14:47
55)	1,2-Dichloropropane-d6	99 %	84 - 123	5	07/27/05 14:47
56)	2-Butanone-d5	91 %	42 - 171	5	07/27/05 14:47

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-29-071905 DL	Lab Sample ID:	507116-004-014-2/4 DL
Sample Date/Time:	07/19/2005 09:40	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	89 %	37 - 169	5	07/27/05	14:47
58) Benzene-d6	106 %	78 - 121	5	07/27/05	14:47
59) Bromoform-d	92 %	76 - 135	5	07/27/05	14:47
60) Chloroethane-d5	99 %	60 - 126	5	07/27/05	14:47
61) Chloroform-d	101 %	80 - 123	5	07/27/05	14:47
62) Toluene-D8	106 %	77 - 120	5	07/27/05	14:47
63) Vinyl Chloride-d3	78 %	49 - 138	5	07/27/05	14:47
64) trans-1,3-Dichloropropene-d4	82 %	80 - 128	5	07/27/05	14:47

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-29-071905	Lab Sample ID:	507116-004-031-1/1
Sample Date/Time:	07/19/2005 09:40	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	ILMO5.2_HW2
Prepared Date/Time:	07/26/2005 00:00	Analytical Method:	CLP_ILM05.3

ca 9/12/05

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Aluminum	330		200	1	ug/L	07/28/05 18:24
2)	Antimony	BQL	U	60	1	ug/L	07/28/05 18:24
3)	Arsenic	BQL	U	10	1	ug/L	07/28/05 18:24
4)	Barium	48.2	J	200	1	ug/L	07/28/05 18:24
5)	Beryllium	BQL	U	5	1	ug/L	07/28/05 18:24
6)	Cadmium	BQL	U	5	1	ug/L	07/28/05 18:24
7)	Calcium	109000		5000	1	ug/L	07/28/05 18:24
8)	Chromium	12.6		10	1	ug/L	07/28/05 18:24
9)	Cobalt	8.3	J	50	1	ug/L	07/28/05 18:24
10)	Copper	3.2	J	25	1	ug/L	07/28/05 18:24
11)	Iron	7610		100	1	ug/L	07/28/05 18:24
12)	Lead	25.3		10	1	ug/L	07/28/05 18:24
13)	Magnesium	20500		5000	1	ug/L	07/28/05 18:24
14)	Manganese	94.0	*	15	1	ug/L	07/28/05 18:24
15)	Nickel	11.1	J	40	1	ug/L	07/28/05 18:24
16)	Potassium	1850	J	5000	1	ug/L	07/28/05 18:24
17)	Selenium	2.6	J	35	1	ug/L	07/28/05 18:24
18)	Silver	BQL	U	10	1	ug/L	07/28/05 18:24
19)	Sodium	79300		5000	1	ug/L	07/28/05 18:24
20)	Thallium	BQL	U	25	1	ug/L	07/28/05 18:24
21)	Vanadium	BQL	U	50	1	ug/L	07/28/05 18:24
22)	Zinc	23.5	J	60	1	ug/L	07/28/05 18:24

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-29-071905	Lab Sample ID:	507116-004-031-1/1
Sample Date/Time:	07/19/2005 09:40	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	ILMO5.2_HG_CW1
Prepared Date/Time:	07/28/2005 13:25	Analytical Method:	CLP_ILM05.3HG

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Mercury	BQL	U	0.2	1	ug/L	07/29/05 12:56

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-32A-071905	Lab Sample ID:	507116-005-017-1/4
Sample Date/Time:	07/19/2005 11:05	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	15:27
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05	15:27
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	15:27
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	15:27
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05	15:27
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	15:27
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	15:27
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05	15:27
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	15:27
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	15:27
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05	15:27
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	15:27
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	15:27
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05	15:27
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05	15:27
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05	15:27
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05	15:27
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05	15:27
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05	15:27
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/27/05	15:27
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05	15:27
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05	15:27
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05	15:27
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05	15:27
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	15:27
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05	15:27
27)	Chloroform	BQL	U	0.50	1	ug/L	07/27/05	15:27
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05	15:27

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-32A-071905 <i>AW9/12/05</i>	Lab Sample ID:	507116-005-017-1/4
Sample Date/Time:	07/19/2005 11:05	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	15:27
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/27/05	15:27
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	15:27
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	15:27
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	15:27
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	15:27
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	15:27
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	15:27
37) Methylcyclohexane	BQL U <i>J</i>	0.50	1	ug/L	07/27/05	15:27
38) Methylene Chloride	1.2 <i>B U</i>	0.50	1	ug/L	07/27/05	15:27
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	15:27
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	15:27
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	15:27
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	15:27
43) Trichloroethene	1.7	0.50	1	ug/L	07/27/05	15:27
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	15:27
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	15:27
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	07/27/05	15:27
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	15:27
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	15:27
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/27/05	15:27
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	15:27

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	101 %	75 - 131	1	07/27/05 15:27
52)	1,1-Dichloroethene-d2	65 %	65 - 130	1	07/27/05 15:27
53)	1,2-Dichlorobenzene-d4	104 %	50 - 150	1	07/27/05 15:27
54)	1,2-Dichloroethane-d4	109 %	78 - 129	1	07/27/05 15:27
55)	1,2-Dichloropropane-d6	95 %	84 - 123	1	07/27/05 15:27
56)	2-Butanone-d5	104 %	42 - 171	1	07/27/05 15:27

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-32A-071905	Lab Sample ID:	507116-005-017-1/4
Sample Date/Time:	07/19/2005 11:05	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	104 %	37 - 169	1	07/27/05	15:27
58) Benzene-d6	99 %	78 - 121	1	07/27/05	15:27
59) Bromoform-d	86 %	76 - 135	1	07/27/05	15:27
60) Chloroethane-d5	102 %	60 - 126	1	07/27/05	15:27
61) Chloroform-d	104 %	80 - 123	1	07/27/05	15:27
62) Toluene-D8	98 %	77 - 120	1	07/27/05	15:27
63) Vinyl Chloride-d3	73 %	49 - 138	1	07/27/05	15:27
64) trans-1,3-Dichloropropene-d4	82 %	80 - 128	1	07/27/05	15:27

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-32-071905	Lab Sample ID:	507116-006-021-1/4
Sample Date/Time:	07/19/2005 12:21	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/25/05	20:49
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/25/05	20:49
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/25/05	20:49
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/25/05	20:49
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/25/05	20:49
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	20:49
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	20:49
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/25/05	20:49
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	20:49
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/25/05	20:49
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/25/05	20:49
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	20:49
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	20:49
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/25/05	20:49
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/25/05	20:49
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/25/05	20:49
17)	Acetone	BQL	U	5.0	1	ug/L	07/25/05	20:49
18)	Benzene	BQL	U	0.50	1	ug/L	07/25/05	20:49
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/25/05	20:49
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/25/05	20:49
21)	Bromoform	BQL	U	0.50	1	ug/L	07/25/05	20:49
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/25/05	20:49
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/25/05	20:49
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/25/05	20:49
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/25/05	20:49
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/25/05	20:49
27)	Chloroform	BQL	U	0.50	1	ug/L	07/25/05	20:49
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/25/05	20:49

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-32-071905	Lab Sample ID:	507116-006-021-1/4
Sample Date/Time:	07/19/2005 12:21	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U		0.50	1	ug/L	07/25/05	20:49
30) Dibromochloromethane	BQL U		0.50	1	ug/L	07/25/05	20:49
31) Dichlorodifluoromethane	BQL U		0.50	1	ug/L	07/25/05	20:49
32) Ethylbenzene	BQL U		0.50	1	ug/L	07/25/05	20:49
33) Ethylene Dibromide	BQL U		0.50	1	ug/L	07/25/05	20:49
34) Freon 113	BQL U	J	0.50	1	ug/L	07/25/05	20:49
35) Isopropylbenzene	BQL U		0.50	1	ug/L	07/25/05	20:49
36) Methyl Acetate	BQL U		0.50	1	ug/L	07/25/05	20:49
37) Methylcyclohexane	BQL U	J	0.50	1	ug/L	07/25/05	20:49
38) Methylene Chloride	0.62	U	0.50	1	ug/L	07/25/05	20:49
39) Styrene	BQL U		0.50	1	ug/L	07/25/05	20:49
40) Tetrachloroethylene	BQL U		0.50	1	ug/L	07/25/05	20:49
41) Toluene	BQL U		0.50	1	ug/L	07/25/05	20:49
42) Total Xylenes	BQL U		0.50	1	ug/L	07/25/05	20:49
43) Trichloroethene	BQL U		0.50	1	ug/L	07/25/05	20:49
44) Trichlorofluoromethane	BQL U		0.50	1	ug/L	07/25/05	20:49
45) Vinyl Chloride	BQL U		0.50	1	ug/L	07/25/05	20:49
46) cis-1,2-Dichloroethene	BQL U		0.50	1	ug/L	07/25/05	20:49
47) cis-1,3-Dichloropropene	BQL U		0.50	1	ug/L	07/25/05	20:49
48) tert-butyl methyl ether	BQL U		0.50	1	ug/L	07/25/05	20:49
49) trans-1,2-dichloroethene	BQL U		0.50	1	ug/L	07/25/05	20:49
50) trans-1,3-dichloropropene	BQL U		0.50	1	ug/L	07/25/05	20:49

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	98 %	75 - 131	1	07/25/05 20:49
52)	1,1-Dichloroethene-d2	71 %	65 - 130	1	07/25/05 20:49
53)	1,2-Dichlorobenzene-d4	102 %	50 - 150	1	07/25/05 20:49
54)	1,2-Dichloroethane-d4	117 %	78 - 129	1	07/25/05 20:49
55)	1,2-Dichloropropane-d6	99 %	84 - 123	1	07/25/05 20:49
56)	2-Butanone-d5	122 %	42 - 171	1	07/25/05 20:49

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-32-071905	Lab Sample ID:	507116-006-021-1/4
Sample Date/Time:	07/19/2005 12:21	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	103 %	37 - 169	1	07/25/05	20:49
58) Benzene-d6	108 %	78 - 121	1	07/25/05	20:49
59) Bromoform-d	83 %	76 - 135	1	07/25/05	20:49
60) Chloroethane-d5	104 %	60 - 126	1	07/25/05	20:49
61) Chloroform-d	111 %	80 - 123	1	07/25/05	20:49
62) Toluene-D8	98 %	77 - 120	1	07/25/05	20:49
63) Vinyl Chloride-d3	88 %	49 - 138	1	07/25/05	20:49
64) trans-1,3-Dichloropropene-d4	85 %	80 - 128	1	07/25/05	20:49

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-30A-071905	Lab Sample ID:	507116-007-025-1/4
Sample Date/Time:	07/19/2005 16:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/25/05 21:22
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/25/05 21:22
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/25/05 21:22
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/25/05 21:22
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/25/05 21:22
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 21:22
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 21:22
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/25/05 21:22
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 21:22
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/25/05 21:22
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/25/05 21:22
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 21:22
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 21:22
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/25/05 21:22
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/25/05 21:22
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/25/05 21:22
17)	Acetone	BQL	U	5.0	1	ug/L	07/25/05 21:22
18)	Benzene	BQL	U	0.50	1	ug/L	07/25/05 21:22
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/25/05 21:22
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/25/05 21:22
21)	Bromoform	BQL	U	0.50	1	ug/L	07/25/05 21:22
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/25/05 21:22
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/25/05 21:22
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/25/05 21:22
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/25/05 21:22
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/25/05 21:22
27)	Chloroform	BQL	U	0.50	1	ug/L	07/25/05 21:22
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/25/05 21:22

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-30A-071905	Lab Sample ID:	507116-007-025-1/4
Sample Date/Time:	07/19/2005 16:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U		0.50	1	ug/L	07/25/05	21:22
30) Dibromochloromethane	BQL U		0.50	1	ug/L	07/25/05	21:22
31) Dichlorodifluoromethane	BQL U		0.50	1	ug/L	07/25/05	21:22
32) Ethylbenzene	BQL U		0.50	1	ug/L	07/25/05	21:22
33) Ethylene Dibromide	BQL U		0.50	1	ug/L	07/25/05	21:22
34) Freon 113	BQL U	J	0.50	1	ug/L	07/25/05	21:22
35) Isopropylbenzene	BQL U		0.50	1	ug/L	07/25/05	21:22
36) Methyl Acetate	BQL U		0.50	1	ug/L	07/25/05	21:22
37) Methylcyclohexane	BQL U	J	0.50	1	ug/L	07/25/05	21:22
38) Methylene Chloride	0.68	U	0.50	1	ug/L	07/25/05	21:22
39) Styrene	BQL U		0.50	1	ug/L	07/25/05	21:22
40) Tetrachloroethylene	BQL U		0.50	1	ug/L	07/25/05	21:22
41) Toluene	BQL U		0.50	1	ug/L	07/25/05	21:22
42) Total Xylenes	BQL U		0.50	1	ug/L	07/25/05	21:22
43) Trichloroethene	BQL U		0.50	1	ug/L	07/25/05	21:22
44) Trichlorofluoromethane	BQL U		0.50	1	ug/L	07/25/05	21:22
45) Vinyl Chloride	BQL U		0.50	1	ug/L	07/25/05	21:22
46) cis-1,2-Dichloroethene	BQL U		0.50	1	ug/L	07/25/05	21:22
47) cis-1,3-Dichloropropene	BQL U		0.50	1	ug/L	07/25/05	21:22
48) tert-butyl methyl ether	BQL U		0.50	1	ug/L	07/25/05	21:22
49) trans-1,2-dichloroethene	BQL U		0.50	1	ug/L	07/25/05	21:22
50) trans-1,3-dichloropropene	BQL U		0.50	1	ug/L	07/25/05	21:22

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	106 %	75 - 131	1	07/25/05 21:22
52)	1,1-Dichloroethene-d2	68 %	65 - 130	1	07/25/05 21:22
53)	1,2-Dichlorobenzene-d4	109 %	50 - 150	1	07/25/05 21:22
54)	1,2-Dichloroethane-d4	129 %	78 - 129	1	07/25/05 21:22
55)	1,2-Dichloropropane-d6	103 %	84 - 123	1	07/25/05 21:22
56)	2-Butanone-d5	138 %	42 - 171	1	07/25/05 21:22

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	1-30A-071905	Lab Sample ID:	507116-007-025-1/4
Sample Date/Time:	07/19/2005 16:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/25/2005 12:53	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	103 %	37 - 169	1	07/25/05	21:22
58) Benzene-d6	107 %	78 - 121	1	07/25/05	21:22
59) Bromoform-d	88 %	76 - 135	1	07/25/05	21:22
60) Chloroethane-d5	111 %	60 - 126	1	07/25/05	21:22
61) Chloroform-d	114 %	80 - 123	1	07/25/05	21:22
62) Toluene-D8	93 %	77 - 120	1	07/25/05	21:22
63) Vinyl Chloride-d3	93 %	49 - 138	1	07/25/05	21:22
64) trans-1,3-Dichloropropene-d4	89 %	80 - 128	1	07/25/05	21:22

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507116-008-032-1/2
Sample Date/Time:	07/21/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:07
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:07
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:07
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:07
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05	17:07
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:07
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:07
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05	17:07
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:07
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:07
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05	17:07
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:07
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:07
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05	17:07
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05	17:07
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05	17:07
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05	17:07
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05	17:07
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05	17:07
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/27/05	17:07
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05	17:07
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05	17:07
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05	17:07
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05	17:07
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:07
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:07
27)	Chloroform	BQL	U	0.50	1	ug/L	07/27/05	17:07
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05	17:07

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507116-008-032-1/2
Sample Date/Time:	07/21/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	17:07
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/27/05	17:07
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	17:07
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	17:07
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	17:07
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	17:07
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	17:07
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	17:07
37) Methylcyclohexane	BQL U	0.50	1	ug/L	07/27/05	17:07
38) Methylene Chloride	0.76 B	0.50	1	ug/L	07/27/05	17:07
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	17:07
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	17:07
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	17:07
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	17:07
43) Trichloroethene	BQL U	0.50	1	ug/L	07/27/05	17:07
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	17:07
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	17:07
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	07/27/05	17:07
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	17:07
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	17:07
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/27/05	17:07
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	17:07

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	98 %	75 - 131	1	07/27/05 17:07
52)	1,1-Dichloroethene-d2	57 %	65 - 130	1	07/27/05 17:07
53)	1,2-Dichlorobenzene-d4	96 %	50 - 150	1	07/27/05 17:07
54)	1,2-Dichloroethane-d4	103 %	78 - 129	1	07/27/05 17:07
55)	1,2-Dichloropropane-d6	91 %	84 - 123	1	07/27/05 17:07
56)	2-Butanone-d5	107 %	42 - 171	1	07/27/05 17:07

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507116-008-032-1/2
Sample Date/Time:	07/21/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:25	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	96 %	37 - 169	1	07/27/05	17:07
58) Benzene-d6	99 %	78 - 121	1	07/27/05	17:07
59) Bromoform-d	82 %	76 - 135	1	07/27/05	17:07
60) Chloroethane-d5	95 %	60 - 126	1	07/27/05	17:07
61) Chloroform-d	99 %	80 - 123	1	07/27/05	17:07
62) Toluene-D8	100 %	77 - 120	1	07/27/05	17:07
63) Vinyl Chloride-d3	75 %	49 - 138	1	07/27/05	17:07
64) trans-1,3-Dichloropropene-d4	84 %	80 - 128	1	07/27/05	17:07

GPL Laboratories, LLLP

Qualifier Definitions

Terra Tech EC, Inc.

Work Order: 507116

All Departments

- U Indicates that the compound was analyzed for but not detected
- BQL Below Quantitation Limit

Organics

- B Indicates that the analyte was found in the associated blank as well as in the sample
- D Indicates that the analyte was reported from a diluted analysis
- E Indicates that the concentration detected exceeded the calibration range of the instrument
- J Value is less than the reporting limit but greater than the MDL
- P Indicates that there is greater than 25% difference for detected pesticide/Arochlor results between the two GC columns

Metals

- J Indicates that the reported value was less than the reporting limit but greater than or equal to the IDL/MDL
- E Indicates that the reported value is estimated because of the possible presence of interference (i.e. the serial dilution not within control limits)
- H Indicates that the element was found in the associated blank as well as in the sample and the value is greater than or equal to the reporting limit
- D Indicates that the analyte was reported from a diluted analysis
- N Spiked sample recovery not within control limits
- * Duplicate analysis not within control limits

GPL Laboratories, LLLP

Chain of Custody

Tetra Tech EC, Inc.

SDG: 507116

GPL LABORATORIES, LLLP

7210A Corporate Court
 Frederick, MD 21703
 (301) 694-5310
 Fax (301) 620-0731

Contract #/Billing Reference

1 of 1 Pgs.

Project:	West	Turnaround Time																	
Client:	USEPA	# of Containers	4																
Send Results To:	Mindy DeBello	Container Type	40 mL LL																
Address:	1000 The American Road	Preservative Used	HCl HNO ₃																
Phone:	Morris Plains NJ 07957 973-630-8000	Type of Analysis	Low Concentration VOCs TAL Metals																
Sample ID#	Date Sampled	Time Sampled	Sample Matrix	Sampler's Initials	Analysis	CLIENT COMMENTS													
TB-071905	7/14/05	07:45	Water	CC	X														
FR-071905		08:00		CC	X														
1-29A-071905		08:25		CW	X														
1-29A-071905		09:40		CW	X														
1-32A-071905		11:05		CW	X														
1-33-071905		12:21		CW	X														
3A-071905		14:20		CW	X	long Petri/10/1													
3B-071905				CW	X														
3C-071905				CW	X														
1-30A-071905		16:00		CW	X														
Relinquished By:	<i>Mindy DeBello</i>	Date/Time:	07/14/05 17:00	Received By:		Date/Time:		Relinquished By:		Date/Time:		Received for Laboratory By:	<i>Chino</i>	Date/Time:	7/14/05	Airbill No.:	852660051631	Temp:	3.0

G.P.W.O. 507116

GPL Laboratories, LLLP

Chain of Custody

Tetra Tech EC, Inc.

SDG: 507116

NO POUCH NEEDED.
See back for peel and stick application instructions.

RECIPIENT: PEEL HERE

FedEx US Airbill

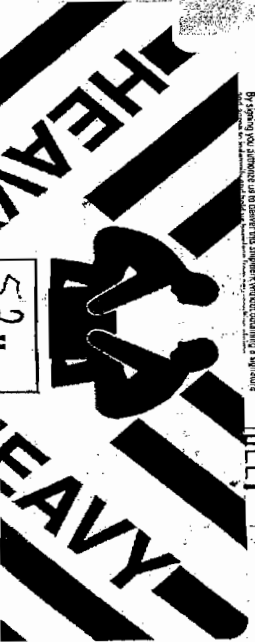
8526 6005 1631

From: This portion can be removed to the sender's receipt
Date: 07/16/05
Sender's Name: OVCIS CIC/MD
Company: OVCIS
Address: AMERICAN CD
City: WASHINGTON
State: DC
Zip: 20005-1631
Sender's Phone: 400-5006

2 Your Internal Billing Reference: 645 3109 0700 07000

3 To
Recipient's Name: GPL Laboratories
Company: GPL Laboratories
Address: 7210A Corporate Ct
City: Frederick
State: MD
Zip: 21703
Recipient's Phone: 301-694-5310

4a Express Package Service
 FedEx Priority Overnight
4b Express Freight Service
 FedEx 1Day Freight
 FedEx 2Day
 FedEx International Priority
 FedEx International Economy
5 Packaging
 FedEx Envelope
 FedEx Small Box
 FedEx Medium Box
 FedEx Large Box
6 Special Handling
 Saturday Delivery
 Signature Required
 Insure to Value
 Fragile
 Restricted
 Hazardous
 Other (Specify):
Do the shipment contents
require a signature?
 Yes (Required)
 No (Optional)
Do you cross-handle the contents?
 Yes (Required)
 No (Optional)
Payment Bill to:
 Sender
 Recipient
 Third Party
Total Packages: 1



ALIGN OPEN



21703 -MD-US 19 FDKA

FedEx PRIORITY OVERNIGHT WED

TRK# 8526 6005 1631

FORM 0275

Deliver By: 20 JUL 05 A2

GPL Laboratories, LLLP

Chain of Custody

Tetra Tech EC, Inc.

SDG: 507116

GPL Laboratories, LLLP

Figure 3

Sample Preservation Check Documentation Form

Work Order: 507116

Parameter:	Metals	Phenol	TPH O&G	Classical Parameters	Cyanide	Sulfide	Radiology	Other	Reagent Lot #	see checklist for comments
Preservative: pH Value	HN03 <2	H2SO4 <2	H2SO4 <2	H2SO4 <2	NaOH >12	NaOH >9	HN03 <2	Preservation Adjustment		
Client ID										
FB - 071905								Y/N		
1-29-A - 071905								Y/N		
1-29 - 071905								Y/N		
								Y/N		
								Y/N		
								Y/N		
								Y/N		
								Y/N		
								Y/N		
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								Y/N		
								Y/N		
								Y/N		
								Y/N		
								Y/N		

Sample Preservation Check Performed By: McDermott Date: 1/21/05

GPL Laboratories, LLLP

Chain of Custody

Tetra Tech EC, Inc.

SDG: 507116

GPL Laboratories, LLLP

Figure 1
SAMPLE RECEIPT CHECKLIST

W.O. No: 507116
 Client Name: Tetra Tech
 Date Received: 7/21/05
 Time Received: 10:05
 Received By: Chris
 Carrier Name: FedX
 Prepared (Logged In) By: MDI 7/24/05
Initials Date
 Project: _____
 Site: _____
 VOA Holding Blank I.D. No: _____

Airbill/Manifest Present?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Trip Blanks: No. of Sets _____	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
No. _____		Field Blanks: No. of Sets _____	
Shipping Container in Good Condition?	<input checked="" type="checkbox"/> <input type="checkbox"/>	Equip. Blank: No. of Sets _____	<input type="checkbox"/> <input checked="" type="checkbox"/>
Custody Seals Present on Shipping Container?	<input type="checkbox"/> <input type="checkbox"/>	Field Duplicate: No. of Sets _____	<input type="checkbox"/> <input checked="" type="checkbox"/>
Condition: Broken _____		MS/MSD: No of Sets _____	<input type="checkbox"/> <input checked="" type="checkbox"/>
Intact-not dated or signed _____		VOA Vials Have Zero Headspace?	<input type="checkbox"/> <input type="checkbox"/>
Intact-dated and signed <input checked="" type="checkbox"/>		If yes, smaller or greater than a Green Pea (see comments)	
Usage of Tamper Evident Type	<input checked="" type="checkbox"/> <input type="checkbox"/>	Preservatives Added to Sample?	<input type="checkbox"/> <input checked="" type="checkbox"/>
Chain-of-Custody Present?	<input checked="" type="checkbox"/> <input type="checkbox"/>	pH Check Required?	<input type="checkbox"/> <input checked="" type="checkbox"/>
Chain-of-Custody Agrees with Sample Labels?	<input checked="" type="checkbox"/> <input type="checkbox"/>	Performed By? _____	
Chain-of-Custody Signed?	<input checked="" type="checkbox"/> <input type="checkbox"/>	Ice Present in Shipping Container?	<input checked="" type="checkbox"/> <input type="checkbox"/>
Packing Present in Shipping Container?	<input checked="" type="checkbox"/> <input type="checkbox"/>	Container # Temp. Container # Temp.	
Type of Packing <u>Bubble wrap</u>		<u>1</u> <u>3.0</u>	
Custody seals on Sample Bottles?	<input checked="" type="checkbox"/> <input type="checkbox"/>		
Condition: Good _____ Broken _____			
Total Number of Sample Bottles <u>31</u>			
Total Number of Samples <u>7</u>			
Samples Intact?	<input checked="" type="checkbox"/> <input type="checkbox"/>		
Sufficient Sample Volume for Indicated Test?	<input checked="" type="checkbox"/> <input type="checkbox"/>	Project Manager Contacted? <u>Pat</u>	
		Name: _____	
		Date Contacted: <u>7/21/05</u>	

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A.

COMMENTS: Received in cooler a 40ml vial looking like a temperature blank (no-ID), but preserved not log in. but keep in walk in fridge.

Checklist Completed By: Michael
Date: 7/21/05

SOP No: F.2V14

CLP DATA ASSESSMENT

Functional Guidelines for Evaluating Organic Analysis

PROJECT NO.: 507118

LABORATORY: GPL Laboratories

SITE: Vestal Well

DATA ASSESSMENT

The current SOP No. HW-13 (Revision 3), July 2001 for CLP Organics Review and Preliminary Review has been applied.

All data were found to be valid and acceptable except those analytes which have been rejected, "R" (unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's

Signature: Cecilia J. March Date: 9/12/05

Verified By: _____ Date: _____

CLP DATA ASSESSMENT

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

All samples were analyzed within specified holding times, therefore, no action was required.

2. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

Qualified as estimated (UJ) due to low %R of associated surrogate:
cis/trans-1,2-dichloroethene: EB-072005, 1-25-072005, 1-25A-072005

CLP DATA ASSESSMENT

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

Trichloroethene exhibited low recovery and exceeded precision criteria for the matrix spikes performed on a project sample from another SDG. No action was required. The associated blank spike was satisfactory.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than the blank contaminant level (2 or 10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) Method blank contamination:

No qualifications were required.

B) Field or rinse blank contamination:

methylene chloride: 1-24-072005, 1-25-072005, 1-25A-072005,
1-30-072005, S-1-072005

C) Trip blank contamination:

No qualifications were required.

CLP DATA ASSESSMENT

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenyl-phosphine (DFTPP).

If the mass calibration is in error, all associated data will be classified as unusable "R".

All criteria were met.

CLP DATA ASSESSMENT

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be ≥ 0.05 (≥ 0.01 for poor performers) in both initial and continuing calibrations. A value < 0.05 , < 0.01 for poor performers, indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

No qualifications were required.

CLP DATA ASSESSMENT

7. CALIBRATION:

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD and %D must be $\leq 30\%$, $\leq 50\%$ for the poor performers. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:

1,2,3-Trichlorobenzene exceeded %RSD criteria, but no qualifications were required.

Qualified as estimated (UJ) due to %D > 30%:
methylcyclohexane: all samples

CLP DATA ASSESSMENT

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must fall within the limits of + 40% of the associated continuing calibration standard. The retention time of the internal standard must not vary more than ± 0.33 minutes from the associated continuing calibration standard. If the area count is outside the (+ 40%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 20 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction.

All internal standards were within limits.

CLP DATA ASSESSMENT

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

N/A

B) Pesticide Fraction:

The retention times of reported compounds must fall within the calculated retention time (RT) windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract.

N/A

CLP DATA ASSESSMENT

10. CONTRACT PROBLEMS NON-COMPLIANCE:

11. FIELD DOCUMENTATION:

12. OTHER PROBLEMS:

None

13. This package contains re-extractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified as not to be used.

DPO: [] ACTION [] FYI REGION II

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

Work Order No.: 507118

LABORATORY: GPL Laboratories DATA USER: EPA Region II

SOW: OLC03.2 REVIEW COMPLETION DATE: 9/12/05

NO. OF SAMPLES: 7 WATER SOIL OTHER

REVIEWER: [] ESD [] ESAT [] OTHER, CONTRACTOR TTECI

QC ITEM	VOA	BNA	PCB		
HOLDING TIMES	O				
GC-MS PERFORMANCE	O				
INITIAL CALIBRATIONS	O				
CONTINUING CALIBRATIONS	O				
FIELD BLANKS (F = N/A)	O				
LABORATORY BLANKS	O				
SURROGATES	O				
MATRIX SPIKE/DUPLICATES	O				
QC SAMPLES (LCS, PVS)	O				
INTERNAL STANDARDS	O				
COMPOUND IDENTIFICATION	O				
COMPOUND QUANTITATION	O				
SYSTEM PERFORMANCE	O				
OVERALL ASSESSMENT	X				

O = No problems or minor problems that do not affect data usability.
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as either estimated or unusable.
Z = More than about 5% of the data points are qualified as unusable.

DPO ACTION ITEMS:

AREAS OF CONCERN:

DATA REJECTION SUMMARY

Type of Review: Level 4 Date: 9/12/05 Work Order No.: 507118

Site Name: Vestal Well Lab Name: GPL Laboratories

Reviewer's Initials: _____ Number of Samples: 7W

Analytes Rejected Due to Exceeding Review Criteria For:

	No. of Compounds/No. of Fractions (Samples)		Total # of Samples	Total # Rejected # in All Samples	Total # Rejected/Total # in All Samples
	Surrogates	Holding Time			
VOA (50)	0	0	7	0 / 350	= 0 %
ACID (14)				/	= %
B/N (51)				/	= %
PEST (21)				/	= %
PCB (7)				/	= %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

Analytes Estimated Due to Exceeding Review Criteria For:

	No. of Compounds/No. of Fractions (Samples)		Total # of Samples	Total # Estimated # in All Samples	Total # Estimated/Total # in All Samples
	Surrogates	Holding Time			
VOA (50)	6	0	7	18 / 350	= 5 %
ACID (14)				/	= %
B/N (51)				/	= %
PEST (21)				/	= %
PCB (7)				/	= %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

STANDARD OPERATING PROCEDURE

Page 1 of 5

Title: Evaluation of Metals Data for the
Contract Laboratory Program
Appendix A.2: Data Assessment Narrative

Date: Jan. 1992
Number: HW-2
Revision: 11

Project # 507118 **Matrix:** Soil
Site Vestal Well **Lab** GPL Laboratories **Water** 5
Contractor TTECI **Reviewer** C. Minch **Other** _____

A.2.1 **Validation Flags-** The following flags have been applied in red by the data validator and must be considered by the data user.

J- This flag indicates the result qualified as **estimated**

Red- Line- A red-line drawn through a sample result indicates **unusable** value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

Fully Usable Data- The results that do not carry "J" or "red-line" are fully **usable**.

Contractual Qualifiers- The legend of contractual qualifiers applied by the lab on Form I's is found on page B-20 of SOW LM01.0.

A.2.2 The data assessment is given below and on the attached sheets.

Arsenic exhibited low CRI recovery and was subsequently qualified as estimated (J/UJ) in all samples.

Chromium was estimated in 1-30-072005 because the serial dilution exceeded criteria.

Title: Evaluation of Metals Data for the
Contract Laboratory Program
Appendix A.2: Data Assessment Narrative

Date: Jan. 1992
Number: HW-2
Revision: 11

A.2.3 Contract-Problem/Non-Compliance

Arsenic failed CRI criteria.
Chromium exceeded serial dilution criteria.

MMB/ESAT Reviewer: _____
Signature

Date: _____

Contractor Reviewer: *Cecilia N. March*
Signature

Date: 9/12/05

Verified by: _____

Date: _____

Title: Evaluation of Metals Data for the
Contract Laboratory Program
Appendix A.3: Contract Non-Compliance
(SMO Report)

Date: Jan. 1992
Number: HW-2
Revision: 11

CONTRACT NON-COMPLIANCE
(SMO REPORT)

Regional Review of Uncontrolled Hazardous Waste
Site Contract Laboratory Data Package

PROJECT NO. 507118

The hardcopied (laboratory name) GFL Laboratories
Inorganic data package received at Region II has been reviewed and the quality assurance and performance data summarized. The data reviewed included:
Sample No: FB-072005, 1-24-072005, 1-30-072005, Influent-072005, Effluent-072005

Conc. & Matrix: 5 water

Contract No.() requires that specific analytical work be done and that associated reports be provided by the contractor to the Regions, EMSL-LV, and SMO. The general criteria used to determine the performance were based on an examination of:

- Data Completeness
- Matrix Spike Results
- Calibration Standards Results
- Laboratory Control Sample
- Duplicate Analysis Results
- Blank Analysis Results
- MSA Results

Items of non-compliance with the above contract are described below.

Comments:

Arsenic failed CRI criteria.
Chromium exceeded serial dilution criteria.

CM
Reviewer's Initials

9/12/05
Date

STANDARD OPERATING PROCEDURE

Title: Evaluation of Metals Data for the
 Contract Laboratory Program
 Appendix A.5: CLP Data Assessment
 Summary Form (Inorganics)

Date: Jan. 1992
 Number: HW-2
 Revision: 11

CLP DATA ASSESSMENT SUMMARY FORM (INORGANICS)

Type of Review: Level 4 Date: 9/12/05 Project No.: 507118
 Site: Vestal Well Lab Name: GPL Laboratories
 Reviewer's Initials: (CM) Number of Samples: 5W

Analytes Rejected Due to Exceeding Review Criteria

	Holding Time	CRDL/CRI Calibration	Prep Blank	Field Blank	Interference	Matrix Spike	Duplicates		Detection Limits	LCS	Serial Dilution	Other	Total Analytes	Rejected
							Lab	Field						
ICP													110	0
Flame AA														
Furnace AA														
Mercury													5	0
Gen. Chem.														
Total													115	0

Analytes Flagged as Estimated (J) Due to Exceeding Criteria For:

	Holding Time	CRDL/CRI Calibration	Prep Blank	Field Blank	Interference	Matrix Spike	Duplicates		Detection Limits	LCS	Serial Dilution	Other	Total Analytes	Estimated
							Lab	Field						
ICP		5									1		110	6
Flame AA														
Furnace AA														
Mercury													5	0
Gen. Chem.														
Total		5									1		115	6

Note:
 Asterisk (*) indicates additional exceedances of review criteria.

Title: Evaluation of Metals Data for the
 Contract Laboratory Program
 Appendix A.6: CLP Data Assessment Checklist

Date: Jan. 1992
 Number: HW-2
 Revision: 11

Inorganic Analysis

INORGANIC REGIONAL DATA ASSESSMENT Region II

PROJECT NO 507118 SITE Vestal Well

LABORATORY GPL Laboratories NO. OF SAMPLES/MATRIX 5W

SDG# _____ REVIEWER (IF NOT ESD) TTECI

SOW# ILMO5.2 REVIEWER'S NAME C. Minch

DPO: ACTION _____ FYI _____ COMPLETION DATE 9/12/05

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN
1. HOLDING TIMES	<u>O</u>	_____	<u>O</u>	_____
2. CALIBRATIONS	<u>O</u>	_____	<u>O</u>	_____
3. BLANKS	<u>O</u>	_____	<u>O</u>	_____
4. ICS	<u>O</u>	_____	<u>O</u>	_____
5. LCS	<u>O</u>	_____	<u>O</u>	_____
6. DUPLICATE ANALYSIS	<u>O</u>	_____	<u>O</u>	_____
7. MATRIX SPIKE	<u>O</u>	_____	<u>O</u>	_____
8. MSA	-	_____	-	_____
9. SERIAL DILUTION	<u>O</u>	_____	<u>O</u>	_____
10. SAMPLE VERIFICATION	<u>O</u>	_____	<u>O</u>	_____
11. FIELD DUPLICATE	-	_____	-	_____
12. OVERALL ASSESSMENT	<u>O</u>	_____	<u>O</u>	_____

O = Data has no problems/or qualified due to minor problems.

M = Data qualified due to major problems.

Z = Data unacceptable.

X = Problems, but do not affect data.

ACTION ITEMS:

Chromium was estimated for failing serial dilution criteria. Arsenic was estimated due to low CRI recovery.

AREAS OF CONCERN:

NOTABLE PERFORMANCE:

Subj: **Vestal Well**
Date: 8/24/05 4:46:28 PM Eastern Daylight Time
From: Auseal
To: huebschman@ipass.net

Pat,

The following issues require resolution before I can complete my review of the Vestal Well data packages identified below:

507118

Volatiles

- ✓ 1. Resubmit Form 8 with correct limits identified (\pm 40% and \pm .3 minutes).
- ✓ 2. Why were TICs not reported for peaks at RT 2.0, 9.7, 17.0, and 19.2 in any of the samples or blanks? Submit any necessary deliverables.
3. Submit spectra and revised Form 1E for file E41869 including the previously unreported TIC at RT 1.97.

507124

Volatiles

1. Resubmit Form 8 with correct limits identified (\pm 40% and \pm .3 minutes).
2. Why were TICs not reported for peaks at RT 2.0, 9.7, 17.0, and 19.2 in any of the samples or blanks? Submit any necessary deliverables.
3. Submit spectra and revised Form 1E for file E41824 including the previously unreported TICs at RT 16.81 and 19.91.
4. Resubmit Form 1E for E41882 with the concentration entered for all values less than 1.0.
5. Resubmit spectra and Form 1E with the concentration entered for the TIC reported in file E41880.
6. The Form 1 for E41903 is missing 1,2,3-trichlorobenzene as a target compound. A positive result was reported in the quant report. Resubmit revised Form 1.

Please forward a hardcopy of all resubmittals to my attention at the address below by 8/31/05.

Thank you.

Celia Minch
873 Chivas Dr.
Toms River, NJ 08753
732-270-0988



Cambridge Isotope Laboratories, Inc.

ES-5038

50 Frontage Road, Andover, MA 01810-5411 USA
PH: 800.322.1174 (N. AMERICA) PH: 978.749.8000
FAX: 978.749.2768 WEB: www.isotope.com

MEMORANDUM

TO: CLP Low Concentration Organics Laboratories
FROM: Cambridge Isotope Laboratories
SUBJECT: Volatiles DMC Standards
DATE: April 22, 2004

I would like to take this opportunity to clarify several issues regarding the Deuterated Monitoring Compound (DMC) standards used for EPA CLP SOW OLC03 2

1. CIL uses deuterated Methanol (CD_3OD) as the solvent for the Volatiles secondary stock solutions used in EPA OLC03 2. This is done to reduce the amount of deuterium back-exchange that may occur when exposed to unlabeled Methanol (CH_3OH). This will however result in a peak at m/z 36, which can be identified as a "laboratory artifact."
2. The Bromoform- d standard that is stabilized in deuterated methanol will, when diluted to working concentrations in unlabeled methanol, undergo a slow back-exchange. Therefore, while the initial analysis using fresh standard will have no native Bromoform contribution, over time, a small amount of native contribution may be observed.
3. 1,3-dichloropropene is manufactured only as a mix of *cis*- and *trans*- isomers that cannot be isolated. Our standard contains approximately 70:30 *cis*-: *trans*- isomers. The *cis*- isomer is not relevant to this method and may be considered a "laboratory artifact" as defined by the method.
4. Two unknown peaks have been found in the Volatiles DMC standard solutions. These peaks are low-level byproducts formed during production of deuterated methanol solvent, and may be detected during sample analysis. These peaks generally elute just after 1,1,2,2-Tetrachloroethane- d_2 and just prior to 1,2-Dichlorobenzene- d_4 , depending on chromatographic conditions. These deuterated compounds, if detected, may also be considered as laboratory artifacts.
5. An unidentified contaminant has been found in CIL product ES-5038-1-10x. The contaminant elutes at, or slightly before Chloromethane, and may in fact be mis-identified as chloromethane. However, the secondary ions that confirm chloromethane are not found in the contaminant. While the concentration cannot be determined without knowing the identity of this contaminant, it calculates at approximately 0.4-0.6 $\mu g/L$ as chloromethane. This peak may be considered a laboratory artifact.

Please feel free to contact CIL to discuss any of these issues

Kevin Millis
Regulatory Affairs Mgr.

4/22/04

Date

Subj: **Vestal Well**
Date: 8/24/05 6:40:19 PM Eastern Daylight Time
From: Auseal
To: huebschman@qplab.com

Pat,

The following issues require resolution before I can complete my review of the Vestal Well data package identified below:

507118

Metals

- ✓1. Resubmit Form 8 with %D entered for all "I" positive results.
- ✓2. Resubmit mercury raw data with absorbance values for all samples and QC.

Please forward a hardcopy of all resubmittals to my attention at the address below by 8/31/05.

Thank you.

Celia Minch

873 Chivas Dr.

Toms River, NJ 08753

732-270-0988

The form eight is required to calculate the % D only if the sample result is fifty times the mdl according to ILMO5.3.

The mercury raw data results are resubmitted with the absorbance results.

Subj: **Re: Vestal Well 507116 Metals**
Date: 8/24/05 8:12:35 PM Eastern Daylight Time
From: Auseal
To: huebschman@ipass.net

Pat,
regarding the Form 8 as specified in ILMO5.3:

Under "% Difference", enter the absolute value (to the nearest whole number) of the percent difference in concentration of required analytes, between the original sample and the diluted sample (adjusted for dilution) according to the following formula:

EQ. 13 Serial Dilution Percent Difference

$$\% \text{Difference} = \frac{|I - S|}{I} \times 100$$

The values for "I" and "S" used to calculate percent difference in EQ. 13 shall be exactly those reported on this form. A value of zero shall be substituted for "S" if the analyte concentration is less than the MDL. **If the analyte concentration in (I) is less than the MDL concentration, leave the "% Difference" field empty.**

3.4.11.2.5 Under "Q", enter "E" if the percent difference is greater than 10% and the original sample concentration (reported on Form IAIN) is greater than 50 times the MDL reported on Form IX-IN.

According to the SOW then, a %D is required for all positive results (see underlined statement above). Why else would it state that an "E" flag is entered if the %D > 10% and the initial value of "I" is greater than 50 times the MDL. Also, a %D of 100% would result if the S value is reported at the MDL.

Please resubmit Form 8.

Celia

Subj: **RE: Vestal Well**
 Date: 9/8/05 4:41:35 PM Eastern Daylight Time
 From: huebschman@ipass.net
 To: Auseal@aol.com
 File: **VOCResponses.pdf** (476894 bytes) DL Time (33600 bps): < 4 minutes
Sent from the Internet (Details)

Celia

The responses for these two workorders are attached.

1. Forms 8 for both workorders are attached
2. Laboratory artifacts – peaks are low level by products formed during production of deuterated methanol solvent for both workorders.
3. on 507118 – it is the same as #2; on 507124 file E41824 is not found in this workorder (wrong file number) per the VOC supervisor.

Items 4, 5, and 6 are attached.

I will have the responses for workorder 507130 tomorrow morning.

Pat Huebschman
Project Manager
GPL Laboratories
301-694-5310-Phone
301-620-0731-Fax
huebschman@gplab.com

-----Original Message-----

From: Auseal@aol.com [<mailto:Auseal@aol.com>]
Sent: Wednesday, August 24, 2005 4:46 PM
To: huebschman@ipass.net
Subject: Vestal Well

Pat,

The following issues require resolution before I can complete my review of the Vestal Well data packages identified below:

507118

Volatiles

1. Resubmit Form 8 with correct limits identified ($\pm 40\%$ and $\pm .3$ minutes).
2. Why were TICs not reported for peaks at RT 2.0, 9.7, 17.0, and 19.2 in any of the samples or blanks? Submit any necessary deliverables.
3. Submit spectra and revised Form 1E for file E41869 including the previously unreported TIC at RT 1.97.

507124

Volatiles

1. Resubmit Form 8 with correct limits identified ($\pm 40\%$ and $\pm .3$ minutes).
2. Why were TICs not reported for peaks at RT 2.0, 9.7, 17.0, and 19.2 in any of the samples or blanks? Submit any necessary deliverables.
3. Submit spectra and revised Form 1E for file E41824 including the previously unreported TICs at RT 16.81 and 19.91.
4. Resubmit Form 1E for E41882 with the concentration entered for all values less than 1.0.
5. Resubmit spectra and Form 1E with the concentration entered for the TIC reported in file E41880.

Friday, September 09, 2005 America Online: Auseal

6. The Form 1 for E41903 is missing 1,2,3-trichlorobenzene as a target compound. A positive result was reported in the quant report. Resubmit revised Form 1.

Please forward a hardcopy of all resubmittals to my attention at the address below by 8/31/05.

Thank you.

Celia Minch

873 Chivas Dr.

Toms River, NJ 08753

732-270-0988

41
61

Analytical Report For 507118

for


Tetra Tech EC, Inc.

Project Manager: Wendy DeMaio

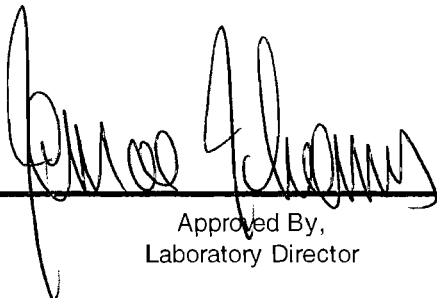
Project Name: Vestal Well 1-1 Site

GPL **Laboratories**

GPL Laboratories, LLLP certifies that the test results meet all requirements of the NELAC Standards unless otherwise noted



Reviewed By,
Project Manager



Approved By,
Laboratory Director



Case Narrative

Tetra Tech EC, Inc.

Vestal Well 1-1 Site

Work Order: 507118

Reviewed by Patricia Huebschman on 08-16-

The Case Narrative, Chain of Custody, Sample Receipt Checklist, and the cover page of the Sample Analysis Report, are integral parts of GPL Laboratories' report package. If you did not receive all of these documents, please contact GPL immediately.

Sample Receipt

Ten water samples were received on 07/21/2005. The samples were delivered by Federal Express. Sample receipt conditions and temperatures are documented on the Sample Receipt checklist.

Sample Analysis

Samples were prepared and analyzed by GPL using the analytical methodologies indicated on the Sample Analysis Summary Report. In some chromatographic analyses, manual integration is used instead of automated integration because it produces more accurate results. All manual integrations are denoted on the sample quantitation report. Analysis results and limits for soil are reported on a dry weight basis unless otherwise specified on the report.

Volatiles

Seven water samples were analyzed for volatile organic compounds using EPA CLP method rev.OLC03.2.

All samples were analyzed within holding time.

All internal standard responses, and retention times were within QC limits.

All surrogate recoveries met QC requirements.

Matrix spike and matrix spike duplicate analyses were shared with work order 507116 performed on sample 1-32A-071905. Recovery of trichloroethene was outside QC limits in the MS analysis. RPD was outside QC limits as well.

A laboratory control sample was analyzed along with the sample batch. All recoveries were within QC limits.

A holding blank was prepared at samples receipt and stored with the samples. The holding blank was analyzed after all the samples were analyzed and results were reported as final.

TIC lists of all samples, method blanks and the holding blanks are enclosed with this package.

The following gas chromatography along with specifications was used to analyze the samples. Restek crossbonded-phase silicon coated fused silica capillary, Length = 60m ID = 0.53mm Film Thickness = 2.0 microns.

Manual integration was performed on several peaks improperly integrated by the software. The manually integrated compounds are designated by an "m" next to the area of the quantitation report, and chromatograms for these compounds were submitted with this package.

Metals

Five water samples were analyzed for HSL metals by CLP_ILM05.3 methods.

A matrix spike, and duplicate were performed on sample I-24-072005 for all required analytes. A serial dilution was performed also for the ICP analytes. The duplicate was outside of the control limits for manganese; all associated data were flagged with an "**".

Calibration standards are verified against independent check standards purchased from a commercial vendor of environmental standards.

All GPL QA/QC criteria were met with the exceptions of those mentioned above.

Pat Hubschman

Reviewed By,
Project Manager

James Johnson
Approved By,
Laboratory Director

GPL Laboratories, LLLP

Sample Summary Report

Tetra Tech EC, Inc.

Work Order: 507118

Client Sample ID	Lab Sample ID	Analytical Method	Matrix	Date Sampled	Date Recieved
EFFLUENT-072005	507118-009-036-1/1	CLP_ILM05.3	WATER	07/20/2005	07/21/2005
	507118-009-036-1/1	CLP_ILM05.3HG			
FB-072005	507118-002-005-1/4	CLP_OLC03.2	WATER	07/20/2005	07/21/2005
	507118-002-033-1/1	CLP_ILM05.3			
	507118-002-033-1/1	CLP_ILM05.3HG			
HOLDING BLANK	507118-010-038-1/2	CLP_OLC03.2	WATER	07/21/2005	07/21/2005
I-24-072005	507118-003-009-1/4	CLP_OLC03.2	WATER	07/20/2005	07/21/2005
	507118-003-034-1/1	CLP_ILM05.3			
	507118-003-034-1/1	CLP_ILM05.3HG			
I-25-072005	507118-005-017-1/4	CLP_OLC03.2	WATER	07/20/2005	07/21/2005
I-25A-072005	507118-004-013-1/4	CLP_OLC03.2	WATER	07/20/2005	07/21/2005
I-30-072005	507118-006-021-1/4	CLP_OLC03.2	WATER	07/20/2005	07/21/2005
	507118-006-037-1/1	CLP_ILM05.3			
	507118-006-037-1/1	CLP_ILM05.3HG			
INFLUENT-072005	507118-008-035-1/1	CLP_ILM05.3	WATER	07/20/2005	07/21/2005
	507118-008-035-1/1	CLP_ILM05.3HG			
S-I-072005	507118-007-025-1/4	CLP_OLC03.2	WATER	07/20/2005	07/21/2005
TB-072005	507118-001-001-1/4	CLP_OLC03.2	WATER	07/20/2005	07/21/2005

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-072005	Lab Sample ID:	507118-001-001-1/4
Sample Date/Time:	07/20/2005 08:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05 10:42
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05 10:42
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05 10:42
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05 10:42
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05 10:42
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 10:42
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 10:42
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05 10:42
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 10:42
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05 10:42
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05 10:42
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 10:42
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 10:42
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05 10:42
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05 10:42
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05 10:42
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05 10:42
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05 10:42
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05 10:42
20)	Bromodichloromethane	7.2		0.50	1	ug/L	07/27/05 10:42
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05 10:42
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05 10:42
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05 10:42
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05 10:42
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 10:42
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05 10:42
27)	Chloroform	10		0.50	1	ug/L	07/27/05 10:42
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05 10:42

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-072005	Lab Sample ID:	507118-001-001-1/4
Sample Date/Time:	07/20/2005 08:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	10:42
30) Dibromochloromethane	2.7	0.50	1	ug/L	07/27/05	10:42
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	10:42
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	10:42
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	10:42
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	10:42
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	10:42
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	10:42
37) Methylcyclohexane	BQL U ^J	0.50	1	ug/L	07/27/05	10:42
38) Methylene Chloride	0.85 B	0.50	1	ug/L	07/27/05	10:42
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	10:42
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	10:42
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	10:42
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	10:42
43) Trichloroethene	BQL U	0.50	1	ug/L	07/27/05	10:42
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	10:42
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	10:42
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	07/27/05	10:42
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	10:42
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	10:42
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/27/05	10:42
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	10:42

CW 9/12/05

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	98 %	75 - 131	1	07/27/05 10:42
52)	1,1-Dichloroethene-d2	65 %	65 - 130	1	07/27/05 10:42
53)	1,2-Dichlorobenzene-d4	104 %	50 - 150	1	07/27/05 10:42
54)	1,2-Dichloroethane-d4	107 %	78 - 129	1	07/27/05 10:42
55)	1,2-Dichloropropane-d6	89 %	84 - 123	1	07/27/05 10:42
56)	2-Butanone-d5	101 %	42 - 171	1	07/27/05 10:42

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-072005	Lab Sample ID:	507118-001-001-1/4
Sample Date/Time:	07/20/2005 08:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	93 %	37 - 169	1	07/27/05	10:42
58) Benzene-d6	103 %	78 - 121	1	07/27/05	10:42
59) Bromoform-d	92 %	76 - 135	1	07/27/05	10:42
60) Chloroethane-d5	101 %	60 - 126	1	07/27/05	10:42
61) Chloroform-d	117 %	80 - 123	1	07/27/05	10:42
62) Toluene-D8	101 %	77 - 120	1	07/27/05	10:42
63) Vinyl Chloride-d3	78 %	49 - 138	1	07/27/05	10:42
64) trans-1,3-Dichloropropene-d4	95 %	80 - 128	1	07/27/05	10:42

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-072005	Lab Sample ID:	507118-002-005-1/4
Sample Date/Time:	07/20/2005 08:15	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05 11:16
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05 11:16
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05 11:16
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05 11:16
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05 11:16
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:16
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:16
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05 11:16
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:16
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05 11:16
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05 11:16
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:16
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:16
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05 11:16
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05 11:16
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05 11:16
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05 11:16
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05 11:16
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05 11:16
20)	Bromodichloromethane	6.5		0.50	1	ug/L	07/27/05 11:16
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05 11:16
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05 11:16
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05 11:16
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05 11:16
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:16
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05 11:16
27)	Chloroform	9.6		0.50	1	ug/L	07/27/05 11:16
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05 11:16

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-072005	Lab Sample ID:	507118-002-005-1/4
Sample Date/Time:	07/20/2005 08:15	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	11:16
30) Dibromochloromethane	2.8	0.50	1	ug/L	07/27/05	11:16
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	11:16
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	11:16
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	11:16
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	11:16
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	11:16
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	11:16
37) Methylcyclohexane	BQL U <i>J</i>	0.50	1	ug/L	07/27/05	11:16
38) Methylene Chloride	0.94 B	0.50	1	ug/L	07/27/05	11:16
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	11:16
40) Tetrachloroethylene	<i>0.24/1.2/0.5</i> BQL U	0.50	1	ug/L	07/27/05	11:16
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	11:16
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	11:16
43) Trichloroethene	BQL U	0.50	1	ug/L	07/27/05	11:16
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	11:16
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	11:16
46) cis-1,2-Dichloroethene	BQL U <i>J</i>	0.50	1	ug/L	07/27/05	11:16
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	11:16
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	11:16
49) trans-1,2-dichloroethene	BQL U <i>J</i>	0.50	1	ug/L	07/27/05	11:16
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	11:16

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	94 %	75 - 131	1	07/27/05 11:16
52)	1,1-Dichloroethene-d2	61 %	65 - 130	1	07/27/05 11:16
53)	1,2-Dichlorobenzene-d4	110 %	50 - 150	1	07/27/05 11:16
54)	1,2-Dichloroethane-d4	109 %	78 - 129	1	07/27/05 11:16
55)	1,2-Dichloropropane-d6	90 %	84 - 123	1	07/27/05 11:16
56)	2-Butanone-d5	114 %	42 - 171	1	07/27/05 11:16

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-072005	Lab Sample ID:	507118-002-005-1/4
Sample Date/Time:	07/20/2005 08:15	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	94 %	37 - 169	1	07/27/05	11:16
58) Benzene-d6	101 %	78 - 121	1	07/27/05	11:16
59) Bromoform-d	95 %	76 - 135	1	07/27/05	11:16
60) Chloroethane-d5	94 %	60 - 126	1	07/27/05	11:16
61) Chloroform-d	112 %	80 - 123	1	07/27/05	11:16
62) Toluene-D8	97 %	77 - 120	1	07/27/05	11:16
63) Vinyl Chloride-d3	70 %	49 - 138	1	07/27/05	11:16
64) trans-1,3-Dichloropropene-d4	89 %	80 - 128	1	07/27/05	11:16

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-072005	Lab Sample ID:	507118-002-033-1/1
Sample Date/Time:	07/20/2005 08:15	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	ILMO5.2_HW2
Prepared Date/Time:	07/26/2005 00:00	Analytical Method:	CLP_ILM05.3

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Aluminum	BQL	U	200	1	ug/L	07/28/05 18:32
2)	Antimony	BQL	U	60	1	ug/L	07/28/05 18:32
3)	Arsenic	BQL	U ^J	10	1	ug/L	07/28/05 18:32
4)	Barium	BQL	U	200	1	ug/L	07/28/05 18:32
5)	Beryllium	BQL	U	5	1	ug/L	07/28/05 18:32
6)	Cadmium	BQL	U	5	1	ug/L	07/28/05 18:32
7)	Calcium	113	J	5000	1	ug/L	07/28/05 18:32
8)	Chromium	BQL	U	10	1	ug/L	07/28/05 18:32
9)	Cobalt	BQL	U	50	1	ug/L	07/28/05 18:32
10)	Copper	BQL	U	25	1	ug/L	07/28/05 18:32
11)	Iron	BQL	U	100	1	ug/L	07/28/05 18:32
12)	Lead	BQL	U	10	1	ug/L	07/28/05 18:32
13)	Magnesium	BQL	U	5000	1	ug/L	07/28/05 18:32
14)	Manganese	0.62	J*	15	1	ug/L	07/28/05 18:32
15)	Nickel	BQL	U	40	1	ug/L	07/28/05 18:32
16)	Potassium	BQL	U	5000	1	ug/L	07/28/05 18:32
17)	Selenium	BQL	U	35	1	ug/L	07/28/05 18:32
18)	Silver	BQL	U	10	1	ug/L	07/28/05 18:32
19)	Sodium	1190	J	5000	1	ug/L	07/28/05 18:32
20)	Thallium	BQL	U	25	1	ug/L	07/28/05 18:32
21)	Vanadium	BQL	U	50	1	ug/L	07/28/05 18:32
22)	Zinc	BQL	U	60	1	ug/L	07/28/05 18:32

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Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-072005	Lab Sample ID:	507118-002-033-1/1
Sample Date/Time:	07/20/2005 08:15	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	ILMO5.2_HG_CW1
Prepared Date/Time:	07/28/2005 13:25	Analytical Method:	CLP_ILM05.3HG

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Mercury	BQL	U	0.2	1	ug/L	07/29/05 12:58

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-24-072005	Lab Sample ID:	507118-003-009-1/4
Sample Date/Time:	07/20/2005 08:50	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	3.1		0.50	1	ug/L	07/27/05 11:49
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05 11:49
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05 11:49
4)	1,1-Dichloroethane	0.82		0.50	1	ug/L	07/27/05 11:49
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05 11:49
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:49
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:49
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05 11:49
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:49
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05 11:49
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05 11:49
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:49
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:49
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05 11:49
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05 11:49
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05 11:49
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05 11:49
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05 11:49
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05 11:49
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/27/05 11:49
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05 11:49
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05 11:49
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05 11:49
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05 11:49
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 11:49
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05 11:49
27)	Chloroform	BQL	U	0.50	1	ug/L	07/27/05 11:49
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05 11:49

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-24-072005	Lab Sample ID:	507118-003-009-1/4
Sample Date/Time:	07/20/2005 08:50	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	11:49
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/27/05	11:49
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	11:49
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	11:49
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	11:49
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	11:49
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	11:49
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	11:49
37) Methylcyclohexane	BQL U J	0.50	1	ug/L	07/27/05	11:49
38) Methylene Chloride	0.74 U U	0.50	1	ug/L	07/27/05	11:49
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	11:49
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	11:49
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	11:49
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	11:49
43) Trichloroethene	BQL U	0.50	1	ug/L	07/27/05	11:49
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	11:49
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	11:49
46) cis-1,2-Dichloroethene	1.1	0.50	1	ug/L	07/27/05	11:49
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	11:49
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	11:49
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/27/05	11:49
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	11:49

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#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	93 %	75 - 131	1	07/27/05 11:49
52)	1,1-Dichloroethene-d2	68 %	65 - 130	1	07/27/05 11:49
53)	1,2-Dichlorobenzene-d4	104 %	50 - 150	1	07/27/05 11:49
54)	1,2-Dichloroethane-d4	101 %	78 - 129	1	07/27/05 11:49
55)	1,2-Dichloropropane-d6	93 %	84 - 123	1	07/27/05 11:49
56)	2-Butanone-d5	103 %	42 - 171	1	07/27/05 11:49

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-24-072005	Lab Sample ID:	507118-003-009-1/4
Sample Date/Time:	07/20/2005 08:50	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	91 %	37 - 169	1	07/27/05	11:49
58) Benzene-d6	103 %	78 - 121	1	07/27/05	11:49
59) Bromoform-d	84 %	76 - 135	1	07/27/05	11:49
60) Chloroethane-d5	98 %	60 - 126	1	07/27/05	11:49
61) Chloroform-d	102 %	80 - 123	1	07/27/05	11:49
62) Toluene-D8	102 %	77 - 120	1	07/27/05	11:49
63) Vinyl Chloride-d3	86 %	49 - 138	1	07/27/05	11:49
64) trans-1,3-Dichloropropene-d4	83 %	80 - 128	1	07/27/05	11:49

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-24-072005	Lab Sample ID:	507118-003-034-1/1
Sample Date/Time:	07/20/2005 08:50	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	ILMO5.2_HW2
Prepared Date/Time:	07/26/2005 00:00	Analytical Method:	CLP_ILM05.3

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Aluminum	1050		200	1	ug/L	07/28/05 18:40
2)	Antimony	BQL	U	60	1	ug/L	07/28/05 18:40
3)	Arsenic	BQL	U J	10	1	ug/L	07/28/05 18:40
4)	Barium	21.0	J	200	1	ug/L	07/28/05 18:40
5)	Beryllium	BQL	U	5	1	ug/L	07/28/05 18:40
6)	Cadmium	BQL	U	5	1	ug/L	07/28/05 18:40
7)	Calcium	80000		5000	1	ug/L	07/28/05 18:40
8)	Chromium	9.9	J	10	1	ug/L	07/28/05 18:40
9)	Cobalt	10.1	J	50	1	ug/L	07/28/05 18:40
10)	Copper	3.6	J	25	1	ug/L	07/28/05 18:40
11)	Iron	12500		100	1	ug/L	07/28/05 18:40
12)	Lead	1.7	J	10	1	ug/L	07/28/05 18:40
13)	Magnesium	15800		5000	1	ug/L	07/28/05 18:40
14)	Manganese	114	*	15	1	ug/L	07/28/05 18:40
15)	Nickel	9.0	J	40	1	ug/L	07/28/05 18:40
16)	Potassium	2100	J	5000	1	ug/L	07/28/05 18:40
17)	Selenium	BQL	U	35	1	ug/L	07/28/05 18:40
18)	Silver	BQL	U	10	1	ug/L	07/28/05 18:40
19)	Sodium	47100		5000	1	ug/L	07/28/05 18:40
20)	Thallium	BQL	U	25	1	ug/L	07/28/05 18:40
21)	Vanadium	BQL	U	50	1	ug/L	07/28/05 18:40
22)	Zinc	48.8	J	60	1	ug/L	07/28/05 18:40

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Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-24-072005	Lab Sample ID:	507118-003-034-1/1
Sample Date/Time:	07/20/2005 08:50	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	ILMO5.2_HG_CW1
Prepared Date/Time:	07/28/2005 13:25	Analytical Method:	CLP_ILM05.3HG

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Mercury	BQL	U	0.2	1	ug/L	07/29/05 13:01

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-25A-072005	Lab Sample ID:	507118-004-013-1/4
Sample Date/Time:	07/20/2005 10:36	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	0.54		0.50	1	ug/L	07/27/05 12:23
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05 12:23
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05 12:23
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05 12:23
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05 12:23
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 12:23
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 12:23
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05 12:23
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 12:23
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05 12:23
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05 12:23
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 12:23
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 12:23
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05 12:23
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05 12:23
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05 12:23
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05 12:23
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05 12:23
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05 12:23
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/27/05 12:23
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05 12:23
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05 12:23
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05 12:23
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05 12:23
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 12:23
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05 12:23
27)	Chloroform	BQL	U	0.50	1	ug/L	07/27/05 12:23
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05 12:23

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-25A-072005	Lab Sample ID:	507118-004-013-1/4
Sample Date/Time:	07/20/2005 10:36	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	12:23
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/27/05	12:23
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	12:23
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	12:23
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	12:23
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	12:23
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	12:23
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	12:23
37) Methylcyclohexane	BQL U J	0.50	1	ug/L	07/27/05	12:23
38) Methylene Chloride	<i>CP 9/12/05</i> 0.86 B U	0.50	1	ug/L	07/27/05	12:23
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	12:23
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	12:23
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	12:23
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	12:23
43) Trichloroethene	0.43 J	0.50	1	ug/L	07/27/05	12:23
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	12:23
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	12:23
46) cis-1,2-Dichloroethene	BQL U J	0.50	1	ug/L	07/27/05	12:23
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	12:23
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	12:23
49) trans-1,2-dichloroethene	BQL U J	0.50	1	ug/L	07/27/05	12:23
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	12:23

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	90 %	75 - 131	1	07/27/05 12:23
52)	1,1-Dichloroethene-d2	63 %	65 - 130	1	07/27/05 12:23
53)	1,2-Dichlorobenzene-d4	102 %	50 - 150	1	07/27/05 12:23
54)	1,2-Dichloroethane-d4	100 %	78 - 129	1	07/27/05 12:23
55)	1,2-Dichloropropane-d6	90 %	84 - 123	1	07/27/05 12:23
56)	2-Butanone-d5	88 %	42 - 171	1	07/27/05 12:23

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-25A-072005	Lab Sample ID:	507118-004-013-1/4
Sample Date/Time:	07/20/2005 10:36	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	86 %	37 - 169	1	07/27/05	12:23
58) Benzene-d6	102 %	78 - 121	1	07/27/05	12:23
59) Bromoform-d	83 %	76 - 135	1	07/27/05	12:23
60) Chloroethane-d5	92 %	60 - 126	1	07/27/05	12:23
61) Chloroform-d	100 %	80 - 123	1	07/27/05	12:23
62) Toluene-D8	98 %	77 - 120	1	07/27/05	12:23
63) Vinyl Chloride-d3	72 %	49 - 138	1	07/27/05	12:23
64) trans-1,3-Dichloropropene-d4	82 %	80 - 128	1	07/27/05	12:23

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-25-072005	Lab Sample ID:	507118-005-017-1/4
Sample Date/Time:	07/20/2005 11:52	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	12:57
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05	12:57
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	12:57
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	12:57
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05	12:57
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	12:57
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	12:57
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05	12:57
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	12:57
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	12:57
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05	12:57
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	12:57
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	12:57
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05	12:57
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05	12:57
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05	12:57
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05	12:57
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05	12:57
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05	12:57
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/27/05	12:57
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05	12:57
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05	12:57
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05	12:57
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05	12:57
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	12:57
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05	12:57
27)	Chloroform	BQL	U	0.50	1	ug/L	07/27/05	12:57
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05	12:57

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-25-072005	Lab Sample ID:	507118-005-017-1/4
Sample Date/Time:	07/20/2005 11:52	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	12:57
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/27/05	12:57
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	12:57
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	12:57
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	12:57
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	12:57
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	12:57
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	12:57
37) Methylcyclohexane	BQL U J	0.50	1	ug/L	07/27/05	12:57
38) Methylene Chloride	<i>CM 9/2/05</i> 0.98 B U	0.50	1	ug/L	07/27/05	12:57
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	12:57
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	12:57
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	12:57
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	12:57
43) Trichloroethene	BQL U	0.50	1	ug/L	07/27/05	12:57
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	12:57
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	12:57
46) cis-1,2-Dichloroethene	BQL U J	0.50	1	ug/L	07/27/05	12:57
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	12:57
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	12:57
49) trans-1,2-dichloroethene	BQL U J	0.50	1	ug/L	07/27/05	12:57
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	12:57

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	95 %	75 - 131	1	07/27/05 12:57
52)	1,1-Dichloroethene-d2	64 %	65 - 130	1	07/27/05 12:57
53)	1,2-Dichlorobenzene-d4	106 %	50 - 150	1	07/27/05 12:57
54)	1,2-Dichloroethane-d4	108 %	78 - 129	1	07/27/05 12:57
55)	1,2-Dichloropropane-d6	88 %	84 - 123	1	07/27/05 12:57
56)	2-Butanone-d5	104 %	42 - 171	1	07/27/05 12:57

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-25-072005	Lab Sample ID:	507118-005-017-1/4
Sample Date/Time:	07/20/2005 11:52	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	87 %	37 - 169	1	07/27/05	12:57
58) Benzene-d6	99 %	78 - 121	1	07/27/05	12:57
59) Bromoform-d	84 %	76 - 135	1	07/27/05	12:57
60) Chloroethane-d5	105 %	60 - 126	1	07/27/05	12:57
61) Chloroform-d	108 %	80 - 123	1	07/27/05	12:57
62) Toluene-D8	101 %	77 - 120	1	07/27/05	12:57
63) Vinyl Chloride-d3	76 %	49 - 138	1	07/27/05	12:57
64) trans-1,3-Dichloropropene-d4	81 %	80 - 128	1	07/27/05	12:57

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-30-072005	Lab Sample ID:	507118-006-021-1/4
Sample Date/Time:	07/20/2005 14:25	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	13:41
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05	13:41
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	13:41
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	13:41
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05	13:41
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	13:41
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	13:41
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05	13:41
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	13:41
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	13:41
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05	13:41
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	13:41
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	13:41
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05	13:41
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05	13:41
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05	13:41
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05	13:41
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05	13:41
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05	13:41
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/27/05	13:41
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05	13:41
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05	13:41
23)	Carbon Disulfide	1.6		0.50	1	ug/L	07/27/05	13:41
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05	13:41
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	13:41
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05	13:41
27)	Chloroform	BQL	U	0.50	1	ug/L	07/27/05	13:41
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05	13:41

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-30-072005	Lab Sample ID:	507118-006-021-1/4
Sample Date/Time:	07/20/2005 14:25	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	13:41
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/27/05	13:41
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	13:41
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	13:41
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	13:41
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	13:41
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	13:41
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	13:41
37) Methylcyclohexane	BQL U <i>J</i>	0.50	1	ug/L	07/27/05	13:41
38) Methylene Chloride	<i>0.87 BU</i>	0.50	1	ug/L	07/27/05	13:41
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	13:41
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	13:41
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	13:41
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	13:41
43) Trichloroethene	BQL U	0.50	1	ug/L	07/27/05	13:41
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	13:41
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	13:41
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	07/27/05	13:41
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	13:41
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	13:41
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/27/05	13:41
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	13:41

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	98 %	75 - 131	1	07/27/05 13:41
52)	1,1-Dichloroethene-d2	68 %	65 - 130	1	07/27/05 13:41
53)	1,2-Dichlorobenzene-d4	103 %	50 - 150	1	07/27/05 13:41
54)	1,2-Dichloroethane-d4	116 %	78 - 129	1	07/27/05 13:41
55)	1,2-Dichloropropane-d6	94 %	84 - 123	1	07/27/05 13:41
56)	2-Butanone-d5	110 %	42 - 171	1	07/27/05 13:41

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-30-072005	Lab Sample ID:	507118-006-021-1/4
Sample Date/Time:	07/20/2005 14:25	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	91 %	37 - 169	1	07/27/05	13:41
58) Benzene-d6	107 %	78 - 121	1	07/27/05	13:41
59) Bromoform-d	84 %	76 - 135	1	07/27/05	13:41
60) Chloroethane-d5	109 %	60 - 126	1	07/27/05	13:41
61) Chloroform-d	104 %	80 - 123	1	07/27/05	13:41
62) Toluene-D8	101 %	77 - 120	1	07/27/05	13:41
63) Vinyl Chloride-d3	83 %	49 - 138	1	07/27/05	13:41
64) trans-1,3-Dichloropropene-d4	84 %	80 - 128	1	07/27/05	13:41

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-30-072005	Lab Sample ID:	507118-006-037-1/1
Sample Date/Time:	07/20/2005 14:25	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	ILMO5.2_HW2
Prepared Date/Time:	07/26/2005 00:00	Analytical Method:	CLP_ILM05.3

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Aluminum	1340		200	1	ug/L	07/28/05 19:38
2)	Antimony	BQL	U	60	1	ug/L	07/28/05 19:38
3)	Arsenic	9.0	J J	10	1	ug/L	07/28/05 19:38
4)	Barium	38.6	J	200	1	ug/L	07/28/05 19:38
5)	Beryllium	BQL	U	5	1	ug/L	07/28/05 19:38
6)	Cadmium	BQL	U	5	1	ug/L	07/28/05 19:38
7)	Calcium	25400		5000	1	ug/L	07/28/05 19:38
8)	Chromium	34.4	J	10	1	ug/L	07/28/05 19:38
9)	Cobalt	1.8	J	50	1	ug/L	07/28/05 19:38
10)	Copper	6.2	J	25	1	ug/L	07/28/05 19:38
11)	Iron	15100		100	1	ug/L	07/28/05 19:38
12)	Lead	2.6	J	10	1	ug/L	07/28/05 19:38
13)	Magnesium	47300		5000	1	ug/L	07/28/05 19:38
14)	Manganese	219	*	15	1	ug/L	07/28/05 19:38
15)	Nickel	23.4	J	40	1	ug/L	07/28/05 19:38
16)	Potassium	2520	J	5000	1	ug/L	07/28/05 19:38
17)	Selenium	3.3	J	35	1	ug/L	07/28/05 19:38
18)	Silver	BQL	U	10	1	ug/L	07/28/05 19:38
19)	Sodium	74100		5000	1	ug/L	07/28/05 19:38
20)	Thallium	BQL	U	25	1	ug/L	07/28/05 19:38
21)	Vanadium	BQL	U	50	1	ug/L	07/28/05 19:38
22)	Zinc	30.5	J	60	1	ug/L	07/28/05 19:38

CW 9/12/05

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	I-30-072005	Lab Sample ID:	507118-006-037-1/1
Sample Date/Time:	07/20/2005 14:25	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	ILMO5.2_HG_CW1
Prepared Date/Time:	07/28/2005 13:25	Analytical Method:	CLP_ILM05.3HG

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Mercury	0.25		0.2	1	ug/L	07/29/05 13:06

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-I-072005	Lab Sample ID:	507118-007-025-1/4
Sample Date/Time:	07/20/2005 16:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	14:14
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05	14:14
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	14:14
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	14:14
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05	14:14
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	14:14
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	14:14
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05	14:14
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	14:14
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	14:14
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05	14:14
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	14:14
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	14:14
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05	14:14
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05	14:14
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05	14:14
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05	14:14
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05	14:14
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05	14:14
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/27/05	14:14
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05	14:14
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05	14:14
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05	14:14
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05	14:14
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	14:14
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05	14:14
27)	Chloroform	BQL	U	0.50	1	ug/L	07/27/05	14:14
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05	14:14

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-I-072005	Lab Sample ID:	507118-007-025-1/4
Sample Date/Time:	07/20/2005 16:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	14:14
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/27/05	14:14
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	14:14
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	14:14
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	14:14
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	14:14
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	14:14
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	14:14
37) Methylcyclohexane	BQL U J	0.50	1	ug/L	07/27/05	14:14
38) Methylene Chloride	1.0 B U	0.50	1	ug/L	07/27/05	14:14
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	14:14
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	14:14
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	14:14
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	14:14
43) Trichloroethene	0.62	0.50	1	ug/L	07/27/05	14:14
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	14:14
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	14:14
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	07/27/05	14:14
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	14:14
48) tert-butyl methyl ether	3.1	0.50	1	ug/L	07/27/05	14:14
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/27/05	14:14
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	14:14

CH 9/12/05

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	104 %	75 - 131	1	07/27/05 14:14
52)	1,1-Dichloroethene-d2	68 %	65 - 130	1	07/27/05 14:14
53)	1,2-Dichlorobenzene-d4	107 %	50 - 150	1	07/27/05 14:14
54)	1,2-Dichloroethane-d4	112 %	78 - 129	1	07/27/05 14:14
55)	1,2-Dichloropropane-d6	97 %	84 - 123	1	07/27/05 14:14
56)	2-Butanone-d5	98 %	42 - 171	1	07/27/05 14:14

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-I-072005	Lab Sample ID:	507118-007-025-1/4
Sample Date/Time:	07/20/2005 16:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	99 %	37 - 169	1	07/27/05	14:14
58) Benzene-d6	104 %	78 - 121	1	07/27/05	14:14
59) Bromoform-d	91 %	76 - 135	1	07/27/05	14:14
60) Chloroethane-d5	100 %	60 - 126	1	07/27/05	14:14
61) Chloroform-d	106 %	80 - 123	1	07/27/05	14:14
62) Toluene-D8	103 %	77 - 120	1	07/27/05	14:14
63) Vinyl Chloride-d3	90 %	49 - 138	1	07/27/05	14:14
64) trans-1,3-Dichloropropene-d4	84 %	80 - 128	1	07/27/05	14:14

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	INFLUENT-072005	Lab Sample ID:	507118-008-035-1/1
Sample Date/Time:	07/20/2005 16:30	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	ILMO5.2_HW2
Prepared Date/Time:	07/26/2005 00:00	Analytical Method:	CLP_ILM05.3

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Aluminum	BQL	U	200	1	ug/L	07/28/05 19:46
2)	Antimony	BQL	U	60	1	ug/L	07/28/05 19:46
3)	Arsenic	BQL	U <i>J</i>	10	1	ug/L	07/28/05 19:46
4)	Barium	43.1	J	200	1	ug/L	07/28/05 19:46
5)	Beryllium	BQL	U	5	1	ug/L	07/28/05 19:46
6)	Cadmium	BQL	U	5	1	ug/L	07/28/05 19:46
7)	Calcium	87900		5000	1	ug/L	07/28/05 19:46
8)	Chromium	BQL	U	10	1	ug/L	07/28/05 19:46
9)	Cobalt	BQL	U	50	1	ug/L	07/28/05 19:46
10)	Copper	5.1	J	25	1	ug/L	07/28/05 19:46
11)	Iron	BQL	U	100	1	ug/L	07/28/05 19:46
12)	Lead	1.3	J	10	1	ug/L	07/28/05 19:46
13)	Magnesium	13000		5000	1	ug/L	07/28/05 19:46
14)	Manganese	165	*	15	1	ug/L	07/28/05 19:46
15)	Nickel	BQL	U	40	1	ug/L	07/28/05 19:46
16)	Potassium	1590	J	5000	1	ug/L	07/28/05 19:46
17)	Selenium	BQL	U	35	1	ug/L	07/28/05 19:46
18)	Silver	BQL	U	10	1	ug/L	07/28/05 19:46
19)	Sodium	49300		5000	1	ug/L	07/28/05 19:46
20)	Thallium	BQL	U	25	1	ug/L	07/28/05 19:46
21)	Vanadium	BQL	U	50	1	ug/L	07/28/05 19:46
22)	Zinc	BQL	U	60	1	ug/L	07/28/05 19:46

GW 7/21/05

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	INFLUENT-072005	Lab Sample ID:	507118-008-035-1/1
Sample Date/Time:	07/20/2005 16:30	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	ILMO5.2_HG_CW1
Prepared Date/Time:	07/28/2005 13:25	Analytical Method:	CLP_ILM05.3HG

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	Mercury	BQL	U	0.2	1	ug/L	07/29/05	13:15

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EFFLUENT-072005	Lab Sample ID:	507118-009-036-1/1
Sample Date/Time:	07/20/2005 16:35	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	ILMO5.2_HW2
Prepared Date/Time:	07/26/2005 00:00	Analytical Method:	CLP_ILM05.3

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Aluminum	BQL	U	200	1	ug/L	07/28/05 19:54
2)	Antimony	BQL	U	60	1	ug/L	07/28/05 19:54
3)	Arsenic	BQL	U J	10	1	ug/L	07/28/05 19:54
4)	Barium	42.7	J	200	1	ug/L	07/28/05 19:54
5)	Beryllium	BQL	U	5	1	ug/L	07/28/05 19:54
6)	Cadmium	BQL	U	5	1	ug/L	07/28/05 19:54
7)	Calcium	87700		5000	1	ug/L	07/28/05 19:54
8)	Chromium	BQL	U	10	1	ug/L	07/28/05 19:54
9)	Cobalt	BQL	U	50	1	ug/L	07/28/05 19:54
10)	Copper	2.7	J	25	1	ug/L	07/28/05 19:54
11)	Iron	BQL	U	100	1	ug/L	07/28/05 19:54
12)	Lead	BQL	U	10	1	ug/L	07/28/05 19:54
13)	Magnesium	13100		5000	1	ug/L	07/28/05 19:54
14)	Manganese	87.3	*	15	1	ug/L	07/28/05 19:54
15)	Nickel	BQL	U	40	1	ug/L	07/28/05 19:54
16)	Potassium	1580	J	5000	1	ug/L	07/28/05 19:54
17)	Selenium	BQL	U	35	1	ug/L	07/28/05 19:54
18)	Silver	BQL	U	10	1	ug/L	07/28/05 19:54
19)	Sodium	49200		5000	1	ug/L	07/28/05 19:54
20)	Thallium	BQL	U	25	1	ug/L	07/28/05 19:54
21)	Vanadium	BQL	U	50	1	ug/L	07/28/05 19:54
22)	Zinc	BQL	U	60	1	ug/L	07/28/05 19:54

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EFFLUENT-072005	Lab Sample ID:	507118-009-036-1/1
Sample Date/Time:	07/20/2005 16:35	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	ILMO5.2_HG_CW1
Prepared Date/Time:	07/28/2005 13:25	Analytical Method:	CLP_ILM05.3HG

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Mercury	BQL	U	0.2	1	ug/L	07/29/05 13:17

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507118-010-038-1/2
Sample Date/Time:	07/21/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:40
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:40
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:40
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:40
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05	17:40
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:40
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:40
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05	17:40
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:40
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:40
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05	17:40
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:40
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:40
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05	17:40
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05	17:40
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05	17:40
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05	17:40
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05	17:40
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05	17:40
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/27/05	17:40
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05	17:40
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05	17:40
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05	17:40
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05	17:40
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	17:40
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05	17:40
27)	Chloroform	BQL	U	0.50	1	ug/L	07/27/05	17:40
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05	17:40

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507118-010-038-1/2
Sample Date/Time:	07/21/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	17:40
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/27/05	17:40
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	17:40
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	17:40
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	17:40
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	17:40
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	17:40
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	17:40
37) Methylcyclohexane	BQL U	0.50	1	ug/L	07/27/05	17:40
38) Methylene Chloride	0.78 B	0.50	1	ug/L	07/27/05	17:40
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	17:40
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	17:40
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	17:40
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	17:40
43) Trichloroethene	BQL U	0.50	1	ug/L	07/27/05	17:40
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	17:40
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	17:40
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	07/27/05	17:40
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	17:40
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	17:40
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/27/05	17:40
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	17:40

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	102 %	75 - 131	1	07/27/05 17:40
52)	1,1-Dichloroethene-d2	60 %	65 - 130	1	07/27/05 17:40
53)	1,2-Dichlorobenzene-d4	109 %	50 - 150	1	07/27/05 17:40
54)	1,2-Dichloroethane-d4	114 %	78 - 129	1	07/27/05 17:40
55)	1,2-Dichloropropane-d6	94 %	84 - 123	1	07/27/05 17:40
56)	2-Butanone-d5	119 %	42 - 171	1	07/27/05 17:40

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507118-010-038-1/2
Sample Date/Time:	07/21/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/21/2005 12:48	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	93 %	37 - 169	1	07/27/05	17:40
58) Benzene-d6	106 %	78 - 121	1	07/27/05	17:40
59) Bromoform-d	89 %	76 - 135	1	07/27/05	17:40
60) Chloroethane-d5	101 %	60 - 126	1	07/27/05	17:40
61) Chloroform-d	105 %	80 - 123	1	07/27/05	17:40
62) Toluene-D8	103 %	77 - 120	1	07/27/05	17:40
63) Vinyl Chloride-d3	74 %	49 - 138	1	07/27/05	17:40
64) trans-1,3-Dichloropropene-d4	77 %	80 - 128	1	07/27/05	17:40

GPL Laboratories, LLLP

Qualifier Definitions

Tetra Tech EC, Inc.

Work Order: 507118

All Departments

- U Indicates that the compound was analyzed for but not detected
- BQL Below Quantitation Limit

Organics

- B Indicates that the analyte was found in the associated blank as well as in the sample
- D Indicates that the analyte was reported from a diluted analysis
- E Indicates that the concentration detected exceeded the calibration range of the instrument
- J Value is less than the reporting limit but greater than the MDL
- P Indicates that there is greater than 25% difference for detected pesticide/Arochlor results between the two GC columns

Metals

- J Indicates that the reported value was less than the reporting limit but greater than or equal to the IDL/MDL
- E Indicates that the reported value is estimated because of the possible presence of interference (i.e. the serial dilution not within control limits)
- H Indicates that the element was found in the associated blank as well as in the sample and the value is greater than or equal to the reporting limit
- D Indicates that the analyte was reported from a diluted analysis
- N Spiked sample recovery not within control limits
- * Duplicate analysis not within control limits

GPL Laboratories, LLLP

Chain of Custody

Tetra Tech EC, Inc.

SDG: 507118

GPL LABORATORIES, LLLP

7210A Corporate Court
Frederick, MD 21703
(301) 694-5310
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Contract #/Billing Reference

Pgs. 1 of 1

Project: <u>Vestal</u>	Turnaround Time												
Client: <u>USEPA</u>	# of Containers	4	1										
Send Results To: <u>Wendy DeWitt</u>	Container Type	40L	1LH										
Address: <u>1000 The American Road</u>	Preservative Used	HCl	HNO ₃										
Phone: <u>473-630-8000</u>	Type of Analysis	Low Concentration VOC's TAL Metals											
<u>Harris Plains, NJ 07410</u>	Lab Cooler No.												
Sample ID#	Date Sampled	Time Sampled	Sample Matrix	Sampler's Initials	Received By:	Date/Time	Relinquished By:	Date/Time	Shipper:	Airbill No.:	Received for Laboratory By:	Date/Time	Temp:
FB-072005	7/20/05	08:00	Water	CC									
FB-072005	7/20/05	08:15		CC									
1-24-072005		08:50		CW									
1-25A-072005		10:36		CW									
1-25-072005		11:52		CW									
1-30-072005		14:25		CW									
S-1-072005		6:00		CW									
INFILTRAT-072005	7/19/05	6:30	Water	CC									
EPFL-072005	7/20/05	6:35	Water	CC									
Relinquished By: <u>[Signature]</u>	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Shipper:	Airbill No.:	Received for Laboratory By:	Date/Time	Temp:			
	07/20/05 16:45						852660051642	<u>Clino</u>	7/21/05	2.0			
Relinquished By:	Date/Time	Received By:	Date/Time	Lab Comments:									
				G.P.W.O. 507118									

GPL Laboratories, LLLP

Chain of Custody

Tetra Tech EC, Inc.

SDG: 507118

NO POUCH NEEDED. See back for peel and stick application instructions.

RECIPIENT: PEEL HERE

300 242



FedEx US Airbill

From: This portion can be removed for recipient's records. Express. FedEx Tracking Number: 852660051642

Sender's Name: GPL Laboratories, Inc. Phone: 301-271-7030

Company: GPL LABORATORIES, INC.

Address: 7210 A CORPORATE CT. STATE: MD ZIP: 21703

City: FREDERICK State: MD ZIP: 21703

To: Recipient's Name: Sample Custodian Phone: 301-271-7030

Company: GPL Laboratories

Recipient's Address: 7210 A CORPORATE CT. State: MD ZIP: 21703

Address: 7210 A CORPORATE CT. State: MD ZIP: 21703

City: FREDERICK State: MD ZIP: 21703



9310459156



FedEx PRIORITY OVERNIGHT THU
EPC# 552283 20JUL05
TRK# 8526 6005 1642 FORM 0215
21703 -10 -16
ZM FDKA
IAD
Deliver By: 21 JUL 05 R2

4a Express:

FedEx Priority Overnight

FedEx 2Day

FedEx 3Day Freight

FedEx 4Day Freight

FedEx 5Day Freight

FedEx International Priority

FedEx International Economy

FedEx International Standard

FedEx International Economy

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466

ALIGN OPEN END OF FEDEX AIRBILL POUCH HERE

GPL Laboratories, LLLP

Chain of Custody

Tetra Tech EC, Inc.

SDG: 507118

GPL Laboratories, LLLP

Figure 1
SAMPLE RECEIPT CHECKLIST

W.O. No: 507118
Client Name: TETRA
Date Received: 7/21/05
Time Received: 10:05 AM
Received By: Chiu

Carrier Name: FedEx
Prepared (Logged In) By: MDI 7/21/05
Initials Date
Project: _____
Site: _____
VOA/Holding Blank I.D. No: _____

Airbill/Manifest Present? YES NO
No. _____
Shipping Container in Good Condition? YES NO
Custody Seals Present on Shipping Container? YES NO
Condition: Broken _____
Intact-not dated or signed _____
Intact-dated and signed
Usage of Tamper Evident Type YES NO
Chain-of-Custody Present? YES NO
Chain-of-Custody Agrees with Sample Labels? YES NO
Chain-of-Custody Signed? YES NO
Packing Present in Shipping Container? YES NO
Type of Packing Bubble wrap
Custody seals on Sample Bottles? YES NO
Condition: Good Broken _____
Total Number of Sample Bottles 37
Total Number of Samples 9
Samples Intact? YES NO
Sufficient Sample Volume for Indicated Test? YES NO

Trip Blanks: No. of Sets _____ YES NO
Field Blanks: No. of Sets _____ YES NO
Equip. Blank: No. of Sets _____ YES NO
Field Duplicate: No. of Sets _____ YES NO
MS/MSD: No. of Sets _____ YES NO
VOA Vials Have Zero Headspace? _____ YES NO
If yes, smaller or greater than a Green Pea (see comments) _____
Preservatives Added to Sample? YES NO
pH Check Required? YES NO
Performed By? _____
Ice Present in Shipping Container? _____ YES NO
Container # Temp. Container # Temp.
1 2.0 _____
Michael
Project Manager Contacted? Pat
Name: _____
Date Contacted: 7/21/05

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A

COMMENTS: One sample in vial residue, looks like a temp. Blank but preserved. Not added to the WOA#.

Checklist Completed By: Michael
Date: 7/21/05

SOP No: F.2V14

CLP DATA ASSESSMENT

Functional Guidelines for Evaluating Organic Analysis

PROJECT NO.: 507124

LABORATORY: GPL Laboratories

SITE: Vestal Well

DATA ASSESSMENT

The current SOP No. HW-13 (Revision 3), July 2001 for CLP Organics Review and Preliminary Review has been applied.

All data were found to be valid and acceptable except those analytes which have been rejected, "R" (unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's

Signature: *Cecelia N. Finch* Date: 9/12/05

Verified By: _____ Date: _____

CLP DATA ASSESSMENT

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time:

All samples were analyzed within specified holding times, therefore, no action was required.

2. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

Qualified as estimated (J) due to high %R of associated surrogate:
vinyl chloride: S7-072105

Qualified as estimated (UJ) due to low %R of associated surrogate:
cis/trans-1,2-dichloroethene: EB42-072105

CLP DATA ASSESSMENT

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

Trichloroethene exhibited low recovery and exceeded precision criteria for the matrix spikes performed on a project sample from another SDG. No action was required. The associated blank spike was satisfactory. The blank spike associated with the sample dilutions exceeded recovery of several compounds. Positive results for trichloroethene were subsequently estimated (J) in samples EB31-072105DL, EB33-072105DL, and S7-072105DL.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than the blank contaminant level (2 or 10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) Method blank contamination:

No qualifications were required.

B) Field or rinse blank contamination:

No qualifications were required.

C) Trip blank contamination:

methylene chloride: EB41-072105, EB33-072105, EB33-072105DL,
EB31-072105DL, S7-072105, S7-072105DL

CLP DATA ASSESSMENT

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenylphosphine (DFTPP).

If the mass calibration is in error, all associated data will be classified as unusable "R".

All criteria were met.

CLP DATA ASSESSMENT

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be ≥ 0.05 (≥ 0.01 for poor performers) in both initial and continuing calibrations. A value < 0.05 , < 0.01 for poor performers, indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

No qualifications were required.

CLP DATA ASSESSMENT

7. CALIBRATION:

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD and %D must be $\leq 30\%$, $\leq 50\%$ for the poor performers. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:

1,2,3-Trichlorobenzene exceeded %RSD criteria, but no qualifications were required.

Qualified as unusable (R) %D > 90%:
acetone: EB33-072105DL, EB31-072105DL, S7-072105DL

Qualified as estimated (J/UJ):
1,2-dichloroethane, carbon tetrachloride: EB31-072105, S7-072105

dichlorodifluoromethane, 1,1,1-trichloroethane, carbon tetrachloride,
methylcyclohexane: EB33-072105DL, EB31-072105DL, S7-072105DL

methylcyclohexane: EB-072105, TB-072105, EB41-072105, EB42-072105,
EB33-072105

CLP DATA ASSESSMENT

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must fall within the limits of + 40% of the associated continuing calibration standard. The retention time of the internal standard must not vary more than ± 0.33 minutes from the associated continuing calibration standard. If the area count is outside the (+ 40%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 20 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction.

All internal standards were within limits.

CLP DATA ASSESSMENT

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

N/A

B) Pesticide Fraction:

The retention times of reported compounds must fall within the calculated retention time (RT) windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract.

N/A

CLP DATA ASSESSMENT

10. CONTRACT PROBLEMS NON-COMPLIANCE:

11. FIELD DOCUMENTATION:

12. OTHER PROBLEMS:

The TICs at the following RT were qualified as unusable (R) in the samples indicated because they were common lab contaminants:

RT 3.2: EB33-072105, EB33-072105DL, S7-072105, S7-072105DL,
EB41-072105

13. This package contains re-extractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified as not to be used.

EB33-072105: E41926

EB31-072105: E41927

S7-072105: E41928

DPO: [] ACTION [] FYI REGION II

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

Work Order No.: 507124

LABORATORY: GPL Laboratories DATA USER: EPA Region II

SOW: OLC03.2 REVIEW COMPLETION DATE: 9/12/05

NO. OF SAMPLES: 7 WATER SOIL OTHER

REVIEWER: [] ESD [] ESAT [] OTHER, CONTRACTOR TTECI

QC ITEM	VOA	BNA	PCB		
HOLDING TIMES	O				
GC-MS PERFORMANCE	O				
INITIAL CALIBRATIONS	O				
CONTINUING CALIBRATIONS	X				
FIELD BLANKS (F = N/A)	O				
LABORATORY BLANKS	O				
SURROGATES	O				
MATRIX SPIKE/DUPLICATES	O				
QC SAMPLES (LCS, PVS)	O				
INTERNAL STANDARDS	O				
COMPOUND IDENTIFICATION	O				
COMPOUND QUANTITATION	O				
SYSTEM PERFORMANCE	O				
OVERALL ASSESSMENT	X				

O = No problems or minor problems that do not affect data usability.
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as either estimated or unusable.
Z = More than about 5% of the data points are qualified as unusable.

DPO ACTION ITEMS:

AREAS OF CONCERN:

DATA REJECTION SUMMARY

Type of Review: Level 4 Date: 9/12/05 Work Order No.: 507124

Site Name: Vestal Well Lab Name: GPL Laboratories

Reviewer's Initials: GM Number of Samples: 7W

Analytes Rejected Due to Exceeding Review Criteria For:

	No. of Compounds/No. of Fractions (Samples)									
	Surrogates	Holding Time	Calibration	Contamination	ID	Internal Standards	Other (LCS)	Total # of Samples	Total # Rejected # in All Samples	Total # Estimated/Total # in All Samples
VOA (50)	0	0	3	0	0	0	3	10	3	/ 500 = 1 %
ACID (14)									/	= %
B/N (51)									/	= %
PEST (21)									/	= %
PCB (7)									/	= %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

Analytes Estimated Due to Exceeding Review Criteria For:

	No. of Compounds/No. of Fractions (Samples)									
	Surrogates	Holding Time	Calibration	Contamination	ID	Internal Standards	Other (LCS)	Total # of Samples	Total # Estimated # in All Samples	Total # Estimated/Total # in All Samples
VOA (50)	3	0	21	6	0	0	3	10	33	/ 500 = 7 %
ACID (14)									/	= %
B/N (51)									/	= %
PEST (21)									/	= %
PCB (7)									/	= %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

Subj: **Vestal Well**
Date: 8/24/05 4:46:28 PM Eastern Daylight Time
From: Auseal
To: huebschman@ipass.net

Pat,

The following issues require resolution before I can complete my review of the Vestal Well data packages identified below:

507118

Volatiles

1. Resubmit Form 8 with correct limits identified ($\pm 40\%$ and $\pm .3$ minutes).
2. Why were TICs not reported for peaks at RT 2.0, 9.7, 17.0, and 19.2 in any of the samples or blanks? Submit any necessary deliverables.
3. Submit spectra and revised Form 1E for file E41869 including the previously unreported TIC at RT 1.97.

507124

Volatiles

- ✓ 1. Resubmit Form 8 with correct limits identified ($\pm 40\%$ and $\pm .3$ minutes).
- ✓ 2. Why were TICs not reported for peaks at RT 2.0, 9.7, 17.0, and 19.2 in any of the samples or blanks? Submit any necessary deliverables.
- ✓ 3. Submit spectra and revised Form 1E for file E41824 including the previously unreported TICs at RT 16.81 and 19.91.
- ✓ 4. Resubmit Form 1E for E41882 with the concentration entered for all values less than 1.0.
5. Resubmit spectra and Form 1E with the concentration entered for the TIC reported in file E41880.
- ✓ 6. The Form 1 for E41903 is missing 1,2,3-trichlorobenzene as a target compound. A positive result was reported in the quant report. Resubmit revised Form 1.

Please forward a hardcopy of all resubmittals to my attention at the address below by 8/31/05.

Thank you.

Celia Minch
873 Chivas Dr.
Toms River, NJ 08753
732-270-0988



Cambridge Isotope Laboratories, Inc.

ES-5038

50 Frontage Road, Andover, MA 01810-5413 USA
PH: 800.322.1174 (N. AMERICA) PH: 978.749.8000
FAX: 978.749.2768 WEB: www.isotope.com


MEMORANDUM

TO CLP Low Concentration Organics Laboratories
FROM Cambridge Isotope Laboratories
SUBJECT: Volatiles DMC Standards
DATE: April 22, 2004

I would like to take this opportunity to clarify several issues regarding the Deuterated Monitoring Compound (DMC) standards used for EPA CLP SOW OLC03 2

- 1 CIL uses deuterated Methanol (CD_3OD) as the solvent for the Volatiles secondary stock solutions used in EPA OLC03 2 This is done to reduce the amount of deuterium back-exchange that may occur when exposed to unlabeled Methanol (CH_3OH). This will however result in a peak at m/z 36, which can be identified as a "laboratory artifact".
- 2 The Bromoform-d standard that is stabilized in deuterated methanol will, when diluted to working concentrations in unlabeled methanol, undergo a slow back-exchange Therefore, while the initial analysis using fresh standard will have no native Bromoform contribution, over time, a small amount of native contribution may be observed
- 3 1,3-dichloropropene is manufactured only as a mix of *cis*- and *trans*- isomers that cannot be isolated Our standard contains approximately 70/30 *cis*-/*trans*- isomers The *cis*- isomer is not relevant to this method and may be considered a "laboratory artifact" as defined by the method.
- 4 Two unknown peaks have been found in the Volatiles DMC standard solutions These peaks are low-level byproducts formed during production of deuterated methanol solvent, and may be detected during sample analysis These peaks generally elute just after 1,1,2,2-Tetrachloroethane-d2 and just prior to 1,2-Dichlorobenzene-d4, depending on chromatographic conditions These deuterated compounds, if detected, may also be considered as laboratory artifacts
- 5 An unidentified contaminant has been found in CIL product ES-5038-1-10x. The contaminant elutes at, or slightly before Chloromethane, and may in fact be mis-identified as chloromethane. However, the secondary ions that confirm chloromethane are not found in the contaminant While the concentration cannot be determined without knowing the identity of this contaminant, it calculates at approximately 0.4-0.6 ug/L as chloromethane. This peak may be considered a laboratory artifact

Please feel free to contact CIL to discuss any of these issues


Kevin Millis
Regulatory Affairs Mgr.

4/22/04
Date

Subj: **Vestal 507124 volatiles**
Date: 9/13/05 8:03:39 AM Eastern Daylight Time
From: Auseal
To: huebschman@ipass.net

Pat,

Re: Vestal 507124 volatiles

The spectra for the TIC (RT 3.24) reported in file E41880 was not among the resubs provided. Please submit.

Thanks.

Celia

Subj: **RE: Vestal 507124 volatiles**
Date: 9/13/05 10:55:01 AM Eastern Daylight Time
From: huebschman@ipass.net
To: Auseal@aol.com
File: **FileE41880.pdf** (68776 bytes) DL Time (33600 bps): < 1 minute
Sent from the Internet (Details)

Here it is

Pat Huebschman
Project Manager
GPL Laboratories
301-694-5310-Phone
301-620-0731-Fax
huebschman@GPLab.com

-----Original Message-----

From: Auseal@aol.com [<mailto:Auseal@aol.com>]
Sent: Tuesday, September 13, 2005 8:04 AM
To: huebschman@ipass.net
Subject: Vestal 507124 volatiles

Pat,

Re: Vestal 507124 volatiles

The spectra for the TIC (RT 3.24) reported in file E41880 was not among the resubs provided. Please submit.

Thanks.

Celia

Analytical Report For 507124

for

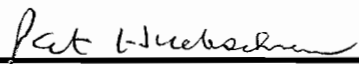
Tetra Tech EC, Inc.

Project Manager: Wendy DeMaio

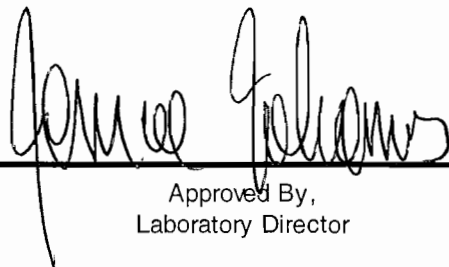
Project Name: Vestal Well 1-1 Site

GPL
Laboratories

GPL Laboratories, LLLP certifies that the test results meet all requirements of the
NELAC Standards unless otherwise noted



Reviewed By,
Project Manager



Approved By,
Laboratory Director



Case Narrative
Tetra Tech EC, Inc.
Vestal Well 1-1 Site
Work Order: 507124

Reviewed by Patricia Huebschman on 08-16-

The Case Narrative, Chain of Custody, Sample Receipt Checklist, and the cover page of the Sample Analysis Report, are integral parts of GPL Laboratories' report package. If you did not receive all of these documents, please contact GPL immediately.

Sample Receipt

Eight water samples were received on 07/22/2005. The samples were delivered by Federal Express. Sample receipt conditions and temperatures are documented on the Sample Receipt checklist.

Sample Analysis

Samples were prepared and analyzed by GPL using the analytical methodologies indicated on the Sample Analysis Summary Report. In some chromatographic analyses, manual integration is used instead of automated integration because it produces more accurate results. All manual integrations are denoted on the sample quantitation report. Analysis results and limits for soil are reported on a dry weight basis unless otherwise specified on the report.

Volatiles

Seven water samples were analyzed for volatile organic compounds using EPA CLP method rev.OLC03.2.

All samples were analyzed within holding time.

All internal standard responses, and retention times were within QC limits.

All surrogate recoveries met QC requirements.

Samples EB-31-072105 and EB-33-072105 were reanalyzed at a dilution. Reanalysis was reported within calibration limits.

Matrix spike and matrix spike duplicate analyses were shared with work order 507130 performed on sample S-2-072205. Recovery of trichloroethene was outside QC limits on both MS/MSD analysis. RPD was outside QC limits as well.

Three laboratory control samples were analyzed along with the sample batches. All recoveries were within QC limits on BKS77029 and BKS77036. Seven compounds were outside QC limits on BKS77037.

A holding blank was prepared at samples receipt and stored with the samples. The holding blank was analyzed after all the samples were analyzed and results were reported as final.

TIC lists of all samples, method blanks and the holding blanks are enclosed with this package.

The following gas chromatography along with specifications was used to analyze the samples. Restek crossbonded-phase silicon coated fused silica capillary, Length = 60m ID = 0.53mm Film Thickness = 2.0 microns.

Manual integration was performed on several peaks improperly integrated by the software. The manually integrated compounds are designated by an "m" next to the area of the quantitation report, and chromatograms for these compounds were submitted with this package.

Pat Hueselm

Reviewed By,
Project Manager

James Adams

Approved By,
Laboratory Director

GPL Laboratories, LLLP

Sample Summary Report

Tetra Tech EC, Inc.

Work Order: 507124

Client Sample ID	Lab Sample ID	Analytical Method	Matrix	Date Sampled	Date Recieved
EB-31-072105	507124-006-021-1/4	CLP_OLC03.2	WATER	07/21/2005	07/22/2005
EB-31-072105 DL	507124-006-022-2/4 DL	CLP_OLC03.2	WATER	07/21/2005	07/22/2005
EB-33-072105	507124-005-017-1/4	CLP_OLC03.2	WATER	07/21/2005	07/22/2005
EB-33-072105 DL	507124-005-018-2/4 DL	CLP_OLC03.2	WATER	07/21/2005	07/22/2005
EB-41-072105	507124-003-009-1/4	CLP_OLC03.2	WATER	07/21/2005	07/22/2005
EB-42-072105	507124-004-013-1/4	CLP_OLC03.2	WATER	07/21/2005	07/22/2005
FB-072105	507124-002-005-1/4	CLP_OLC03.2	WATER	07/21/2005	07/22/2005
HOLDING BLANK	507124-008-029-1/2	CLP_OLC03.2	WATER	07/21/2005	07/22/2005
S-7-072105	507124-007-025-1/4	CLP_OLC03.2	WATER	07/21/2005	07/22/2005
S-7-072105 DL	507124-007-026-2/4 DL	CLP_OLC03.2	WATER	07/21/2005	07/22/2005
TB-072105	507124-001-001-1/4	CLP_OLC03.2	WATER	07/21/2005	07/22/2005

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-072105	Lab Sample ID:	507124-001-001-1/4
Sample Date/Time:	07/21/2005 07:40	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	18:13
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05	18:13
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	18:13
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	18:13
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05	18:13
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	18:13
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	18:13
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05	18:13
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	18:13
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	18:13
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05	18:13
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	18:13
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	18:13
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05	18:13
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05	18:13
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05	18:13
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05	18:13
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05	18:13
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05	18:13
20)	Bromodichloromethane	7.3		0.50	1	ug/L	07/27/05	18:13
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05	18:13
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05	18:13
23)	Carbon Disulfide	1.4		0.50	1	ug/L	07/27/05	18:13
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05	18:13
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	18:13
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05	18:13
27)	Chloroform	9.9		0.50	1	ug/L	07/27/05	18:13
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05	18:13

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-072105	Lab Sample ID:	507124-001-001-1/4
Sample Date/Time:	07/21/2005 07:40	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

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29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	18:13
30) Dibromochloromethane	2.6	0.50	1	ug/L	07/27/05	18:13
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	18:13
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	18:13
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	18:13
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	18:13
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	18:13
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	18:13
37) Methylcyclohexane	BQL U J	0.50	1	ug/L	07/27/05	18:13
38) Methylene Chloride	0.71 B	0.50	1	ug/L	07/27/05	18:13
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	18:13
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	18:13
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	18:13
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	18:13
43) Trichloroethene	BQL U	0.50	1	ug/L	07/27/05	18:13
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	18:13
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	18:13
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	07/27/05	18:13
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	18:13
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	18:13
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/27/05	18:13
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	18:13

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	97 %	75 - 131	1	07/27/05 18:13
52)	1,1-Dichloroethene-d2	66 %	65 - 130	1	07/27/05 18:13
53)	1,2-Dichlorobenzene-d4	107 %	50 - 150	1	07/27/05 18:13
54)	1,2-Dichloroethane-d4	99 %	78 - 129	1	07/27/05 18:13
55)	1,2-Dichloropropane-d6	96 %	84 - 123	1	07/27/05 18:13
56)	2-Butanone-d5	99 %	42 - 171	1	07/27/05 18:13

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	TB-072105	Lab Sample ID:	507124-001-001-1/4
Sample Date/Time:	07/21/2005 07:40	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	87 %	37 - 169	1	07/27/05	18:13
58) Benzene-d6	104 %	78 - 121	1	07/27/05	18:13
59) Bromoform-d	91 %	76 - 135	1	07/27/05	18:13
60) Chloroethane-d5	92 %	60 - 126	1	07/27/05	18:13
61) Chloroform-d	113 %	80 - 123	1	07/27/05	18:13
62) Toluene-D8	104 %	77 - 120	1	07/27/05	18:13
63) Vinyl Chloride-d3	72 %	49 - 138	1	07/27/05	18:13
64) trans-1,3-Dichloropropene-d4	93 %	80 - 128	1	07/27/05	18:13

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-072105	Lab Sample ID:	507124-002-005-1/4
Sample Date/Time:	07/21/2005 07:50	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05 18:46
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05 18:46
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05 18:46
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05 18:46
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05 18:46
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 18:46
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 18:46
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05 18:46
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 18:46
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05 18:46
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05 18:46
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 18:46
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 18:46
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05 18:46
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05 18:46
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05 18:46
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05 18:46
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05 18:46
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05 18:46
20)	Bromodichloromethane	1.5		0.50	1	ug/L	07/27/05 18:46
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05 18:46
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05 18:46
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05 18:46
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05 18:46
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 18:46
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05 18:46
27)	Chloroform	2.3		0.50	1	ug/L	07/27/05 18:46
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05 18:46

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-072105	Lab Sample ID:	507124-002-005-1/4
Sample Date/Time:	07/21/2005 07:50	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

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29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	18:46
30) Dibromochloromethane	0.49 J	0.50	1	ug/L	07/27/05	18:46
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	18:46
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	18:46
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	18:46
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	18:46
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	18:46
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	18:46
37) Methylcyclohexane	BQL U <i>J</i>	0.50	1	ug/L	07/27/05	18:46
38) Methylene Chloride	0.69 B	0.50	1	ug/L	07/27/05	18:46
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	18:46
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	18:46
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	18:46
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	18:46
43) Trichloroethene	0.44 J	0.50	1	ug/L	07/27/05	18:46
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	18:46
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	18:46
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	07/27/05	18:46
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	18:46
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	18:46
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/27/05	18:46
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	18:46

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	101 %	75 - 131	1	07/27/05 18:46
52)	1,1-Dichloroethene-d2	67 %	65 - 130	1	07/27/05 18:46
53)	1,2-Dichlorobenzene-d4	101 %	50 - 150	1	07/27/05 18:46
54)	1,2-Dichloroethane-d4	101 %	78 - 129	1	07/27/05 18:46
55)	1,2-Dichloropropane-d6	97 %	84 - 123	1	07/27/05 18:46
56)	2-Butanone-d5	94 %	42 - 171	1	07/27/05 18:46

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	FB-072105	Lab Sample ID:	507124-002-005-1/4
Sample Date/Time:	07/21/2005 07:50	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	90 %	37 - 169	1	07/27/05	18:46
58) Benzene-d6	104 %	78 - 121	1	07/27/05	18:46
59) Bromoform-d	86 %	76 - 135	1	07/27/05	18:46
60) Chloroethane-d5	96 %	60 - 126	1	07/27/05	18:46
61) Chloroform-d	101 %	80 - 123	1	07/27/05	18:46
62) Toluene-D8	105 %	77 - 120	1	07/27/05	18:46
63) Vinyl Chloride-d3	81 %	49 - 138	1	07/27/05	18:46
64) trans-1,3-Dichloropropene-d4	85 %	80 - 128	1	07/27/05	18:46

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-41-072105	Lab Sample ID:	507124-003-009-1/4
Sample Date/Time:	07/21/2005 09:05	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	19:19
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05	19:19
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	19:19
4)	1,1-Dichloroethane	0.66		0.50	1	ug/L	07/27/05	19:19
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05	19:19
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	19:19
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	19:19
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05	19:19
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	19:19
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	19:19
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05	19:19
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	19:19
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	19:19
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05	19:19
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05	19:19
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05	19:19
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05	19:19
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05	19:19
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05	19:19
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/27/05	19:19
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05	19:19
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05	19:19
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05	19:19
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05	19:19
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	19:19
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05	19:19
27)	Chloroform	BQL	U	0.50	1	ug/L	07/27/05	19:19
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05	19:19

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-41-072105	Lab Sample ID:	507124-003-009-1/4
Sample Date/Time:	07/21/2005 09:05	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

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29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	19:19
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/27/05	19:19
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	19:19
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	19:19
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	19:19
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	19:19
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	19:19
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	19:19
37) Methylcyclohexane	BQL U J	0.50	1	ug/L	07/27/05	19:19
38) Methylene Chloride	0.70 B U	0.50	1	ug/L	07/27/05	19:19
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	19:19
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	19:19
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	19:19
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	19:19
43) Trichloroethene	BQL U	0.50	1	ug/L	07/27/05	19:19
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	19:19
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	19:19
46) cis-1,2-Dichloroethene	12	0.50	1	ug/L	07/27/05	19:19
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	19:19
48) tert-butyl methyl ether	1.9	0.50	1	ug/L	07/27/05	19:19
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	07/27/05	19:19
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	19:19

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51) 1,1,2,2-Tetrachloroethane-d2		99 %	75 - 131	1	07/27/05 19:19
52) 1,1-Dichloroethene-d2		68 %	65 - 130	1	07/27/05 19:19
53) 1,2-Dichlorobenzene-d4		104 %	50 - 150	1	07/27/05 19:19
54) 1,2-Dichloroethane-d4		104 %	78 - 129	1	07/27/05 19:19
55) 1,2-Dichloropropane-d6		98 %	84 - 123	1	07/27/05 19:19
56) 2-Butanone-d5		100 %	42 - 171	1	07/27/05 19:19

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-41-072105	Lab Sample ID:	507124-003-009-1/4
Sample Date/Time:	07/21/2005 09:05	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	93 %	37 - 169	1	07/27/05	19:19
58) Benzene-d6	105 %	78 - 121	1	07/27/05	19:19
59) Bromoform-d	82 %	76 - 135	1	07/27/05	19:19
60) Chloroethane-d5	98 %	60 - 126	1	07/27/05	19:19
61) Chloroform-d	100 %	80 - 123	1	07/27/05	19:19
62) Toluene-D8	107 %	77 - 120	1	07/27/05	19:19
63) Vinyl Chloride-d3	80 %	49 - 138	1	07/27/05	19:19
64) trans-1,3-Dichloropropene-d4	86 %	80 - 128	1	07/27/05	19:19

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-42-072105	Lab Sample ID:	507124-004-013-1/4
Sample Date/Time:	07/21/2005 10:25	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	0.76		0.50	1	ug/L	07/27/05 19:52
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05 19:52
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05 19:52
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05 19:52
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05 19:52
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 19:52
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 19:52
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05 19:52
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 19:52
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05 19:52
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05 19:52
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 19:52
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 19:52
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05 19:52
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05 19:52
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05 19:52
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05 19:52
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05 19:52
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05 19:52
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/27/05 19:52
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05 19:52
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05 19:52
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05 19:52
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05 19:52
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05 19:52
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05 19:52
27)	Chloroform	BQL	U	0.50	1	ug/L	07/27/05 19:52
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05 19:52

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-42-072105	Lab Sample ID:	507124-004-013-1/4
Sample Date/Time:	07/21/2005 10:25	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	19:52
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/27/05	19:52
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	19:52
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	19:52
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	19:52
34) Freon 113	BQL U	0.50	1	ug/L	07/27/05	19:52
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/27/05	19:52
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	19:52
37) Methylcyclohexane	BQL U J	0.50	1	ug/L	07/27/05	19:52
38) Methylene Chloride	0.76 B	0.50	1	ug/L	07/27/05	19:52
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	19:52
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/27/05	19:52
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	19:52
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	19:52
43) Trichloroethene	BQL U	0.50	1	ug/L	07/27/05	19:52
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	19:52
45) Vinyl Chloride	BQL U	0.50	1	ug/L	07/27/05	19:52
46) cis-1,2-Dichloroethene	BQL U J	0.50	1	ug/L	07/27/05	19:52
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	19:52
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	19:52
49) trans-1,2-dichloroethene	BQL U J	0.50	1	ug/L	07/27/05	19:52
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	19:52

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	99 %	75 - 131	1	07/27/05 19:52
52)	1,1-Dichloroethene-d2	64 %	65 - 130	1	07/27/05 19:52
53)	1,2-Dichlorobenzene-d4	110 %	50 - 150	1	07/27/05 19:52
54)	1,2-Dichloroethane-d4	110 %	78 - 129	1	07/27/05 19:52
55)	1,2-Dichloropropane-d6	96 %	84 - 123	1	07/27/05 19:52
56)	2-Butanone-d5	110 %	42 - 171	1	07/27/05 19:52

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-42-072105	Lab Sample ID:	507124-004-013-1/4
Sample Date/Time:	07/21/2005 10:25	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	99 %	37 - 169	1	07/27/05	19:52
58) Benzene-d6	104 %	78 - 121	1	07/27/05	19:52
59) Bromoform-d	87 %	76 - 135	1	07/27/05	19:52
60) Chloroethane-d5	104 %	60 - 126	1	07/27/05	19:52
61) Chloroform-d	114 %	80 - 123	1	07/27/05	19:52
62) Toluene-D8	104 %	77 - 120	1	07/27/05	19:52
63) Vinyl Chloride-d3	82 %	49 - 138	1	07/27/05	19:52
64) trans-1,3-Dichloropropene-d4	82 %	80 - 128	1	07/27/05	19:52

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-33-072105	Lab Sample ID:	507124-005-017-1/4
Sample Date/Time:	07/21/2005 11:40	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

USE
07/27/05

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	20:25
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/27/05	20:25
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/27/05	20:25
4)	1,1-Dichloroethane	4.0		0.50	1	ug/L	07/27/05	20:25
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	07/27/05	20:25
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	20:25
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	20:25
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/27/05	20:25
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	20:25
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	07/27/05	20:25
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/27/05	20:25
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	20:25
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	20:25
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/27/05	20:25
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/27/05	20:25
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/27/05	20:25
17)	Acetone	BQL	U	5.0	1	ug/L	07/27/05	20:25
18)	Benzene	BQL	U	0.50	1	ug/L	07/27/05	20:25
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/27/05	20:25
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/27/05	20:25
21)	Bromoform	BQL	U	0.50	1	ug/L	07/27/05	20:25
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/27/05	20:25
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/27/05	20:25
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	07/27/05	20:25
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/27/05	20:25
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/27/05	20:25
27)	Chloroform	BQL	U	0.50	1	ug/L	07/27/05	20:25
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/27/05	20:25

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-33-072105	Lab Sample ID:	507124-005-017-1/4
Sample Date/Time:	07/21/2005 11:40	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

USE
@ 9/12/05

29) Cyclohexane	BQL U	0.50	1	ug/L	07/27/05	20:25
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/27/05	20:25
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/27/05	20:25
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/27/05	20:25
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/27/05	20:25
34) Freon 113	8.1	0.50	1	ug/L	07/27/05	20:25
35) Isopropylbenzene	0.48 J	0.50	1	ug/L	07/27/05	20:25
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/27/05	20:25
37) Methylcyclohexane	BQL U J	0.50	1	ug/L	07/27/05	20:25
38) Methylene Chloride	0.80 B U	0.50	1	ug/L	07/27/05	20:25
39) Styrene	BQL U	0.50	1	ug/L	07/27/05	20:25
40) Tetrachloroethylene	0.56	0.50	1	ug/L	07/27/05	20:25
41) Toluene	BQL U	0.50	1	ug/L	07/27/05	20:25
42) Total Xylenes	BQL U	0.50	1	ug/L	07/27/05	20:25
43) Trichloroethene	3.4	0.50	1	ug/L	07/27/05	20:25
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/27/05	20:25
45) Vinyl Chloride	8.5	0.50	1	ug/L	07/27/05	20:25
46) cis-1,2-Dichloroethene	49* 41 E	0.50	1	ug/L	07/27/05	20:25
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/27/05	20:25
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/27/05	20:25
49) trans-1,2-dichloroethene	1.3	0.50	1	ug/L	07/27/05	20:25
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/27/05	20:25

* FROM DILUTION

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51) 1,1,2,2-Tetrachloroethane-d2		99 %	75 - 131	1	07/27/05 20:25
52) 1,1-Dichloroethene-d2		68 %	65 - 130	1	07/27/05 20:25
53) 1,2-Dichlorobenzene-d4		99 %	50 - 150	1	07/27/05 20:25
54) 1,2-Dichloroethane-d4		105 %	78 - 129	1	07/27/05 20:25
55) 1,2-Dichloropropane-d6		96 %	84 - 123	1	07/27/05 20:25
56) 2-Butanone-d5		98 %	42 - 171	1	07/27/05 20:25

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-33-072105	Lab Sample ID:	507124-005-017-1/4
Sample Date/Time:	07/21/2005 11:40	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/27/2005 08:47	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	97 %	37 - 169	1	07/27/05	20:25
58) Benzene-d6	103 %	78 - 121	1	07/27/05	20:25
59) Bromoform-d	77 %	76 - 135	1	07/27/05	20:25
60) Chloroethane-d5	101 %	60 - 126	1	07/27/05	20:25
61) Chloroform-d	100 %	80 - 123	1	07/27/05	20:25
62) Toluene-D8	99 %	77 - 120	1	07/27/05	20:25
63) Vinyl Chloride-d3	88 %	49 - 138	1	07/27/05	20:25
64) trans-1,3-Dichloropropene-d4	81 %	80 - 128	1	07/27/05	20:25

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-33-072105 DL	Lab Sample ID:	507124-005-018-2/4 DL
Sample Date/Time:	07/21/2005 11:40	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

Handwritten note: (C) 9/2/05

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	BQL	U J	2.5	5	ug/L	08/01/05 14:42
2)	1,1,2,2-Tetrachloroethane	BQL	U	2.5	5	ug/L	08/01/05 14:42
3)	1,1,2-Trichloroethane	BQL	U	2.5	5	ug/L	08/01/05 14:42
4)	1,1-Dichloroethane	5.4		2.5	5	ug/L	08/01/05 14:42
5)	1,1-Dichloroethene	BQL	U	2.5	5	ug/L	08/01/05 14:42
6)	1,2,3-Trichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 14:42
7)	1,2,4-Trichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 14:42
8)	1,2-Dibromo-3-Chloropropane	BQL	U	2.5	5	ug/L	08/01/05 14:42
9)	1,2-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 14:42
10)	1,2-Dichloroethane	BQL	U	2.5	5	ug/L	08/01/05 14:42
11)	1,2-Dichloropropane	BQL	U	2.5	5	ug/L	08/01/05 14:42
12)	1,3-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 14:42
13)	1,4-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 14:42
14)	2-Butanone	BQL	U	25	5	ug/L	08/01/05 14:42
15)	2-Hexanone	BQL	U	25	5	ug/L	08/01/05 14:42
16)	4-Methyl-2-Pentanone	BQL	U	25	5	ug/L	08/01/05 14:42
17)	Acetone	BQL	U R	25	5	ug/L	08/01/05 14:42
18)	Benzene	BQL	U	2.5	5	ug/L	08/01/05 14:42
19)	Bromochloromethane	BQL	U	2.5	5	ug/L	08/01/05 14:42
20)	Bromodichloromethane	BQL	U	2.5	5	ug/L	08/01/05 14:42
21)	Bromoform	BQL	U	2.5	5	ug/L	08/01/05 14:42
22)	Bromomethane	BQL	U	2.5	5	ug/L	08/01/05 14:42
23)	Carbon Disulfide	BQL	U	2.5	5	ug/L	08/01/05 14:42
24)	Carbon Tetrachloride	BQL	U J	2.5	5	ug/L	08/01/05 14:42
25)	Chlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 14:42
26)	Chloroethane	BQL	U	2.5	5	ug/L	08/01/05 14:42
27)	Chloroform	BQL	U	2.5	5	ug/L	08/01/05 14:42
28)	Chloromethane	BQL	U	2.5	5	ug/L	08/01/05 14:42

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-33-072105 DL	Lab Sample ID:	507124-005-018-2/4 DL
Sample Date/Time:	07/21/2005 11:40	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	2.5	5	ug/L	08/01/05	14:42
30) Dibromochloromethane	BQL U	2.5	5	ug/L	08/01/05	14:42
31) Dichlorodifluoromethane	BQL U J	2.5	5	ug/L	08/01/05	14:42
32) Ethylbenzene	BQL U	2.5	5	ug/L	08/01/05	14:42
33) Ethylene Dibromide	BQL U	2.5	5	ug/L	08/01/05	14:42
34) Freon 113	9.6	2.5	5	ug/L	08/01/05	14:42
35) Isopropylbenzene	BQL U	2.5	5	ug/L	08/01/05	14:42
36) Methyl Acetate	BQL U	2.5	5	ug/L	08/01/05	14:42
37) Methylcyclohexane	BQL U	2.5	5	ug/L	08/01/05	14:42
38) Methylene Chloride	4.9	2.5	5	ug/L	08/01/05	14:42
39) Styrene	BQL U	2.5	5	ug/L	08/01/05	14:42
40) Tetrachloroethylene	BQL U	2.5	5	ug/L	08/01/05	14:42
41) Toluene	BQL U	2.5	5	ug/L	08/01/05	14:42
42) Total Xylenes	BQL U	2.5	5	ug/L	08/01/05	14:42
43) Trichloroethene	5.2	2.5	5	ug/L	08/01/05	14:42
44) Trichlorofluoromethane	BQL U	2.5	5	ug/L	08/01/05	14:42
45) Vinyl Chloride	11	2.5	5	ug/L	08/01/05	14:42
46) cis-1,2-Dichloroethene	49	2.5	5	ug/L	08/01/05	14:42
47) cis-1,3-Dichloropropene	BQL U	2.5	5	ug/L	08/01/05	14:42
48) tert-butyl methyl ether	BQL U	2.5	5	ug/L	08/01/05	14:42
49) trans-1,2-dichloroethene	2.4 J	2.5	5	ug/L	08/01/05	14:42
50) trans-1,3-dichloropropene	BQL U	2.5	5	ug/L	08/01/05	14:42

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	107 %	75 - 131	5	08/01/05 14:42
52)	1,1-Dichloroethene-d2	74 %	65 - 130	5	08/01/05 14:42
53)	1,2-Dichlorobenzene-d4	120 %	50 - 150	5	08/01/05 14:42
54)	1,2-Dichloroethane-d4	123 %	78 - 129	5	08/01/05 14:42
55)	1,2-Dichloropropane-d6	104 %	84 - 123	5	08/01/05 14:42
56)	2-Butanone-d5	120 %	42 - 171	5	08/01/05 14:42

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-33-072105 DL	Lab Sample ID:	507124-005-018-2/4 DL
Sample Date/Time:	07/21/2005 11:40	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	102 %	37 - 169	5	08/01/05	14:42
58) Benzene-d6	120 %	78 - 121	5	08/01/05	14:42
59) Bromoform-d	97 %	76 - 135	5	08/01/05	14:42
60) Chloroethane-d5	104 %	60 - 126	5	08/01/05	14:42
61) Chloroform-d	116 %	80 - 123	5	08/01/05	14:42
62) Toluene-D8	105 %	77 - 120	5	08/01/05	14:42
63) Vinyl Chloride-d3	131 %	49 - 138	5	08/01/05	14:42
64) trans-1,3-Dichloropropene-d4	105 %	80 - 128	5	08/01/05	14:42

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-31-072105	Lab Sample ID:	507124-006-021-1/4
Sample Date/Time:	07/21/2005 13:50	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

USE
07/29/05

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	07/29/05	23:48
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/29/05	23:48
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/29/05	23:48
4)	1,1-Dichloroethane	3.9		0.50	1	ug/L	07/29/05	23:48
5)	1,1-Dichloroethene	2.2		0.50	1	ug/L	07/29/05	23:48
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	23:48
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	23:48
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/29/05	23:48
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	23:48
10)	1,2-Dichloroethane	BQL	U <i>J</i>	0.50	1	ug/L	07/29/05	23:48
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/29/05	23:48
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	23:48
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	23:48
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/29/05	23:48
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/29/05	23:48
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/29/05	23:48
17)	Acetone	BQL	U	5.0	1	ug/L	07/29/05	23:48
18)	Benzene	BQL	U	0.50	1	ug/L	07/29/05	23:48
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/29/05	23:48
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/29/05	23:48
21)	Bromoform	BQL	U	0.50	1	ug/L	07/29/05	23:48
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/29/05	23:48
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/29/05	23:48
24)	Carbon Tetrachloride	BQL	U <i>J</i>	0.50	1	ug/L	07/29/05	23:48
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/29/05	23:48
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/29/05	23:48
27)	Chloroform	BQL	U	0.50	1	ug/L	07/29/05	23:48
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/29/05	23:48

Analytical Summary Report

Client Name: Tetra Tech EC, Inc. *USE* Sample Matrix: WATER
 Client Sample ID: EB-31-072105 Lab Sample ID: 507124-006-021-1/4
 Sample Date/Time: 07/21/2005 13:50 *(CNU) 9/2/05* Percent Moisture: NA
 Receipt Date/Time: 07/22/2005 11:51 Preparation Method: SW5030LL
 Prepared Date/Time: 07/29/2005 14:20 Analytical Method: CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	07/29/05	23:48
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/29/05	23:48
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/29/05	23:48
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/29/05	23:48
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/29/05	23:48
34) Freon 113	BQL U	0.50	1	ug/L	07/29/05	23:48
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/29/05	23:48
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/29/05	23:48
37) Methylcyclohexane	BQL U	0.50	1	ug/L	07/29/05	23:48
38) Methylene Chloride	BQL U	0.50	1	ug/L	07/29/05	23:48
39) Styrene	BQL U	0.50	1	ug/L	07/29/05	23:48
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/29/05	23:48
41) Toluene	BQL U	0.50	1	ug/L	07/29/05	23:48
42) Total Xylenes	BQL U	0.50	1	ug/L	07/29/05	23:48
43) Trichloroethene	<i>62 *</i> 58 E <i>J</i>	0.50	1	ug/L	07/29/05	23:48
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/29/05	23:48
45) Vinyl Chloride	0.54	0.50	1	ug/L	07/29/05	23:48
46) cis-1,2-Dichloroethene	<i>21 *</i> 10	0.50	1	ug/L	07/29/05	23:48
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/29/05	23:48
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/29/05	23:48
49) trans-1,2-dichloroethene	0.67	0.50	1	ug/L	07/29/05	23:48
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/29/05	23:48

** FROM DILUTION*

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51) 1,1,2,2-Tetrachloroethane-d2		96 %	75 - 131	1	07/29/05 23:48
52) 1,1-Dichloroethene-d2		74 %	65 - 130	1	07/29/05 23:48
53) 1,2-Dichlorobenzene-d4		111 %	50 - 150	1	07/29/05 23:48
54) 1,2-Dichloroethane-d4		94 %	78 - 129	1	07/29/05 23:48
55) 1,2-Dichloropropane-d6		100 %	84 - 123	1	07/29/05 23:48
56) 2-Butanone-d5		104 %	42 - 171	1	07/29/05 23:48

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-31-072105	Lab Sample ID:	507124-006-021-1/4
Sample Date/Time:	07/21/2005 13:50	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	104 %	37 - 169	1	07/29/05	23:48
58) Benzene-d6	103 %	78 - 121	1	07/29/05	23:48
59) Bromoform-d	95 %	76 - 135	1	07/29/05	23:48
60) Chloroethane-d5	93 %	60 - 126	1	07/29/05	23:48
61) Chloroform-d	93 %	80 - 123	1	07/29/05	23:48
62) Toluene-D8	97 %	77 - 120	1	07/29/05	23:48
63) Vinyl Chloride-d3	95 %	49 - 138	1	07/29/05	23:48
64) trans-1,3-Dichloropropene-d4	85 %	80 - 128	1	07/29/05	23:48

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-31-072105 DL	Lab Sample ID:	507124-006-022-2/4 DL
Sample Date/Time:	07/21/2005 13:50 <i>CM 9/12/05</i>	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	BQL	U <i>J</i>	2.5	5	ug/L	08/01/05 15:15
2)	1,1,2,2-Tetrachloroethane	BQL	U	2.5	5	ug/L	08/01/05 15:15
3)	1,1,2-Trichloroethane	BQL	U	2.5	5	ug/L	08/01/05 15:15
4)	1,1-Dichloroethane	5.2		2.5	5	ug/L	08/01/05 15:15
5)	1,1-Dichloroethene	3.0		2.5	5	ug/L	08/01/05 15:15
6)	1,2,3-Trichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:15
7)	1,2,4-Trichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:15
8)	1,2-Dibromo-3-Chloropropane	BQL	U	2.5	5	ug/L	08/01/05 15:15
9)	1,2-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:15
10)	1,2-Dichloroethane	BQL	U	2.5	5	ug/L	08/01/05 15:15
11)	1,2-Dichloropropane	BQL	U	2.5	5	ug/L	08/01/05 15:15
12)	1,3-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:15
13)	1,4-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:15
14)	2-Butanone	BQL	U	25	5	ug/L	08/01/05 15:15
15)	2-Hexanone	BQL	U	25	5	ug/L	08/01/05 15:15
16)	4-Methyl-2-Pentanone	BQL	U	25	5	ug/L	08/01/05 15:15
17)	Acetone	BQL	U <i>R</i>	25	5	ug/L	08/01/05 15:15
18)	Benzene	BQL	U	2.5	5	ug/L	08/01/05 15:15
19)	Bromochloromethane	BQL	U	2.5	5	ug/L	08/01/05 15:15
20)	Bromodichloromethane	BQL	U	2.5	5	ug/L	08/01/05 15:15
21)	Bromoform	BQL	U	2.5	5	ug/L	08/01/05 15:15
22)	Bromomethane	BQL	U	2.5	5	ug/L	08/01/05 15:15
23)	Carbon Disulfide	BQL	U	2.5	5	ug/L	08/01/05 15:15
24)	Carbon Tetrachloride	BQL	U <i>J</i>	2.5	5	ug/L	08/01/05 15:15
25)	Chlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:15
26)	Chloroethane	BQL	U	2.5	5	ug/L	08/01/05 15:15
27)	Chloroform	BQL	U	2.5	5	ug/L	08/01/05 15:15
28)	Chloromethane	BQL	U	2.5	5	ug/L	08/01/05 15:15

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-31-072105 DL	Lab Sample ID:	507124-006-022-2/4 DL
Sample Date/Time:	07/21/2005 13:50	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	2.5	5	ug/L	08/01/05	15:15
30) Dibromochloromethane	BQL U	2.5	5	ug/L	08/01/05	15:15
31) Dichlorodifluoromethane	BQL U	2.5	5	ug/L	08/01/05	15:15
32) Ethylbenzene	BQL U	2.5	5	ug/L	08/01/05	15:15
33) Ethylene Dibromide	BQL U	2.5	5	ug/L	08/01/05	15:15
34) Freon 113	BQL U	2.5	5	ug/L	08/01/05	15:15
35) Isopropylbenzene	BQL U	2.5	5	ug/L	08/01/05	15:15
36) Methyl Acetate	BQL U	2.5	5	ug/L	08/01/05	15:15
37) Methylcyclohexane	BQL U	2.5	5	ug/L	08/01/05	15:15
38) Methylene Chloride	4.4	2.5	5	ug/L	08/01/05	15:15
39) Styrene	BQL U	2.5	5	ug/L	08/01/05	15:15
40) Tetrachloroethylene	BQL U	2.5	5	ug/L	08/01/05	15:15
41) Toluene	BQL U	2.5	5	ug/L	08/01/05	15:15
42) Total Xylenes	BQL U	2.5	5	ug/L	08/01/05	15:15
43) Trichloroethene	62	2.5	5	ug/L	08/01/05	15:15
44) Trichlorofluoromethane	BQL U	2.5	5	ug/L	08/01/05	15:15
45) Vinyl Chloride	BQL U	2.5	5	ug/L	08/01/05	15:15
46) cis-1,2-Dichloroethene	21	2.5	5	ug/L	08/01/05	15:15
47) cis-1,3-Dichloropropene	BQL U	2.5	5	ug/L	08/01/05	15:15
48) tert-butyl methyl ether	BQL U	2.5	5	ug/L	08/01/05	15:15
49) trans-1,2-dichloroethene	BQL U	2.5	5	ug/L	08/01/05	15:15
50) trans-1,3-dichloropropene	BQL U	2.5	5	ug/L	08/01/05	15:15

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	114 %	75 - 131	5	08/01/05 15:15
52)	1,1-Dichloroethene-d2	72 %	65 - 130	5	08/01/05 15:15
53)	1,2-Dichlorobenzene-d4	110 %	50 - 150	5	08/01/05 15:15
54)	1,2-Dichloroethane-d4	118 %	78 - 129	5	08/01/05 15:15
55)	1,2-Dichloropropane-d6	101 %	84 - 123	5	08/01/05 15:15
56)	2-Butanone-d5	118 %	42 - 171	5	08/01/05 15:15

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	EB-31-072105 DL	Lab Sample ID:	507124-006-022-2/4 DL
Sample Date/Time:	07/21/2005 13:50	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	110 %	37 - 169	5	08/01/05	15:15
58) Benzene-d6	103 %	78 - 121	5	08/01/05	15:15
59) Bromoform-d	95 %	76 - 135	5	08/01/05	15:15
60) Chloroethane-d5	96 %	60 - 126	5	08/01/05	15:15
61) Chloroform-d	110 %	80 - 123	5	08/01/05	15:15
62) Toluene-D8	98 %	77 - 120	5	08/01/05	15:15
63) Vinyl Chloride-d3	98 %	49 - 138	5	08/01/05	15:15
64) trans-1,3-Dichloropropene-d4	90 %	80 - 128	5	08/01/05	15:15

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-7-072105	Lab Sample ID:	507124-007-025-1/4
Sample Date/Time:	07/21/2005 15:15	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

USE
07/21/05

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	7.9	B	0.50	1	ug/L	07/30/05 00:21
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	07/30/05 00:21
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	07/30/05 00:21
4)	1,1-Dichloroethane	16		0.50	1	ug/L	07/30/05 00:21
5)	1,1-Dichloroethene	1.9		0.50	1	ug/L	07/30/05 00:21
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/30/05 00:21
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	07/30/05 00:21
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	07/30/05 00:21
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/30/05 00:21
10)	1,2-Dichloroethane	BQL	U <i>J</i>	0.50	1	ug/L	07/30/05 00:21
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	07/30/05 00:21
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/30/05 00:21
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	07/30/05 00:21
14)	2-Butanone	BQL	U	5.0	1	ug/L	07/30/05 00:21
15)	2-Hexanone	BQL	U	5.0	1	ug/L	07/30/05 00:21
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	07/30/05 00:21
17)	Acetone	BQL	U	5.0	1	ug/L	07/30/05 00:21
18)	Benzene	BQL	U	0.50	1	ug/L	07/30/05 00:21
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	07/30/05 00:21
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	07/30/05 00:21
21)	Bromoform	BQL	U	0.50	1	ug/L	07/30/05 00:21
22)	Bromomethane	BQL	U	0.50	1	ug/L	07/30/05 00:21
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	07/30/05 00:21
24)	Carbon Tetrachloride	BQL	U <i>J</i>	0.50	1	ug/L	07/30/05 00:21
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	07/30/05 00:21
26)	Chloroethane	BQL	U	0.50	1	ug/L	07/30/05 00:21
27)	Chloroform	BQL	U	0.50	1	ug/L	07/30/05 00:21
28)	Chloromethane	BQL	U	0.50	1	ug/L	07/30/05 00:21

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-7-072105	Lab Sample ID:	507124-007-025-1/4
Sample Date/Time:	07/21/2005 15:15	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

USE
@ 9/12/05

29) Cyclohexane	BQL U	0.50	1	ug/L	07/30/05	00:21
30) Dibromochloromethane	BQL U	0.50	1	ug/L	07/30/05	00:21
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	07/30/05	00:21
32) Ethylbenzene	BQL U	0.50	1	ug/L	07/30/05	00:21
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	07/30/05	00:21
34) Freon 113	BQL U	0.50	1	ug/L	07/30/05	00:21
35) Isopropylbenzene	BQL U	0.50	1	ug/L	07/30/05	00:21
36) Methyl Acetate	BQL U	0.50	1	ug/L	07/30/05	00:21
37) Methylcyclohexane	BQL U	0.50	1	ug/L	07/30/05	00:21
38) Methylene Chloride	0.40 J 0.50 U	0.50	1	ug/L	07/30/05	00:21
39) Styrene	BQL U	0.50	1	ug/L	07/30/05	00:21
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	07/30/05	00:21
41) Toluene	BQL U	0.50	1	ug/L	07/30/05	00:21
42) Total Xylenes	BQL U	0.50	1	ug/L	07/30/05	00:21
43) Trichloroethene	50* 40-E J	0.50	1	ug/L	07/30/05	00:21
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	07/30/05	00:21
45) Vinyl Chloride	14 J	0.50	1	ug/L	07/30/05	00:21
46) cis-1,2-Dichloroethene	120* 92-E	0.50	1	ug/L	07/30/05	00:21
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	07/30/05	00:21
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	07/30/05	00:21
49) trans-1,2-dichloroethene	1.1	0.50	1	ug/L	07/30/05	00:21
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	07/30/05	00:21

* FROM DILUTION

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	101 %	75 - 131	1	07/30/05 00:21
52)	1,1-Dichloroethene-d2	71 %	65 - 130	1	07/30/05 00:21
53)	1,2-Dichlorobenzene-d4	111 %	50 - 150	1	07/30/05 00:21
54)	1,2-Dichloroethane-d4	97 %	78 - 129	1	07/30/05 00:21
55)	1,2-Dichloropropane-d6	96 %	84 - 123	1	07/30/05 00:21
56)	2-Butanone-d5	105 %	42 - 171	1	07/30/05 00:21

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-7-072105	Lab Sample ID:	507124-007-025-1/4
Sample Date/Time:	07/21/2005 15:15	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	07/29/2005 14:20	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	113 %	37 - 169	1	07/30/05	00:21
58) Benzene-d6	97 %	78 - 121	1	07/30/05	00:21
59) Bromoform-d	98 %	76 - 135	1	07/30/05	00:21
60) Chloroethane-d5	84 %	60 - 126	1	07/30/05	00:21
61) Chloroform-d	93 %	80 - 123	1	07/30/05	00:21
62) Toluene-D8	99 %	77 - 120	1	07/30/05	00:21
63) Vinyl Chloride-d3	140 %	49 - 138	1	07/30/05	00:21
64) trans-1,3-Dichloropropene-d4	89 %	80 - 128	1	07/30/05	00:21

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-7-072105 DL	Lab Sample ID:	507124-007-026-2/4 DL
Sample Date/Time:	07/21/2005 15:15	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

CAW 9/12/05

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	1,1,1-Trichloroethane	9.0	<i>J</i>	2.5	5	ug/L	08/01/05 15:48
2)	1,1,2,2-Tetrachloroethane	BQL	U	2.5	5	ug/L	08/01/05 15:48
3)	1,1,2-Trichloroethane	BQL	U	2.5	5	ug/L	08/01/05 15:48
4)	1,1-Dichloroethane	20		2.5	5	ug/L	08/01/05 15:48
5)	1,1-Dichloroethene	2.6		2.5	5	ug/L	08/01/05 15:48
6)	1,2,3-Trichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:48
7)	1,2,4-Trichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:48
8)	1,2-Dibromo-3-Chloropropane	BQL	U	2.5	5	ug/L	08/01/05 15:48
9)	1,2-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:48
10)	1,2-Dichloroethane	BQL	U	2.5	5	ug/L	08/01/05 15:48
11)	1,2-Dichloropropane	BQL	U	2.5	5	ug/L	08/01/05 15:48
12)	1,3-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:48
13)	1,4-Dichlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:48
14)	2-Butanone	BQL	U	25	5	ug/L	08/01/05 15:48
15)	2-Hexanone	BQL	U	25	5	ug/L	08/01/05 15:48
16)	4-Methyl-2-Pentanone	BQL	U	25	5	ug/L	08/01/05 15:48
17)	Acetone	BQL	<i>U R</i>	25	5	ug/L	08/01/05 15:48
18)	Benzene	BQL	U	2.5	5	ug/L	08/01/05 15:48
19)	Bromochloromethane	BQL	U	2.5	5	ug/L	08/01/05 15:48
20)	Bromodichloromethane	BQL	U	2.5	5	ug/L	08/01/05 15:48
21)	Bromoform	BQL	U	2.5	5	ug/L	08/01/05 15:48
22)	Bromomethane	BQL	U	2.5	5	ug/L	08/01/05 15:48
23)	Carbon Disulfide	BQL	U	2.5	5	ug/L	08/01/05 15:48
24)	Carbon Tetrachloride	BQL	<i>U J</i>	2.5	5	ug/L	08/01/05 15:48
25)	Chlorobenzene	BQL	U	2.5	5	ug/L	08/01/05 15:48
26)	Chloroethane	BQL	U	2.5	5	ug/L	08/01/05 15:48
27)	Chloroform	BQL	U	2.5	5	ug/L	08/01/05 15:48
28)	Chloromethane	BQL	U	2.5	5	ug/L	08/01/05 15:48

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-7-072105 DL	Lab Sample ID:	507124-007-026-2/4 DL
Sample Date/Time:	07/21/2005 15:15 <i>(Call) 9/12/05</i>	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U		2.5	5	ug/L	08/01/05	15:48
30) Dibromochloromethane	BQL U		2.5	5	ug/L	08/01/05	15:48
31) Dichlorodifluoromethane	BQL U	J	2.5	5	ug/L	08/01/05	15:48
32) Ethylbenzene	BQL U		2.5	5	ug/L	08/01/05	15:48
33) Ethylene Dibromide	BQL U		2.5	5	ug/L	08/01/05	15:48
34) Freon 113	BQL U		2.5	5	ug/L	08/01/05	15:48
35) Isopropylbenzene	BQL U		2.5	5	ug/L	08/01/05	15:48
36) Methyl Acetate	BQL U		2.5	5	ug/L	08/01/05	15:48
37) Methylcyclohexane	BQL U	J	2.5	5	ug/L	08/01/05	15:48
38) Methylene Chloride	4.4	U	2.5	5	ug/L	08/01/05	15:48
39) Styrene	BQL U		2.5	5	ug/L	08/01/05	15:48
40) Tetrachloroethylene	BQL U		2.5	5	ug/L	08/01/05	15:48
41) Toluene	BQL U		2.5	5	ug/L	08/01/05	15:48
42) Total Xylenes	BQL U		2.5	5	ug/L	08/01/05	15:48
43) Trichloroethene	50	J	2.5	5	ug/L	08/01/05	15:48
44) Trichlorofluoromethane	BQL U		2.5	5	ug/L	08/01/05	15:48
45) Vinyl Chloride	21		2.5	5	ug/L	08/01/05	15:48
46) cis-1,2-Dichloroethene	120		2.5	5	ug/L	08/01/05	15:48
47) cis-1,3-Dichloropropene	BQL U		2.5	5	ug/L	08/01/05	15:48
48) tert-butyl methyl ether	BQL U		2.5	5	ug/L	08/01/05	15:48
49) trans-1,2-dichloroethene	BQL U		2.5	5	ug/L	08/01/05	15:48
50) trans-1,3-dichloropropene	BQL U		2.5	5	ug/L	08/01/05	15:48

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	106 %	75 - 131	5	08/01/05 15:48
52)	1,1-Dichloroethene-d2	68 %	65 - 130	5	08/01/05 15:48
53)	1,2-Dichlorobenzene-d4	120 %	50 - 150	5	08/01/05 15:48
54)	1,2-Dichloroethane-d4	119 %	78 - 129	5	08/01/05 15:48
55)	1,2-Dichloropropane-d6	93 %	84 - 123	5	08/01/05 15:48
56)	2-Butanone-d5	115 %	42 - 171	5	08/01/05 15:48

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	S-7-072105 DL	Lab Sample ID:	507124-007-026-2/4 DL
Sample Date/Time:	07/21/2005 15:15	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	109 %	37 - 169	5	08/01/05	15:48
58) Benzene-d6	100 %	78 - 121	5	08/01/05	15:48
59) Bromoform-d	104 %	76 - 135	5	08/01/05	15:48
60) Chloroethane-d5	82 %	60 - 126	5	08/01/05	15:48
61) Chloroform-d	109 %	80 - 123	5	08/01/05	15:48
62) Toluene-D8	99 %	77 - 120	5	08/01/05	15:48
63) Vinyl Chloride-d3	93 %	49 - 138	5	08/01/05	15:48
64) trans-1,3-Dichloropropene-d4	90 %	80 - 128	5	08/01/05	15:48

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507124-008-029-1/2
Sample Date/Time:	07/21/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	1,1,1-Trichloroethane	BQL	U	0.50	1	ug/L	08/01/05	16:21
2)	1,1,2,2-Tetrachloroethane	BQL	U	0.50	1	ug/L	08/01/05	16:21
3)	1,1,2-Trichloroethane	BQL	U	0.50	1	ug/L	08/01/05	16:21
4)	1,1-Dichloroethane	BQL	U	0.50	1	ug/L	08/01/05	16:21
5)	1,1-Dichloroethene	BQL	U	0.50	1	ug/L	08/01/05	16:21
6)	1,2,3-Trichlorobenzene	BQL	U	0.50	1	ug/L	08/01/05	16:21
7)	1,2,4-Trichlorobenzene	BQL	U	0.50	1	ug/L	08/01/05	16:21
8)	1,2-Dibromo-3-Chloropropane	BQL	U	0.50	1	ug/L	08/01/05	16:21
9)	1,2-Dichlorobenzene	BQL	U	0.50	1	ug/L	08/01/05	16:21
10)	1,2-Dichloroethane	BQL	U	0.50	1	ug/L	08/01/05	16:21
11)	1,2-Dichloropropane	BQL	U	0.50	1	ug/L	08/01/05	16:21
12)	1,3-Dichlorobenzene	BQL	U	0.50	1	ug/L	08/01/05	16:21
13)	1,4-Dichlorobenzene	BQL	U	0.50	1	ug/L	08/01/05	16:21
14)	2-Butanone	BQL	U	5.0	1	ug/L	08/01/05	16:21
15)	2-Hexanone	BQL	U	5.0	1	ug/L	08/01/05	16:21
16)	4-Methyl-2-Pentanone	BQL	U	5.0	1	ug/L	08/01/05	16:21
17)	Acetone	BQL	U	5.0	1	ug/L	08/01/05	16:21
18)	Benzene	BQL	U	0.50	1	ug/L	08/01/05	16:21
19)	Bromochloromethane	BQL	U	0.50	1	ug/L	08/01/05	16:21
20)	Bromodichloromethane	BQL	U	0.50	1	ug/L	08/01/05	16:21
21)	Bromoform	BQL	U	0.50	1	ug/L	08/01/05	16:21
22)	Bromomethane	BQL	U	0.50	1	ug/L	08/01/05	16:21
23)	Carbon Disulfide	BQL	U	0.50	1	ug/L	08/01/05	16:21
24)	Carbon Tetrachloride	BQL	U	0.50	1	ug/L	08/01/05	16:21
25)	Chlorobenzene	BQL	U	0.50	1	ug/L	08/01/05	16:21
26)	Chloroethane	BQL	U	0.50	1	ug/L	08/01/05	16:21
27)	Chloroform	BQL	U	0.50	1	ug/L	08/01/05	16:21
28)	Chloromethane	BQL	U	0.50	1	ug/L	08/01/05	16:21

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507124-008-029-1/2
Sample Date/Time:	07/21/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

29) Cyclohexane	BQL U	0.50	1	ug/L	08/01/05	16:21
30) Dibromochloromethane	BQL U	0.50	1	ug/L	08/01/05	16:21
31) Dichlorodifluoromethane	BQL U	0.50	1	ug/L	08/01/05	16:21
32) Ethylbenzene	BQL U	0.50	1	ug/L	08/01/05	16:21
33) Ethylene Dibromide	BQL U	0.50	1	ug/L	08/01/05	16:21
34) Freon 113	BQL U	0.50	1	ug/L	08/01/05	16:21
35) Isopropylbenzene	BQL U	0.50	1	ug/L	08/01/05	16:21
36) Methyl Acetate	BQL U	0.50	1	ug/L	08/01/05	16:21
37) Methylcyclohexane	BQL U	0.50	1	ug/L	08/01/05	16:21
38) Methylene Chloride	0.93	0.50	1	ug/L	08/01/05	16:21
39) Styrene	BQL U	0.50	1	ug/L	08/01/05	16:21
40) Tetrachloroethylene	BQL U	0.50	1	ug/L	08/01/05	16:21
41) Toluene	BQL U	0.50	1	ug/L	08/01/05	16:21
42) Total Xylenes	BQL U	0.50	1	ug/L	08/01/05	16:21
43) Trichloroethene	BQL U	0.50	1	ug/L	08/01/05	16:21
44) Trichlorofluoromethane	BQL U	0.50	1	ug/L	08/01/05	16:21
45) Vinyl Chloride	BQL U	0.50	1	ug/L	08/01/05	16:21
46) cis-1,2-Dichloroethene	BQL U	0.50	1	ug/L	08/01/05	16:21
47) cis-1,3-Dichloropropene	BQL U	0.50	1	ug/L	08/01/05	16:21
48) tert-butyl methyl ether	BQL U	0.50	1	ug/L	08/01/05	16:21
49) trans-1,2-dichloroethene	BQL U	0.50	1	ug/L	08/01/05	16:21
50) trans-1,3-dichloropropene	BQL U	0.50	1	ug/L	08/01/05	16:21

#	Surrogate Parameter	Percent Recovery	Control Limits	Dil Fact	Analysis Date/Time
51)	1,1,2,2-Tetrachloroethane-d2	111 %	75 - 131	1	08/01/05 16:21
52)	1,1-Dichloroethene-d2	65 %	65 - 130	1	08/01/05 16:21
53)	1,2-Dichlorobenzene-d4	114 %	50 - 150	1	08/01/05 16:21
54)	1,2-Dichloroethane-d4	125 %	78 - 129	1	08/01/05 16:21
55)	1,2-Dichloropropane-d6	99 %	84 - 123	1	08/01/05 16:21
56)	2-Butanone-d5	118 %	42 - 171	1	08/01/05 16:21

Analytical Summary Report

Client Name:	Tetra Tech EC, Inc.	Sample Matrix:	WATER
Client Sample ID:	HOLDING BLANK	Lab Sample ID:	507124-008-029-1/2
Sample Date/Time:	07/21/2005 00:00	Percent Moisture:	NA
Receipt Date/Time:	07/22/2005 11:51	Preparation Method:	SW5030LL
Prepared Date/Time:	08/01/2005 11:04	Analytical Method:	CLP_OLC03.2

57) 2-Hexanone-d5	121 %	37 - 169	1	08/01/05	16:21
58) Benzene-d6	107 %	78 - 121	1	08/01/05	16:21
59) Bromoform-d	104 %	76 - 135	1	08/01/05	16:21
60) Chloroethane-d5	95 %	60 - 126	1	08/01/05	16:21
61) Chloroform-d	113 %	80 - 123	1	08/01/05	16:21
62) Toluene-D8	101 %	77 - 120	1	08/01/05	16:21
63) Vinyl Chloride-d3	101 %	49 - 138	1	08/01/05	16:21
64) trans-1,3-Dichloropropene-d4	99 %	80 - 128	1	08/01/05	16:21

GPL Laboratories, LLLP

Qualifier Definitions

Tetra Tech EC, Inc.

Work Order: 507124

All Departments

U Indicates that the compound was analyzed for but not detected

BQL Below Quantitation Limit

Organics

B Indicates that the analyte was found in the associated blank as well as in the sample

D Indicates that the analyte was reported from a diluted analysis

E Indicates that the concentration detected exceeded the calibration range of the instrument

J Value is less than the reporting limit but greater than the MDL

P Indicates that there is greater than 25% difference for detected pesticide/Arochlor results between the two GC columns

Metals

J Indicates that the reported value was less than the reporting limit but greater than or equal to the IDL/MDL

E Indicates that the reported value is estimated because of the possible presence of interference (i.e. the serial dilution not within control limits)

H Indicates that the element was found in the associated blank as well as in the sample and the value is greater than or equal to the reporting limit

D Indicates that the analyte was reported from a diluted analysis

N Spiked sample recovery not within control limits

* Duplicate analysis not within control limits

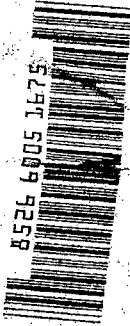
NO POUCH NEEDED
See back for peel and stick application instructions

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2 Your Internal Billing Reference: 6145-1105-0700-03000
3 To Recipient's Name: Sample Custodian Phone: 340-883-9774
Company: GPL Laboratories
Recipients Address: 7210 A Corporate Ct
We cannot deliver to PO, APO, or FPO ZIP codes.
Address: Frederick
City: Frederick State: MD ZIP: 21703

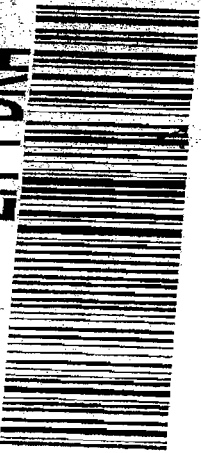


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 FedEx Pak
 FedEx Tube
 FedEx Box
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6 Special Handling
 SATURDAY Delivery
 HOLD Warehouse at FedEx Location
 INCLUDE FedEx address in Series 1
 NOOD Subsidy at FedEx Location
 ADDITIONAL Location
 ADDITIONAL Priority
 ADDITIONAL Priority
 ADDITIONAL Priority

7 Payment Bill to:
 Sender
 Recipient
 Third Party
 Credit Card
 Cash/Check

8 Sign to Authorize Delivery Without a Signature
 Signature Required
 Signature Not Required

Total Packages: [] Total Weight: [] Total Charges: []

466

APPENDIX E
Statistical Trend Analyses Data and Charts

Mann-Kendall Statistical Test

(For Groundwater Sampling Trend Analysis)

Instructions: Do not change formulas or other information in cells with a blue background, only cells with a yellow background are used for data entry. To use the spreadsheet, **provide at least four rounds and not more than ten rounds of data** that is **not seasonally affected**. Use consistent units. The spreadsheet contains several error checks, and a data entry error may cause "DATA ERR" or "DATE ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at both 80 percent and 90 percent confidence levels. If an increasing or decreasing trend is not present, an additional coefficient of variation test is used to test for stability, as proposed by Wiedemeier et al, 1999. For additional information, refer to the Interim Guidance on Natural Attenuation from the governing regulatory agencies for the site and applicable guidance for recommendations on data entry for non-detect values (**See protocol at bottom of worksheet**).

Error Messages: There is a section below the data entry screen that describes data entry errors in more detail and which cell has that error. Thus a user can determine what and where their error is very quickly. Note that a space is seen as text in Excel formulae.

Data Entry and Error Messages: When there are less than four rounds of data entered, instead of getting an "ERROR" message, only "n<4" is displayed. But, if text, a zero or a negative number is inadvertently entered, the "ERROR" message is displayed. Thus, during data entry, an "ERROR" message is only displayed when there actually is an error. Note that the **date must be entered before sample results collected on that date are entered** to avoid an error message.

To avoid biasing the Mann-Kendall test, **the same value for all ND results must be entered** in the spreadsheet for a given compound. This is to make sure that any identified trends are data trends and not trends of laboratory detection limits. **SEE PROTOCOL AT BOTTOM OF WORKSHEET !**

Site Name = Vestal Well 1-1 Site Site ID No. = Well Number = S-1


Event Number	Compound -> Sampling Date (most recent last)	1,1,1-TCA Concentration (leave blank if no data - 0 if ND)	1,1-DCA Concentration (leave blank if no data)	1,1-DCE Concentration (leave blank if no data)	1,2-DCA Concentration (leave blank if no data)	Chloroethane Concentration (leave blank if no data)	Vinyl Chloride Concentration (leave blank if no data)
1	10/15/2002	0.681	0.25	0.25	0.25	0.25	0.25
2	5/23/2003	0.25	0.25	0.25	0.25	0.25	0.25
3	7/9/2004	0.25	0.25	0.25	0.25	0.25	0.25
4	7/20/2005	0.25	0.25	0.25	0.25	0.25	0.25
5							
6							
7							
8							
9							
10							

Mann Kendall Statistic (S) =	-3	0	0	0	0	0	0
Number of Rounds (n) =	4	4	4	4	4	4	4
Average =	0.36	0.25	0.25	0.25	0.25	0.25	0.25
Standard Deviation =	0.216	0.000	0.000	0.000	0.000	0.000	0.000
Coefficient of Variation(CV)=	0.602	0.000	0.000	0.000	0.000	0.000	0.000

Error Check, Blank if No Errors Detected

Trend = 80% Confidence Level	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Trend = 90% Confidence Level	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend

Stability Test, if No Trend Exists at 80% Confidence Level	CV<=1 STABLE	CV<=1 STABLE	CV<=1 STABLE	CV<=1 STABLE	CV<=1 STABLE	CV<=1 STABLE	CV<=1 STABLE
--	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------

Data Entry By = LB Date = 10/12/2005 Checked By = CC 

Mann-Kendall Statistical Test

(For Groundwater Sampling Trend Analysis)

Instructions: Do not change formulas or other information in cells with a blue background, only cells with a yellow background are used for data entry. To use the spreadsheet, **provide at least four rounds and not more than ten rounds of data** that is **not seasonally affected**. Use consistent units. The spreadsheet contains several error checks, and a data entry error may cause "DATA ERR" or "DATE ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at both 80 percent and 90 percent confidence levels. If an increasing or decreasing trend is not present, an additional coefficient of variation test is used to test for stability, as proposed by Wiedemeier et al, 1999. For additional information, refer to the Interim Guidance on Natural Attenuation from the governing regulatory agencies for the site and applicable guidance for recommendations on data entry for non-detect values (**See protocol at bottom of worksheet**).
Error Messages: There is a section below the data entry screen that describes data entry errors in more detail and which cell has that error. Thus a user can determine what and where their error is very quickly. Note that a space is seen as text in Excel formulae.

Data Entry and Error Messages: When there are less than four rounds of data entered, instead of getting an "ERROR" message, only "n<4" is displayed. But, if text, a zero or a negative number is inadvertently entered, the "ERROR" message is displayed. Thus, during data entry, an "ERROR" message is only displayed when there actually is an error. Note that the **date must be entered before sample results collected on that date are entered** to avoid an error message.

To avoid biasing the Mann-Kendall test, **the same value for all ND results must be entered** in the spreadsheet for a given compound. This is to make sure that any identified trends are data trends and not trends of laboratory detection limits. **SEE PROTOCOL AT BOTTOM OF WORKSHEET !**

Site Name = Vestal Well 1-1 Site		Site ID No. =	Well Number = S-2				
Event Number	Compound -> Sampling Date (most recent last)	1,1,1-TCA Concentration (leave blank if no data - 0 if ND)	1,1-DCA Concentration (leave blank if no data)	1,1-DCE Concentration (leave blank if no data)	1,2-DCA Concentration (leave blank if no data)	Chloroethane Concentration (leave blank if no data)	Vinyl Chloride Concentration (leave blank if no data)
1	11/14/1996	150	230	35	0.5	0.5	250
2	11/13/1997	56	72	13	0.5	2.9	71
3	6/9/1999	85	110	18	5	5	5
4	7/12/2000	190	180	33		5	310
5	6/19/2001	79	100	17	20	20	170
6	10/16/2002	46.3	66	14.3	0.25	0.25	117
7	5/22/2003	57.9	85.5	24.3	0.25	0.25	191
8	7/8/2004	15	41	9.1	0.25	1.4	25
9	7/22/2005	2.3	7.2	1.7	0.25	0.91	9
10							
Mann Kendall Statistic (S) =		-22	-24	-18	-11	-4	-10
Number of Rounds (n) =		9	9	9	8	9	9
Average =		75.72	99.08	18.38	3.38	4.02	127.56
Standard Deviation =		60.543	68.589	10.822	6.914	6.284	110.118
Coefficient of Variation(CV)=		0.800	0.692	0.589	2.049	1.562	0.863

Error Check, Blank if No Errors Detected							
Trend = 80% Confidence Level	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	No Trend	DECREASING
Trend = 90% Confidence Level	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	No Trend	No Trend
Stability Test, if No Trend Exists at 80% Confidence Level	NA	NA	NA	NA	NA	CV>1 NON-STABLE	NA

Data Entry By =	LB	Date =	10/12/2005	Checked By =	CC
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Mann-Kendall Statistical Test
(For Groundwater Sampling Trend Analysis)

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Site Name = Vestal Well 1-1 Site		Site ID No. =					Well Number = S-2	
Compound ->	Event Number	Sampling Date (most recent last)	cis-1,2-DCE Concentration (leave blank if no data - 0 if ND)	trans-1,2-DCE Concentration (leave blank if no data)	TCE Concentration (leave blank if no data)	PCE Concentration (leave blank if no data)	Total VOC Concentration (leave blank if no data)	Concentration (leave blank if no data)
	1	11/14/1996	840	0.5	60	0.5	1572.5	
	2	11/13/1997	260	1	68	0.5	504.9	
	3	6/9/1999			63	5	994	
	4	7/12/2000	710		39		1472	
	5	6/19/2001	350	20	49	20	807	
	6	10/16/2002	229	1.36	43.9	0.65	533.68	
	7	5/22/2003	320	1.83	34	0.25	741	
	8	7/8/2004	260	1.2	47	0.25	409.98	
	9	7/22/2005	100	0.25	62	0.25	185.59	
	10							
Mann Kendall Statistic (S) =			-17	-1	-10	-10	-22	0
Number of Rounds (n) =			8	7	9	8	9	0
Average =			383.63	3.73	51.77	3.43	802.29	#DIV/0!
Standard Deviation =			254.922	7.192	11.901	6.890	471.313	#DIV/0!
Coefficient of Variation(CV)=			0.665	1.926	0.230	2.012	0.587	#DIV/0!
Error Check, Blank if No Errors Detected								
Trend = 80% Confidence Level			DECREASING	No Trend	DECREASING	DECREASING	DECREASING	N<4
Trend = 90% Confidence Level			DECREASING	No Trend	No Trend	No Trend	DECREASING	N<4
Stability Test, If No Trend Exists at 80% Confidence Level			NA	CV>1 NON-STABLE	NA	NA	NA	n<4
Data Entry By =			LB	Date =	10/12/2005	Checked By =	CC	

Mann-Kendall Statistical Test

(For Groundwater Sampling Trend Analysis)

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Site Name =	Vestal Well 1-1 Site	Site ID No. =	Well Number =	S-6		
Event Number	Compound -> Sampling Date (most recent last)	1,1,1-TCA Concentration (leave blank if no data - 0 if ND)	1,1-DCE Concentration (leave blank if no data)	1,2-DCA Concentration (leave blank if no data)	Chloroethane Concentration (leave blank if no data)	Vinyl Chloride Concentration (leave blank if no data)
1	10/15/2002	0.25	0.25	0.25	0.25	0.463
2	5/22/2003	0.25	0.25	0.25	0.25	0.475
3	7/8/2004	0.25	0.36	0.25	0.25	0.5
4	7/22/2005	0.25	0.25	0.25	0.25	0.25
5						
6						
7						
8						
9						
10						

Mann Kendall Statistic (S) =	-2	0	0	0	0
Number of Rounds (n) =	4	4	4	4	4
Average =	0.25	0.32	0.25	0.25	0.42
Standard Deviation =	0.000	0.085	0.000	0.000	0.116
Coefficient of Variation(CV)=	0.000	0.263	0.000	0.000	0.274

Error Check, Blank if No Errors Detected						
Trend = 80% Confidence Level	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Trend = 90% Confidence Level	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Stability Test, if No Trend Exists at 80% Confidence Level	CV<=1 STABLE	CV<=1 STABLE	CV<=1 STABLE	CV<=1 STABLE	CV<=1 STABLE	CV<=1 STABLE

Data Entry By =	LB	Date =	10/12/2005	Checked By =	CC
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Mann-Kendall Statistical Test
(For Groundwater Sampling Trend Analysis)

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Site Name = Vestal Well 1-1 Site		Site ID No. =	Well Number =				S-6
Compound ->							
Event Number	Sampling Date (most recent last)	cis-1,2-DCE Concentration (leave blank if no data - 0 if ND)	trans-1,2-DCE Concentration (leave blank if no data)	TCE Concentration (leave blank if no data)	PCE Concentration (leave blank if no data)	Total VOC Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/15/2002	21	0.25	29.3	0.528	59.36	
2	5/22/2003	23	0.25	53.8	0.25	78.36	
3	7/8/2004	23	0.25	39	0.25	62.36	
4	7/22/2005	26	0.25	49	0.25	69.3	
5							
6							
7							
8							
9							
10							

Mann Kendall Statistic (S) =	5	0	2	-3	2	0
Number of Rounds (n) =	4	4	4	4	4	0
Average =	23.25	0.25	42.78	0.32	67.35	#DIV/0!
Standard Deviation =	2.062	0.000	10.895	0.139	8.441	#DIV/0!
Coefficient of Variation(CV)=	0.089	0.000	0.255	0.435	0.125	#DIV/0!

Error Check, Blank if No Errors Detected						
Trend = 80% Confidence Level	INCREASING	No Trend	No Trend	No Trend	No Trend	No Trend
Trend = 90% Confidence Level	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Stability Test, if No Trend Exists at 80% Confidence Level	NA	CV<=1 STABLE	CV<=1 STABLE	CV<=1 STABLE	CV<=1 STABLE	n<4 n<4

Mann-Kendall Statistical Test

(For Groundwater Sampling Trend Analysis)

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Site Name = Vestal Well 1-1 Site	Site ID No. =	Well Number =	S-7				
Event Number	Compound -> Sampling Date (most recent last)	1,1,1-TCA Concentration (leave blank if no data - 0 if ND)	1,1-DCA Concentration (leave blank if no data)	1,1-DCE Concentration (leave blank if no data)	1,2-DCA Concentration (leave blank if no data)	Chloroethane Concentration (leave blank if no data)	Vinyl Chloride Concentration (leave blank if no data)
1	11/15/1996	51	33	5	5	5	78
2	11/14/1997	330	41	1.1	0.5	0.82	31
3	10/15/2002	1220	89	32.9	0.25	0.25	37.1
4	5/23/2003	135	39.3	8.27	0.25	0.25	40.3
5	7/8/2004	28	22	2.5	0.25	0.25	24
6	7/21/2005	7.9	16	1.9	0.25	0.25	14
7							
8							
9							
10							

Mann Kendall Statistic (S) =	-7	-7	-3	-9	-9	-9	-9
Number of Rounds (n) =	6	6	6	6	6	6	6
Average =	295.32	40.05	8.61	1.08	1.14	1.14	37.40
Standard Deviation =	468.124	25.890	12.181	1.921	1.906	1.906	22.022
Coefficient of Variation(CV)=	1.585	0.646	1.414	1.774	1.677	1.677	0.589

Error Check, Blank if No Errors Detected							
Trend = 80% Confidence Level	DECREASING	DECREASING	No Trend	DECREASING	DECREASING	DECREASING	DECREASING
Trend = 90% Confidence Level	No Trend	No Trend	No Trend	DECREASING	DECREASING	DECREASING	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA	NA	CV>1 NON-STABLE	NA	NA	NA	NA
Data Entry By =	LB	Date =	10/12/2005	Checked By =	CC	TETRA TECH	

Mann-Kendall Statistical Test

(For Groundwater Sampling Trend Analysis)

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Site Name = Vestal Well 1-1 Site		Site ID No. =	Well Number = S-7				
Compound ->	cis-1,2-DCE Concentration (leave blank if no data - 0 if ND)	trans-1,2-DCE Concentration (leave blank if no data)	TCE Concentration (leave blank if no data)	PCE Concentration (leave blank if no data)	Total VOC Concentration (leave blank if no data)	Concentration (leave blank if no data)	
Event Number	Sampling Date (most recent last)						
1	11/15/1996	170	5	37	5	380	
2	11/14/1997	110	0.5	45	0.5	561.22	
3	10/15/2002	40.7	0.93	25.6	0.25	1445.3	
4	5/23/2003	38.4	0.769	23.7	0.25	286	
5	7/8/2004	69	0.76	18	0.25	164.26	
6	7/21/2005	120	0.25	50	0.25	210.9	
7							
8							
9							
10							
Mann Kendall Statistic (S) =		-3	-9	-3	-9	-7	0
Number of Rounds (n) =		6	6	6	6	6	0
Average =		91.35	1.37	33.22	1.08	507.95	#DIV/0!
Standard Deviation =		51.426	1.795	12.767	1.921	480.303	#DIV/0!
Coefficient of Variation(CV)=		0.563	1.312	0.384	1.774	0.946	#DIV/0!
Error Check, Blank if No Errors Detected							N<4
Trend = 80% Confidence Level		No Trend	DECREASING	No Trend	DECREASING	DECREASING	N<4
Trend = 90% Confidence Level		No Trend	DECREASING	No Trend	DECREASING	No Trend	N<4
Stability Test, If No Trend Exists at 80% Confidence Level		CV<=1 STABLE	NA	CV<=1 STABLE	NA	NA	n<4 n<4

Mann-Kendall Statistical Test

(For Groundwater Sampling Trend Analysis)

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Site Name = Vestal Well 1-1 Site	Site ID No. =	Well Number =	S-11
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Event Number	Compound -> Sampling Date (most recent last)	1,1,1-TCA Concentration (leave blank if no data - 0 if ND)	1,1-DCA Concentration (leave blank if no data)	1,1-DCE Concentration (leave blank if no data)	1,2-DCA Concentration (leave blank if no data)	Chloroethane Concentration (leave blank if no data)	Vinyl Chloride Concentration (leave blank if no data)
1	11/14/1996	1600	40	55	0.5	0.5	18
2	11/13/1997	56	5.3	5.2	0.5	0.5	0.5
3	6/9/1999	110	9	4	5	5	5
4	7/12/2000	2000	52	35	2		3
5	6/19/2001	130	19	1	10	10	10
6	10/15/2002	106	29.6	3.73	0.25	0.25	1.19
7	5/21/2003	77.4	21.1	0.25	0.25	1.27	2.24
8	7/8/2004	910	75	54	0.25	3.3	11
9	7/22/2005	370	41	0.25	0.25	0.25	7.8
10							

Mann Kendall Statistic (S) =	-2
Number of Rounds (n) =	9
Average =	2.63
Standard Deviation =	3.436
Coefficient of Variation(CV)=	1.305

Error Check, Blank if No Errors Detected							
Trend = 80% Confidence Level	No Trend	INCREASING	DECREASING	DECREASING	No Trend	No Trend	No Trend
Trend = 90% Confidence Level	No Trend	INCREASING	DECREASING	DECREASING	No Trend	No Trend	No Trend
Stability Test, If No Trend Exists at 80% Confidence Level	CV>1 NON-STABLE	NA	NA	NA	CV>1 NON-STABLE	CV<=1 STABLE	

Data Entry By =	LB	Date =	10/12/2005
		Checked By =	CC

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Site Name = Vestal Well 1-1 Site		Site ID No. =	Well Number = S-11				
Event Number	Compound -> Sampling Date (most recent last)	cis-1,2-DCE Concentration (leave blank if no data - 0 if ND)	trans-1,2-DCE Concentration (leave blank if no data)	TCE Concentration (leave blank if no data)	PCE Concentration (leave blank if no data)	Total VOC Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	11/14/1996	2900	11	500	4.9	5131	
2	11/13/1997	300	2.8	64	1.4	441.7	
3	6/9/1999			100	5	383	
4	7/12/2000	1700	4	350	3	4154	
5	6/19/2001	120	1	90	10	417	
6	10/15/2002	232	2.53	86	1.71	467.9	
7	5/21/2003	167	1.69	98	1.02	394	
8	7/8/2004	670	3	220	1.6	2049.25	
9	7/22/2005	410	2.9	120	1.6	1110.8	
10							
Mann Kendall Statistic (S) =		-6	-6	0	-11	-2	0
Number of Rounds (n) =		8	8	9	9	9	0
Average =		812.38	3.62	180.89	3.36	1616.52	#DIV/0!
Standard Deviation =		987.311	3.116	150.004	2.905	1816.173	#DIV/0!
Coefficient of Variation(CV)=		1.215	0.862	0.829	0.865	1.124	#DIV/0!
Error Check, Blank if No Errors Detected							
Trend = 80% Confidence Level		No Trend	No Trend	No Trend	DECREASING	No Trend	N<4
Trend = 90% Confidence Level		No Trend	No Trend	No Trend	No Trend	No Trend	N<4
Stability Test, If No Trend Exists at 80% Confidence Level		NON-STABLE	CV<=1 STABLE	CV<=1 STABLE	NA	CV>1 NON-STABLE	n<4

Mann-Kendall Statistical Test
(For Groundwater Sampling Trend Analysis)

Instructions: Do not change formulas or other information in cells with a blue background, only cells with a yellow background are used for data entry. To use the spreadsheet, provide at least four rounds and not more than ten rounds of data that is not seasonally affected. Use consistent units. The spreadsheet contains several error checks, and a data entry error may cause "DATA ERR" or "DATE ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at both 80 percent and 90 percent confidence levels. If an increasing or decreasing trend is not present, an additional coefficient of variation test is used to test for stability, as proposed by Wiedemeier et al, 1999. For additional information, refer to the Interim Guidance on Natural Attenuation from the governing regulatory agencies for the site and applicable guidance for recommendations on data entry for non-detect values (See protocol at bottom of worksheet).

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Site Name = Vestal Well 1-1 Site Site ID No. = Well Number = EB-31

Event Number	Compound -> Sampling Date (most recent last)	1,1,1-TCA Concentration (leave blank if no data - 0 if ND)	1,1-DCA Concentration (leave blank if no data)	1,1-DCE Concentration (leave blank if no data)	1,2-DCA Concentration (leave blank if no data)	Chloroethane Concentration (leave blank if no data)	Vinyl Chloride Concentration (leave blank if no data)
1	11/13/1996	1	9	3.5	1	1	46
2	11/14/1997	0.5	3	1	0.5	0.5	19
3	6/10/1999	5	4	5	5	5	5
4	7/12/2000	10	5	3	10	10	10
5	6/19/2001	10	6	3	10	10	10
6	10/16/2002	0.6	4.79	3.2	0.25	0.25	5.42
7	5/21/2003	0.316	4.02	1.95	0.25	0.25	0.655
8	7/8/2004	0.5	4.1	0.25	0.25	0.25	20
9	7/21/2005	0.25	3.9	2.2	0.25	0.25	0.54
10							

Mann Kendall Statistic (S) =	-8	-13	-13	-12	-17
Number of Rounds (n) =	9	9	9	8	9
Average =	3.13	4.87	2.57	3.06	2.19
Standard Deviation =	4.166	1.763	1.410	4.220	3.550
Coefficient of Variation(CV)=	1.331	0.362	0.549	1.381	1.623

Error Check, Blank if No Errors Detected

Trend = 80% Confidence Level	DECREASING	No Trend	DECREASING	DECREASING	DECREASING	DECREASING
Trend = 90% Confidence Level	DECREASING	No Trend	No Trend	No Trend	DECREASING	DECREASING

Stability Test, if No Trend Exists at 80% Confidence Level	NA	CV<=1 STABLE	NA	NA	NA	NA
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Data Entry By = LB Date = 10/12/2005 Checked By = CC

Mann-Kendall Statistical Test
(For Groundwater Sampling Trend Analysis)

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Site Name = Vestal Well 1-1 Site Site ID No. = Well Number = EB-31

Event Number	Compound -> Sampling Date (most recent last)	cis-1,2-DCE Concentration (leave blank if no data - 0 if ND)	trans-1,2-DCE Concentration (leave blank if no data)	TCE Concentration (leave blank if no data)	PCE Concentration (leave blank if no data)	Total VOC Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	11/13/1996	34	1	36	1	128.5	
2	11/14/1997	38	0.5	41	0.5	106	
3	6/10/1999			45	5	67	
4	7/12/2000	17	10	54	10	79	
5	6/19/2001	15	10	57	10	81	
6	10/16/2002	15.9	0.334	76.3	0.137	97.62	
7	5/21/2003	8.2	0.311	44.9	0.25	62	
8	7/8/2004	75	1.8	4.1	0.51	119.9	
9	7/21/2005	21	0.25	62	0.25	90.31	
10							

Mann Kendall Statistic (S) =	-4	-11	12	-8	-4	0
Number of Rounds (n) =	8	8	9	9	9	0
Average =	28.01	3.02	46.70	3.07	92.37	#DIV/0!
Standard Deviation =	21.456	4.336	20.117	4.209	22.789	#DIV/0!
Coefficient of Variation(CV)=	0.766	1.434	0.431	1.370	0.247	#DIV/0!

Error Check, Blank if No Errors Detected

Trend = 80% Confidence Level	No Trend	DECREASING	INCREASING	No Trend	No Trend	N<4
Trend = 90% Confidence Level	No Trend	DECREASING	No Trend	No Trend	No Trend	N<4

Stability Test, if No Trend Exists at 80% Confidence Level	CV<=1 STABLE	NA	NA	CV>1 NON-STABLE	CV<=1 STABLE	n<4 n<4
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Data Entry, Rv = LB Date = 10/12/2005 Checked By = CC

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Site Name = Vestal Well 1-1 Site		Site ID No. =	Well Number = EB-33				
Event Number	Compound -> Sampling Date (most recent last)	1,1,1-TCA Concentration (leave blank if no data - 0.25 if ND)	1,1-DCA Concentration (leave blank if no data)	1,1-DCE Concentration (leave blank if no data)	1,2-DCA Concentration (leave blank if no data)	Chloroethane Concentration (leave blank if no data)	Vinyl Chloride Concentration (leave blank if no data)
1	11/14/1996	18	50	4.5	0.5	0.5	15
2	11/13/1997	22	39	6.9	0.5	0.5	8.9
3	6/9/1999	7	23	3	5	5	5
4	7/13/2000	6	14	50	25	50	8
5	6/19/2001	25	11	25	25	25	24
6	10/16/2002	1.42	9.78	0.25	0.25	0.25	118
7	5/21/2003	0.85	5.1	0.25	0.25	0.25	14.6
8	7/8/2004	0.29	4.1	2.1	0.25	0.25	2
9	7/21/2005	0.25	4	0.25	0.25	0.25	8.5
10							

Mann Kendall Statistic (S) =	-26	-36	-15	-11	-13	-4
Number of Rounds (n) =	9	9	9	8	9	9
Average =	8.98	17.78	10.25	4.00	9.11	22.67
Standard Deviation =	9.971	16.499	16.811	8.642	17.334	36.329
Coefficient of Variation(CV)=	1.110	0.928	1.640	2.160	1.902	1.603

Error Check, Blank if No Errors Detected

Trend = 80% Confidence Level	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	No Trend
Trend = 90% Confidence Level	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	No Trend
Stability Test, if No Trend Exists at 80% Confidence Level	NA	NA	NA	NA	NA	CV>1 NON-STABLE

Data Entry By =	LB	Date =	10/12/2005	Checked By =	CC
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Site Name = Vestal Well 1-1 Site Site ID No. = Well Number = **EB-33**

Event Number	Compound -> Sampling Date (most recent last)	cis-1,2-DCE Concentration (leave blank if no data - 0 if ND)	trans-1,2-DCE Concentration (leave blank if no data)	TCE Concentration (leave blank if no data)	PCE Concentration (leave blank if no data)	Total VOC Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	11/14/1996	2000	0.5	290	139	2384.4	
2	11/13/1997	1100	7.1	88	2.2	1285.23	
3	6/9/1999	750		81	5	1321	
4	7/13/2000	420	4	55	25	833	
5	6/19/2001	218	3.24	15	0.918	552	
6	10/16/2002	120	2.13	8.16	0.531	355.35	
7	5/21/2003	11	0.39	50	0.25	176	
8	7/8/2004	49	0.25	5.2	0.56	70.55	
9	7/21/2005					75.34	
10							

Mann Kendall Statistic (S) =	-26	-13	-30	-18	-32	0
Number of Rounds (n) =	8	7	9	8	9	0
Average =	583.50	2.52	66.88	21.68	783.65	#DIV/0!
Standard Deviation =	685.520	2.504	89.500	48.131	768.254	#DIV/0!
Coefficient of Variation(CV)=	1.175	0.995	1.338	2.220	0.980	#DIV/0!

Error Check, Blank if No Errors Detected

Trend = 80% Confidence Level	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	N<4
Trend = 90% Confidence Level	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	N<4

Stability Test, if No Trend Exists at 80% Confidence Level	NA	NA	NA	NA	NA	NA	n<4
							n<4

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Site Name = Vestal Well 1-1 Site		Site ID No. =			Well Number =		EB-41	
Event Number	Compound -> Sampling Date (most recent last)	1,1,1-TCA Concentration (leave blank if no data - 0.25 if ND)	1,1-DCA Concentration (leave blank if no data)	1,1-DCE Concentration (leave blank if no data)	1,2-DCA Concentration (leave blank if no data)	Chloroethane Concentration (leave blank if no data)	Vinyl Chloride Concentration (leave blank if no data)	
1	11/15/1996	0.5	0.5	0.5	0.5	0.5	0.5	
2	11/14/1997	0.5	0.5	0.5	0.5	0.5	0.5	
3	6/10/1999	5	5	5	5	5	5	
4	7/13/2000	10						
5	6/20/2001	10	10	10	10	10	10	
6	10/16/2002	0.893	0.717	0.25	0.25	0.25	0.191	
7	5/21/2003	0.25	0.349	0.25	0.25	0.25	0.25	
8	6/29/2004	0.25	0.37	0.25	0.25	0.25	0.25	
9	7/21/2005	0.25	0.66	0.25	0.25	0.25	0.25	
10								
Mann Kendall Statistic (S) =		-11	-3	-11	-11	-11	-8	
Number of Rounds (n) =		9	8	8	8	8	8	
Average =		3.07	2.26	2.13	2.13	2.13	2.12	
Standard Deviation =		4.207	3.501	3.578	3.578	3.578	3.583	
Coefficient of Variation(CV)=		1.370	1.548	1.684	1.684	1.684	1.692	
Error Check, Blank if No Errors Detected								
Trend = 80% Confidence Level		DECREASING	No Trend	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING
Trend = 90% Confidence Level		No Trend	No Trend	DECREASING	DECREASING	DECREASING	No Trend	No Trend
Stability Test, If No Trend Exists at 80% Confidence Level		NA	CV>1 NON-STABLE	NA	NA	NA	NA	NA
Data Entry By =		LB	Date =	10/12/2005	Checked By =	CC		

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Compound ->		cis-1,2-DCE Concentration (leave blank if no data - 0 if ND)	trans-1,2-DCE Concentration (leave blank if no data)	TCE Concentration (leave blank if no data)	PCE Concentration (leave blank if no data)	Total VOC Concentration (leave blank if no data)	Concentration (leave blank if no data)
Event Number	Sampling Date (most recent last)						
1	11/15/1996	4.6	0.5	0.5	0.5		
2	11/14/1997		0.5	0.5	0.5	4.6	
3	6/10/1999	4		5	5	6	
4	7/13/2000	6		2		6	
5	6/20/2001	14	10	10	10	8	
6	10/16/2002	4.94	0.25	0.524	2.25	31.2	
7	5/21/2003	6.9	0.25	0.86	0.25	8.4	
8	6/29/2004	6.7	0.25	0.77	0.25	9.69	
9	7/21/2005	12	0.25	0.25	0.25	14.56	
10							

Mann Kendall Statistic (S) =	14	-10	-3	-10	21	0
Number of Rounds (n) =	8	7	9	8	8	0
Average =	7.39	1.71	2.27	2.38	11.06	#DIV/0!
Standard Deviation =	3.642	3.656	3.258	3.497	8.694	#DIV/0!
Coefficient of Variation(CV)=	0.493	2.132	1.437	1.473	0.786	#DIV/0!

Error Check, Blank if No Errors Detected						N<4
Trend = 80% Confidence Level	INCREASING	DECREASING	No Trend	DECREASING	INCREASING	N<4
Trend = 90% Confidence Level	INCREASING	DECREASING	No Trend	No Trend	INCREASING	N<4
Stability Test, if No Trend Exists at 80% Confidence Level	NA	NA	CV>1 NON-STABLE	NA	NA	n<4 n<4

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Site Name = Vestal Well 1-1 Site Site ID No. = Well Number = 1-29

Event Number	Compound -> Sampling Date (most recent last)	1,1,1-TCA Concentration (leave blank if no data - 0.25 if ND)	1,1-DCA Concentration (leave blank if no data)	1,1-DCE Concentration (leave blank if no data)	1,2-DCA Concentration (leave blank if no data)	Chloroethane Concentration (leave blank if no data)	Vinyl Chloride Concentration (leave blank if no data)
1	11/13/1996	440	49	24	0.5	0.5	0.5
2	11/12/1997	70	37	5.9	1	0.5	0.5
3	6/8/1999	68	94	18	5	5	5
4	7/11/2000	15.5	10	2			
5	10/15/2002	91.2	12.2	7.4	0.25	0.125	0.25
6	5/20/2003	70.35	8.755	6.215	0.25	0.25	0.25
7	7/6/2004	37	5.9	4.1	0.25	0.25	0.25
8	7/19/2005	63	8.5	5.4	0.25	0.25	0.25
9							
10							

Mann Kendall Statistic (S) =	-10	-20	-12	-9	-7	-10
Number of Rounds (n) =	8	8	8	7	7	7
Average =	106.88	28.17	9.13	1.07	0.98	1.00
Standard Deviation =	136.581	30.916	7.670	1.754	1.777	1.768
Coefficient of Variation(CV)=	1.278	1.097	0.840	1.637	1.810	1.768

Error Check, Blank if No Errors Detected

Trend = 80% Confidence Level	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING
Trend = 90% Confidence Level	No Trend	DECREASING	DECREASING	No Trend	No Trend	DECREASING

Stability Test, if No Trend Exists at 80% Confidence Level	NA	NA	NA	NA	NA	NA
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Data Entry By = LB Date = 10/12/2005 Checked By = CC

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Instructions: Do not change formulas or other information in cells with a blue background, only cells with a yellow background are used for data entry. To use the spreadsheet, **provide at least four rounds** and **not more than ten rounds of data** that is **not seasonally affected**. Use consistent units. The spreadsheet contains several error checks, and a data entry error may cause "DATA ERR" or "DATE ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at both 80 percent and 90 percent confidence levels. If an increasing or decreasing trend is not present, an additional coefficient of variation test is used to test for stability, as proposed by Wiedemeier et al., 1999. For additional information, refer to the Interim Guidance on Natural Attenuation from the governing regulatory agencies for the site and applicable guidance for recommendations on data entry for non-detect values (**See protocol at bottom of worksheet**).

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Site Name = Vestal Well 1-1 Site		Site ID No. =	Well Number = 1-29				
Event Number	Compound -> Sampling Date (most recent last)	cis-1,2-DCE Concentration (leave blank if no data - 0 if ND)	trans-1,2-DCE Concentration (leave blank if no data)	TCE Concentration (leave blank if no data)	PCE Concentration (leave blank if no data)	Total VOC Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	11/13/1996	320	0.5	130	0.5		
2	11/12/1997	110	0.5	19	0.5		
3	6/8/1999			26	5		
4	7/11/2000	28		3			
5	10/15/2002	64.9	0.8	45.1	0.25	51.04	
6	5/20/2003	54.45	0.211	37.45	0.25	163.14	
7	7/6/2004	52	0.25	24	0.25	125.5	
8	7/19/2005	46	0.25	33	0.25	50.3	
9							
10							
Mann Kendall Statistic (S) =		-13	-5	-2	-10	-2	0
Number of Rounds (n) =		7	6	8	7	4	0
Average =		96.48	0.42	39.69	1.00	97.50	#DIV/0!
Standard Deviation =		101.755	0.227	38.624	1.768	56.211	#DIV/0!
Coefficient of Variation(CV)=		1.055	0.543	0.973	1.768	0.577	#DIV/0!
Error Check, Blank if No Errors Detected							
Trend = 80% Confidence Level		DECREASING	No Trend	No Trend	DECREASING	No Trend	N<4
Trend = 90% Confidence Level		DECREASING	No Trend	No Trend	DECREASING	No Trend	N<4
Stability Test, if No Trend Exists at 80% Confidence Level		NA	CV<=1 STABLE	CV<=1 STABLE	NA	CV<=1 STABLE	n<4 n<4

Mann-Kendall Statistical Test
(For Groundwater Sampling Trend Analysis)

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Site Name = Vestal Well 1-1 Site	Site ID No. =	Well Number = 1-29A	
Event Number	Sampling Date (most recent last)	Compound ->	
1	11/12/1996	1,1,1-TCA Concentration (leave blank if no data - 0.25 if ND)	1,1-DCE Concentration (leave blank if no data)
2	11/12/1997	18	1,2-DCA Concentration (leave blank if no data)
3	6/8/1999	45	Chloroethane Concentration (leave blank if no data)
4	6/18/2001	22	Vinyl Chloride Concentration (leave blank if no data)
5	10/15/2002	12	
6	5/20/2003	10.4	
7	7/6/2004	9.93	
8	7/19/2005	8.8	
9		10	
10			

Mann Kendall Statistic (S) =	-20	-9	-2	-11	-11	-11
Number of Rounds (n) =	8	8	8	8	8	8
Average =	17.02	11.85	2.93	2.13	2.13	2.13
Standard Deviation =	12.217	8.309	2.921	3.578	3.578	3.578
Coefficient of Variation(CV)=	0.718	0.701	0.996	1.684	1.684	1.684

Error Check, Blank if No Errors Detected						
Trend = 80% Confidence Level	DECREASING	DECREASING	No Trend	DECREASING	DECREASING	DECREASING
Trend = 90% Confidence Level	DECREASING	No Trend	No Trend	DECREASING	DECREASING	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA	NA	CV<=1 STABLE	NA	NA	NA
Data Entry By =	LB	Date =	10/12/2005	Checked By =	CC	TT

Mann-Kendall Statistical Test
(For Groundwater Sampling Trend Analysis)

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Site Name = Vestal Well 1-1 Site		Site ID No. =	Well Number =	Influent				
Event Number	Sampling Date (most recent last)	Compound ->	1,1,1-TCA Concentration (leave blank if no data - 0 if ND)	1,1-DCA Concentration (leave blank if no data)	1,1-DCE Concentration (leave blank if no data)	1,2-DCA Concentration (leave blank if no data)	Chloroethane Concentration (leave blank if no data)	Vinyl Chloride Concentration (leave blank if no data)
1	11/11/1997		150	25	12	0.7	0.6	3.2
2	6/7/1999		170	27	10	1	0.6	3.5
3	7/13/2000		140	26	11	0.2	0.6	3.9
4	6/6/2001		120	24	8.9	0.5	0.5	3.9
5	9/12/2002		130	28	10	0.5	0.7	5
6	4/1/2003		98	22	8.5	0.7	0.7	3.7
7	6/1/2004		100	16	8.1	0.7	0.7	3
8	7/1/2005		110	17	9.4	0.55	0.55	3.5
9								
10								

Mann Kendall Statistic (S) =	-18	-14	-17	-3	4	0
Number of Rounds (n) =	8	8	8	5	8	8
Average =	127.25	23.13	9.74	0.58	0.62	3.71
Standard Deviation =	25.252	4.486	1.303	0.295	0.075	0.608
Coefficient of Variation(CV)=	0.198	0.194	0.134	0.509	0.122	0.164

Error Check, Blank if No Errors Detected	
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
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Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
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Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
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Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
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Trend = 90% Confidence Level	DECREASING
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Trend = 90% Confidence Level	DECREASING
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Stability Test, if No Trend Exists at 80% Confidence Level	NA
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Stability Test, if No Trend Exists at 80% Confidence Level	NA
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Stability Test, if No Trend Exists at 80% Confidence Level	NA
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Stability Test, if No Trend Exists at 80% Confidence Level	NA
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Stability Test, if No Trend Exists at 80% Confidence Level	NA
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Stability Test, if No Trend Exists at 80% Confidence Level	NA
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Stability Test, if No Trend Exists at 80% Confidence Level	NA
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Checked By =	DC
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Trend = 90% Confidence Level	DECREASING
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Checked By =	DC
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Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	NA
Data Entry By =	LB
Date =	5/18/2005
Checked By =	DC
Trend = 80% Confidence Level	DECREASING
Trend = 90% Confidence Level	DECREASING
Stability Test, if No Trend Exists at 80% Confidence Level	

Mann-Kendall Statistical Test
(For Groundwater Sampling Trend Analysis)

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Site Name = Vestal Well 1-1 Site		Site ID No. =	Well Number =	Influent			
Event Number	Compound -> Sampling Date (most recent last)	cis-1,2-DCE Concentration (leave blank if no data - 0 if ND)	trans-1,2-DCE Concentration (leave blank if no data)	TCE Concentration (leave blank if no data)	PCE Concentration (leave blank if no data)	Total VOC Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	11/11/1997	86	0.3	56	0.5		
2	6/7/1999	89	2	60	0.5		
3	7/13/2000	79	0.3	59	0.5		
4	6/6/2001	60	0.5	45	0.5		
5	9/12/2002	51	0.3	47	0.5		
6	4/1/2003	51	0.2	38			
7	6/1/2004	44	0.25	36		213	
8	7/1/2005	44	0.25	36		227.55	
9							
10							

Mann Kendall Statistic (S) =	-24	-14	-21	0	0	1	0
Number of Rounds (n) =	8	8	8	5	2	2	0
Average =	63.00	0.51	47.13	0.50	220.28	#DIV/0!	#DIV/0!
Standard Deviation =	18.822	0.608	10.148	0.000	10.288	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.299	1.185	0.215	0.000	0.047	0.047	#DIV/0!
Error Check, Blank if No Errors Detected						N<4	N<4

Trend = 80% Confidence Level	DECREASING	DECREASING	DECREASING	No Trend	N<4	N<4	N<4
Trend = 90% Confidence Level	DECREASING	DECREASING	DECREASING	No Trend	N<4	N<4	N<4

Stability Test, if No Trend Exists at 80% Confidence Level	NA	NA	NA	CV<=1	n<4	n<4	n<4
	NA	NA	NA	STABLE	n<4	n<4	n<4

Data Entry Bv = LB Date = 11/29/2005 Checked By = DC