SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

3-14-007

2008 Annual Groundwater Monitoring Report

Prepared for:

U.S. Environmental Protection Agency
Region II
New York, New York

Submitted: January 9, 2009

Prepared by:

MACTEC Engineering and Consulting, Inc.

MACTEC

107 Audubon Road, Suite 301
Wakefield, Massachusetts 01880
781-245-6606

MACTEC

engineering and constructing a better tomorrow

January 9, 2009

Mr. Kevin Willis
Remedial Project Manager
New York/Caribbean Superfund Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency - Region II
290 Broadway, 20th Floor
New York, NY 10007-1866

RE: Sarney Farm Superfund Site
2008 Annual Groundwater Monitoring Report

Dear Mr. Willis:

On behalf of Pitney Bowes Inc. and Cytec Industries, Inc., a copy of the 2008 Annual Groundwater Monitoring Report for the Sarney Farm Superfund site is enclosed. The report discusses data collected during the September 2008 sampling event. The 2008 sampling was performed in accordance with the additional response action required by EPA as detailed in EPA's June 12, 2003 and August 8, 2008 correspondence to Pitney Bowes Inc. As in the past, individual homeowners will be provided with the laboratory results of water samples collected from their wells under separate cover.

If you should have any questions regarding this report, please do not hesitate to contact either of the undersigned.

Sincerely,
MACTEC Engineering and Consulting, P.C.

Christopher Mazzolini
Project Scientist

Charles A. Collet, P.E.
Project Manager

cc: Angela Carpenter, John La Padula, USEPA (w/o enclosure)
Michael Mason, NYSDEC
Mark Pettegrew, Pitney Bowes Inc.
Tricia Haught, Foley, Day, Berry & Howard LLP
Anton Marek, CYTEC
Laura Sarney
MACTEC Project File
[P:\3650080112\ PB Sarney Farm 2008 GW Monitoring Report\4.0 Project Deliverables\4.1 Reports]

MACTEC Engineering and Consulting, Inc.
107 Audubon Road, Bldg. 2, Suite 301 • Wakefield, MA 01880 • Phone: 781-245-6606 • Fax 781-246-5060 www.mactec.com

Sarney Farm Superfund Site
Amenia, New York

2008 Annual Groundwater Monitoring Report

Prepared for:

U.S. Environmental Protection Agency
Region II
New York, New York

Submitted: January 9, 2009

Prepared by:

MACTEC Engineering and Consulting, Inc.

107 Audubon Road, Suite 301
Wakefield, Massachusetts 01880
781-245-6606

MACTEC Project No. 3650080112.01

Christopher Mazzolini
Project Scientist

1/9/09
Date

Charles A. Collet, P.E.
Project Manager

1/7/09
Date

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

GLOSSARY OF ACRONYMS

ARCS	Assessment and Remediation of Contaminated Sediments
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLP	Contract Laboratory Program
COC	Constituents-of-Concern
1,2-DCA	1,2-dichloroethane
DO	Dissolved Oxygen
DCHD	Dutchess County Health Department
FBR	Feet Below Grade, or Reference
FS	Feasibility Study
LTTD	Low-Temperature Thermal Desorption
MACTEC	MACTEC Engineering and Consulting, Inc.
MCL	Maximum Contaminant Level
MIBK	4-methyl-2-pentanone
µg/L	Micrograms per Liter
NPL	National Priorities List
NYSDEC	New York State Department of Environmental Conservation
Order	Unilateral Administrative Order
ORP	Oxidation/Reduction Potential
PCOR	Preliminary Close-Out Report
PRGE	Post-ROD Groundwater Evaluation
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
RA	Remedial Action
RI	Remedial Investigation
ROD	Record of Decision
Site	Sarney Farm Superfund Site
TCE	Trichloroethylene
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

This report, prepared by MACTEC Engineering and Consulting, Inc. (MACTEC), formerly ESE New York P.C., on behalf of Pitney Bowes Inc. and Cytec Industries Inc., presents the data for the September 2008 groundwater sampling events at the Sarney Farm Superfund Site (Site), located on Benson Hill Road in Amenia, New York (Figure 1). This work has been completed pursuant to the requirements of U.S. Environmental Protection Agency (USEPA) Unilateral Administrative Order (Order), Index Number II Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 96-0214 for the Sarney Farm Superfund Site (USEPA, 2003), and USEPA correspondence (dated June 12, 2003) detailing specific Additional Response Action requirements. Field work, laboratory analyses and data validation discussed in this report were completed in accordance with the Groundwater Focused Feasibility Study Sampling and Analysis Plan dated February 26, 1999 (QST, 1999).

1.1 SITE CHRONOLOGY

In the late 1960s, a five-acre portion of the Site was permitted by the Dutchess County Health Department (DCHD) as a sanitary landfill. Non-permitted industrial waste disposal was reported to have occurred at the Site over a two-year period between 1968 and 1969. The disposal of industrial waste at the Site led to its inclusion on the New York State Department of Environmental Conservation (NYSDEC) Region 3 Suspected Hazardous Waste Sites Inventory in 1980, and eventually, on USEPA's National Priorities List (NPL) in June 1986. Remedial Investigation (RI) and Feasibility Study (FS) reports were completed on behalf of USEPA in 1986 and 1988, the findings of which resulted in the issuance of a Record of Decision (ROD) for the Site in September 1990. The ROD detailed the selected remedy for the Site, which included the following:

Drum Removal and Soil Remediation

- Drum removal activities; and
- Excavation and on-site treatment of impacted soil by low-temperature thermal desorption (LTTD).

Groundwater Remediation

- No Further Action that included a long-term program to monitor the distribution of contaminants in the bedrock aquifer underlying the Site.

Drum Removal

The drum removal phase of the remedy was completed between 1992 and 1995. The work began under the direction of TAMS Consultants (an Assessment and Remediation of Contaminated Sediments [ARCS] contractor) on behalf of the USEPA. IT Corporation performed the remedial work under subcontract to TAMS. During 1993, U.S. Army Corps of Engineers (USACE) assumed the lead role on behalf of USEPA. IT Corporation was subcontracted by USACE to complete the work. Drum removal and disposal was completed by March 1995.

Soil Remediation

The ROD for the soil remedy was completed by CDM Federal Programs in August 1995 for the USACE. In May 1996, USEPA issued a Special Notice Letter to Pitney Bowes Inc. requesting that Pitney Bowes perform the soil remediation work. Pitney Bowes retained MACTEC (formerly ESE New York, P.C.) to complete the Remedial Action (RA) for soil. MACTEC proposed minor modifications to the existing design specifications in November 1996, which were subsequently approved by USEPA and NYSDEC in January 1997. MACTEC retained Williams Environmental Services, Inc. to undertake the excavation and on-site thermal treatment of soils. Soil remediation work plans were submitted to USEPA and NYSDEC in June 1997. Approvals were received September/August 1997, and mobilization began in September 1997. On-site thermal treatment of soil to remove volatile organic compounds (VOCs) including 2-butanone, trichloroethylene (TCE), 4-methyl-2-pentanone (MIBK), toluene, 1,2-dichloroethane (1,2-DCA), chloroform, and total xylenes was conducted from August through December 1997. Following a winter shut-down, Site restoration was completed between May and September 1998. Activities related to the treatment of impacted soil were completed by Pitney Bowes in accordance with the 1996 Administrative Order (USEPA, 1996) that was issued by USEPA and documented in the RA Report dated August 1998 (QST, 1998).

Based on the successful completion of the drum/debris removal efforts, the completion of on-site LTTD treatment of soil, and the findings of the Post-ROD Groundwater Evaluation (PRGE) Report (QST, 2001), USEPA issued a Preliminary Close-Out Report (PCOR) for the Site (USEPA, 2002). The PCOR included a complete discussion of remedial activities completed at the Site (including additional groundwater investigation), and concluded that all RAs at the Site have been completed in accordance with Close Out Procedures for National Priorities List Sites (OSWER Directive 9320.2-09 A-P).

Groundwater Remediation

During 1997, CDM installed two overburden monitoring wells, six piezometers, and one bedrock monitoring well in Area 6 (Figure 2). At that time, the monitoring network was comprised of 22 wells (12 overburden and 10 bedrock) and six piezometers. Two rounds of groundwater samples were collected during that year (May and August). Nineteen wells/piezometers were sampled during the first round (seven overburden, two piezometers, and 10 bedrock wells) and 12 wells/piezometers were sampled during the second round (five overburden, three piezometers, and four bedrock wells).

Additional groundwater investigation was required by USEPA and completed on behalf of Pitney Bowes and Cytec by MACTEC between 1999 and 2000 (referred to as Phase 1 and Phase 2, respectively), and included sediment sampling, the installation of additional multi-level bedrock monitoring wells and piezometers, groundwater pumping tests, and groundwater sampling, including nearby residential wells. Sampling locations are shown in Figure 2.

Upon review of groundwater data collected during the Phase 1 and Phase 2 investigations, USEPA required additional rounds of groundwater sampling in 2001 and 2002. The first 2001 sampling event was completed during June, and included monitoring wells MW-7D, MW-9D, MW-10D, MW-11D, MW-14D, MW-15D, EW-4D, and five nearby residential wells (Figure 2).

The findings of these June 2001 investigations were presented to USEPA in the PRGE Report (QST, 2001) that was approved by USEPA and finalized on November 13, 2001. The PRGE Report concluded that constituents-of-concern (COCs), primarily 1,2-DCA, generally exhibited a steady decrease in concentration since routine sampling was initiated in the late 1990s. However certain COCs were still present in a small area of the Site at concentrations in excess of current USEPA Region II groundwater Maximum Contaminant Level (MCL) standards. The overall decrease in 1,2-DCA concentration in groundwater was attributed to the completion of drum removal and on-site LTTD treatment of impacted soil, and the attenuation of contaminants through natural physical and chemical degradation processes. In addition, ongoing sampling and analysis of groundwater collected from down gradient residential supply wells confirmed that site-related constituents have not impacted, nor are they expected to impact, nearby private supply wells. A second 2001 sampling event was completed in December, and included monitoring wells MW-7D, MW-9D, and MW-10D.

Revised Groundwater Monitoring

Between 1999 and 2002, groundwater sampling had been conducted at approximately six-month intervals at selected monitoring wells at the Site. Specifically, sampling events were performed in July and November 1999, May and November 2000, June and December 2001, and June 2002. The results of sampling events, up to and including the June 2001 sampling event were included in the PRGE Report (QST, 2001). The results of the December 2001 sampling event were provided to USEPA as an attachment to the Monthly Progress Report Number 65 dated March 11, 2002. The findings of the June 2002 sampling event were included in a Groundwater Evaluation Report (MACTEC, 2002). In addition to presenting the findings of the June 2002 sampling event, the November 2002 report included a recommendation that future groundwater sampling events at the Site be conducted on an annual basis. The rationale for reducing the sampling frequency was that a continued, steady decrease in groundwater concentrations had been observed during each subsequent sampling event during the period between 1997 and 2002. USEPA approved this recommendation and has required annual sampling for a period of five years beginning in 2003. Subsequently, groundwater sampling has been completed in the summer of 2003, 2004, 2005, 2006, 2007 and 2008 with reports being submitted for each year describing the results of the sample analyses. As stated in the 2006 Groundwater Monitoring Report (MACTEC, 2006), the steady and predictable rate of decrease of contaminant concentrations in wells monitored over the past nine years supports groundwater sampling of the current list of wells (MW-7D, MW-9D, MW-10D, and five residences) every two years to provide data at a frequency that will be suitable to demonstrate a continuation in the observed decreasing trend in concentrations. In response to the request for changing the sampling frequency to biennial, USEPA correspondence dated August 8, 2008 directed that annual sampling for four additional years is required. This document presents the results of the September 2008 annual groundwater monitoring program at the Site, the first of the four newly mandated annual sampling events.

The current USEPA specified groundwater monitoring program requires annual sampling which is generally conducted in the third quarter of each year of monitoring wells MW-7D (shallow and deep), MW-9D (zones 1 (deep), 2 (intermediate), and 3 (shallow)), MW-10D (zones 1 (deep), 2 (intermediate), and 3 (shallow)), and five private residential water supply wells (Sarney, Emerson, Taylor, 151 BHR, and Hurlburt).

SECTION 2.0

2.0 GROUNDWATER SAMPLING

Before conducting the September 2008 sampling, on June 24, 2008, MACTEC and Geosearch retrieved the stainless steel submersible pump which was lodged in monitoring well MW-7D-D during the 2007 sampling event. After the pump was removed, USEPA required that the monitoring well be redeveloped to remove any accumulated silt. On August 13, 2008, MACTEC and Geosearch redeveloped monitoring wells MW-7D-D and MW-7D-S using a polyvinyl chloride (PVC) surge block and check valve. Well development continued until the water was visually clear.

Groundwater sampling during the September 2008 sampling event included residential wells near the Site and select multi-level bedrock monitoring wells located downgradient of Area 4 (MW-7D and MW-9D), and west of Areas 1 and 2 (MW-10D) (Figure 2). The residential wells, referred to as 151 BHR (formerly referred to in previous reports as "Chamberlin"), Taylor, Emerson, Hurlburt, and Sarney, were included in the sampling effort to confirm that these wells remain unaffected by past waste disposal at the Site. Prior to sampling, water level measurements were collected from the USEPA specified groundwater monitoring wells included in this sampling event (MW-7D, -9D, and -10D).

Groundwater sampling was completed in accordance with USEPA Region II Groundwater Sampling Procedure for Low-Stress (Low Flow) Purging and Sampling, and the Groundwater Focused Feasibility Study Sampling and Analysis Plan approved by USEPA. Specifically, the two discrete sampling zones at MW-7D, MW-7D-S (shallow) and MW-7D-D (deep) were purged and sampled using a conventional, variable speed, stainless steel submersible pump equipped with dedicated Teflon discharge tubing. The purging process at MW-7D-S included low-flow pumping to minimize drawdown in the well, and monitoring of various groundwater parameters (e.g., pH, temperature, dissolved oxygen (DO), Oxidation/Reduction Potential (ORP), turbidity and conductivity) to determine that the wells were hydraulically connected to the formation, and that valid groundwater samples would be collected. Once the parameters stabilized over three consecutive readings, the wells were considered sufficiently purged and samples were collected by directing the pump discharge into laboratory prepared sample containers.

Monitoring wells MW-9D and MW-10D are equipped with Solinst multi-level sampling devices that include dedicated, nitrogen-driven, stainless steel/Teflon bladder sampling pumps set at three

discrete intervals. Both MW-9D and MW-10D include three discrete depth sampling ports/pump assemblies that are referred to as zones 1 (deep), 2 (medium) and 3 (shallow). Purging at these wells was required mainly to flush stagnant water from the dedicated sampling tubes since the design of the multi-level sampling system, which includes the use of permanent packers, precludes the presence of standing casing water. The 0.25-inch diameter sampling tubes contain approximately 0.004 gallons of water per foot. The saturated length of the sampling tubes ranges from approximately 130 feet (deep zone at MW-9D-1) to approximately 45 feet in shallow zone at the same well location. The volume of stagnant tubing water in the longest sampling tube is therefore approximately 0.52 gallons. To adequately purge stagnant sampling tube water at MW-9D and MW-10D, the water was pumped for a minimum of 30 minutes at flow rates of approximately 0.07 gallons/minute, resulting in the removal of approximately two gallons of water, which is at least four times the standing volume of the deepest zone and up to 11 times the standing volume for the shallowest zone. Once the dedicated bladder pumps were operated for a minimum of 30 minutes, purge parameters (e.g., pH, temperature, etc.) were recorded, and samples collected. All groundwater samples were submitted for laboratory analysis for VOCs by Contract Laboratory Program (CLP) Method OLM03.2 (NYS 95.1).

Residential water samples were collected from five locations identified as Sarney, Emerson, Taylor, 151 BHR and Hurlburt. The residential water samples were collected from an outside spigot or at the kitchen sink. Before the samples were collected, the water was allowed to run for a minimum of 15 minutes to clear the plumbing system of any standing water. Residential samples were submitted for laboratory analysis for VOCs by CLP Method OLC02.1 (NYS 95.4).

The sample bottles were pre-preserved with Hydrochloric acid to ensure a pH of less than 2 units. Quality assurance/quality control (QA/QC) samples (field duplicates/trip blanks) were also collected and submitted for laboratory analyses.

Groundwater samples were collected, stored and shipped to the laboratory under strict chain-of-custody protocols in accordance with the procedures described in the approved Work Plan (MACTEC, 2001). The samples were collected in laboratory-prepared sample containers, and stored on ice in secure coolers until being hand-delivered to the laboratory (TestAmerica Laboratories located in Westfield, MA) for VOC analysis. Backup documentation for laboratory deliverables is maintained at both the Newburgh Laboratory file retention facility and in the central project file at MACTEC's office in Wakefield, MA. Analytical laboratory data reports are

provided in Appendix A. Analytical data were validated in accordance with USEPA Region II data validation guidelines by MACTEC in Portland, Maine. The data validation report is included in Appendix B.

SECTION 3.0

3.0 SAMPLING RESULTS AND DATA INTERPRETATION

3.1 RESIDENTIAL WELL SAMPLING RESULTS

During the 2008 sampling, VOCs were not detected in any of the residential wells. The absence of Site-related VOCs in the residential wells is consistent with previous sampling events completed in 1985, 1986, 1990, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 2000, 2001, 2002, 2003, 2004, 2005, 2006 and 2007 where no VOCs were detected in excess of State or Federal guidelines. These data confirm that nearby residential wells have not been, and are not currently being impacted by residual concentrations of Site-related compounds resulting from historic activities at the Site.

3.2 GROUNDWATER MONITORING WELL SAMPLING RESULTS

The results of groundwater VOC analyses are summarized and provided in Table 1 (VOCs in Bedrock Wells). This table includes groundwater data for the selected wells dating back to when each well was installed and first sampled (1997 for MW-7D, and 1999 for MW-9 and -10D). The table is organized by well, with data presented in chronological order from the earliest to the latest sampling events. For convenience, columns for the current sampling event data are shaded in blue. Additionally, the concentration of any compound detected above its respective USEPA guideline is shown in bold font.

During the 2008 sampling event, 1,2-DCA was detected at concentrations above the USEPA MCL (5 micrograms per liter (µg/L)) in the shallow and deep zone of MW-7D, in the three zones (shallow, intermediate, deep) in MW-9D and two zones (intermediate, deep) in MW-10D. This data appears consistent with previous rounds of sampling as depicted on Figures 3, 4, 5, and 6 which present a graphical depiction of the groundwater concentration data.

Concentrations of 1,2-DCA were detected at the highest levels observed in 2008 in the intermediate zone of MW-9D and in the deep zone of MW-7D. These wells are both located downgradient from Area 4, the former disposal area (Figure 2). At MW-7D-D (deep zone 72-101 feet below grade, or reference (fbr)), 1,2-DCA was detected at a concentration of 150 µg/L, a slight increase from 130 µg/L in 2007. At MW-7D-S (shallow zone 39-72 fbr), the concentration of 1,2-DCA was 110 µg/L, the same concentration detected in 2007. At MW-9D, located about 140 feet west of MW-7D, 1,2-DCA was detected at concentrations of 110, 130, and 120 µg/L in

zones D1 (102-147 fbr), D2 (55-102 fbr), and D3 (38-55 fbr), respectively. The concentration detected in the shallow zone increased slightly from 2007 levels, and the concentration in the intermediate and deep zones decreased slightly from levels detected in 2007. At MW-10D, 1,2-DCA was detected at concentrations of 41 µg/L in the deep zone (110-144 fbr) and 46 µg/L in the intermediate zone (68-110 fbr). 1,2-DCA was reported at an estimated concentration of 1.1 µg/L in the shallow zone (40-68 fbr).

As observed during previous sampling events, benzene, TCE, and/or cis-1,2-dichloroethene were detected in 2008 at trace to very low concentrations in monitoring wells MW-7D (shallow and deep), MW-9D (shallow, intermediate and deep) and MW-10D (shallow and deep). These compounds were typically identified at concentrations consistent with historic data ranging from less than 1 to 22 µg/L, which is less than each of their respective USEPA MCLs.

3.3 STATISTICAL EVALUATION OF TRENDS IN 1,2-DCA CONCENTRATION DATA

In general, 1,2-DCA continues to demonstrate consistent to decreasing concentrations in groundwater. It is anticipated that over time, the concentration of 1,2-DCA will decrease to below the MCL.

As indicated in the 2007 Groundwater Monitoring Report, MACTEC recommended the monitoring of groundwater quality be reduced to every two years (MACTEC, 2008). Based on the steady and predictable rate of decrease of contaminant concentrations in wells monitored over the past six years (2002 – 2007) annually, groundwater sampling of the current list of wells (MW-7D, MW-9D, and MW-10D, and five residences) every two years would provide data at a frequency that will be suitable to demonstrate a continuation in the observed decreasing trend in concentrations.

To further illustrate that persistent downward concentration trends are occurring, a statistical evaluation of concentration data for 1,2-DCA, the remaining COCs in groundwater above criteria was performed and presented in detail in the 2007 annual sampling report. Since concentrations at MW-10-D3 had attenuated to below the criterion for 1,2-DCA, it was not been included in the 2007 trend analysis.

In summary, strong downward trends in the concentrations of 1,2-DCA were indicated by the Mann-Kendall trend test at all locations (see Table 2 from the 2007 report, which has been

attached for reference). Regression analysis with the first-order model showed that the estimated times to reach the 1,2-DCA MCL of 5 µg/L in groundwater varied from 12 to 21 years (from 2008). Based on this analysis, were future sampling frequency to be revised to every two years until the criterion is met and then confirmed with a final sampling round, it would be protective of human health and the environment. However, USEPA has directed Pitney Bowes to perform as additional response activities, four additional years of annual sampling pursuant to the Order regarding the Sarney Farm Site. Accordingly, annual groundwater sampling will be continued through at least 2011, unless USEPA revises its current directive.

SECTION 4.0

4.0 CONCLUSIONS AND RECOMMENDATIONS

No COCs were detected in the residential wells in 2008, and none have been detected above State or Federal guidelines since monitoring began in 1985.

Data collected during the 2008 sampling event indicate that concentrations of 1,2-DCA remain above the USEPA MCL in selected monitoring wells located on the Site. The impacted area of the aquifer remains relatively small, with the concentration of 1,2-DCA in groundwater continuing to show a decreasing trend since source removal activities and treatment of contaminated soils was completed in 1997. The data continues to support the understanding that natural processes (biodegradation, dispersion, and volatilization) will continue to reduce concentrations of 1,2-DCA and other low to trace level VOCs.

The majority of the impacted Site area is remote and difficult to access, however if the Site were to be re-developed, the DCHD would restrict the installation of potable water supply wells in this area. Based on these factors, MACTEC agrees with USEPA's position as stated in the PCOR that additional administrative controls (e.g., deed restrictions) are not necessary at this time and The No Further Action remedy selected in the ROD continues to be protective and appropriate. Other than periodic groundwater monitoring, no further response actions are necessary.

Groundwater monitoring of select bedrock and residential wells has been conducted on an annual basis for seven years (2002 through 2008) with previous semi-annual sampling having been conducted from 1999 through 2001. Based on the USEPA directive to perform an additional four years of groundwater monitoring, including 2008, the next annual sampling event will be planned for summer 2009.

SECTION 5.0

5.0 REFERENCES

MACTEC (formerly ESE New York, P.C.), June 11, 2001. Sarney Farm Site, June 2001Groundwater sampling Program ESE No. 716472.0400, letter submitted to EPA Region II.

MACTEC (formerly ESE New York, P.C.), November 4, 2002. Groundwater Evaluation Report.

MACTEC Engineering and Consulting, Inc. (MACTEC), April, 2008. Groundwater Monitoring Report.

QST New York, P.C., August, 1998. Remedial Action Report, draft submitted to EPA Region II.

QST New York, P.C., February 26, 1999. Sarney Farm Superfund Site, Groundwater Focused Feasibility Study Sampling and Analysis Plan, Final version submitted to USEPA by QST New York P.C.

QST New York, P.C., November 13, 2001. Post-ROD Groundwater Evaluation Report.

U.S. Environmental Protection Agency (USEPA), October, 2002. Preliminary Close-Out Report for the Sarney Farm Superfund Site.

USEPA, 2003. Unilateral Administrative Order, Index Number II CERCLA 96-0214 for the Sarney Farm Superfund Site.

USEPA, February 13, 2008. RE: Follow up: Sarney Farm Superfund Site, email submitted to MACTEC.

TABLES

TABLES

TABLE 1
VOCS IN BEDROCK WELLS
1997 THROUGH 2008 SAMPLING EVENTS

2008 Annual Groundwater Monitoring Report
Sarney Farm Superfund Site
Amenia, New York

Well No. / Date Sampled / Sample/Zone Depth / Analyte (ug/L)	EPA MCL (ug/L)	NYSDEC MCL (ug/L)	MW-7D 05/28/97 50 ft.	MW-7D 08/06/97 50 ft.	MW-7DD 08/06/97 89 ft.	MW-7D-D 9/15/1999 72 - 101 ft.	MW-7D-D-DUP 9/15/1999 72 - 101 ft.	MW-7D-D 11/16/1999 72 - 101 ft.	MW-7D-D 5/25/2000 72 - 101 ft	MW-7D-D 11/14/2000 72 - 101 ft.	MW-7D-D-DP 11/14/2000 72 - 101 ft.	MW-7D-D 6/19/2001 72 - 101 ft.	MW-7D-DUP 6/19/2001 72 - 101 ft	MW-7D-D 12/12/2001 72 - 101 ft.
Chloromethane					9									
Vinyl Chloride	2	2												
Chloroethane														
Methylene Chloride			25					0.5 J						
Acetone						3 J	5 J							
Methyl Ethyl Ketone														
Carbon Disulfide														
1,1-Dichloroethene	7													
1,1-Dichloroethane			46			4 J	4 J	4.1	3 J	3 J	2 J	3 J	3 J	2 J
Chloroform														
1,2-Dichloroethane	**5**	**0.8**	**6400**	**760**	**910**	**640 D**	**680 D**	**600 D**	**490**	**600**	**540**	**460**	**490**	**510**
2-Butanone														
1,1,1-Trichloroethane	200													
Carbon Tetrachloride	5	5												
1,2-Dichloropropane	5													
Trichloroethene	**5**		**16**			2 J	3 J	3.3	2 J	3 J	3 J	2 J	2 J	2 J
Benzene	**5**	**0.7**	**100**	**17**	**17**	**14**	**15**	**14**	**11**	**12**	**12**	**11**	**10**	**8 J**
4-Methyl-2-Pentanone														
2-Hexanone														
Tetrachloroethene	5													
Toluene	1000													
Chlorobenzene														
Ethylbenzene	700													
Styrene	100													
P & M Xylenes														
O Xylene														
Xylenes (total)	10000													
1,1,2-Trichloroethane	5	0.6												
Dichlorodifluoromethane														
Trichlorofluoromethane														
cis-1,2-Dichloroethene	70					31	33	47 JD	36	41	40	35	34	32
trans-1,2-Dichloroethene	**100**		**140**	16	27									
N-Propylbenzene														
1,3,5-Trimethylbenzene														
1,2,4-Trimethylbenzene														
1,3-Dichlorobenzene														
1,4-Dichlorobenzene														
1,2-Dichlorobenzene														
1,2,4-Trichlorobenzene	70													
Naphthalene		10												
1,2,3-Trichlorobenzene														

Notes
1997 and Sept 1999 data have NOT been validated
BOLD = Exceedance of the applicable EPA MCL
Most recent sampling events are shaded columns
MCL = Maximum Contaminant Level
ug/L = Microgram per Liter

ft = foot
USEPA = U S Enviromental Proclection Agency
NYSDEC = New York State Department of Environmental Conservation

Data Qualifiers
B = Analyte detected in blank
D = Value obtained through secondary dilution.
E = Value exceeded instrument calibration range
J = Indicates an estimated value.
U = Analyzed for but not detected

TABLE 1
VOCS IN BEDROCK WELLS
1997 THROUGH 2008 SAMPLING EVENTS

2008 Annual Groundwater Monitoring Report
Sarney Farm Superfund Site
Amenia, New York

Well No. Date Sampled Sample/Zone Depth Analyte (ug/L)	EPA MCL (ug/L)	NYSDEC MCL (ug/L)	MW-7D-DUP 12/12/2001 72 - 101 ft.		MW-7D-D 6/20/2002 72 - 101 ft.		MW-7D-DUP 6/20/2002 72 - 101 ft.		MW-7D 7/24/2003 72 - 101 ft.		MW-7D-DUP 7/24/2003 72 - 101 ft.		MW-7D 7/13/2004 72 - 101 ft.		MW-7D-DUP 7/13/2004 72 - 101 ft.		MW-7D-D 8/10/2005 72 - 101 ft.		MW-7D-D-DP 8/10/2005 72 - 101 ft.		MW-7D-D 7/25/2006 72 - 101 ft.		MW-7D-D-DP 7/25/2006 72 - 101 ft.		MW-7D-D 7/18/2007 72 - 101 ft.		MW-7D-D 9/3/2008 72 - 101 ft.	
Chloromethane																												
Vinyl Chloride	2	2																										
Chloroethane																												
Methylene Chloride																												
Acetone			4	J																								
Methyl Ethyl Ketone																												
Carbon Disulfide																												
1,1-Dichloroethene	7																											
1,1-Dichloroethane			2	J	3	J	3	J	2	J	1	J	1	J	1	J	1	J	1	J	1	J	1	J	1.2	J	0.76	J
Chloroform																												
1,2-Dichloroethane	**5**	**0.8**	**520**		**380**		**360**		**250**		**250**		**290**	**J**	**280**	**J**	**290**		**270**		**190**		**190**		130		**150**	
2-Butanone																												
1,1,1-Trichloroethane	200																											
Carbon Tetrachloride	5	5																										
1,2-Dichloropropane	5																											
Trichloroethene	**5**		2	J	3	J	3	J	2	J	2	J	2	J	2	J	2	J	2	J	2	J	2	J	1.8	J	1.5	J
Benzene	**5**	**0.7**	**8**	**J**	**11**		**12**		**5**	**J**	**5**	**J**					**7**	**J**	**7**	**J**	**5**	**J**	**5**	**J**	3.7	J	4.8	J
4-Methyl-2-Pentanone																												
2-Hexanone																												
Tetrachloroethene	5																											
Toluene	1000																											
Chlorobenzene																												
Ethylbenzene	700																											
Styrene	100																											
P & M Xylenes																												
O Xylene																												
Xylenes (total)	10000																											
1,1,2-Trichloroethane	5	0.6																										
Dichlorodifluoromethane																												
Trichlorofluoromethane																												
cis-1,2-Dichloroethene	70		31		37		38		30		30		34	J	32	J	32		32		27		26		20		22	
trans-1,2-Dichloroethene	**100**														3	J												
N-Propylbenzene																												
1,3,5-Trimethylbenzene																												
1,2,4-Trimethylbenzene																												
1,3-Dichlorobenzene																												
1,4-Dichlorobenzene																												
1,2-Dichlorobenzene																												
1,2,4-Trichlorobenzene	70																											
Naphthalene		10																										
1,2,3-Trichlorobenzene																												

Notes
1997 and Sept 1999 data have NOT been validated
BOLD = Exceedance of the applicable EPA MCL
Most recent sampling events are shaded columns
MCL = Maximum Contaminant Level
ug/L = Microgram per Liter

ft = foot
USEPA = U S Enviromental Proctection Agency
NYSDEC = New York State Department of Environmental Conservation

Data Qualifiers
B = Analyte detected in blank.
D = Value obtained through secondary dilution.
E = Value exceeded instrument calibration range.
J = Indicates an estimated value
U = Analyzed for but not detected.

TABLE 1
VOCS IN BEDROCK WELLS
1997 THROUGH 2008 SAMPLING EVENTS

2008 Annual Groundwater Monitoring Report
Sarney Farm Superfund Site
Amenia, New York

Well No. / Date Sampled / Sample/Zone Depth / Analyte (ug/L)	EPA MCL (ug/L)	NYSDEC MCL (ug/L)	MW-7D-S 11/16/1999 39 - 72 ft.	MW-7D-S-DUP 11/16/1999 39 - 72 ft.	MW-7D-S 5/25/2000 39 - 72 ft.	MW-7D-S 11/14/2000 39 - 72 ft.	MW-7D-S 6/19/2001 39 - 72 ft	MW-7D-S 12/12/2001 39 - 72 ft.	MW-7D-S 6/20/2002 39 - 72 ft	MW-7D-S 7/24/2003 39 - 72 ft.	MW-7D-S 7/13/2004 39 - 72 ft	MW-7D-S 8/10/2005 39 - 72 ft.	MW-7D-S 7/25/2006 39 - 72 ft.	MW-7D-S 7/17/2007 39 - 72 ft.	MW-7D-S/DP 7/17/2007 39 - 72 ft.	MW-7D-S 9/3/2008 39 - 72 ft.
Chloromethane																
Vinyl Chlonde	2	2														
Chloroethane																
Methylene Chlonde																
Acetone								3 J								
Methyl Ethyi Ketone																
Carbon Disulfide																
1,1-Dichloroethene	7													0.12 J	0 1 J	0.1 J
1,1-Dichloroethane			3.6	3 6	6 J	5 J	4 J	3 J	5 J		2 J		0 5 J	2 2	2.2	1.4 J
Chloroform																
1,2-Dichloroethane	**5**	**0.8**	**390 D**	**410 D**	**250**	**280**	**190**	**340**	**170**	2 J	2 J	1 J	**8 J**	**110**	**120**	**110**
2-Butanone																
1,1,1-Trichloroethane	200															
Carbon Tetrachloride	5	5														
1,2-Dichloropropane	5															
Trichloroethene	**5**		4.6	4	4 J	2 J	1 J	2 J	2 J		1 J		0 6 J	1 5 J	1.6 J	1.4 J
Benzene	**5**	**0.7**	**12**	**10**	**12**	**12**	**9 J D**	**8 J**	**9 J**					1.3 J	1.4 J	2.2 J
4-Methyl-2-Pentanone																
2-Hexanone																
Tetrachloroethene	5															
Toluene	1000															
Chlorobenzene																
Ethylbenzene	700															
Styrene	100															
P & M Xylenes																
O Xylene																
Xylenes (total)	10000															
1,1,2-Trichloroethane	5	0 6														
Dichlorodifluoromethane																
Trichlorofluoromethane																
cis-1,2-Dichloroethene	70		45 JD	44 JD	31	16	9 J	19 J	13	3 J	11 J	4 J	7 J	9 5 J	9 5 J	12
trans-1,2-Dichloroethene	**100**															
N-Propylbenzene																
1,3,5-Trimethylbenzene																
1,2,4-Trimethylbenzene																
1,3-Dichlorobenzene																
1,4-Dichlorobenzene																
1,2-Dichlorobenzene																
1,2,4-Trichlorobenzene	70															
Naphthalene		10														
1,2,3-Trichlorobenzene																

Notes
1997 and Sept 1999 data have NOT been validated
BOLD = Exceedance of the applicable EPA MCL
Most recent sampling events are shaded columns
MCL = Maximum Contaminant Level
ug/L = Microgram per Liter

ft = foot
USEPA = U S Enviromental Proctection Agency
NYSDEC = New York State Department of Environmental Conservation

Data Qualifiers
B = Analyte detected in blank
D = Value obtained through secondary dilution.
E = Value exceeded instrument calibration range
J = Indicates an estimated value.
U = Analyzed for but not detected

TABLE 1
VOCS IN BEDROCK WELLS
1997 THROUGH 2008 SAMPLING EVENTS

2008 Annual Groundwater Monitoring Report
Sarney Farm Superfund Site
Amenia, New York

Well No. / Date Sampled / Sample/Zone Depth / Analyte (ug/L)	EPA MCL (ug/L)	NYSDEC MCL (ug/L)	MW-9D1 09/15/99 102 - 147 ft.	MW-9D1 11/15/99 102 - 147 ft.	MW-9D1 05/24/00 102 - 147 ft.	MW-9D1 11/14/00 102 - 147 ft.	MW-9D1 06/19/01 102 - 147 ft.	MW-9D1 12/12/01 102 - 147 ft.	MW-9D1 06/20/02 102 - 147 ft.	MW-9D1 07/24/03 102 - 147 ft.	MW-9D1 07/13/04 102 - 147 ft.	MW-9D1 08/10/05 102 - 147 ft.	MW-9D1 07/25/06 102 - 147 ft.	MW-9D1 07/17/07 102 - 147 ft.	MW-9D1 09/04/08 102 - 147 ft.
Chloromethane															
Vinyl Chloride	2	2													
Chloroethane															
Methylene Chloride			2 J	1 1 J											
Acetone			5 J					3 J							
Methyl Ethyl Ketone															
Carbon Disulfide														7.1 J	
1,1-Dichloroethene	7														
1,1-Dichloroethane			4 J	3.3	2 J	2 J	1 J	1 J	2 J	1 J	0 9 J		0.5 J	0.59 J	0.47 J
Chloroform												2 J	1 J	0.78 J	
1,2-Dichloroethane	**5**	**0.8**	**510 D**	**400 D**	**320**	**290**	**240**	**200**	**160**	**200**	**150 J**	**93**	**100**	**110**	**110**
2-Butanone															
1,1,1-Trichloroethane	200														
Carbon Tetrachloride	5	5													
1,2-Dichloropropane	5														
Trichloroethene	**5**		3 J	2.8	1 J	1 J		1 J	2 J	2 J	2 J		0.5 J	0.86 J	0.69 J
Benzene	**5**	**0.7**	**17**	**15**	**10 J**	**9 J**	**8 J**	**7 J**	**7 J**	**7 J**		4 J	4 J	4.6 J	4.6 J
4-Methyl-2-Pentanone															
2-Hexanone															
Tetrachloroethene	5														
Toluene	1000														
Chlorobenzene															
Ethylbenzene	700														
Styrene	100														
P & M Xylenes															
O Xylene															
Xylenes (total)	10000														
1,1,2-Trichloroethane	5	0 6													
Dichlorodifluoromethane															
Trichlorofluoromethane															
cis-1,2-Dichloroethene	70			24	16	13	10	13	13	16	12 J	7 J	7 J	8 6 J	8.2 J
trans-1,2-Dichloroethene	**100**		23												
N-Propylbenzene															
1,3,5-Trimethylbenzene															
1,2,4-Trimethylbenzene															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
1,2-Dichlorobenzene															
1,2,4-Trichlorobenzene	70														
Naphthalene		10													
1,2,3-Trichlorobenzene															

Notes
1997 and Sept 1999 data have NOT been validated
BOLD = Exceedance of the applicable EPA MCL
Most recent sampling events are shaded columns
MCL = Maximum Contaminant Level
ug/L = Microgram per Liter

ft = foot
USEPA = U S Enviromental Proctection Agency
NYSDEC = New York State Department of Environmental Conservation

Data Qualifiers
B = Analyte detected in blank
D = Value obtained through secondary dilution
E = Value exceeded instrument calibration range
J = Indicates an estimated value
U = Analyzed for but not detected

TABLE 1
VOCS IN BEDROCK WELLS
1997 THROUGH 2008 SAMPLING EVENTS

2008 Annual Groundwater Monitoring Report
Sarney Farm Superfund Site
Amenia, New York

Well No. / Date Sampled / Sample/Zone Depth / Analyte (ug/L)	EPA MCL (ug/L)	NYSDEC MCL (ug/L)	MW-9D2 09/15/99 55 - 102 ft		MW-9D2 11/15/99 55 - 102 ft.		MW-9D2 05/24/00 55 - 102 ft.		MW-9D2 11/14/00 55 - 102 ft		MW-9D2 06/19/01 55 - 102 ft.		MW-9D2 12/12/01 55 - 102 ft		MW-9D2 06/20/02 55 - 102 ft		MW-9D2 07/24/03 55 - 102 ft		MW-9D2 07/13/04 55 - 102 ft		MW-9D2 08/10/05 55 - 102 ft		MW-9D2 07/25/06 55 - 102 ft.		MW-9D2 07/17/07 55 - 102 ft		MW-9D2 09/03/08 55 - 102 ft.	
Chloromethane																												
Vinyl Chloride	2	2																										
Chloroethane																												
Methylene Chloride																												
Acetone			3	J									3	J														
Methyl Ethyl Ketone																												
Carbon Disulfide																												
1,1-Dichloroethene	7																											
1,1-Dichloroethane			5	J	5.3		3	J	3	J	3	J	2	J	2	J	2	J	1	J	1	J	0.8	J	0.68	J	0.67	J
Chloroform																												
1,2-Dichloroethane	**5**	**0.8**	**610**	**D**	**360**	**D**	**300**		**310**		**300**		**280**		**260**		**200**		**160**	**J**	**140**		**160**		**140**		**130**	
2-Butanone																												
1,1,1-Trichloroethane	200				1.6																							
Carbon Tetrachloride	5	5																										
1,2-Dichloropropane	5																											
Trichloroethene	**5**		5	J	**9.3**		2	J	**8**	**J**	**4**	**J**	**6**	**J**	**7**	**J**	3	J	3	J	**5**	**J**	2	J	2.1	J	2.2	J
Benzene	**5**	**0.7**	**12**		**11**		**7**	**J**	**7**	**J**	**8**	**J**	**6**	**J**	**6**	**J**	2	J					0.6	J	1	J	0.76	J
4-Methyl-2-Pentanone																												
2-Hexanone																												
Tetrachloroethene	5										0.5																	
Toluene	1000																											
Chlorobenzene																												
Ethylbenzene	700																											
Styrene	100																											
P & M Xylenes																												
O Xylene																												
Xylenes (total)	10000																											
1,1,2-Trichloroethane	5	0.6																										
Dichlorodifluoromethane																												
Trichlorofluoromethane																												
cis-1,2-Dichloroethene	70		30		38	D	18		33		27		28		26		19		15	J	16		16		14		12	
trans-1,2-Dichloroethene	**100**																											
N-Propylbenzene																												
1,3,5-Trimethylbenzene																												
1,2,4-Trimethylbenzene																												
1,3-Dichlorobenzene																												
1,4-Dichlorobenzene																												
1,2-Dichlorobenzene																												
1,2,4-Trichlorobenzene	70																											
Naphthalene		10																										
1,2,3-Trichlorobenzene																												

Notes:
1997 and Sept 1999 data have NOT been validated
BOLD = Exceedance of the applicable EPA MCL
Most recent sampling events are shaded columns
MCL = Maximum Contaminant Level
ug/L = Microgram per Liter

ft = foot
USEPA = U S Enviromental Proclection Agency
NYSDEC = New York State Department of Environmental Conservation

Data Qualifiers
B = Analyte detected in blank
D = Value obtained through secondary dilution
E = Value exceeded instrument calibration range
J = Indicates an estimated value
U = Analyzed for but not detected

TABLE 1
VOCS IN BEDROCK WELLS
1997 THROUGH 2008 SAMPLING EVENTS

2008 Annual Groundwater Monitoring Report
Sarney Farm Superfund Site
Amenia, New York

Well No. Date Sampled Sample/Zone Depth Analyte (ug/L)	EPA MCL (ug/L)	NYSDEC MCL (ug/L)	MW-9D3 09/15/99 38 - 55 ft.	MW-9D3 11/15/99 38 - 55 ft.	MW-9D3 05/24/00 38 - 55 ft.	MW-9D3 11/14/00 38 - 55 ft	MW-9D3 06/19/01 38 - 55 ft.	MW-9D3 12/12/01 38 - 55 ft.	MW-9D3 06/20/02 38 - 55 ft.	MW-9D3 07/24/03 38 - 55 ft.	MW-9D3 07/13/04 38 - 55 ft.	MW-9D3 08/10/05 38 - 55 ft.	MW-9D3 07/25/06 38 - 55 ft.	MW-9D3 07/17/07 38 - 55 ft.	MW-9D3 09/03/08 38 - 55 ft.
Chloromethane															
Vinyl Chloride	2	2													
Chloroethane															
Methylene Chloride															
Acetone			4 J												
Methyl Ethyl Ketone															
Carbon Disulfide															
1,1-Dichloroethene	7			4.5											
1,1-Dichloroethane			4 J		3 J	2 J	2 J	2 J	2 J	2 J	1 J		0.8 J	0.58 J	0.5 J
Chloroform															
1,2-Dichloroethane	**5**	**0.8**	**540 D**	**450 D**	**350**	**330**	**310**	**360**	**270**	**200**	**190 J**	**150**	**130**	**110**	**120**
2-Butanone															
1,1,1-Trichloroethane	200			1.5	1 J										
Carbon Tetrachloride	5	5													
1,2-Dichloropropane	5														
Trichloroethene	**5**		4 J	**9.1**	**8 J**	**7 J**	**8 J**	**7 J**	**8 J**	**6 J**	**6 J**	**5 J**	**5 J**	**4.5 J**	4 J
Benzene	**5**	**0.7**	**10**	**9.3**	**8 J**	**7 J**	**7 J**	**6 J**	**5 J**	2 J			0.6 J	0.24 J	
4-Methyl-2-Pentanone															
2-Hexanone															
Tetrachloroethene	5								0.9 J					0.36 J	
Toluene	1000														
Chlorobenzene															
Ethylbenzene	700														
Styrene	100														
P & M Xylenes															
O Xylene															
Xylenes (total)	10000														
1,1,2-Trichloroethane	5	0.6													
Dichlorodifluoromethane															
Trichlorofluoromethane															
cis-1,2-Dichloroethene	70		24	39 JD	37	33	32	32	27	21	18 J	15	13	9.7 J	9.4 J
trans-1,2-Dichloroethene	**100**														
N-Propylbenzene															
1,3,5-Trimethylbenzene															
1,2,4-Trimethylbenzene															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
1,2-Dichlorobenzene															
1,2,4-Trichlorobenzene	70														
Naphthalene		10													
1,2,3-Trichlorobenzene															

Notes:
1997 and Sept. 1999 data have NOT been validated.
BOLD = Exceedance of the applicable EPA MCL
Most recent sampling events are shaded columns
MCL = Maximum Contaminant Level
ug/L = Microgram per Liter

ft = foot
USEPA = U.S Enviromental Protection Agency
NYSDEC = New York State Department of Environmental Conservation

Data Qualifiers:
B = Analyte detected in blank.
D = Value obtained through secondary dilution.
E = Value exceeded instrument calibration range
J = Indicates an estimated value.
U = Analyzed for but not detected.

TABLE 1
VOCS IN BEDROCK WELLS
1997 THROUGH 2008 SAMPLING EVENTS

2008 Annual Groundwater Monitoring Report
Sarney Farm Superfund Site
Amenia, New York

Well No. / Date Sampled / Sample/Zone Depth / Analyte (ug/L)	EPA MCL (ug/L)	NYSDEC MCL (ug/L)	MW-10D1 09/15/99 110 - 144 ft.	MW-10D1 11/15/99 110 - 144 ft.	MW-10D1 05/24/00 110 - 144 ft.	MW-10D1 11/14/00 110 - 144 ft.	MW-10D1 06/19/01 110 - 144 ft.	MW-10D1 12/12/01 110 - 144 ft.	MW-10D1 06/19/02 110 - 144 ft.	MW-10D1 07/24/03 110 - 144 ft	MW-10D1 07/13/04 110 - 144 ft.	MW-10D1 08/10/05 110 - 144 ft.	MW-10D1 07/25/06 110 - 144 ft.	MW-10D1 07/17/07 110 - 144 ft.	MW-10D1 09/04/08 110 - 144 ft.
Chloromethane															
Vinyl Chloride	2	2													
Chloroethane															
Methylene Chloride															
Acetone			6 J												
Methyl Ethyl Ketone															
Carbon Disulfide															
1,1-Dichloroethene	7														
1,1-Dichioroethane															
Chloroform			1 J	0.9 J										0.36 J	0.34 J
1,2-Dichloroethane	**5**	**0.8**	**47**	**70 D**	**66**	**61**	**74**	**67**	**56**	**62**	**61 J**	**40**	**44**	**40**	**41**
2-Butanone															
1,1,1-Trichloroethane	200														
Carbon Tetrachloride	5	5													
1,2-Dichloropropane	5														
Trichloroethene	**5**														
Benzene	**5**	**0.7**												0.15 J	0.14 J
4-Methyl-2-Pentanone															
2-Hexanone															
Tetrachloroethene	5														
Toluene	1000													0.43 J	0.35 J
Chlorobenzene															
Ethylbenzene	700														
Styrene	100														
P & M Xylenes															
O Xylene															
Xylenes (total)	10000														
1,1,2-Trichloroethane	5	0.6													
Dichlorodifluoromethane															
Trichlorofluoromethane															
cis-1,2-Dichloroethene	70		1 J	2	1 J	1 J	1 J	2 J	2 J	2 J	2 J	1 J	1 J	1.3 J	1.3 J
trans-1,2-Dichloroethene	**100**														
N-Propylbenzene															
1,3,5-Trimethylbenzene															
1,2,4-Trimethylbenzene															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
1,2-Dichlorobenzene															
1,2,4-Trichlorobenzene	70														
Naphthalene		10													
1,2,3-Trichlorobenzene															

Notes
1997 and Sept 1999 data have NOT been validated
BOLD = Exceedance of the applicable EPA MCL
Most recent sampling events are shaded columns
MCL = Maximum Contaminant Level
ug/L = Microgram per Liter

ft = foot
USEPA = U S Enviromental Proctection Agency
NYSDEC = New York State Department of Environmental Conservation

Data Qualifiers
B = Analyte detected in blank
D = Value obtained through secondary dilution
E = Value exceeded instrument calibration range
J = Indicates an estimated value
U = Analyzed for but not detected

TABLE 1
VOCS IN BEDROCK WELLS
1997 THROUGH 2008 SAMPLING EVENTS

2008 Annual Groundwater Monitoring Report
Sarney Farm Superfund Site
Amenia, New York

Well No. / Date Sampled / Sample/Zone Depth / Analyte (ug/L)	EPA MCL (ug/L)	NYSDEC MCL (ug/L)	MW-10D2 09/15/99 68 - 110 ft	MW-10D2 11/15/99 68 - 110 ft.	MW-10D2 05/24/00 68 - 110 ft.	MW-10D2 11/14/00 68 - 110 ft.	MW-10D2 06/19/01 68 - 110 ft.	MW-10D2 12/12/01 68 - 110 ft.	MW-10D2 06/19/02 68 - 110 ft	MW-10D2 07/24/03 68 - 110 ft	MW-10D2 07/13/04 68 - 110 ft.	MW-10D2 08/10/05 68 - 110 ft.	MW-10D2 07/25/06 68 - 110 ft.	MW-10D2 07/17/07 68 - 110 ft.	MW-10D2 09/04/08 68 - 110 ft.
Chloromethane															
Vinyl Chloride	2	2						2 J							
Chloroethane															
Methylene Chloride															
Acetone			3 J												
Methyl Ethyl Ketone															
Carbon Disulfide															
1,1-Dichloroethene	7														
1,1-Dichloroethane															
Chloroform															
1,2-Dichloroethane	**5**	**0.8**	**48**	**67 D**	**69**	**91**	**82**	**88**	**87**	**73**	**69 J**	**55**	**30**	**62**	**46**
2-Butanone															
1,1,1-Trichloroethane	200														
Carbon Tetrachloride	5	5													
1,2-Dichloropropane	5														
Trichloroethene	**5**														
Benzene	**5**	**0.7**													
4-Methyl-2-Pentanone															
2-Hexanone															
Tetrachloroethene	5														
Toluene	1000														
Chlorobenzene															
Ethylbenzene	700														
Styrene	100														
P & M Xylenes															
O Xylene															
Xylenes (total)	10000														
1,1,2-Trichloroethane	5	0 6													
Dichlorodifluoromethane															
Trichlorofluoromethane															
cis-1,2-Dichloroethene	70		1 J	2 3		1 J		3 J	3 J	2 J	1 J	1 J	0 8 J	0.91 J	0 31 J
trans-1,2-Dichloroethene	**100**														
N-Propylbenzene															
1,3,5-Trimethylbenzene															
1,2,4-Trimethylbenzene															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
1,2-Dichlorobenzene															
1,2,4-Trichlorobenzene	70														
Naphthalene		10													
1,2,3-Trichlorobenzene															

Notes.
1997 and Sept 1999 data have NOT been validated
BOLD = Exceedance of the applicable EPA MCL
Most recent sampling events are shaded columns
MCL = Maximum Contaminant Level
ug/L = Microgram per Liter

ft = foot
USEPA = U S Enviromental Proctection Agency
NYSDEC = New York State Department of Environmental Conservation

Data Qualifiers
B = Analyte detected in blank
D = Value obtained through secondary dilution.
E = Value exceeded instrument calibration range.
J = Indicates an estimated value
U = Analyzed for but not detected

TABLE 1
VOCS IN BEDROCK WELLS
1997 THROUGH 2008 SAMPLING EVENTS

2008 Annual Groundwater Monitoring Report
Sarney Farm Superfund Site
Amenia, New York

Well No. / Date Sampled / Sample/Zone Depth / Analyte (ug/L)	EPA MCL (ug/L)	NYSDEC MCL (ug/L)	MW-10D3 09/15/99 40 - 68 ft.	MW-10D3 11/15/99 40 - 68 ft.	MW-10D3 05/24/00 40 - 68 ft.	MW-10D3 11/14/00 40 - 68 ft.	MW-10D3 06/19/01 40 - 68 ft.	MW-10D3 12/12/01 40 - 68 ft.	MW-10D3 06/19/02 40 - 68 ft.	MW-10D3 07/24/03 40 - 68 ft.	MW-10D3 07/13/04 40 - 68 ft.	MW-10D3 08/10/05 40 - 68 ft.	MW-10D3 07/25/06 40 - 68 ft.	MW-10D3 07/17/07 40 - 68 ft.	MW-10D3 09/04/08 40 - 68 ft.
Chloromethane									3 J						
Vinyl Chloride	2	2													
Chloroethane															
Methylene Chloride															
Acetone			3 J												
Methyl Ethyl Ketone															
Carbon Disulfide															
1,1-Dichloroethene	7														
1,1-Dichloroethane															
Chloroform															
1,2-Dichloroethane	**5**	**0.8**	3 J	**14**	**6 J**		**19**	**5 J**	3 J	**6 J**	**6 J**	**5 J**		10 U	1.1 J
2-Butanone															
1,1,1-Trichloroethane	200														
Carbon Tetrachloride	5	5													
1,2-Dichloropropane	5														
Trichloroethene	**5**		1 J			1 J								0.52 J	0.39 J
Benzene	**5**	**0.7**													
4-Methyl-2-Pentanone															
2-Hexanone															
Tetrachloroethene	5														
Toluene	1000														
Chlorobenzene															
Ethylbenzene	700														
Styrene	100														
P & M Xylenes															
O Xylene															
Xylenes (total)	10000														
1,1,2-Trichloroethane	5	0.6													
Dichlorodifluoromethane															
Trichlorofluoromethane															
cis-1,2-Dichloroethene	70			0.8 J											
trans-1,2-Dichloroethene	**100**														
N-Propylbenzene															
1,3,5-Trimethylbenzene															
1,2,4-Trimethylbenzene															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
1,2-Dichlorobenzene															
1,2,4-Trichlorobenzene	70														
Naphthalene		10													
1,2,3-Trichlorobenzene															

Notes
1997 and Sept 1999 data have NOT been validated
BOLD = Exceedance of the applicable EPA MCL
Most recent sampling events are shaded columns
MCL = Maximum Contaminant Level
ug/L = Microgram per Liter

ft = foot
USEPA = U S Enviromental Proctection Agency
NYSDEC = New York State Department of Environmental Conservation

Data Qualifiers
B = Analyte detected in blank
D = Value obtained through secondary dilution
E = Value exceeded instrument calibration range
J = Indicates an estimated value
U = Analyzed for but not detected

Prepared by CTM
Checked by DLC 11/3/08

Table 2
Trend Analysis for 1,2-DCA to Reach Maximum Concentation Limit of 5 ug/L

2008 Annual Groundwater Monitoring Report
Sarney Farm Superfund Site
Amenia, New York

Location	Data Points *	Trend		Regression Analysis			
				Linear Model		First-order Model	
		MK S-value	p-value	R-square(%)	Years to 5 µg/L from 9/15/1999	R-Square(%)	Years to 5 µg/L from 9/15/1999
MW-7D-D	12	-54	<0.001	88.8	9.7	90.3	**26.9**
MW-7D-S	12	-43	0.0015	61.3	6.8	37.8	7.3
	8	-20	0.007	42.7	9.8	60.6	**28**
MW-9-D1	12	-57	<0.001	72.2	8.6	86.1	**21**
MW-9-D2	12	-59	<0.001	63.2	9.7	83.4	**28.5**
MW-9-D3	12	-60	<0.001	85.2	9.1	95.7	**24.3**
MW-10-D1	12	-32	0.016	40.2	18.1	43.5	40.8
	10	-31	0.002	73	14.1	76.4	**30.2**
MW-10-D2	12	-15	0.172	17.8	21.1	19.2	44.5
	9	-30	<0.001	80	12.4	67.3	**24.3**

Notes:

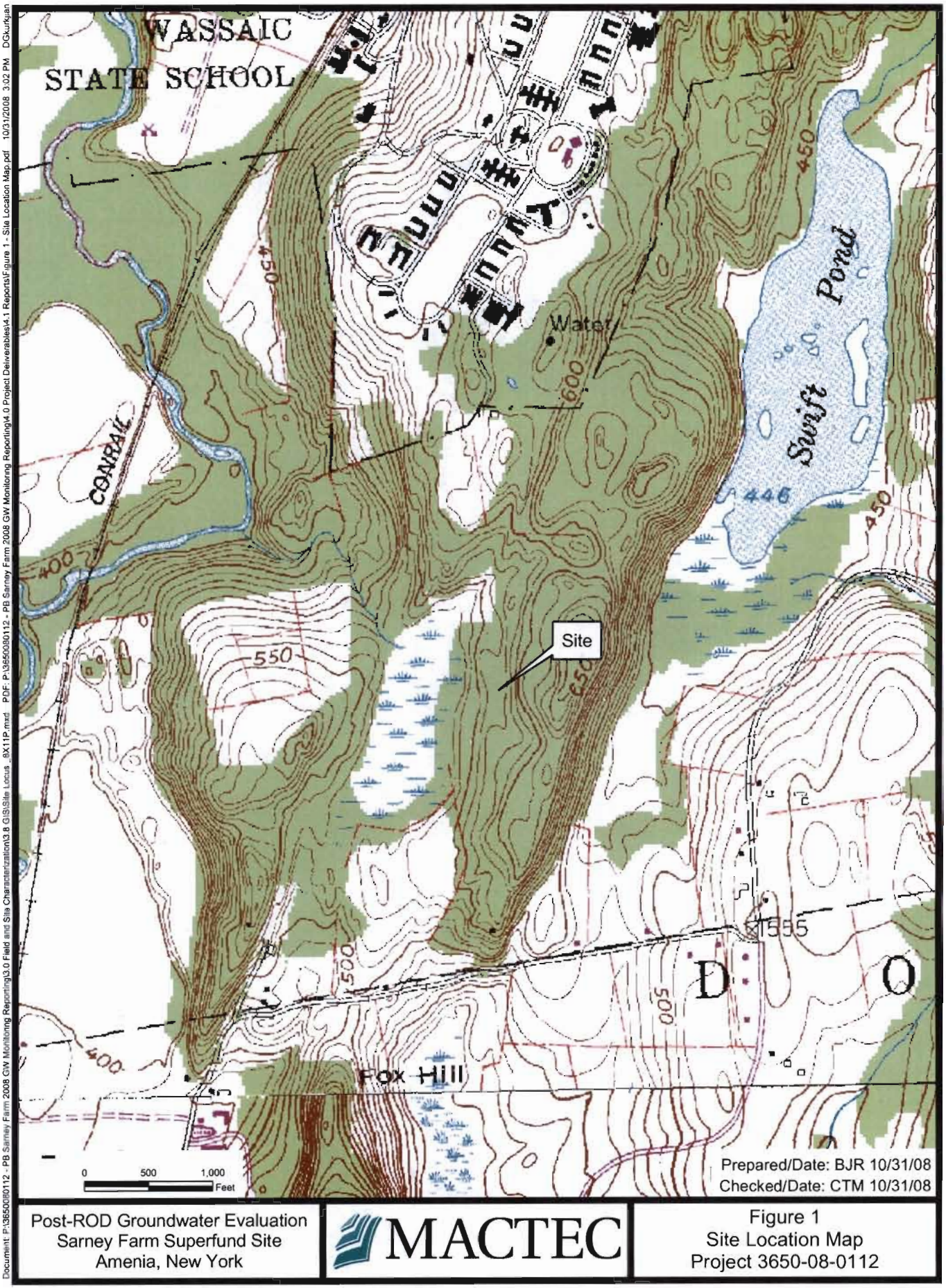
1. MK = Mann Kendall nonparametric trend test
2. S-value is the sum of the calculations for the MK test; a negative value indicates downward trending
3. p-value is determined from a table of p-values corresponding to the number of samples and the S-value For a 90% level of confidence for a trend (the null hypothesis of no trend is rejected), the p-value should be less than 0.1.
4. Time in the regression analysis is marked from first date in the data set series, 9/15/1999. The time to reach 5 µg/L from now (Feb 2008) is about 8.3 years less than tabulated.
5. The best estimate for the time for 1,2-DCA to reach 5 µg/L (from 9/15/1999) at each location is bolded.
6. µg/L = Microgram per Liter

* = Alternate evaluation which includes apparently anomalous data, See Report Text.

Created by: RML
Checked by: MAM

FIGURES

FIGURES

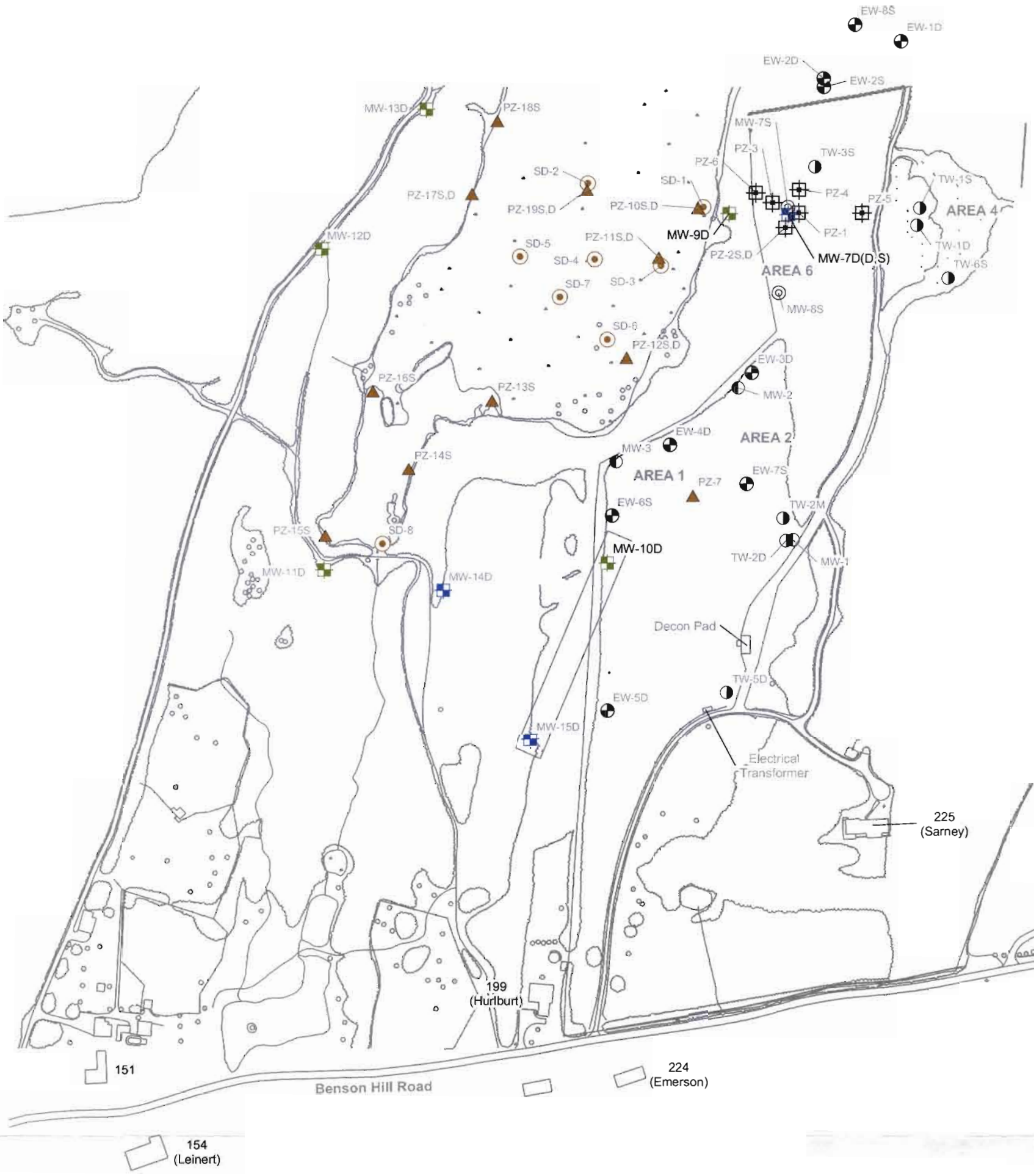


Post-ROD Groundwater Evaluation
Sarney Farm Superfund Site
Amenia, New York

MACTEC

Figure 1
Site Location Map
Project 3650-08-0112

Document: P:\3650\80112 - PB Sarney Farm 2008 GW Monitoring Reporting\3.0 Field and Site Characterization\3.8 GIS\Site Locus _8X11P.mxd PDF: P:\3650\80112 - PB Sarney Farm 2008 GW Monitoring Reporting\4.0 Project Deliverables\4.1 Reports\Figure 1 - Site Location Map.pdf 10/31/2008 3:02 PM DGkurkjian



Legend

- *TW-1D* - TAMS Deep Monitoring Well (1991)
- *TW-1M* - TAMS Intermediate Depth Monitoring Well (1991)
- *TW-1S* - TAMS Shallow Monitoring Well (1991)
- *MW-3* - CDM Monitoring Well (1984)
- *EW-4D* - EBASCO Deep Monitoring Well (1989)
- *EW-6S* - EBASCO Shallow Monitoring Well (1989)
- *MW-7S* - CDM Monitoring Well (1997)
- *PZ-4* - CDM Shallow Piezometer (1997)
- *MW-11D* - ESE Multi-Level Bedrock Well
- *MW-7D* - Existing Bedrock Well Modification
- *PZ-16* - ESE Shallow Piezometer
- *SD-8* - ESE Sediment Sampling Location (1999)

N

0 125 250 Feet

Prepared by BJR | Checked by CTM

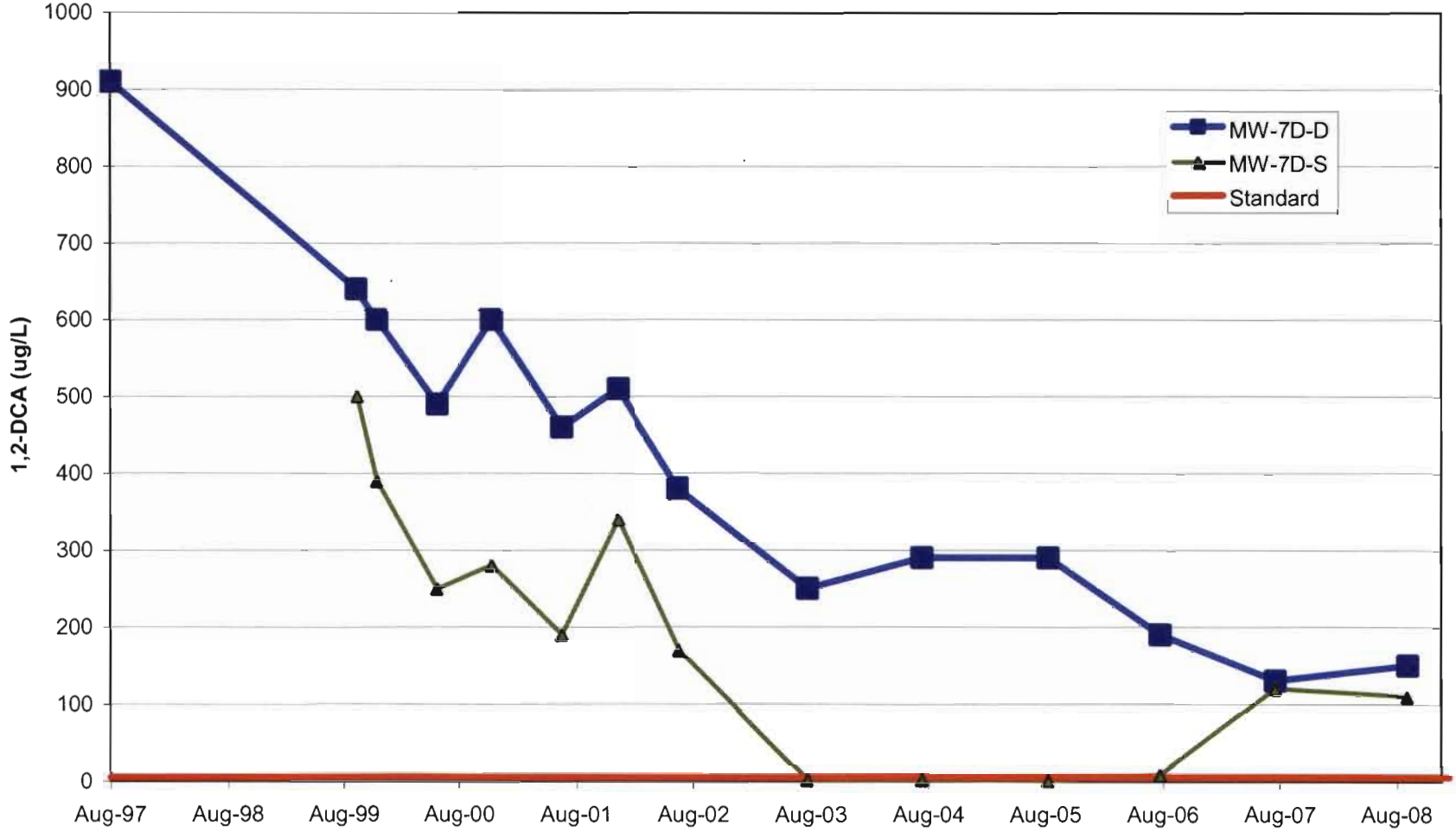
Figure 2
Site Plan

Post-Rod Groundwater Evaluation
Sarney Farm Superfund Site
Amenia, New York

MACTEC Engineering and Consulting
107 Audubon Road, Suite 301
Wakefield, MA 01880

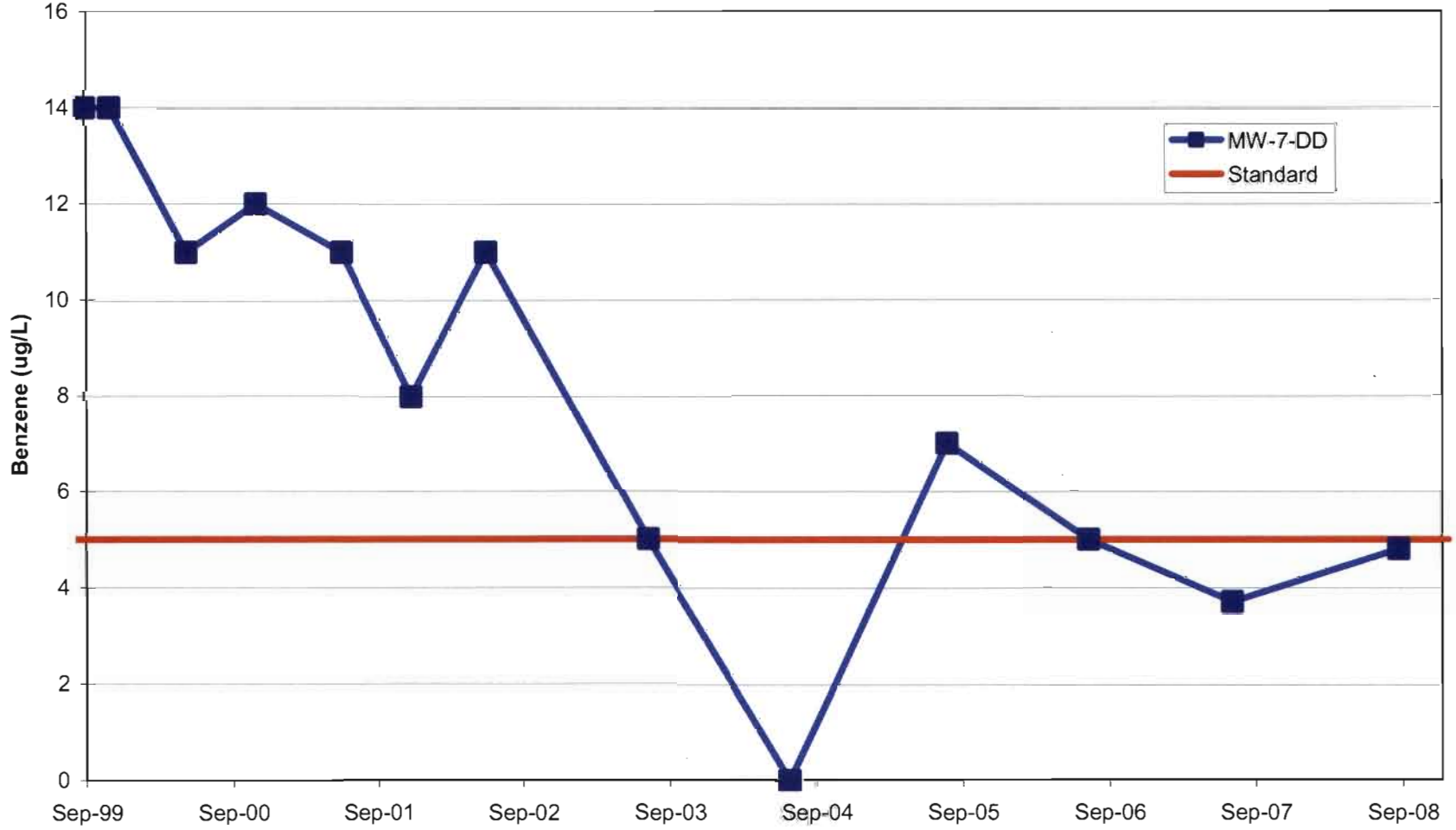
Document: P:\GIS\Projects\Sarney\Mapdocuments\SarneyFarm_11X17_LS.mxd PDF: P:\3650080112 - PB Sarney Farm 2008 GW Monitoring Reporting\4.0 Project Deliverables\4.1 Reports\Figure 2 - Site Map.pdf 11/19/2008 9:11 AM bjroden

Figure 3
1,2-DCA Concentrations in Groundwater
MW-7 Series
Sarney Farm Superfund Site
Amenia, New York



Created by: DLC 10/29/08
Checked by: CTM 10/30/08

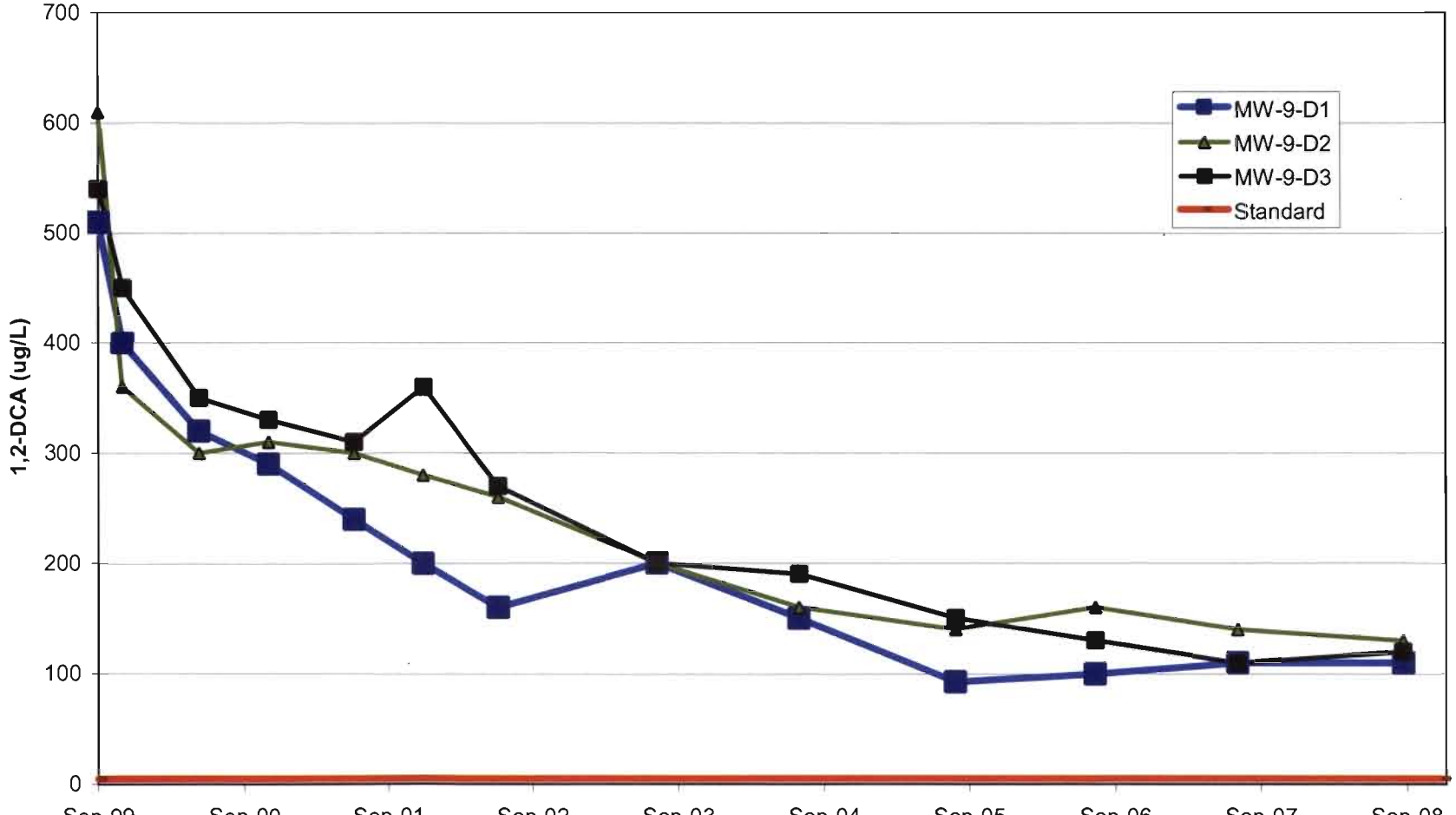
Figure 4
Benzene Concentrations in Groundwater
MW-7 Series
Sarney Farm Superfund Site
Amenia, New York



Created by: DLC 10/29/08
Checked by: CTM 10/30/08

P:\3650080112 - PB Sarney Farm 2008 GW Monitoring Reporting\4.0 Project Deliverables\4.1 Reports\Final\Figures 3-6 Sept 2008.xls

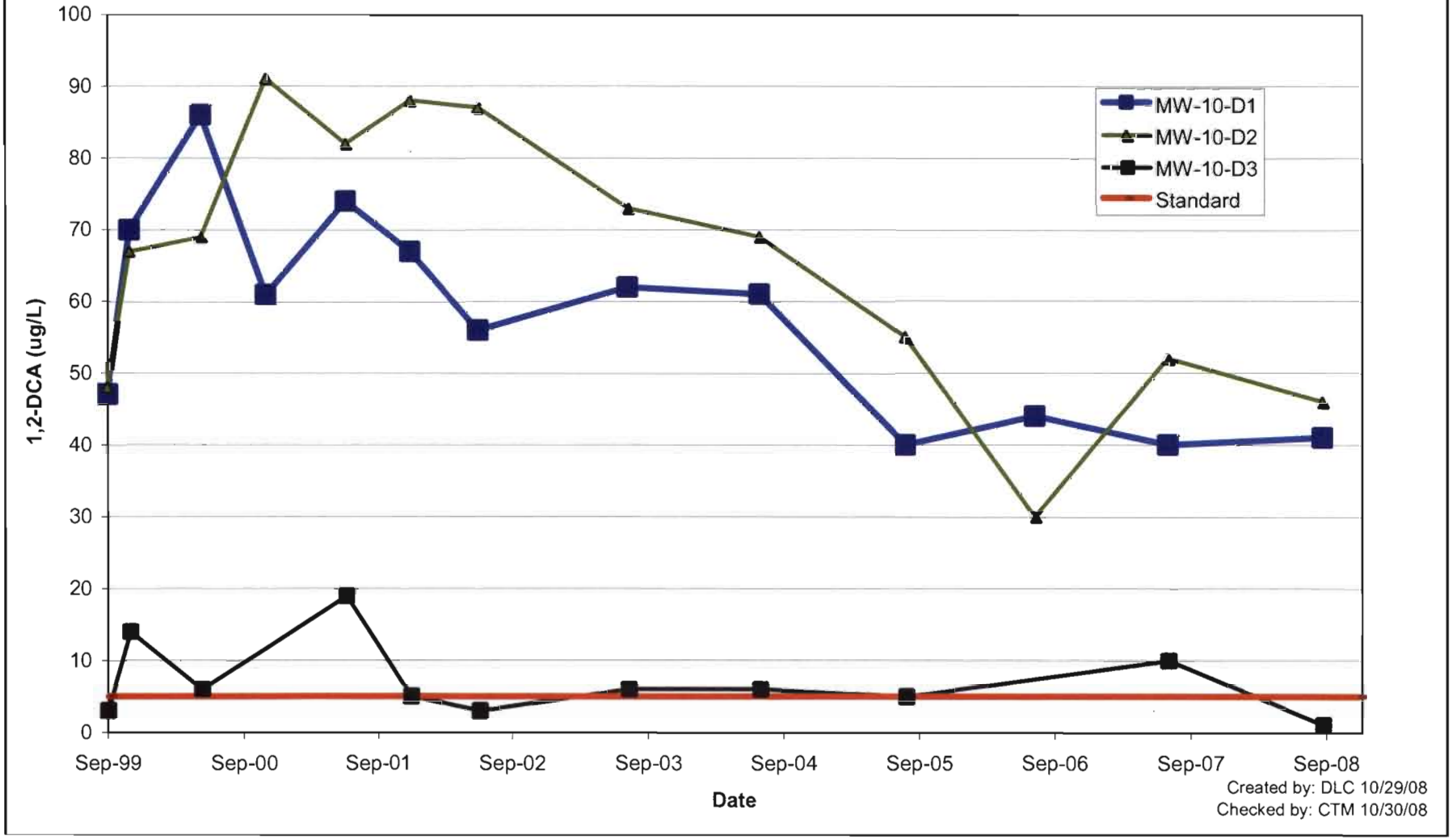
Figure 5
1,2-DCA Concentrations in Groundwater
MW-9 Series
Sarney Farm Superfund Site
Amenia, New York



Created by: DLC 10/29/08
Checked by: CTM 10/30/08

P:\3650080112 - PB Sarney Farm 2008 GW Monitoring Reporting\4.0 Project Deliverables\4.1 Reports\Final\Figures 3-6 Sept 2008.xls

Figure 6
1,2-DCA Concentrations in Groundwater
MW-10 Series
Sarney Farm Superfund Site
Amenia, New York



P:\3650080112 - PB Sarney Farm 2008 GW Monitoring Reporting\4.0 Project Deliverables\4.1 Reports\Final\Figures 3-6 Sept 2008.xls

APPENDIX A

APPENDIX A

2008 Laboratory Data Reports

(Provided on CD)

APPENDIX B

APPENDIX B

2008 Data Validation Reports

FILE COPY

MACTEC

DATA VALIDATION SUMMARY REPORT
OCTOBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

1.0 Introduction

Data validation was completed on one residential water sample collected on October 29, 2008 at the Sarney Farm Superfund Site in Amenia, New York. The sample was shipped to TestAmerica Laboratories, Inc., located in Shelton, Connecticut, and analyzed by STL Buffalo, located in Amherst, New York. The sample was analyzed for volatile organic compounds (VOCs) in accordance with the following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (ASP) method:

- U.S. Environmental Protection Agency (USEPA) Contract Lab Protocol (CLP) for low concentration volatiles (OLC 2.1); NYSDEC 95-4.

The residential well water sample (Hurlbert) was reported in sample delivery group (SDG) 220-7067-1. Table 1 includes sampling date and lab ID of the residential sample.

Data validation was completed using USEPA Region II standard operating procedures (CLP/SOW OLC03.2 SOP HW-13). The data package was validated using Region II CLP quality control (QC) limits. Data validation checks and data qualification procedures described in USEPA Region II data validation standard operating procedures (USEPA, 2001) were used during the data review. Data quality control reviews were completed using laboratory QC summary forms and raw data. During the Region II full data validation the following data quality indicators were reviewed:

- Case Narrative
- Sample Collection and Holding Times
- QC Blanks
- Instrument Calibration
- Laboratory Control Samples (LCS)
- Surrogate Spikes
- Internal Standards
- Reporting Limits
- Electronic Data Verification
- Raw Data (Chromatograms and Mass Spectra)
- Calculation verification

Final validated results are presented in Table 2. Data qualifications were completed if necessary in accordance with the guidelines using the following qualifiers:

U = The target compound was not detected at concentrations greater than the associated quantitation limit.

J = The reported concentration is considered an estimated value

2.0 Data Validation Observations and Actions

Results are interpreted to be usable as reported by the laboratory unless discussed in the following subsections.

2.1 Residential Wells

Blanks

Acetone (3 J µg/L) was reported in the trip blank associated with the residential well sample Hurlbert. An action level was calculated at ten times the blank concentration and compared to sample data. Acetone was reported at 0.7 µg/L in the Hurlbert residential sample and was qualified non-detect (U) at the reporting limit of 5 µg/L.

References:

New York State Department of Environmental Conservation (NYSDEC), 1995. "Analytical Services Protocols"; 10/95 Edition; October 1995.

U.S. Environmental Protection Agency (USEPA), 2001. "USEPA Region II Contract Laboratory Program (CLP/SOW OLC03.2) Standard Operating Procedure HW-13"; USEPA Region II; Rev 3; July 2001.

Reviewed by:
QA Chemist: Tige Cunningham

Tige Cunningham

Date: 1/8/09
Quality Assurance Officer: Chris Ricardi, NRCC-EAC

Chris Ricardi

Date: 1/8/09

Table 1
Sample Summary - 220-7067
Data Validation Report
October 2008 Residential Sampling Event
Sarney Farm Superfund Site
Amenia, New York

Lab Sample ID	Location	Sample ID	Sample Date	VOA
Residential				
220-7067-1	HURLBERT	HURLBERT	10/29/2008	42

Notes:
Number listed under method indicates number of target analytes reported.

Prepared by / Date: KJC 01/08/09
Checked by / Date: TLC 01/08/09

Table 2
Final Results Summary
October 2008 Sampling Event
Sarney Farm Superfund Site
Amenia, New York

			Location	HURLBERT	
			COC Sample	HURLBERT	
			Date Sampled	10/29/08	
			Sample Type	FS	
			Report Number	220-7067-1	
Fraction	Analysis Method	Parameter Name	Units	Final Result	Final Qual
N	VOA	1,1,1-Trichloroethane	UG/L	1	U
N	VOA	1,1,2,2-Tetrachloroethane	UG/L	1	U
N	VOA	1,1,2-Trichloroethane	UG/L	1	U
N	VOA	1,1-Dichloroethane	UG/L	1	U
N	VOA	1,1-Dichloroethene	UG/L	1	U
N	VOA	1,2,4-Trichlorobenzene	UG/L	1	U
N	VOA	1,2-Dibromo-3-chloropropane	UG/L	1	U
N	VOA	1,2-Dibromoethane	UG/L	1	U
N	VOA	1,2-Dichlorobenzene	UG/L	1	U
N	VOA	1,2-Dichloroethane	UG/L	1	U
N	VOA	1,2-Dichloropropane	UG/L	0.5	U
N	VOA	1,3-Dichlorobenzene	UG/L	1	U
N	VOA	1,4-Dichlorobenzene	UG/L	1	U
N	VOA	2-Butanone	UG/L	5	U
N	VOA	2-Hexanone	UG/L	5	U
N	VOA	4-Methyl-2-pentanone	UG/L	5	U
N	VOA	Acetone	UG/L	5	U
N	VOA	Benzene	UG/L	1	U
N	VOA	Bromochloromethane	UG/L	1	U
N	VOA	Bromodichloromethane	UG/L	1	U
N	VOA	Bromoform	UG/L	1	U
N	VOA	Bromomethane	UG/L	1	U
N	VOA	Carbon disulfide	UG/L	1	U
N	VOA	Carbon tetrachloride	UG/L	1	U
N	VOA	Chlorobenzene	UG/L	1	U
N	VOA	Chlorodibromomethane	UG/L	1	U
N	VOA	Chloroethane	UG/L	1	U
N	VOA	Chloroform	UG/L	1	U
N	VOA	Chloromethane	UG/L	1	U
N	VOA	Cis-1,2-Dichloroethene	UG/L	1	U
N	VOA	cis-1,3-Dichloropropene	UG/L	1	U
N	VOA	Ethyl benzene	UG/L	1	U
N	VOA	Methylene chloride	UG/L	2	U
N	VOA	Styrene	UG/L	1	U
N	VOA	Tetrachloroethene	UG/L	1	U
N	VOA	Toluene	UG/L	1	U
N	VOA	trans-1,2-Dichloroethene	UG/L	1	U
N	VOA	trans-1,3-Dichloropropene	UG/L	0.5	U
N	VOA	Trichloroethene	UG/L	1	U
N	VOA	Vinyl chloride	UG/L	1	U
N	VOA	Xylenes, Total	UG/L	1	U

Table 2
Final Results Summary
October 2008 Sampling Event
Sarney Farm Superfund Site
Amenia, New York

			Location	QC
			COC Sample	TRIP BLANK
			Date Sampled	10/29/08
			Sample Type	TB
			Report Number	220-7067-1
Fract	Analysis Method	Parameter Name	Units	Final Result Final Qual
N	VOA	1,1,1-Trichloroethane	UG/L	1 U
N	VOA	1,1,2,2-Tetrachloroethane	UG/L	1 U
N	VOA	1,1,2-Trichloroethane	UG/L	1 U
N	VOA	1,1-Dichloroethane	UG/L	1 U
N	VOA	1,1-Dichloroethene	UG/L	1 U
N	VOA	1,2,4-Trichlorobenzene	UG/L	1 U
N	VOA	1,2-Dibromo-3-chloropropane	UG/L	1 U
N	VOA	1,2-Dibromoethane	UG/L	1 U
N	VOA	1,2-Dichlorobenzene	UG/L	1 U
N	VOA	1,2-Dichloroethane	UG/L	1 U
N	VOA	1,2-Dichloropropane	UG/L	0.5 U
N	VOA	1,3-Dichlorobenzene	UG/L	1 U
N	VOA	1,4-Dichlorobenzene	UG/L	1 U
N	VOA	2-Butanone	UG/L	0.6 J
N	VOA	2-Hexanone	UG/L	5 U
N	VOA	4-Methyl-2-pentanone	UG/L	5 U
N	VOA	Acetone	UG/L	3 J
N	VOA	Benzene	UG/L	1 U
N	VOA	Bromochloromethane	UG/L	1 U
N	VOA	Bromodichloromethane	UG/L	1 U
N	VOA	Bromoform	UG/L	1 U
N	VOA	Bromomethane	UG/L	1 U
N	VOA	Carbon disulfide	UG/L	1 U
N	VOA	Carbon tetrachloride	UG/L	1 U
N	VOA	Chlorobenzene	UG/L	1 U
N	VOA	Chlorodibromomethane	UG/L	1 U
N	VOA	Chloroethane	UG/L	1 U
N	VOA	Chloroform	UG/L	1 U
N	VOA	Chloromethane	UG/L	0.7 J
N	VOA	Cis-1,2-Dichloroethene	UG/L	1 U
N	VOA	cis-1,3-Dichloropropene	UG/L	1 U
N	VOA	Ethyl benzene	UG/L	1 U
N	VOA	Methylene chloride	UG/L	2 U
N	VOA	Styrene	UG/L	1 U
N	VOA	Tetrachloroethene	UG/L	1 U
N	VOA	Toluene	UG/L	1 U
N	VOA	trans-1,2-Dichloroethene	UG/L	1 U
N	VOA	trans-1,3-Dichloropropene	UG/L	0.5 U
N	VOA	Trichloroethene	UG/L	1 U
N	VOA	Vinyl chloride	UG/L	1 U
N	VOA	Xylenes, Total	UG/L	1 U

Notes:
N = normal
FS = field sample
TB = trip blank
U = not detected, value is the detection limit
J = value is estimated

Prepared by / Date: KJC 01/08/09
Checked by / Date: TLC 01/08/09

lab_sample	analys	run	fract	lab_sample	field_sample	param_name	final_	final_	lab_r	lab_c	result_	dilutio	field_sample	ext	analysis_da	validati	validation
220-7067	VOA	1	N	A8D78901	HURLBERT	1,1,1-Trichloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,1,2,2-Tetrachloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,1,2-Trichloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,1-Dichloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,1-Dichloroethene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,2,4-Trichlorobenzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,2-Dibromo-3-chloropropane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,2-Dibromoethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,2-Dichlorobenzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,2-Dichloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,2-Dichloropropane	0.5	U	0.5	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,3-Dichlorobenzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	1,4-Dichlorobenzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	2-Butanone	5	U	5	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	2-Hexanone	5	U	5	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	4-Methyl-2-pentanone	5	U	5	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	**VOA**	**1**	**N**	**A8D78901**	**HURLBERT**	**Acetone**	**5**	**U**	**0.7**	J	**UG/L**	**1**	**10/29/2008**		**11/10/2008**	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Benzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Bromochloromethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Bromodichloromethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Bromoform	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Bromomethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Carbon disulfide	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Carbon tetrachloride	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Chlorobenzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Chlorodibromomethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Chloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Chloroform	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Chloromethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Cis-1,2-Dichloroethene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	cis-1,3-Dichloropropene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Ethyl benzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Methylene chloride	2	U	2	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Styrene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Tetrachloroethene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II

lab_sample	analys	run	fract	lab_sample	field_sample_	param_name	final_	final_	lab_r	lab_c	result_	dilutio	field_sample	ext	analysis_da	validati	validation
220-7067	VOA	1	N	A8D78901	HURLBERT	Toluene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	trans-1,2-Dichloroethene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	trans-1,3-Dichloropropene	0.5	U	0.5	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Trichloroethene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Vinyl chloride	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78901	HURLBERT	Xylenes, Total	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,1,1-Trichloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,1,2,2-Tetrachloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,1,2-Trichloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,1-Dichloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,1-Dichloroethene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,2,4-Trichlorobenzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,2-Dibromo-3-chloropropane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,2-Dibromoethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,2-Dichlorobenzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,2-Dichloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,2-Dichloropropane	0.5	U	0.5	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,3-Dichlorobenzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	1,4-Dichlorobenzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	2-Butanone	0.6	J	0.6	J	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	2-Hexanone	5	U	5	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	4-Methyl-2-pentanone	5	U	5	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Acetone	3	J	3	J	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Benzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Bromochloromethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Bromodichloromethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Bromoform	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Bromomethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Carbon disulfide	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Carbon tetrachloride	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Chlorobenzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Chlorodibromomethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Chloroethane	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Chloroform	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Chloromethane	0.7	J	0.7	J	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II

lab_sample	analys	run	fract	lab_sample	field_sample_	param_name	final_r	final_	lab_r	lab_c	result_	dilutic	field_sample	ext	analysis_da	validati	validation
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Cis-1,2-Dichloroethene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	cis-1,3-Dichloropropene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Ethyl benzene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Methylene chloride	2	U	2	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Styrene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Tetrachloroethene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Toluene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	trans-1,2-Dichloroethene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	trans-1,3-Dichloropropene	0.5	U	0.5	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Trichloroethene	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Vinyl chloride	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II
220-7067	VOA	1	N	A8D78902	TRIP BLANK	Xylenes, Total	1	U	1	U	UG/L	1	10/29/2008		11/10/2008	8-Jan	Tier_II

EPA OLC 2.1 - LOW CONC. VOLATILES
ANALYSIS DATA SHEET

Client No.

HURLBERT

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7067

Matrix: (soil/water) WATER Lab Sample ID: A8D78901

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G6003.RR

Level: (low/med) LOW Date Samp/Recv: 10/29/2008 10/31/2008

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 11/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	~~5~~ ~~0.7~~	~~J~~ U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U

TC
1/8/09

EPA OLC 2.1 - LOW CONC. VOLATILES
ANALYSIS DATA SHEET

Client No.

HURLBERT

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7067

Matrix: (soil/water) WATER Lab Sample ID: A8D78901

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G6003.RR

Level: (low/med) LOW Date Samp/Recv: 10/29/2008 10/31/2008

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 11/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-42-5	Styrene	1	U
1330-20-7	Total Xylenes	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

TC
11/9/09

EPA OLC 2.1 - LOW CONC. VOLATILES
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

HURLBERT

Lab Name: TestAmerica Laborat Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7067

Matrix: (soil/water) WATER Lab Sample ID: A8D78901

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G6003.RR

Level: (low/med) LOW Date Samp/Recv: 10/29/2008 10/31/2008

% Moisture: not dec. _____ Date Analyzed: 11/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

FORM IE - GC/MS VOA TIC

TC 11/9/08

EPA OLC 2.1 - LOW CONC. VOLATILES
ANALYSIS DATA SHEET

Client No.

TRIP BLANK

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 7067

Matrix: (soil/water) WATER Lab Sample ID: A8D78902

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G6004.RR

Level: (low/med) LOW Date Samp/Recv: 10/29/2008 10/31/2008

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 11/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	0.7	J
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	3	J
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	0.6	J
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U

TC 11/8/09

EPA OLC 2.1 - LOW CONC. VOLATILES
ANALYSIS DATA SHEET

Client No.

TRIP BLANK

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: REGNY Case No.: _____ SAS No.: _____ SDG No.: 7067

Matrix: (soil/water) WATER Lab Sample ID: A8D78902

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G6004.RR

Level: (low/med) LOW Date Samp/Recv: 10/29/2008 10/31/2008

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 11/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-42-5	Styrene	1	U
1330-20-7	Total Xylenes	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

TC
1/5/09

EPA OLC 2.1 - LOW CONC. VOLATILES
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

TRIP BLANK

Lab Name: TestAmerica Laborat Contract: NO

Lab Code: RECNY Case No.: ____ SAS No.: ____ SDG No.: 7067

Matrix: (soil/water) WATER Lab Sample ID: A8D78902

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G6004.RR

Level: (low/med) LOW Date Samp/Recv: 10/29/2008 10/31/2008

% Moisture: not dec. ____ Date Analyzed: 11/10/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: ____ (uL)

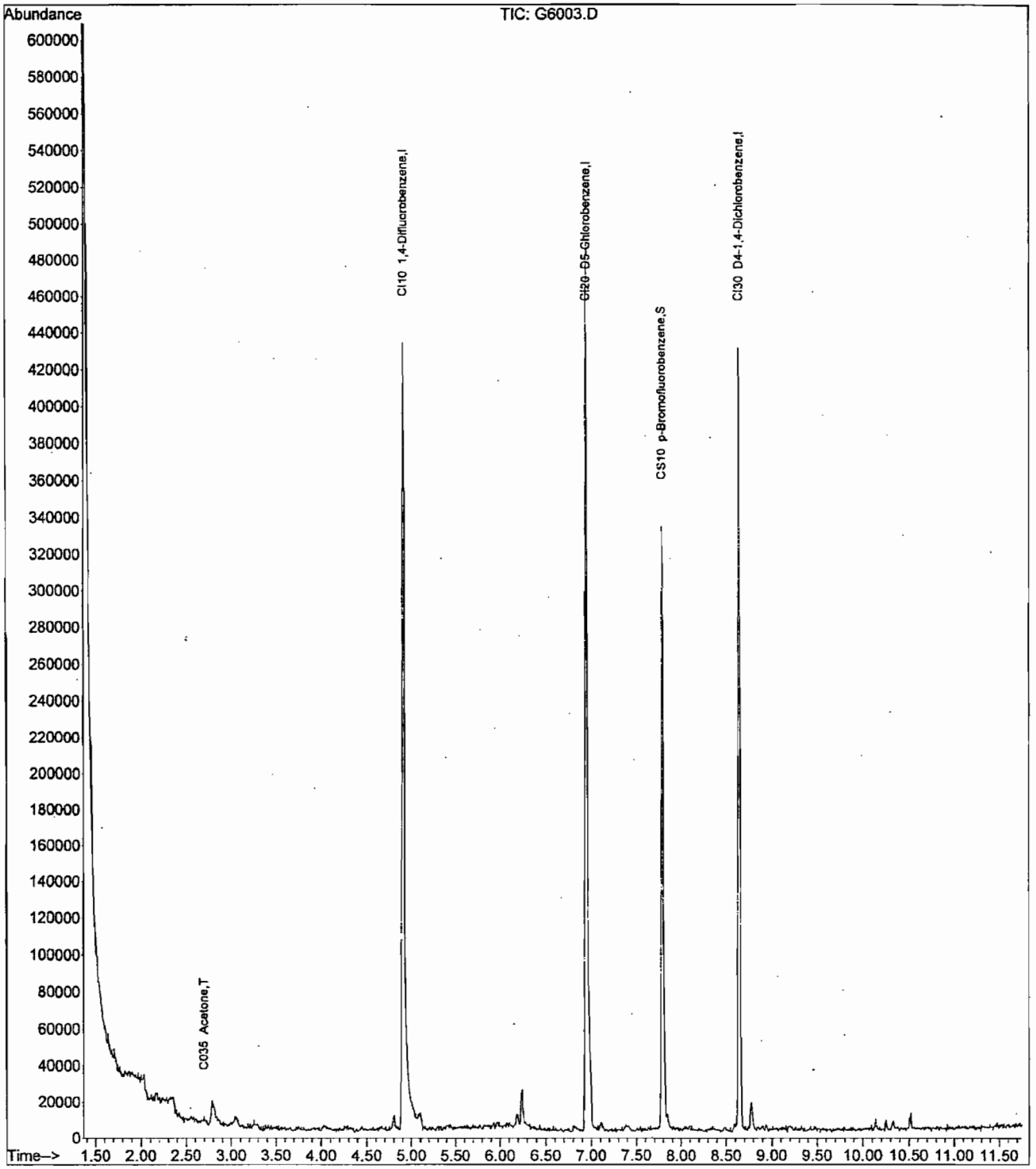
Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

TC
1/8/09

Data File : D:\MSDCHEM\G\DATA\111008\G6003.D Vial: 11
Acq On : 10 Nov 2008 15:20 Operator: TRB
Sample : A8D78901 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT2.P

Quant Time: Nov 10 18:53:30 2008 Results File: A8I0000...WCLP.RES
Quant Method : D:\MSDCHEM\G.....0000878-LOWCLP.M (RTE Integrator)
Title : HP5973N CLP LOW LEVEL WATER
Last Update : Mon Nov 10 18:53:11 2008
Response via : Continuing Cal File: D:\MSDChem\G\Data\111008\G5996.D
DataAcq Meth : CLP



Quantitation Report TA Buffalo (Not Reviewed) **50/120**

Data File : D:\MSDCHEM\G\DATA\111008\G6003.D Vial: 11
Acq On : 10 Nov 2008 15:20 Operator: TRB
Sample : A8D78901 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT2.P
Quant Time: Nov 10 18:53:30 2008 Results File: A8I0000...WCLP.RES

Quant Method : D:\MSDCHEM\G.....0000878-LOWCLP.M (RTE Integrator)
Title : HP5973N CLP LOW LEVEL WATER
Last Update : Mon Nov 10 18:53:11 2008
Response via : Single (D:\MSDChem\G\Data\111008\G5996.D 10 Nov 2008 11:53)
DataAcq Meth : CLP
IS QA File : D:\MSDChem\G\Data\111008\G5996.D (10 Nov 2008 11:53)

S+E NJM 11/10/08 NOTE

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.91	114	376856	25.00	ng	0.00 95.36%
17) CI20	D5-Chlorobenzene	6.95	117	282748	25.00	ng	0.00 92.64%
40) CI30	D4-1,4-Dichlorobenze	8.64	152	95317	25.00	ng	0.00 71.63%

System Monitoring Compounds
38) CS10 p-Bromofluorobenzene 7.79 174 79303 21.71 ng 0.00 ✓
Spiked Amount 25.000 Range 80 - 120 Recovery = 86.84%

Target Compounds							Qvalue
2) C010	Chloromethane	1.45	50	21696	N.D.		
3) C015	Bromomethane	1.72	94	184	N.D.		
4) C020	Vinyl Chloride	1.60	62	116	N.D.		
5) C025	Chloroethane	1.95	64	617	N.D.		
6) C030	Methylene Chloride	3.04	84	3809	N.D.		
7) C035	Acetone	2.70	43	7346	3.60	ng	93
8) C040	Carbon Disulfide	2.79	76	32963	N.D.		
9) C045	1,1-Dichloroethene	2.60	96	55	N.D.		
10) C050	1,1-Dichloroethane	3.59	63	238	N.D.		
11) C057	trans-1,2-dichloro	3.26	96	253	N.D.		
12) C056	cis-1,2-Dichloroet	4.03	96	416	N.D.		
13) C060	Chloroform	4.26	83	521	N.D.		
14) C222	Bromochloromethane	4.07	128	60	N.D.		
15) C065	1,2-Dichloroethane	4.67	62	804	N.D.		
16) C110	2-Butanone	4.06	43	1297	N.D.		
18) C115	1,1,1-Trichloroeth	4.38	97	76	N.D.		
19) C120	Carbon Tetrachlori	4.37	117	55	N.D.		
20) C150	Trichloroethene	5.10	95	1779	N.D.		
21) C130	Bromodichlorometha	5.54	83	64	N.D.		
22) C140	1,2-Dichloropropan	5.24	63	98	N.D.		
23) C145	cis-1,3-Dichloropr	5.72	75	68	N.D.		
24) C165	Benzene	4.64	78	809	N.D.		
25) C155	Dibromochlorometha	6.54	129	78	N.D.		
26) C170	trans-1,3-Dichloro	6.23	75	139	N.D.		
27) C160	1,1,2-Trichloroeth	6.26	97	127	N.D.		
28) C220	Tetrachloroethene	6.32	166	62	N.D.		
29) C163	1,2-Dibromoethane	6.79	107	56	N.D.		
30) C210	4-Methyl-2-Pentano	5.84	43	894	N.D.		
31) C215	2-Hexanone	6.43	43	1243	N.D.		
32) C230	Toluene	5.97	91	2495	N.D.		
33) C235	Chlorobenzene	6.96	112	192	N.D.		
34) C240	Ethylbenzene	7.02	91	778	N.D.		
35) C246	m,p-Xylene	7.12	106	577	N.D.		
36) C247	o-Xylene	7.40	106	201	N.D.		
37) C245	Styrene	7.42	104	738	N.D.		
39) C225	1,1,2,2-Tetrachlor	7.90	83	115	N.D.		
41) C180	Bromoform	7.74	173	80	N.D.		
42) C260	1,3-Dichlorobenzen	8.59	146	842	N.D.		
43) C267	1,4-Dichlorobenzen	8.66	146	967	N.D.		
44) C249	1,2-Dichlorobenzen	8.95	146	670	N.D.		
45) C286	1,2-Dibromo-3-Chlo	9.53	75	56	N.D.		

3.60 ng / 5 mls = 0.72 ppb

TC 11/8/09

11/17/08

Data File : D:\MSDCHEM\G\DATA\111008\G6003.D Vial: 11
Acq On : 10 Nov 2008 15:20 Operator: TRB
Sample : A8D78901 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT2.P
Quant Time: Nov 10 18:53:30 2008 Results File: A8I0000...WCLP.RES

Quant Method : D:\MSDCHEM\G.....0000878-LOWCLP.M (RTE Integrator)
Title : HP5973N CLP LOW LEVEL WATER
Last Update : Mon Nov 10 18:53:11 2008
Response via : Single (D:\MSDChem\G\Data\111008\G5996.D 10 Nov 2008 11:53)
DataAcq Meth : CLP
IS QA File : D:\MSDChem\G\Data\111008\G5996.D (10 Nov 2008 11:53)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
46) C313 1,2,4-Trichloroben	10.13	180	1554	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : D:\MSDCHEM\G\DATA\111008\G6000.D Vial: 8
Acq On : 10 Nov 2008 13:50 Operator: TRB
Sample : VSTD001 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT2.P
Quant Time: Nov 10 15:11:20 2008 Results File: A8I0000...WCLP.RES

Quant Method : D:\MSDCHEM\G.....0000878-LOWCLP.M (RTE Integrator)
Title : HP5973N CLP LOW LEVEL WATER
Last Update : Mon Nov 10 14:05:06 2008
Response via : Single (D:\MSDChem\G\Data\111008\G5996.D 10 Nov 2008 11:53)
DataAcq Meth : CLP
IS QA File : D:\MSDChem\G\Data\111008\G5996.D (10 Nov 2008 11:53)

	Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
1)	CI10	1,4-Difluorobenzene	4.91	114	400889	25.00	ng		0.00 101.44%
17)	CI20	D5-Chlorobenzene	6.95	117	303191	25.00	ng		0.00 99.33%
40)	CI30	D4-1,4-Dichlorobenze	8.64	152	106906	25.00	ng		0.00 80.34%
	System Monitoring Compounds								
38)	CS10	p-Bromofluorobenzene	7.79	174	22424	5.73	ng		0.00
	Spiked Amount 25.000		Range 80 - 120		Recovery = 22.92%#				
	Target Compounds								Qvalue
2)	C010	Chloromethane	1.45	50	55311	5.01	ng		80
3)	C015	Bromomethane	1.86	94	20487	5.16	ng		99
4)	C020	Vinyl Chloride	1.57	62	47783	4.72	ng		95
5)	C025	Chloroethane	1.93	64	25046	5.16	ng		98
6)	C030	Methylene Chloride	3.05	84	65957	6.82	ng		99
7)	C035	Acetone	2.69	43	51923	23.91	ng		96
8)	C040	Carbon Disulfide	2.79	76	106301	5.02	ng		100
9)	C045	1,1-Dichloroethene	2.61	96	29296	4.46	ng		93
10)	C050	1,1-Dichloroethane	3.59	63	60121	4.29	ng		93
11)	C057	trans-1,2-dichloroet	3.26	96	30665	4.03	ng		97
12)	C056	cis-1,2-Dichloroethe	4.03	96	35693	4.35	ng	#	84
13)	C060	Chloroform	4.27	83	53031	4.35	ng		97
14)	C222	Bromochloromethane	4.21	128	16088	4.49	ng	#	68
15)	C065	1,2-Dichloroethane	4.67	62	41952	4.31	ng		95
16)	C110	2-Butanone	4.05	43	62086	21.89	ng		94
18)	C115	1,1,1-Trichloroethan	4.39	97	36699	4.06	ng		97
19)	C120	Carbon Tetrachloride	4.50	117	26192m	4.10	ng	#	82
20)	C150	Trichloroethene	5.09	95	27507	4.25	ng		94
21)	C130	Bromodichloromethane	5.45	83	26927	3.91	ng		97
22)	C140	1,2-Dichloropropane	5.25	63	29151	4.26	ng		92
23)	C145	cis-1,3-Dichloroprop	5.75	75	30060	3.98	ng		89
24)	C165	Benzene	4.65	78	119066	4.30	ng		100
25)	C155	Dibromochloromethane	6.55	129	14499	3.89	ng		92
26)	C170	trans-1,3-Dichloropr	6.13	75	22492	3.91	ng		98
27)	C160	1,1,2-Trichloroethan	6.26	97	21793	4.61	ng		89
28)	C220	Tetrachloroethene	6.35	166	21122	4.44	ng	#	82
29)	C163	1,2-Dibromoethane	6.64	107	18916	4.35	ng		95
30)	C210	4-Methyl-2-Pentanone	5.84	43	140511	21.70	ng		99
31)	C215	2-Hexanone	6.42	43	80400	20.18	ng		95
32)	C230	Toluene	5.97	91	117805	4.51	ng		88
33)	C235	Chlorobenzene	6.96	112	67588	4.40	ng		96
34)	C240	Ethylbenzene	7.03	91	112838	4.26	ng		97
35)	C246	m,p-Xylene	7.11	106	86056	8.41	ng		97
36)	C247	o-Xylene	7.40	106	40767	3.98	ng	#	87
37)	C245	Styrene	7.41	104	55405	3.60	ng	#	30
39)	C225	1,1,2,2-Tetrachloroe	7.90	83	20763	3.86	ng	#	78
41)	C180	Bromoform	7.57	173	4967	4.35	ng	#	80
42)	C260	1,3-Dichlorobenzene	8.60	146	36705	4.34	ng		97
43)	C267	1,4-Dichlorobenzene	8.66	146	38583	4.60	ng		96
44)	C249	1,2-Dichlorobenzene	8.94	146	33921	4.46	ng		93
45)	C286	1,2-Dibromo-3-Chloro	9.53	75	1871	5.36	ng	#	88

Data File : D:\MSDCHEM\G\DATA\111008\G6000.D Vial: 8
Acq On : 10 Nov 2008 13:50 Operator: TRB
Sample : VSTD001 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT2.P
Quant Time: Nov 10 15:11:20 2008 Results File: A8I0000...WCLP.RES

Quant Method : D:\MSDCHEM\G.....0000878-LOWCLP.M (RTE Integrator)
Title : HP5973N CLP LOW LEVEL WATER
Last Update : Mon Nov 10 14:05:06 2008
Response via : Single (D:\MSDChem\G\Data\111008\G5996.D 10 Nov 2008 11:53)
DataAcq Meth : CLP
IS QA File : D:\MSDChem\G\Data\111008\G5996.D (10 Nov 2008 11:53)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
46) C313 1,2,4-Trichlorobenze	10.14	180	14161	5.33	ng	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Line Standard Calculation Check

1ppb std

Benzene

$$RF = \frac{(119066)(25\,ng)}{400889\,(5)} = \frac{1.485}{1.9635}$$

303191

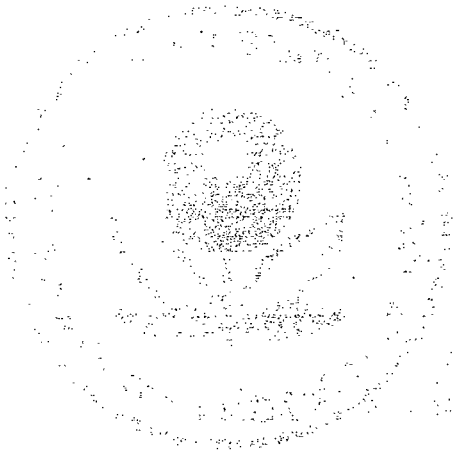
12 DCB

$$RF = \frac{33921\,(25)}{106906\,(5)} = 1.58648$$

TC
1/8/09

SOP HW-13
Revision 3
Date: September 2006

Organic Data Review for Low Concentration Water
CLP/SOW, OLC03.2



Prepared by: George Karras Date: 12/05/06
George Karras, Chemist HWSS

Peer Reviewed by: Russell Arnone Date: 12/05/06
Russell Arnone, Chemist HWSS

Concurred by: Linda Mauel Date: 12/5/06
Linda Mauel, Chief HWSS

Approved by: Robert Runyon Date: 12/9/06
Robert Runyon, Chief, HWSB

Annual Review

Reviewed by:_____ Date:_____

Reviewed by:_____ Date:_____

YES NO N/A

PART A: VOA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody Records, Sampling Trip Report or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data? ___ [✓] ___

ACTION: If samples were not iced or the ice was melted upon arrival at the laboratory and the temperature of the cooler was > 10° C, then flag all positive results with a "J" and all non-detects "UJ".

ACTION: If both VOA vials for a sample have air bubbles or the VOA vial analyzed had air bubbles, flag all positive results "J" and all non-detects "R".

2.0 Holding Times

2.1 Have any VOA technical holding times, determined from date of collection to date of analysis, been exceeded? ___ [✓] ___

Technical Holding Times: The technical holding time criterion for water samples is 14 days from sample collection provided that samples are acid-preserved to pH 2 or below, and that they are stored in 4°C ± 2°C. If uncertain about preservation, notify the TOPO to contact the sampler and determine whether or not samples were preserved.

ACTION: List sampling, VTSR, analysis dates and preservation for samples which missed holding time in the table below.

YES NO N/A

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample ID	Was Sample Preserved?	Date Sampled	Date Lab Received	Date Analyzed

ACTION: Qualify sample results using preservation and technical holding time information as follows:

a. If there is no evidence that the samples were properly preserved, but were analyzed within the technical holding time (14 days from sample collection), qualify all positive results for non-halogenated compounds (including ketones and aromatics) with "J" and non-detects "R".

b. If there is no evidence that the samples were properly preserved, but were analyzed within 14 days from sample collection, qualify all positive results for halogenated compounds with "J" and non-detects "UJ".

c. If there is no evidence that the samples were properly preserved, and the samples were analyzed beyond 14 days from sample collection, qualify positive results for all volatile compounds with "J" and non-detects "R".

d. If the samples were properly preserved, but were analyzed outside of the technical holding time (14 days from sample collection), qualify positive results for all volatile compounds with "J" and non-detects "R".

	YES	NO	N/A

NOTE: Contractual Holding Times: Sample must be analyzed within 10 days from validated time of sample receipt (VTSR) at the laboratory.

3.0 Deuterated Monitoring Compound (DMC) Recovery (Form II LCV)

3.1 Are the Volatile SMC Recovery Summaries (Form II LCV-1 and LCV-2) present? [✓] ___ ___

ACTION: Call the TOPO to obtain an explanation/resubmittal from the lab. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.2 Were outliers marked correctly with an asterisk? [ ] ___ [✓]

ACTION: Circle all outliers in red.

3.3 Were more than three of the fourteen (14) Deuterated Monitoring Compounds (DMC's) recoveries outside their corresponding limits? ___ [ ] [✓]

If yes, were samples re-analyzed? [ ] ___ ___

Were method blanks re-analyzed? [ ] ___ ___

ACTION: If any DMC is outside the required limits (see Table below), qualify their associated target compounds (See Table below) as follows:

→ Only p-Bromofluorobenzene was used as a surrogate Recovery in sample was 87%

Professional Judgment used not to Qualify data

YES NO N/A

VOLATILE DMC AND THEIR ASSOCIATED TARGET COMPOUNDS

Chloroethane-d5	**1,2-Dichloropropane-d6**	**1,2-Dichlorobenzene-d4**
Dichlorodifluoromethane Chloromethane Bromomethane Chloroethane Carbon Disulfide	Cyclohexane Methylcyclohexane 1,2-Dichloropropane Bromodichloromethane	Chlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene 1,2,3-Trichlorobenzene
Bromoform-d	**trans-1,3-Dichloropropene-d4**	**Chloroform-d**
Dibromochloromethane 1,2-Dibromoethane Bromoform	cis-1,3-Dichloropropene trans-1,3-Dichloropropene 1,1,2-Trichloroethane	1,1-Dichloroethane Bromochloromethane Chloroform
2-Butanone-d5	**1,1-dichloroethene-d2**	**2-Hexanone-d5**
Acetone 2-butanone	trans-1,2-Dichloroethene cis-1,2-Dichloroethene	4-Methyl-2-pentanone 2-Hexanone
Vinyl Chloride-d3	**Benzene-d6**	**1,1,2,2-Tetrachloroethane-d2**
Vinyl Chloride	Benzene	1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-chloropropane

YES NO N/A

1,2-Dichloroethane-d4	Toluene-d8	
Trichlorofluoromethane	Trichloroethene	
1,1-Dichloroethene	Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane	Tetrachloroethene	
Methyl Acetate	Ethylbenzene	
Methylene Chloride	Xylenes (total)	
Methyl tert-Butyl Ether	Styrene	
Carbon Tetrachloride	Isopropylbenzene	
1,2-Dichloroethane		
1,1,1-Trichloroethane		

VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY LIMITS

DMC	%RECOVERY LIMITS	DMC	%RECOVERY LIMITS
Vinyl Chloride-d3	49-138	1,2-Dichloropropane-d6	84-123
Chloroethane-d5	60-126	Toluene-d8	77-120
DMC	%RECOVERY LIMITS	DMC	%RECOVERY LIMITS
1,1-Dichloroethene-d2	65-130	trans-1,3-Dichloropropane-d4	80-128
2-Butanone-d5	42-171	2-Hexanone-d5	37-169
Chloroform-d	80-123	Bromoform-d	76-135
1,2-Dichloroethane-d4	78-129	1,1,2,2-Tetrachloroethane-d2	75-131

YES NO N/A

Benzene-d6	78-121	1,2-Dichlorobenzene-d4	50-150

1. For any recovery greater than the upper limit:

   a. Qualify "J" all positive associated target compounds.
   b. Do not qualify associated non-detects.

2. For any recovery greater than or equal to 20%, but less than the lower limit:

   a. Qualify "J" all positive associated target compounds.
   b. Qualify "UJ" associated non-detects.

3. For any recovery less than 20%:

   a. Qualify "J" all positive associated target compounds.
   b. Qualify "R" all associated non-detects.

NOTE: Up tp three (3) DMC's per sample may fail to meet the recovery limits. (SOW OLC03.2, sec. 11.4.4, p. D-41/VOA)
As per SOW, any sample which has more than 3 DMC's outside the limits, it must be reanalyzed (sec. 11.5.1 p. d-42/VOA).

ACTION: Note in the Data Assessment under Contract Problems/ Non-Compliance if the Lab did not perform reanalysis.

3.4 Are there any transcription/calculation errors between raw data and form II? ___ [✓] ___

ACTION: If large errors exist, ask the TOPO to obtain an explanation/resubmittal from the lab, make any necessary corrections and note errors in the data assessment.

	YES	NO	N/A

4.0 Matrix Spike/Matrix Spike Duplicate Recovery (Form III LCV)

4.1 Is the MS/MSD Recovery Form (Form III LCV) present? [ ] ___ ✓

4.2 Was the MS/MSD analyzed at the required frequency (once per SDG, or every 20 samples, whichever is more frequent) for the Low Concentration VOA method? [ ] ___ ✓

ACTION: If any MS/MSD data are missing, take action as specified in section 3.1 above.

ACTION: No action is taken on MS/MSD data alone. However, Using professional judgement, the Validator may use the MS and MSD results in conjunction with other QC criteria and determine the need for some qualification of the data.

5.0 Method Blanks (Form IV LCV)

5.1 Is the Volatile Method Blank Summary (Form IV LCV) present? [✓] ___ ___

5.2 Frequency of Analysis: For the analysis of Low Concentration VOA TCL compounds, has a method blank been analyzed for each SDG or every 20 samples, whichever is more frequent? [✓] ___ ___

5.3 Has a VOA method blank been analyzed at least once every twelve hours for each GC/MS system used? ✓ ___ ___

5.4 Was a VOA instrument blank analyzed after each sample/dilution which contained a target compound at a concentration > 25 µg/ℓ, and ketones > 125 µg/ℓ (see SOW, page D-44/VOA, section 12.1.1.3)? [✓] ___ ___

ACTION: If any method/instrument blank data are missing, notify the TOPO to obtain resubmittals or an

YES NO N/A

explanation from the lab. If method blank data are unavailable, the reviewer may use professional judgement, or substitute field blank or trip blank data for missing method blank data.

If an instrument blank was not analyzed after a sample containing > 25 µg/ℓ, (ketones > 125 µg/ℓ) inspect the sample chromatogram acquired immediately after this sample for possible carryover. Use professional judgement to determine if carryover occurred and qualify analyte(s) accordingly.

5.5 Was a storage blank analyzed once per SDG after all the samples were analyzed? ☑ ___ ___

ACTION: If storage blank data is missing, contact the TOPO to obtain any missing deliverables from the laboratory. If unavailable, note in the Contract Problems/Non-Compliance section of the Data Assessment.

5.6 The validator should verify that the correct identification scheme for EPA blanks was used. (See SOW page B-30, section 3.3.7.3 for more information.)

Was the correct identification scheme used for all Low Concentration VOA blanks? ☑ ___ ___

ACTION: Contact the TOPO to obtain corrections from the lab, or make the necessary corrections. Document in the "Contract Problems/Non-Compliance section of the Data Assessment all corrections made by the validator.

5.7 Chromatography: review the blank raw data - chromatograms (RICs), quant. reports, data system printouts and spectra.

Also compare the storage blank raw data with the method blank. Determine if contamination in the storage blank is also present in the method blank.

	YES	NO	N/A
Is the chromatographic performance (baseline stability) for each instrument acceptable for Low Concentration VOAs?	[✓]	___	___

ACTION: Use professional judgement to determine the effect on the data.

5.8 Are all detected hits for target compounds in method, instrument and storage blanks less than the CRQL for that analyte?	[✓]	___	___

Exception: Acetone and 2-butanone must be less than 2X times the CRQL, and Methylene Chloride and Cyclohexane must be less than 10X times its CRQL.

ACTION: If no, an explanation and laboratory's corrective actions must be addressed in the case narrative. If the narrative contains no explanation, then make a note in the Contract Problems/Non-Compliance section of the Data Assessment.

6.0 Contamination

NOTE: "Water blanks", "drill blanks", and distilled water blanks" are validated like any other sample, and are not used to qualify data. Do not confuse them with the other QC blanks discussed below.

6.1 Does the storage blank contain positive results (TCL and/or TICs) for Low Concentration VOAs?	___	[ ]	[✓]

ACTION: If the storage blank contains target compounds at a concentration greater than the CRQL, positive sample results for those compounds should be flagged "J". If gross contamination occurred positive sample results for that compound may be rejected (R).

6.2 Do any method/reagent/instrument blanks contain positive results (including TICs) for Low Concentration VOAs? When applied as described in

YES NO N/A

the table below, the contaminant concentration in these blanks are multiplied by the sample dilution factor. ___ [ ] ✓

NOTE: Contaminated instrument blanks are unacceptable under this SOW (see page D-46/VOA, section 12.1.6.2).

ACTION: Document in the Data Assessment under Contract Problems/Non-Compliance if a contaminated instrument blank was submitted.

ACTION: Sample analysis results after the high concentration sample must be evaluated for carryover. Sample must meet the maximum carryover criteria as listed in SOW sec. 11.4.9.2, p. D-42/VOA. ("the sample must not contain a concentration above the CRQL for the target compounds that exceeded the limit in the contaminated sample.")

6.3 Do any field/trip/rinse blanks have positive Low Concentration VOA results (including TICs)? ✓ [ ] ___

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated with a particular group of samples (may exceed one per case) must be used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped. Blanks may not be qualified because of contamination in another blank. Field blanks & trip blanks must be qualified for system monitoring compound, instrument performance criteria, spectral or calibration QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks. If any blanks are grossly contaminated, all associated sample data should be qualified unusable (R).

Sample: HURLBERT

Acetone Qualified
ND in sample @ 0.7ppb
elevated to RL of 5ug/L

Trip blank

Acetone 3 ug/L
Chloromethane 0.7ppb
2-butanone 0.6ppb

~~12DCP~~ (TC)

YES NO N/A

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
Methylene Chloride **Cyclohexane**	Sample conc. is > CRQL, but < 10x blank value.	Sample conc. is < CRQL and < 10x blank value.	Sample conc. is > CRQL and > 10x blank value.
Acetone **2-Butanone**	Sample conc. is > CRQL, but < 2x blank value.	Sample conc. is < CRQL and < 2x blank value.	Sample conc. is > CRQL and > 2x blank value.
Other contaminants	Sample conc. is > CRQL, but < 1x blank value.	Sample conc. is < CRQL and < 1x blank value.	Sample conc. is > CRQL and > 1x blank value.

NOTE: Analytes qualified "U" for blank contamination are treated as "hits" when qualifying for calibration criteria.

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R" (unusable).

6.4 Are there field/rinse/equipment blanks associated with every sample? [ ] ___ ✓

ACTION: Note in data assessment that there is no associated field/rinse/equipment blank.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 GC/MS Instrument Performance Check (Form V-LCV)

	YES	NO	N/A
7.1 Are the GC/MS Instrument Performance Check Forms (Form V-LCV) present for Bromofluorobenzene (BFB)?	[✓]	___	___ (TC)
7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the BFB provided for each twelve hour shift?	[✓]	___	___ (TC)
7.3 Has an instrument performance compound been analyzed for every twelve hours of sample analysis per instrument?	[✓]	___	___ (TC)

ACTION: List date, time, instrument ID and sample analyses for which associated GC/MS tuning data are missing.

DATE	TIME	INSTRUMENT ID	SAMPLE NUMBERS
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

ACTION: Notify the TOPO to obtain missing data from the lab. If the lab cannot provide missing data, reject (R) all data generated outside an acceptable twelve hour calibration interval.

7.4 Have the ion abundances been normalized to m/z 95 (see SOW, page D-24/VOA)?	[✓]	___	___

NOTE: All ion abundance ratios must be normalized to m/z 95, the nominal base peak, even though the ion abundance of m/z 174 may be up to 120% that of m/z 95.

ACTION: If mass assignment is in error, qualify all associated data as unusable (R).

	YES	NO	N/A
7.5 Have the ion abundance criteria been met for each instrument used?	☑		

ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).

ACTION: If ion abundance criteria are not met, professional Judgement may be applied to determine to what extent the data may be utilized.

7.6 Are there any transcription/calculation errors between mass lists and Form Vs? (Check at least two values but if errors are found, check more.)		☑	
7.7 Is the number of significant figures for the reported relative abundances consistent with the number given in the ion abundance criteria column on Form V LCV?	☑		

ACTION: If large errors exist, take action as specified in section 3.1 above.

7.8 Is the spectrum of the mass calibration compound acceptable?	☑		

ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.

8.0 Target Compound List (TCL) Analytes (Form I LCV)

8.1 Are the Organic Analysis Data Sheets (Form I LCV) present with required header information on each page, for each of the following:			
a. Samples and/or fractions as appropriate?	☑		
b. Laboratory Control/MS/MSD samples?	☑		
c. Blanks?	☑		

YES NO N/A

8.2 Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following:

a. Samples and/or fractions as appropriate? [✓] ___ ___

b. Laboratory Control/MS/MSD samples? [✓] ___ ___

c. Blanks? [✓] ___ ___

ACTION: If any data are missing, take action specified in 3.1 above.

8.3 Is chromatographic performance acceptable with respect to:

Baseline stability? [✓] ___ ___

Resolution? [✓] ___ ___

Peak shape? [✓] ___ ___

Full-scale graph (attenuation)? [✓] ___ ___

Other: _____? [ ] ___ [✓]

ACTION: Use professional judgement to determine the acceptability of the data.

8.4 Are lab-generated standard mass spectra of the identified VOA compounds present for each sample? [✓] ___ ___

ACTION: If any mass spectra are missing, take action as specified in 3.1 above. If lab does not generate their own standard spectra, make note under the "Contract Problems/Non-Compliance" section of the Data Assessment. If spectra are unavailable reject "R" the reported results.

	YES	NO	N/A
8.5 Is the RRT of each reported compound within ± 0.06 RRT units of the standard RRT in the continuing calibration?	☑		
8.6 Are all ions present in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	☑		
8.7 Do sample and standard relative ion intensities agree to within ±20%?	☑		

ACTION: Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all such data should be rejected (R) flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected (U) at the calculated detection limit. In order to be positively identified, the data must comply with the criteria listed in sections 8.4-8.7 above.

ACTION: When sample carry-over is suspected, use professional judgement to determine if instrument cross-contamination has affected positive compound identifications.

9.0 Tentatively Identified Compounds (TIC)

	YES	NO	N/A
9.1 Are all Tentatively Identified Compound Forms (Form I LCV-TIC) present? Do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier?	☑		
9.2 Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			
a. Samples and/or fractions as appropriate?	☑		
b. Blanks? Trip	☑		

	YES	NO	N/A
b. Are Alkanes listed in/or part of the Case Narrative?	[ ]	___	✓

ACTION: If any TIC data are missing, take action specified in 3.1 above.

ACTION: Add "JN" qualifier to all chemically named TICs if missing.

9.3 Are any target compounds (from any fraction) listed as TICs? (Example: 1,2-dimethylbenzene is xylene - a VOA target analyte - and should not be reported as a TIC.)	___	[✓]	___
9.4 Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	[✓]	___	✓
9.5 Do TIC and "best match" standard relative ion intensities agree within ± 20%?	[ ]	___	✓

ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined that an incorrect identification was made, change its identification to "unknown" or to some less specific identification (example: "C3 substituted benzene") as appropriate. Also, when a compound is not found in any blank, but is detected in a sample and is a suspected artifact of a common laboratory contaminant, the result should be qualified as unusable (R). (I.e., common lab contaminants such as CO_2 - M/E 44, Siloxanes - M/E 73, hexane, Aldol condensation products, solvent preservatives, and related by-products. See the National Functional Guidelines June 2001, pp. 34-35 for further guidance.)

	YES	NO	N/A

10.0 Compound Quantitation and Reported Detection Limits

10.1 Are there any transcription/calculation errors in Form I results? (Check at least two positive values. Verify that the correct internal standards, quantitation ions, and RRFs were used to calculate Form I results.) — YES: ☑ NO: ☐ N/A: ☐

10.2 Are the CRQLs adjusted to reflect sample dilutions? — YES: ☑ NO: ☐ N/A: ☐

ACTION: If errors are large, take action as specified in section 3.1 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQLs data from the diluted sample). Replace concentrations that exceed the calibration range in the original analysis by crossing out the "E" and its corresponding value on the original Form I and substituting the data from the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's not to be used, including any in the data summary package.

11.0 Standards Data (GC/MS)

11.1 Are the reconstructed ion chromatograms, and data system printouts (quant. reports) present for each initial and continuing calibration? — YES: ☑ NO: ☐ N/A: ☐

ACTION: If any calibration standard data are missing, take action specified in section 3.1 above.

12.0 GC/MS Initial Calibration (Form VI)

YES NO N/A

12.1 Are the Initial Calibration Forms (Form VI LCV) present and complete for the volatile fraction at concentrations of 0.5, 1, 5, 10, and 25 µg/ℓ? ☑ ___ ___

ACTION: If any Initial Calibration forms are missing, take action as specified in section 3.1 above.

12.2 Are response factors stable for VOA's over the concentration range of the calibration (e.g., %RSD ≤ 30.0, ≤ 50 for poor performers)? ☑ ___ ___

ACTION: Circle all outliers in red.

NOTE: There are fourteen (14) compounds (see Table below) which are poor performers. The RRF for these compounds must be greater than or equal to 0.01. The %RSD must be less than or equal to 50%.

VOLATILE COMPOUNDS WITH POOR RESPONSE

Volatile Compounds	
Acetone	1,2-Dichloropropane
2-Butanone	1,2-Dibromo-3-chloropropane
Carbon Disulfide	4-Methyl-2-pentanone
Chloroethane	2-Hexanone
Chloromethane	1,2-Dichloropropane-d6 (DMC)
Cyclohexane	2-Hexanone-d5 (DMC)
Chloroethane-d5 (DMC)	2-Butanone-d5 (DMC)

NOTE: Although 20 Low Conc. VOA compounds have no maximum %RSD and require only minimal RRF performance (see Table D-2, page D-53/VOA), the technical acceptance criteria are the same for all analytes.

YES NO N/A

ACTION: If %RSD > 30.0%, or > 50.0% for the poor performers, qualify associated positive results for that analyte "J" (estimated) and non-detects using professional judgement. If %RSD is > 90, flag all non-detects for that analyte "R" (unusable) and positive hits "J".

NOTE: Analytes previously qualified "U" for blank contamination are still treated as "hits" when qualifying for initial calibration criteria.

12.3 Are any $\overline{RRF}$s < 0.05 or < 0.01 for poor performers? ___ [✓] ___

ACTION: Circle all outliers in red.

ACTION: If any $\overline{RRF}$ values are < 0.05 or < 0.01 for poor performers, qualify associated non-detects unusable (R) and associated positive results estimated (J).

NOTE: Contract Requirements: The SOW allows up to two of the required analytes (see compounds marked with a "*" on Form VI and Table D-2, page D-53/VOA) to fail contractual %RSD and RRF criteria, provided the %RSD is ≤ 40.0 and RRF ≥ 0.010.

ACTION: If more than two of the required analytes failed %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance.

12.4 Are there any transcription/calculation errors in the reporting of $\overline{RRF}$s, RRFs or %RSD values? (Check at least 2 values, but if errors are found, check more.) ___ [✓] ___

ACTION: Circle errors in red.

ACTION: If errors are large, contact the TOPO to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance.

Benzene:
12 DCB checked
for 1ppb Lcs Std

13.0 GC/MS Continuing Calibration (Form VII LCV)

	YES	NO	N/A
13.1 Are the Continuing Calibration Forms (Form VII LCV) present and complete for the volatile fraction?	☑		
13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument?	☑		

ACTION: If any forms are missing or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, ask the TOPO to obtain explanation/resubmittal from the laboratory. If continuing calibration data are unavailable, flag all associated sample data as unusable (R).

ACTION: List below all sample analyses that were not within twelve hours of the previous continuing calibration analysis.

_____

_____

13.3 Do any volatile compounds have a % Difference (%D) between the initial RRF and continuing RRF which exceeds the ± 30% , or ± 50% for the poor performers criteria?		☑	

ACTION: Circle all outliers in red.

NOTE: Although 20 Low Conc. VOA compounds have no maximum %D and require only minimal RRF performance (see Table D-2, page D-53/VOA), the technical acceptance criteria are the same for all analytes.

ACTION: Qualify both positive results and non-detects for the outlier compound(s) as estimated (J). When % D is above 90%, reject all non-detects for that analyte as unusable (R) and qualify positive results "J".

13.4 Do any volatile compounds have a RRF < 0.05 or < 0.01 for the poor performers?		☑	

YES NO N/A

ACTION: Circle all outliers in red.

ACTION: If the RRF < 0.05, or < 0.01 for poor performers qualify associated positive results as estimated (J) and associated non-detects unusable (R).

NOTE: Contract Requirements: The SOW allows up to two of the required analytes (see compounds marked with a "*" on Form VI, or Table D-2, page D-53/VOA) to fail %D or RRF criteria, provided %D is within ±40.0 and RRF ≥ 0.010.

ACTION: Document in the Data Assessment under Contract Problems/Non-Compliance if more than two of the required analytes failed the above acceptance criteria.

13.5 Are there any transcription/calculation errors in the reporting of RRFs, or %D between initial RRFs and continuing RRFs? (Check at least two values but if errors are found, check more.) ___ ☑ ___

ACTION: Circle errors with red pencil. Benzene

ACTION: If errors are large, notify the TOPO to obtain explanation/resubmittals from the lab. Document errors in the Contract Problems/Non-Compliance section of the Data Assessment. 12DCB ✓

14.0 Internal Standard (Form VIII LCV)

14.1 Are the internal standard areas (Form VIII LCV) of every sample and blank within the upper and lower limits (± 40%) for each continuing calibration? ☑ ___ ___

If no, was the sample reanalyzed? ☑ ___ ___

ACTION: 1. Circle all outliers with red pencil.

2. List all the outliers below.

Sample #	Int. Std.	Area	Lower Limit	Upper Limit

YES NO N/A

(Attach additional sheets if necessary,
or attach copies of Form VIIIs.)

ACTION: 1. If the internal standard area count is outside the **upper** limit, flag with "J" all positive results quantitated with this internal standard.

2. Do not qualify non-detects when associated IS area counts are > +40%.

3. If the IS area is less than the lower limit (-40%), qualify "J" all positive results quantitated with this Internal Standard. Qualify "R" all non-detects.

INTERNAL STANDARDS ACTIONS FOR VOLATILES

CRITERIA	ACTION	
	Detected Associated Compounds	Non-detected Associated Compounds
Area counts > 40% of 12-hour standard	"J"	No Action
Area counts < 40% of 12-hour	"J"	"R"

YES NO N/A

14.2 Are the retention times of the internal standards within ±20 seconds of the associated calibration standard? [✓] ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 20 seconds.

NOTE: Contract Requirements: The SOW (section 11.5.1 page D-41/VOA) states that any sample which fails the acceptance criteria for IS response must be reanalyzed.

ACTION: Document in the Data Assessment under Contract Problems/Non-Compliance any sample(s) which failed the above IS acceptance criteria.

15.0 Field Duplicates

15.1 Were any field duplicates submitted for Low Concentration VOA analysis? [ ] ___ ✓

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between duplicate results must be addressed in the reviewer narrative. If large differences exist, contact the TOPO to confirm identification of field duplicates with the sampler.

Not Collected

FILE COPY

MACTEC

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

1.0 Introduction

Data validation was completed on water samples collected on September 3rd and 4th, 2008 at the Sarney Farm Superfund Site in Amenia, New York. Samples were analyzed by TestAmerica Laboratories, Inc., located in Shelton, Connecticut, and STL Buffalo, located in Amherst, New York. Samples were analyzed for volatile organic compounds (VOCs) in accordance with the following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (ASP) methods:

- Method 95-1: U.S. Environmental Protection Agency (USEPA) Contract Lab Protocol (CLP) for low/medium level (OLM03.2)
- Method 95-4: USEPA CLP Low Concentration

Groundwater samples collected form monitoring wells were analyzed for VOCs following the low/medium level protocol (sample delivery group (SDG) 220-6428-1), and residential samples were analyzed following the low concentration protocol (SDG A08-A932). Table 1 includes a list of samples included in this data evaluation.

Data validation was completed on all samples from the sites using A USEPA Region II standard operating procedures. Data packages were validated using Region II CLP quality control (QC) limits and professional judgment of the project chemist. Data validation checks and data qualification procedures described in USEPA Region II data validation standard operating procedures (USEPA, 2001a; USEPA, 2001b) were used during the data review. During the Region II full data validation the following data quality indicators were reviewed. Data quality control reviews are completed using laboratory QC summary forms and raw data. The following reviews are completed during validation:

- Case Narrative
- Sample Collection and Holding Times
- QC Blanks
- Instrument Calibration
- Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- Laboratory Control Samples (LCS)
- Surrogate Spikes
- Internal Standards
- Field Duplicates
- Reporting Limits
- Electronic Data Verification
- Raw Data (Chromatograms and Mass Spectra)
- Calculation verification

Final validated results are presented in Table 1. Data qualifications were completed if necessary in accordance with the guidelines using the following qualifiers:

U = The target compound was not detected at concentrations greater than the associated quantitation limit.

J = The reported concentration is considered an estimated value

2.0 Data Validation Observations and Actions

Results are interpreted to be usable as reported by the laboratory unless discussed in the following subsections.

2.1 Monitoring Wells

Blanks

Methylene chloride (0.5 – 0.54 µg/L) was reported in the method blanks. An action level was established at ten times the maximum concentration reported in the method blanks and compared to sample data. Methylene chloride was reported at 0.13 µg/L in sample MW-9D-1 and qualified as non-detect (U) at the reporting limit of 10 µg/L.

Matrix Spike/Matrix Spike Duplicates

No matrix spike/matrix spike duplicate sets were analyzed for the monitoring well data set.

Continuing Calibration

Two continuing calibration standards were analyzed with samples in SDG 220-6428-1. The percent difference (%D) between the initial calibration average response factor and the continuing calibration response factor was above the CLP control limit of 25 for the following compounds: 2-butanone (-34), bromomethane (28), and acetone (28). With the exception of bromomethane in sample MW-7D-D, acetone, 2-butanone, and bromomethane were not detected in the associated samples, and quantitation limits were qualified as estimated (UJ) in samples MW-7D-D, MW-9D-1, MW-7D/DP, MW-7D-S, MW-9D-2, MW-9D-3, MW-10D-2, MW-10D-3, and MW-10D-1. Bromomethane was detected at 0.9 µg/L in sample MW-7D-D and was qualified estimated (J).

2.2 Residential Wells

Blanks

Methylene chloride (0.7 ug/L) was reported in the method blank associated with the samples. An action level was calculated at ten times the blank concentration and compared to sample data. Methylene chloride was reported below the action level in the following samples and qualified non-detect (U): **LIENERT (0.2 µg/L) and 151 BHR (3 µg/L).**

Surrogates

A single surrogate, bromofluorobenzene, was used in the analysis of samples. The CLP low concentration method (OLC03.2) stipulates the use of fourteen deuterated monitoring compounds as surrogates, and data for these monitoring compounds was not available. All percent recoveries for bromofluorobenzene (BFB) were in control indicating good accuracy would be expected from the individual sample runs. Calibration data met data validation guideline specifications for all compounds unless noted in this report. Based on professional judgment sample results were reported unqualified.

Matrix Spike/Matrix Spike Duplicates

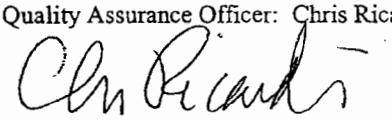
No matrix spike/matrix spike duplicate sets were analyzed for the residential well data set.

References:

U.S. Environmental Protection Agency (USEPA), 2001a. "USEPA Region II Contract Laboratory Program (CLP/SOW OLM04.2) Standard Operating Procedure HW-6"; USEPA Region II; Rev 12; March 2001.

U.S. Environmental Protection Agency (USEPA), 2001b. "USEPA Region II Contract Laboratory Program (CLP/SOW OLC03.2) Standard Operating Procedure HW-13"; USEPA Region II; Rev 3; July 2001.

Reviewed by:
QA Chemist: Tige Cunningham
Date: 10/31/08
Quality Assurance Officer: Chris Ricardi, NRCC-EAC



Date: November 6, 2008

Table 1
Sample Summary - 220-6428 & A08-A932
Data Validation Report
September 2008 Groundwater and Residential Sampling Event
Sarney Farm Superfund Site
Amenia, New York

				VOC Analysis Methods	
Lab Sample ID	Location	Sample ID	Sample Date	OLM03.2/Vol	95-4
Groundwater					
220-6428-9	MW-10D-1	MW-10D-1	9/4/2008	36	
220-6428-7	MW-10D-2	MW-10D-2	9/4/2008	36	
220-6428-8	MW-10D-3	MW-10D-3	9/4/2008	36	
220-6428-1	MW-7D-D	MW-7D-D	9/3/2008	36	
220-6428-2	MW-7D-D	MW-7D/DP	9/3/2008	36	
220-6428-4	MW-7D-S	MW-7D-S	9/3/2008	36	
220-6428-10	MW-9D-1	MW-9D-1	9/4/2008	36	
220-6428-5	MW-9D-2	MW-9D-2	9/3/2008	36	
220-6428-6	MW-9D-3	MW-9D-3	9/3/2008	36	
220-6428-3	QC	MW-7D-D/FB	9/3/2008	36	
220-6428-15	QC	TRIP BLANK	9/4/2008	36	
Residential					
A8A93203	151BHR	151 BHR	9/4/2008		42
A8A93201	EMERSON	EMERSON	9/4/2008		42
A8A93204	SARNEY	SARNEY	9/4/2008		42
A8A93202	TAYLOR	LIENERT	9/4/2008		42

Notes: Number listed under method indicates number of target analytes reported.

Prepared by / Date: KJC 11/05/08
Checked by / Date: TLC 11/5/08

Table 2
Final Results Summary
September 2008 Sampling Event
Sarney Farm Superfund Site
Amenia, New York

			Location	MW-10D-1		MW-10D-2		MW-10D-3		MW-7D-D		MW-7D-D		MW-7D-S	
			COC Sample	MW-10D-1		MW-10D-2		MW-10D-3		MW-7D-D		MW-7D/DP		MW-7D-S	
			Date Sampled	09/04/08		09/04/08		09/04/08		09/03/08		09/03/08		09/03/08	
			Sample Type	FS		FS		FS		FS		FD		FS	
			Report Number	220-6428		220-6428		220-6428		220-6428		220-6428		220-6428	
Fract	Analysis Method	Parameter Name	Units	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
N	OLM03.2/Vol	1,1,1-Trichloroethane	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	1,1,2,2-Tetrachloroethane	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	1,1,2-Trichloroethane	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	1,1-Dichloroethane	ug/L	10	U	10	U	10	U	0.76	J	0.74	J	1.4	J
N	OLM03.2/Vol	1,1-Dichloroethene	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	1,2-Dichloroethane	ug/L	41		46		1.1	J	150		160		110	
N	OLM03.2/Vol	1,2-Dichloropropane	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	2-Butanone	ug/L	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
N	OLM03.2/Vol	2-Hexanone	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	4-Methyl-2-pentanone	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Acetone	ug/L	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
N	OLM03.2/Vol	Benzene	ug/L	0.14	J	10	U	10	U	4.8	J	5.1	J	2.2	J
N	OLM03.2/Vol	Bromodichloromethane	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Bromoform	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Bromomethane	ug/L	10	UJ	10	UJ	10	UJ	0.9	J	10	UJ	10	UJ
N	OLM03.2/Vol	Carbon disulfide	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Carbon tetrachloride	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Chlorobenzene	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Chlorodibromomethane	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Chloroethane	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Chloroform	ug/L	0.34	J	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Chloromethane	ug/L	10	U	10	U	10	U	10	U	10	U	0.61	J
N	OLM03.2/Vol	Cis-1,2-Dichloroethene	ug/L	1.3	J	0.31	J	10	U	22		24		12	
N	OLM03.2/Vol	cis-1,3-Dichloropropene	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Ethyl benzene	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Methylene chloride	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	o-Xylene	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Styrene	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Tetrachloroethene	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Toluene	ug/L	0.35	J	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	trans-1,2-Dichloroethene	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	trans-1,3-Dichloropropene	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Trichloroethene	ug/L	10	U	10	U	0.39	J	1.5	J	1.6	J	1.4	J
N	OLM03.2/Vol	Vinyl chloride	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Xylene, m/p	ug/L	10	U	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Xylenes, Total	ug/L	10	U	10	U	10	U	10	U	10	U	10	U

Table 2
Final Results Summary
September 2008 Sampling Event
Sarney Farm Superfund Site
Amenia, New York

			Location	MW-9D-1		MW-9D-2		MW-9D-3		QC		QC	
			COC Sample	MW-9D-1		MW-9D-2		MW-9D-3		MW-7D-D/FB		TRIP BLANK	
			Date Sampled	09/04/08		09/03/08		09/03/08		09/03/08		09/04/08	
			Sample Type	FS		FS		FS		FB		TB	
			Report Number	220-6428		220-6428		220-6428		220-6428		220-6428	
Fracl	Analysis Method	Parameter Name	Units	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
N	OLM03.2/Vol	1,1,1-Trichloroethane	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	1,1,2,2-Tetrachloroethane	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	1,1,2-Trichloroethane	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	1,1-Dichloroethane	ug/L	0.47	J	0.67	J	0.5	J	10	U	10	U
N	OLM03.2/Vol	1,1-Dichloroethene	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	1,2-Dichloroethane	ug/L	110		130		120		10	U	10	U
N	OLM03.2/Vol	1,2-Dichloropropane	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	2-Butanone	ug/L	10	UJ	10	UJ	10	UJ	10	U	10	U
N	OLM03.2/Vol	2-Hexanone	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	4-Methyl-2-pentanone	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Acetone	ug/L	10	UJ	10	UJ	10	UJ	10	U	10	U
N	OLM03.2/Vol	Benzene	ug/L	4.6	J	0.76	J	10	U	10	U	10	U
N	OLM03.2/Vol	Bromodichloromethane	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Bromoform	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Bromomethane	ug/L	10	UJ	10	UJ	10	UJ	10	U	10	U
N	OLM03.2/Vol	Carbon disulfide	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Carbon tetrachloride	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Chlorobenzene	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Chlorodibromomethane	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Chloroethane	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Chloroform	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Chloromethane	ug/L	1.6	J	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Cis-1,2-Dichloroethene	ug/L	8.2	J	12		9.4	J	10	U	10	U
N	OLM03.2/Vol	cis-1,3-Dichloropropene	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Ethyl benzene	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Methylene chloride	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	o-Xylene	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Styrene	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Tetrachloroethene	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Toluene	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	trans-1,2-Dichloroethene	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	trans-1,3-Dichloropropene	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Trichloroethene	ug/L	0.69	J	2.2	J	4	J	10	U	10	U
N	OLM03.2/Vol	Vinyl chloride	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Xylene, m/p	ug/L	10	U	10	U	10	U	10	U	10	U
N	OLM03.2/Vol	Xylenes, Total	ug/L	10	U	10	U	10	U	10	U	10	U

Table 2
Final Results Summary
September 2008 Sampling Event
Sarney Farm Superfund Site
Amenia, New York

			Location	QC		QC	
			COC Sample	MW-7D-D/FB		TRIP BLANK	
			Date Sampled	09/03/08		09/04/08	
			Sample Type	FB		TB	
			Report Number	220-6428		220-6428	
Fraction	Analysis Method	Parameter Name	Units	Final Result	Final Qual	Final Result	Final Qual
N	OLM03.2/Vol	1,1,1-Trichloroethane	ug/L	10	U	10	U
N	OLM03.2/Vol	1,1,2,2-Tetrachloroethane	ug/L	10	U	10	U
N	OLM03.2/Vol	1,1,2-Trichloroethane	ug/L	10	U	10	U
N	OLM03.2/Vol	1,1-Dichloroethane	ug/L	10	U	10	U
N	OLM03.2/Vol	1,1-Dichloroethene	ug/L	10	U	10	U
N	OLM03.2/Vol	1,2-Dichloroethane	ug/L	10	U	10	U
N	OLM03.2/Vol	1,2-Dichloropropane	ug/L	10	U	10	U
N	OLM03.2/Vol	2-Butanone	ug/L	10	U	10	U
N	OLM03.2/Vol	2-Hexanone	ug/L	10	U	10	U
N	OLM03.2/Vol	4-Methyl-2-pentanone	ug/L	10	U	10	U
N	OLM03.2/Vol	Acetone	ug/L	10	U	10	U
N	OLM03.2/Vol	Benzene	ug/L	10	U	10	U
N	OLM03.2/Vol	Bromodichloromethane	ug/L	10	U	10	U
N	OLM03.2/Vol	Bromoform	ug/L	10	U	10	U
N	OLM03.2/Vol	Bromomethane	ug/L	10	U	10	U
N	OLM03.2/Vol	Carbon disulfide	ug/L	10	U	10	U
N	OLM03.2/Vol	Carbon tetrachloride	ug/L	10	U	10	U
N	OLM03.2/Vol	Chlorobenzene	ug/L	10	U	10	U
N	OLM03.2/Vol	Chlorodibromomethane	ug/L	10	U	10	U
N	OLM03.2/Vol	Chloroethane	ug/L	10	U	10	U
N	OLM03.2/Vol	Chloroform	ug/L	10	U	10	U
N	OLM03.2/Vol	Chloromethane	ug/L	10	U	10	U
N	OLM03.2/Vol	Cis-1,2-Dichloroethene	ug/L	10	U	10	U
N	OLM03.2/Vol	cis-1,3-Dichloropropene	ug/L	10	U	10	U
N	OLM03.2/Vol	Ethyl benzene	ug/L	10	U	10	U
N	OLM03.2/Vol	Methylene chloride	ug/L	10	U	10	U
N	OLM03.2/Vol	o-Xylene	ug/L	10	U	10	U
N	OLM03.2/Vol	Styrene	ug/L	10	U	10	U
N	OLM03.2/Vol	Tetrachloroethene	ug/L	10	U	10	U
N	OLM03.2/Vol	Toluene	ug/L	10	U	10	U
N	OLM03.2/Vol	trans-1,2-Dichloroethene	ug/L	10	U	10	U
N	OLM03.2/Vol	trans-1,3-Dichloropropene	ug/L	10	U	10	U
N	OLM03.2/Vol	Trichloroethene	ug/L	10	U	10	U
N	OLM03.2/Vol	Vinyl chloride	ug/L	10	U	10	U
N	OLM03.2/Vol	Xylene, m/p	ug/L	10	U	10	U
N	OLM03.2/Vol	Xylenes, Total	ug/L	10	U	10	U

Table 2
Final Results Summary
September 2008 Sampling Event
Sarney Farm Superfund Site
Amenia, New York

			Location	151BHR		EMERSON		SARNEY		TAYLOR	
			COC Sample	151 BHR		EMERSON		SARNEY		LIENERT	
			Date Sampled	09/04/08		09/04/08		09/04/08		09/04/08	
			Sample Type	FS		FS		FS		FS	
			Report Number	A08-A932		A08-A932		A08-A932		A08-A932	
Fract	Analysis Method	Parameter Name	Units	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
N	95-4	1,1,1-Trichloroethane	UG/L	1	U	1	U	1	U	1	U
N	95-4	1,1,2,2-Tetrachloroethane	UG/L	1	U	1	U	1	U	1	U
N	95-4	1,1,2-Trichloroethane	UG/L	1	U	1	U	1	U	1	U
N	95-4	1,1-Dichloroethane	UG/L	1	U	1	U	1	U	1	U
N	95-4	1,1-Dichloroethene	UG/L	1	U	1	U	1	U	1	U
N	95-4	1,2-Dibromo-3-chloropropane	UG/L	1	U	1	U	1	U	1	U
N	95-4	1,2-Dibromoethane	UG/L	1	U	1	U	1	U	1	U
N	95-4	1,2-Dichlorobenzene	UG/L	1	U	1	U	1	U	1	U
N	95-4	1,2-Dichloroethane	UG/L	1	U	1	U	1	U	1	U
N	95-4	1,2-Dichloropropane	UG/L	1	U	1	U	1	U	1	U
N	95-4	1,3-Dichlorobenzene	UG/L	1	U	1	U	1	U	1	U
N	95-4	1,4-Dichlorobenzene	UG/L	1	U	1	U	1	U	1	U
N	95-4	2-Butanone	UG/L	5	U	5	U	5	U	5	U
N	95-4	2-Hexanone	UG/L	5	U	5	U	5	U	5	U
N	95-4	4-Methyl-2-pentanone	UG/L	5	U	5	U	5	U	5	U
N	95-4	Acetone	UG/L	5	U	5	U	2	J	5	U
N	95-4	Benzene	UG/L	1	U	1	U	1	U	1	U
N	95-4	Bromochloromethane	UG/L	1	U	1	U	1	U	1	U
N	95-4	Bromodichloromethane	UG/L	1	U	1	U	1	U	1	U
N	95-4	Bromoform	UG/L	1	U	1	U	1	U	1	U
N	95-4	Bromomethane	UG/L	1	U	1	U	1	U	1	U
N	95-4	Carbon disulfide	UG/L	1	U	1	U	1	U	1	U
N	95-4	Carbon tetrachloride	UG/L	1	U	1	U	1	U	1	U
N	95-4	Chlorobenzene	UG/L	1	U	1	U	1	U	1	U
N	95-4	Chlorodibromomethane	UG/L	1	U	1	U	1	U	1	U
N	95-4	Chloroethane	UG/L	1	U	1	U	1	U	1	U
N	95-4	Chloroform	UG/L	1	U	1	U	1	U	1	U
N	95-4	Chloromethane	UG/L	1	U	1	U	0.2	J	0.2	J
N	95-4	Cis-1,2-Dichloroethene	UG/L	1	U	1	U	1	U	1	U
N	95-4	cis-1,3-Dichloropropene	UG/L	1	U	1	U	1	U	1	U
N	95-4	Ethyl benzene	UG/L	1	U	1	U	1	U	1	U
N	95-4	Methylene chloride	UG/L	3	U	2	U	2	U	2	U
N	95-4	o-Xylene	UG/L	1	U	1	U	1	U	1	U
N	95-4	Styrene	UG/L	1	U	1	U	1	U	1	U
N	95-4	Tetrachloroethene	UG/L	1	U	1	U	1	U	1	U
N	95-4	Toluene	UG/L	1	U	1	U	1	U	1	U
N	95-4	trans-1,2-Dichloroethene	UG/L	1	U	1	U	1	U	1	U
N	95-4	trans-1,3-Dichloropropene	UG/L	1	U	1	U	1	U	1	U

Table 2
Final Results Summary
September 2008 Sampling Event
Sarney Farm Superfund Site
Amenia, New York

			Location	151BHR		EMERSON		SARNEY		TAYLOR	
			COC Sample	151 BHR		EMERSON		SARNEY		LIENERT	
			Date Sampled	09/04/08		09/04/08		09/04/08		09/04/08	
			Sample Type	FS		FS		FS		FS	
			Report Number	A08-A932		A08-A932		A08-A932		A08-A932	
Fraci	Analysis Method	Parameter Name	Units	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
N	95-4	Trichloroethene	UG/L	1	U	1	U	1	U	1	U
N	95-4	Vinyl acetate	UG/L	5	U	5	U	5	U	5	U
N	95-4	Vinyl chloride	UG/L	1	U	1	U	1	U	1	U
N	95-4	Xylene, m/p	UG/L	1	U	1	U	1	U	1	U

Notes:

N = normal

FS = field sample

FD = field duplicate

FB = field blank

TB = trip blank

U = not detected, value is the detection limit

J = value is estimated

Prepared by / Date: KJC 11/05/08

Checked by / Date: TLC 11/5/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-7D-D**

Lab Sample ID: 220-6428-1
Client Matrix: Water

Date Sampled: 09/03/2008 1305
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1351
Date Prepared: 09/12/2008 1351

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0271.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U *	0.10	10
Bromomethane	0.90	J	0.10	10
Vinyl chloride	10	U *	0.10	10
Chloroethane	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
Acetone	10	U * J	0.10	10
Carbon disulfide	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
1,1-Dichloroethane	0.76	J	0.10	10
Chloroform	10	U	0.10	10
1,2-Dichloroethane	150		0.10	10
Methyl Ethyl Ketone	10	U J	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
Trichloroethene	1.5	J	0.10	10
Dibromochloromethane	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Benzene	4.8	J	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
Bromoform	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Toluene	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
m&p-Xylene	10	U	0.10	10
o-Xylene	10	U	0.10	10
cis-1,2-Dichloroethene	22		0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90	76 - 114
4-Bromofluorobenzene	92	86 - 115
Toluene-d8 (Surr)	96	88 - 110

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-7D-D**

Lab Sample ID: 220-6428-1
Client Matrix: Water

Date Sampled: 09/03/2008 1305
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1351
Date Prepared: 09/12/2008 1351

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0271.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-7D/DP**

Lab Sample ID: 220-6428-2
Client Matrix: Water

Date Sampled: 09/03/2008 1305
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1704
Date Prepared: 09/12/2008 1704

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0279.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U *	0.10	10
Bromomethane	10	U J	0.10	10
Vinyl chloride	10	U *	0.10	10
Chloroethane	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
Acetone	10	U * J	0.10	10
Carbon disulfide	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
1,1-Dichloroethane	0.74	J	0.10	10
Chloroform	10	U	0.10	10
1,2-Dichloroethane	160		0.10	10
Methyl Ethyl Ketone	10	U J	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
Trichloroethene	1.6	J	0.10	10
Dibromochloromethane	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Benzene	5.1	J	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
Bromoform	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Toluene	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
m&p-Xylene	10	U	0.10	10
o-Xylene	10	U	0.10	10
cis-1,2-Dichloroethene	24		0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88	76 - 114
4-Bromofluorobenzene	90	86 - 115
Toluene-d8 (Surr)	93	88 - 110

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-7D/DP**

Lab Sample ID: 220-6428-2
Client Matrix: Water

Date Sampled: 09/03/2008 1305
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1704
Date Prepared: 09/12/2008 1704

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0279.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-7D-D/FB**

Lab Sample ID: 220-6428-3
Client Matrix: Water

Date Sampled: 09/03/2008 1340
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/11/2008 2144
Date Prepared: 09/11/2008 2144

Analysis Batch: 220-19935

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0262.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U *	0.10	10
Bromomethane	10	U	0.10	10
Vinyl chloride	10	U *	0.10	10
Chloroethane	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
Acetone	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Chloroform	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
Trichloroethene	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Benzene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
Bromoform	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Toluene	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
m&p-Xylene	10	U	0.10	10
o-Xylene	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	76 - 114
4-Bromofluorobenzene	90	86 - 115
Toluene-d8 (Surr)	94	88 - 110

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-7D-D/FB**

Lab Sample ID: 220-6428-3
Client Matrix: Water

Date Sampled: 09/03/2008 1340
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/11/2008 2144
Date Prepared: 09/11/2008 2144

Analysis Batch: 220-19935

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0262.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-7D-S**

Lab Sample ID: 220-6428-4
Client Matrix: Water

Date Sampled: 09/03/2008 1447
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1415
Date Prepared: 09/12/2008 1415

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0272.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.61	J *	0.10	10
Bromomethane	10	U J	0.10	10
Vinyl chloride	10	U *	0.10	10
Chloroethane	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
Acetone	10	U * J	0.10	10
Carbon disulfide	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
1,1-Dichloroethane	1.4	J	0.10	10
Chloroform	10	U	0.10	10
1,2-Dichloroethane	110		0.10	10
Methyl Ethyl Ketone	10	U J	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
Trichloroethene	1.4	J	0.10	10
Dibromochloromethane	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Benzene	2.2	J	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
Bromoform	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Toluene	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
m&p-Xylene	10	U	0.10	10
o-Xylene	10	U	0.10	10
cis-1,2-Dichloroethene	12		0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102	76 - 114
4-Bromofluorobenzene	93	86 - 115
Toluene-d8 (Surr)	96	88 - 110

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-7D-S**

Lab Sample ID: 220-6428-4
Client Matrix: Water

Date Sampled: 09/03/2008 1447
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1415
Date Prepared: 09/12/2008 1415

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0272.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

TC 11/14/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-9D-2**

Lab Sample ID: 220-6428-5
Client Matrix: Water

Date Sampled: 09/03/2008 1835
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1439
Date Prepared: 09/12/2008 1439

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0273.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U *	0.10	10
Bromomethane	10	U J	0.10	10
Vinyl chloride	10	U *	0.10	10
Chloroethane	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
Acetone	10	U *	0.10	10
Carbon disulfide	10	U J	0.10	10
1,1-Dichloroethene	10	U	0.10	10
1,1-Dichloroethane	0.67	J	0.10	10
Chloroform	10	U	0.10	10
1,2-Dichloroethane	130		0.10	10
Methyl Ethyl Ketone	10	U J	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
Trichloroethene	2.2	J	0.10	10
Dibromochloromethane	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Benzene	0.76	J	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
Bromoform	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Toluene	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
m&p-Xylene	10	U	0.10	10
o-Xylene	10	U	0.10	10
cis-1,2-Dichloroethene	12		0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87	76 - 114
4-Bromofluorobenzene	91	86 - 115
Toluene-d8 (Surr)	95	88 - 110

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-9D-2**

Lab Sample ID: 220-6428-5
Client Matrix: Water

Date Sampled: 09/03/2008 1835
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1439
Date Prepared: 09/12/2008 1439

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0273.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: MW-9D-3

Lab Sample ID: 220-6428-6
Client Matrix: Water

Date Sampled: 09/03/2008 1915
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1503
Date Prepared: 09/12/2008 1503

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0274.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U *	0.10	10
Bromomethane	10	U *J	0.10	10
Vinyl chloride	10	U *	0.10	10
Chloroethane	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
Acetone	10	U *J	0.10	10
Carbon disulfide	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
1,1-Dichloroethane	0.50	J	0.10	10
Chloroform	10	U	0.10	10
1,2-Dichloroethane	120		0.10	10
Methyl Ethyl Ketone	10	U J	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
Trichloroethene	4.0	J	0.10	10
Dibromochloromethane	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Benzene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
Bromoform	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Toluene	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
m&p-Xylene	10	U	0.10	10
o-Xylene	10	U	0.10	10
cis-1,2-Dichloroethene	9.4	J	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86	76 - 114
4-Bromofluorobenzene	91	86 - 115
Toluene-d8 (Surr)	96	88 - 110

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-9D-3**

Lab Sample ID: 220-6428-6
Client Matrix: Water

Date Sampled: 09/03/2008 1915
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1503
Date Prepared: 09/12/2008 1503

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0274.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-10D-2**

Lab Sample ID: 220-6428-7
Client Matrix: Water

Date Sampled: 09/04/2008 0940
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1527
Date Prepared: 09/12/2008 1527

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0275.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U *	0.10	10
Bromomethane	10	U J	0.10	10
Vinyl chloride	10	U *	0.10	10
Chloroethane	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
Acetone	10	U * J	0.10	10
Carbon disulfide	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Chloroform	10	U	0.10	10
1,2-Dichloroethane	46		0.10	10
Methyl Ethyl Ketone	10	U J	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
Trichloroethene	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Benzene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
Bromoform	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Toluene	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
m&p-Xylene	10	U	0.10	10
o-Xylene	10	U	0.10	10
cis-1,2-Dichloroethene	0.31	J	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	76 - 114
4-Bromofluorobenzene	90	86 - 115
Toluene-d8 (Surr)	94	88 - 110

TC 01/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-10D-2**

Lab Sample ID: 220-6428-7
Client Matrix: Water

Date Sampled: 09/04/2008 0940
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1527
Date Prepared: 09/12/2008 1527

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0275.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-10D-3**

Lab Sample ID: 220-6428-8
Client Matrix: Water

Date Sampled: 09/04/2008 1040
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1551
Date Prepared: 09/12/2008 1551

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0276.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U *	0.10	10
Bromomethane	10	U J	0.10	10
Vinyl chloride	10	U *	0.10	10
Chloroethane	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
Acetone	10	U * J	0.10	10
Carbon disulfide	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Chloroform	10	U	0.10	10
1,2-Dichloroethane	1.1	J	0.10	10
Methyl Ethyl Ketone	10	U J	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
Trichloroethene	0.39	J	0.10	10
Dibromochloromethane	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Benzene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
Bromoform	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Toluene	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
m&p-Xylene	10	U	0.10	10
o-Xylene	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
,2-Dichloroethane-d4 (Surr)	86	76 - 114
Bromofluorobenzene	89	86 - 115
ıene-d8 (Surr)	91	88 - 110

11/4/08 TC

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-10D-3**

Lab Sample ID: 220-6428-8
Client Matrix: Water

Date Sampled: 09/04/2008 1040
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1551
Date Prepared: 09/12/2008 1551

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0276.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: MW-10D-1

Lab Sample ID: 220-6428-9
Client Matrix: Water

Date Sampled: 09/04/2008 1405
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1615
Date Prepared: 09/12/2008 1615

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0277.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U *	0.10	10
Bromomethane	10	U J	0.10	10
Vinyl chloride	10	U *	0.10	10
Chloroethane	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
Acetone	10	U * J	0.10	10
Carbon disulfide	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Chloroform	0.34	J	0.10	10
1,2-Dichloroethane	41		0.10	10
Methyl Ethyl Ketone	10	U J	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
Trichloroethene	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Benzene	0.14	J	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
Bromoform	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Toluene	0.35	J	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
m&p-Xylene	10	U	0.10	10
o-Xylene	10	U	0.10	10
cis-1,2-Dichloroethene	1.3	J	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	76 - 114
4-Bromofluorobenzene	93	86 - 115
Toluene-d8 (Surr)	95	88 - 110

11/4/08 TC

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-10D-1**

Lab Sample ID: 220-6428-9
Client Matrix: Water

Date Sampled: 09/04/2008 1405
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1615
Date Prepared: 09/12/2008 1615

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0277.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

11/4/08 TC

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-9D-1**

Lab Sample ID: 220-6428-10
Client Matrix: Water

Date Sampled: 09/04/2008 1520
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/12/2008 1638
Date Prepared: 09/12/2008 1638

Analysis Batch: 220-20007

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0278.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.6	J *	0.10	10
Bromomethane	10	U J	0.10	10
Vinyl chloride	10	U *	0.10	10
Chloroethane	10	U	0.10	10
Methylene Chloride	0.13	J B	0.10	10
Acetone	10	U *J	0.10	10
Carbon disulfide	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
1,1-Dichloroethane	0.47	J	0.10	10
Chloroform	10	U	0.10	10
1,2-Dichloroethane	110		0.10	10
Methyl Ethyl Ketone	10	U J	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
Trichloroethene	0.69	J	0.10	10
Dibromochloromethane	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Benzene	4.6	J	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
Bromoform	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Toluene	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
m&p-Xylene	10	U	0.10	10
o-Xylene	10	U	0.10	10
cis-1,2-Dichloroethene	8.2	J	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102	76 - 114
4-Bromofluorobenzene	91	86 - 115
Toluene-d8 (Surr)	94	88 - 110

11/4/08 TC

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **MW-9D-1**

Lab Sample ID: 220-6428-10
Client Matrix: Water

Date Sampled: 09/04/2008 1520
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method:	OLM03.2/Vol	Analysis Batch: 220-20007	Instrument ID: HP 5890/5971A GC/MS
Preparation:	5030B		Lab File ID: N0278.D
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	09/12/2008 1638		Final Weight/Volume: 5 mL
Date Prepared:	09/12/2008 1638		

Tentatively Identified Compounds **Number TIC's Found:** 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

11/4/08 TC

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-6428-15TB
Client Matrix: Water

Date Sampled: 09/04/2008 1812
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/11/2008 2120
Date Prepared: 09/11/2008 2120

Analysis Batch: 220-19935

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0261.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U *	0.10	10
Bromomethane	10	U	0.10	10
Vinyl chloride	10	U *	0.10	10
Chloroethane	10	U	0.10	10
Methylene Chloride	10	U	0.10	10
Acetone	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Chloroform	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
Trichloroethene	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Benzene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
Bromoform	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Toluene	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
m&p-Xylene	10	U	0.10	10
o-Xylene	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90	76 - 114
4-Bromofluorobenzene	89	86 - 115
Toluene-d8 (Surr)	91	88 - 110

TC 11/4/08

Client: MACTEC Engineering and Consulting Inc

Job Number: 220-6428-1
Sdg Number: 220-6428

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 220-6428-15TB
Client Matrix: Water

Date Sampled: 09/04/2008 1812
Date Received: 09/06/2008 1013

OLM03.2/Vol Volatile Organic Compounds (GC/MS)

Method: OLM03.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/11/2008 2120
Date Prepared: 09/11/2008 2120

Analysis Batch: 220-19935

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: N0261.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

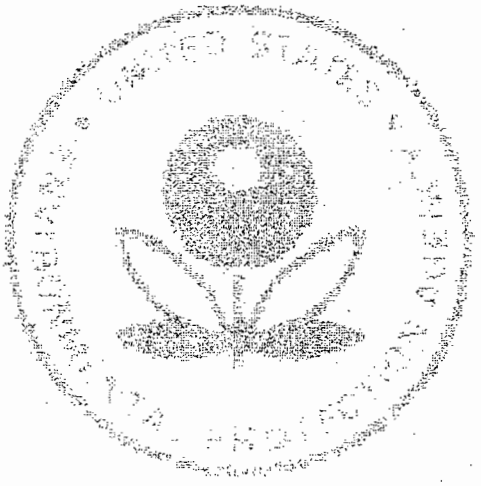
Tentatively Identified Compounds **Number TIC's Found:** 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

TC 11/4/08

SOP # HW-6
Revision # 14
Date: September 2006

CLP Organics Data Review and Preliminary Review (CLP/SOW OLM0 4.3)



Prepared by: George Karras Date: 12/05/06
George Karras, Chemist HWSS

Peer Reviewed by: Russell Arnone Date: 12/05/06
Russell Arnone, Chemist HWSS

Concurred by: Linda Mapel Date: 12/5/06
Linda Mapel, Chief HWSS

Approved by: Robert Runyon Date: 12/11/06
Robert Runyon, Chief HWSB

Annual Review

Reviewed by: _____ Date: _____
Name

Reviewed by: _____ Date: _____
Name

TABLE OF CONTENTS

INTRODUCTION

Scope and Applicability

This SOP offers detailed guidance in evaluating laboratory data generated according to the methods in the "USEPA Contract Laboratory Program Statement of Work for Organics Analysis OLM04.2," May 1999. The validation methods and actions discussed in this document are based on the requirements set forth in the "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," October 1999. This document attempts to cover technical as well as contractual problems specific to each fraction and sample matrix; however, situations may arise where data limitations must be assessed based on the reviewer's professional judgement.

In addition to technical requirements, contractual requirements are also covered in this document. While it is important that instances of contract non-compliance be addressed in the Data Assessment, the technical criteria are always used to qualify the analytical data.

Summary of Method

To ensure a thorough evaluation of each result in a data case, the reviewer must complete the checklist within this SOP, answering specific questions while performing the prescribed "ACTIONS" in each section. Qualifiers (or flags) are applied to questionable or unusable results as instructed. The data qualifiers discussed in this document are defined on page 3.

The reviewer must prepare a detailed data assessment to be submitted along with the completed SOP checklist. The Data Assessment must list all data qualifications, reasons for qualifications, instances of missing data and contract non-compliance. This information is further summarized on the Organic Regional Data Assessment Summary and Data Rejection Summary forms (see attached).

CADRE reports, when available, may be incorporated into the Data Assessment.

Reviewer Qualifications

Data reviewers must possess a working knowledge of the USEPA Statement of Work and National Functional Guidelines mentioned above.

Acronyms

BFB - bromofluorobenzene
BHC - benzene hexachloride
BNA - base neutral acid(another name for Semi Volatiles)
CADRE - Computer Aided Data Review and Evaluation
CARD - CLP Analytical Results Database
CCS - contract compliance screening
CLASS - Contract Laboratory Analytical Services Support
CLP - Contract Laboratory Program
CRQL - Contract Required Quantitation Limit
%D - percent difference
DCB -decachlorobiphenyl
DDD - dichlorodiphenyldichloroethane
DDE - dichlorodiphenylethane
DDT - dichlorodiphenyltrichloroethane
DoC - Date of Collection
GC - gas chromatography
GC/ECD - gas chromatograph/electron capture detector
GC/MS - gas chromatograph/mass spectrometer
GPC - gel permeation chromatography
IS - internal standard
kg - kilogram
µg - microgram
MAGIC - Mainframe Access Graphical Interface with CARD
MS - matrix spike
MSD - matrix spike duplicate
ℓ - liter
mℓ - milliliter
PCB - Polychlorinated biphenyl
PE - performance evaluation
PEM - Performance Evaluation Mixture
QC - quality control
RAS - Routine Analytical Services
RIC - reconstructed ion chromatogram
RPD - relative percent difference
RRF - relative response factor
$\overline{RRF}$ - average relative response factor (from initial calibration)
RRT - relative retention time
RSD - relative standard deviation
RT - retention time
RSCC - Regional Sample Control Center
SDG - sample delivery group
SMC - system monitoring compound
SOP - standard operating procedure
SOW - Statement of Work
SVOA - semivolatile organic acid
TCL - Target Compound List
TCLP - Toxicity Characteristics Leachate Procedure
TCX -tetrachloro-m-xylene
TIC - tentatively identified compound

Acronyms (cont'd.)

TOPO - Task Order Project Officer
TPO - Technical Project Officer
VOA - Volatile organic
VTSR - Validated Time of Sample Receipt

Data Qualifiers

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

JN - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

LAB QUALIFIERS:

D - The positive value is the result of an analysis at a secondary dilution factor.

B - The analyte is present in the associated method blank as well as in the sample. This qualifier has a different meaning when validating inorganic data.

E - The concentration of this analyte exceeds the calibration range of the instrument.

P - Pesticide/Aroclor target analytes when the % Difference between the analyte concentrations obtained from the two dissimilar GC columns is greater than 25%.

A - Indicates a Tentatively Identified Compound (TIC) is a suspected adol-condensation product.

C - Applies to Pesticide results where the identification of the analyte has been confirmed by GC/MS.

X,Y,Z Laboratory defined flags. The data reviewer must change these qualifiers during validation so that the data user may understand their impact on the data.

YES NO N/A

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: SDG 220-6428 LABORATORY: Test America - Shelton CT

SITE NAME: Sarney Farm Superfund Site SDG Number(s): 220-6428

1.0 Chain of Custody and Sampling Trip Reports

1.1 Are the Traffic Reports/Chain-of-Custody Records present for all samples? ☑ ___ ___

ACTION: If no, contact RSCC, or contact the WAM to obtain replacement of missing or illegible copies from the lab.

1.2 Is the Sampling Trip Report present for all samples and all fractions? [ ] ___ ☑

ACTION: If no, contact either RSCC or ask the WAM to obtain this information from the prime contractor.

2.0 Data Completeness and Deliverables

2.1 Have any missing deliverables been received and added to the data package? ___ ☑

NOTE: The lab is required to submit data for only two analyses, for each fraction. (i.e., the original sample and one dilution, or the most concentrated dilution analyzed and one further dilution.)

ACTION: Contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the lab. If lab cannot provide them, note the effect on the review of the package in the Contract Problems/Non-compliance section of the Data Assessment.

2.2 Was CLASS CCS checklist included with package?

2.3 Are there any discrepancies between the Traffic Reports/Chain-of-Custody Records, Sampling Report and Sample Tags? [ ] ☑ ___

___ ☑ ___

ACTION: If yes, contact the WAM to obtain an explanation or resubmittal of any missing deliverables from the laboratory.

3.0 Cover Letter SDG Narrative

3.1 Is the Narrative or Cover Letter Present? ☑ ___ ___

		YES	NO	N/A
3.2	Are case number, SDG number and contract number contained in the SDG Narrative or cover letter (see SOW, Exhibit B, section 2.6.1)? EPA sample numbers in the SDG, detailed documentation of any quality control, sample, shipment, and/or analytical problems encountered in processing the samples? Corrective action taken?	✓	✓	
3.3	Does the narrative contain the following information:			
	VOA: description of trap and columns used for sample analyses?			
	VOA: a NOTE stating whether Volatile low level soil samples prepared according to the modified SW-846 Method 5035?(p. B-9/VOA, sec 2.6.1)		✓	
	VOA: any discrepancies between low level soil weights determined in the field and in the Laboratory? (p. B-10/VOA, sec. 2.6.1)			
	BNA: description of columns used for sample analyses?			✓
	Pest: description of columns used for sample analyses?			
NOTE:	As per section 6.23.3.1 SOW/p. D-11/Pest, Packed columns are not permitted.			✓
3.4	Does the narrative, VOA and BNA sections, contain a list of all TIC's identified as alkanes and their estimated concentrations?	✓		
3.5	Is the temperature indicator bottle present in the cooler? If not, did the Laboratory document in the SDG Narrative the alternative technique used to determine the cooler temperature?(Exhibit A/ p. A-5 sec. 4.2.1.2.3.3)	✓ on COC		
3.6	Does the narrative contain a record of all cooler temperatures? If the temperature of a cooler was exceeded, > 10° C, the lab must list by fraction and sample number, all affected samples.	✓ on COC		
3.7	Does the Narrative contain a list of sample reanalyses submitted? Did the Lab distinguish whether the reanalysis is billable, and if so why?			
3.8	Does the narrative contain a list of the pH values determined for each water sample submitted for volatile analysis (SOW Exhibit B, section 2.6.1.2)?	✓ (TC)	✓	
3.9	Does the Case Narrative contain the statement, "verbatim", as required in Section B of the SOW?		✓	
				(TC)

	YES	NO	N/A
	[ ]	___	✓

ACTION: If "No", to any question in this section, contact the TOPO to obtain all necessary resubmittals. If information is not available, document in the Data Assessment under Contract Problems/Non-Compliance section.

4.0 Data Validation Checklist

4.1 Check the package for the following discrepancies:

a. Is the package paginated in ascending order starting from the SDG narrative?	[✓]	___	___
b. Are all forms and copies legible?	[✓]	___	___
c. Is each fraction assembled in the order set forth in the SOW?	[✓]	___	___
The following checklist is divided into three parts. Part A is for any VOA analyses, Part B is for BNA's and Part C is Pesticide/PCB's.			

Does this package contain:

VOA Data? VOA only Groundwater ✓			
BNA Data?	✓	___	
Pesticide/PCB data?	___	✓	
ACTION: Complete corresponding parts of checklist.	___	✓	

YES NO N/A

PART A: VOA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody Records, Sampling Report or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data? — — —

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data shall be flagged as estimated (J). If a soil sample other than TCLP contains more than 90% water, then qualify positive results "J", and non-detects "R".

ACTION: If samples were not iced or the ice was melted upon arrival at the laboratory and the cooler temperature was elevated (> 10° C), then flag all positive results with a "J" and all non-detects "UJ".

ACTION: If both VOA vials for a sample have air bubbles or the VOA vial analyzed had air bubbles, flag all positive results "J" and all non-detects "R".

ACTION: The smallest soil size permitted is 0.5g. If any soil sample is smaller than 0.5g, document in the Data Assessment under Contract Problems/Non-Compliance.

2.0 Holding Times

2.1 Have any VOA technical holding times, determined from date of collection to date of analysis, been exceeded? — — —

Technical Holding Times for AQUEOUS AND SOIL NON-ENCORE SAMPLES: If unpreserved, aqueous samples, maintained at 4° C for aromatic hydrocarbons analysis must be analyzed within 7 days of collection. If preserved with HCl (pH < 2) and stored at 4° C, then aqueous samples must be analyzed within 14 days of collection. If uncertain about preservation, contact sampler to determine whether or not samples were preserved. The holding time for non-Encore soils is 10 days from date of collection.

ACTION: If technical holding times for aqueous samples and soil non-Encore samples are exceeded, flag all positive results as estimated "J" and sample quantitation limits as estimated "UJ", and document in the Data Assessment that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all results must be qualified "J", but the reviewer may determine that non-detect data are unusable "R". If holding times are exceeded by more than 28 days, all non detect data are unusable "R".

YES NO N/A

NOTE: Contractual Holding Times: Analysis of water samples must be completed within 10 days of Validated Time of Sample Receipt (VTSR). This requirement does not apply to Performance Evaluation (PE) samples.

Technical Holding Times for soils Encore samples:

i) If sample was preserved ≤ 2 days of VTSR:

1. and analyzed ≤ 14 days from DoC, NO action needed.
2. and analyzed > 14 days from DoC, qualify positive results "J" and non-detects "UJ".
3. and analyzed > 28 days from DoC, qualify positive results "J" and non-detects "R".

ii) If sample was NOT preserved, or preserved > 2 days of VTSR

1. and analyzed ≤ 7 days from DoC, No action needed.
2. and analyzed > 7 days from DoC, qualify AROMATIC analytes only, both positive and non-detects, as estimated "J".
3. and analyzed > 10 days from DoC, qualify ALL positive analytes "J" and ALL non-detects as "UJ".
4. and analyzed ≥ 20 days from DoC, qualify positive results "J" and non-detects "R".

Note: CONTRACT holding times for soil Encore samples are:

1. Samples must be preserved within two (2) days of VTSR and must be analyzed within ten (10) days of VTSR.

2. Samples NOT preserved within two (2) days of VTSR must be analyzed within two (2) days of VTSR.

ACTION: If contractual holding times are exceeded, document in the Data Assessment.

NOTE: The data reviewer must note in the Data Assessment whether or not technical and contractual holding times were met.

Table of Holding Time Violations

(See Chain-of-Custody Records)

Sample ID	Sample Matrix	Was Sample Preserved?	Date Sampled	Date Lab Received	Date Analyzed

	YES	NO	N/A

3.0 System Monitoring Compound (SMC) Recovery (Form II)

		YES	NO	N/A
3.1	Are the VOA SMC Recovery Summaries (Form II) present for each of the following matrices:			
	a. ~~low~~ Med Water?	[✓]	___	___
	b. Low Soil?	[ ]	___	___
	c. Med Soil?	[ ]	___	___
3.2	Are all the VOA samples listed on the appropriate System Monitoring Compound Recovery Summary for each of the following matrices:			
	a. ~~low~~ Med Water?	[✓]	___	___
	b. Low Soil?	[ ]	___	___
	c. Med Soil?	[ ]	___	___
ACTION:	Contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.			
3.3	Were outliers marked correctly with an asterisk?			
ACTION:	Circle all outliers with red pencil.			
3.4	Was one or more VOA system monitoring compound recovery outside of contract specifications for any sample or method blank?	[ ]	[✓]	___
	If yes, were samples re-analyzed?			
	Were method blanks re-analyzed?	___	[ ]	___ (TC)
ACTION:	If recoveries are ≥ 10%, but 1 or more compounds fail to meet SOW specifications:	[ ]	___	___
	1. All positive results are qualified as estimated "J".	[✓]	___	___
	2. Flag all non-detects as estimated detection limits "UJ" where recovery is less than the lower acceptance limit.			
	3. If SMC recoveries are above allowable levels, qualify positive results "J" and do not qualify non-detects.			
ACTION:	If any system monitoring compound recovery is < 10%:			
	1. Flag all positive results as estimated "J".			
	2. Flag all non-detects as unusable "R".			

	YES	NO	N/A

Professional judgement should be used to qualify data that only have method blank SMC recoveries out of specification in both original and re-analyses. Check the internal standard areas.

NOTE: Contractual requirements state that if any SMC fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

NOTE: The laboratory must submit the following data:

1. If SMC recoveries and internal standard responses meet the acceptance criteria in the re-analyzed sample, then the laboratory must submit only the re-analysis.

2. If an SMC recovery and/or internal standard response fails to meet the acceptance criteria upon re-analysis, then submit data from both analyses.

(Refer to section 11.4.3.2, page D-45/VOA of the SOW for more information.)

3.5 Are there any transcription/calculation errors between raw data and Form II? Checked Surrogates on Raw data for MW-7A-D & MW-7D/DP

ACTION: If large errors exist, contact the TOPO to obtain an explanation or resubmittal of corrected deliverables from the laboratory. Make any necessary corrections and note the effect in the Data Assessment. — [✓] —

4.0 Matrix Spikes (Form III)

4.1 Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present? [✓] — —

4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices:

a. Low Water? [✓] — —

b. Low Soil? [ ] — [✓]

c. Med Soil? [ ] — [✓]

ACTION: If any matrix spike data are missing, take the action specified in section 3.2 above.

ACTION: No action is taken based upon MS/MSD data alone. However, using informed professional judgement, the MS/MSD results may be used in conjunction with other QC criteria to determine the need for qualification of the data.

ACTION: Circle all outliers with red pencil.

5.0 Blanks (Form IV)

		YES	NO	N/A
5.1	Is the Method Blank Summary (Form IV) present?	[✓]		
5.2	Frequency of Analysis: for the analysis of VOA TCL compounds, has a reagent/method blank been analyzed during every 12-hour time period on each GC/MS system, before any samples, and for each matrix?(water, low soil or medium soil)	[✓]		
5.3	Has a VOA method blank been analyzed at least once every twelve hours for each matrix/concentration and GC/MS system used?			
5.4	Was a VOA instrument blank analyzed after each sample/dilution which contained a target compound that exceeded the initial calibration range?	[✓]		
5.5	Was a VOA storage blank analyzed at the end of all samples for each SDG in a case?	[✓]		
ACTION:	If any method/instrument blank data are missing, contact the TOPO to obtain any missing deliverables from the laboratory. If method blank data are not available, reject "R" all associated positive data. However, using professional judgement, the data reviewer may substitute field blank or trip blank data for missing method blank data. If the instrument blank was not analyzed after a sample with high concentration of reported values, inspect the chromatogram of the sample analyzed immediately after this analysis for possible carryover. Use professional judgement to determine if any contamination occurred and qualify analyte(s) accordingly. If storage blank data is missing, contact the TOPO to obtain any missing deliverables from the laboratory. If unavailable, note in the Contract Problems/Non-Compliance section of the Data Assessment.	[ ]		[✓]

Note: A storage blank shall be analyzed and reported as a water sample unless the SDG contains only soil samples. Then, the storage blank may be analyzed and reported as a soil sample. (p. D-49/VOA sec. 12.1.3.5)

5.6	The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-30, section 3.3.7.3 of the SOW for further information. Was the correct identification scheme used for all VOA blanks?			
ACTION:	Contact the TOPO to obtain missing deliverables from the lab, or make the required corrections on the forms. Document in the Data Assessment under Contract Problems/Non-compliance if corrections were made by the validator.	[✓]		

	YES	NO	N/A
5.7 Chromatography: review the blank raw data- chromatograms (RICs), quant. reports or data system printouts and spectra. Is the chromatographic performance (baseline stability) for each instrument acceptable for VOA's?			
ACTION: Use professional judgement to determine the effect on the data.			
5.8 Are all detected hits for target compounds in method, instrument and storage blanks less than the CRQL for that analyte?	[X]	___	___
Exception: Acetone and 2-butanone must be less than 5 times the CRQL, and methylene chloride and Cyclohexane must be less than 2.5 times its CRQL. (p. D-50/VOA sec. 12.1.4.6)			
ACTION: If no, an explanation and laboratory's corrective actions must be addressed in the case narrative. If the narrative contains no explanation, then make a note in the Contract Problems/Non-Compliance section of the Data Assessment.	[V]	___	___

6.0 Contamination

NOTE: "Water blanks", "drill blanks", and "distilled water blanks" are validated like any other sample, and are not used to qualify data. Do not confuse them with the other QC blanks discussed below.			
6.1 Do any method/instrument/reagent/storage blanks have positive results (TCL and/or TIC) for VOA's?			
NOTE: When applied as directed in the table below, the contaminant concentration in these blanks are multiplied by the sample dilution factor and corrected for %moisture when necessary.	___	[V]	___
NOTE: A contaminated instrument blank is not allowable under this SOW. The instrument blank must meet the technical acceptance criteria for blank analyses(sec. 12.1.4). See page D-48/VOA, section 12.1.2.4 for additional information. Document in the Data Assessment under Contract Problems/Non-Compliance if contaminated instrument blank was submitted.			
6.2 Do any field/trip/rinse blanks have positive VOA results (TCL and/or TIC)?			
ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)			
NOTE: All field blank results associated with a particular group of samples (may exceed one per case) must be used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped and are not required for non-aqueous matrices. Blanks may not be qualified because of contamination in another blank. Field Blanks & Trip Blanks must be qualified for system monitoring compound, instrument performance criteria, spectral or calibration, and Internal standard QC problems.	___	[V]	___
ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks. If any blanks are grossly contaminated, all associated data should be qualified as unusable "R".			

YES NO N/A

NOTE: Analytes qualified "U" for blank contamination are till considered as "hits" when qualifying for calibration criteria.

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R".

For:	Flag sample result with a "U"	Report CRQL & qualify "U" when:	No qualification is needed when:
TCL COMPOUNDS			
Methylene Chloride Acetone Toluene 2-Butanone Cyclohexane	Sample conc. is > CRQL, but ≤ 10× blank value.	Sample conc. is < CRQL and ≤ 10× blank value.	Sample conc. is > CRQL and > 10× blank value.
Other Contaminants	Sample conc. is > CRQL, but ≤ 5× blank value.	Sample conc. is < CRQL and ≤ 5× blank value.	Sample conc. is > CRQL and > 5× blank value.

MB 220-19935
$MeCl_2$ @ 0.5 ug/L

MB 220-20007
$MeCl_2$ @ 0.54 ug/L

Action: MW-9D-1 $MeCl_2$ reported @ a13 Qualified U @ CRQL of 10 ug/L

6.3 Are there field/rinse/equipment blanks associated with every sample? [ ] ___ [✓]

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For samples with high concentrations of suspected blank contaminants, use professional judgement to qualify these values and make a note in the Data Assessment.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 GC/MS Instrument Performance Check (Form V)

7.1 Are the GC/MS Instrument Performance Check Forms (Form V) present for Bromofluorobenzene (BFB)? [✓] ___ ___

7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the BFB provided for each twelve hour shift? [✓] ___ ___

7.3 Is the mass spectrum of BFB acquired according to sec. 9.2.4.1 D-23/VOA? [✓] ___ ___

Note: Sec. 9.2.4.1 states that "the mass spectrum of BFB MUST be acquired in the following manner. Three scans (the peak apex scan and the scans immediately preceding and following the apex) are acquired and averaged. Background subtraction is required, and MUST be accomplished using a single scan no more than 20 scans prior to the elution of BFB. DO NOT background subtract part of the BFB peak." See Attachment 2 for BFB criteria.

	YES	NO	N/A
Action: If not, reject "R" all samples associated with that particular BFB.			
7.4 Has an instrument performance check been analyzed for every analytical sequence on each instrument?			
ACTION: List date, time, instrument ID, and sample numbers for which associated GC/MS tuning data are unavailable.	✓		

DATE	TIME	INSTRUMENT	SAMPLE NUMBERS

ACTION: Notify the TOPO to obtain missing data, if possible. If the lab cannot provide the missing data, reject, "R", all data generated outside an acceptable twelve hour calibration interval.			
7.5 Have the ion abundances been normalized to m/z 95 as specified in Exhibit D, page D-56/VOA?			
NOTE: All ion abundance ratios must be normalized to m/z 95, the nominal base peak, even though the ion abundance of m/z 174 may be up to 120% that of m/z 95.	✓		
ACTION: If mass assignment is in error, qualify all associated data as unusable "R".			
7.6 Have the ion abundance criteria been met for each instrument used?			
ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).			
ACTION: If ion abundance criteria are not met, the Region II TPO must be notified.	✓		
7.7 Are there any transcription/calculation errors between mass lists and Form Vs? (Check at least two values, but if errors are found check more.)			
7.8 Is the number of significant figures for the reported relative abundances consistent with the number given for each ion in the ion abundance criteria column?		✓	
	✓		
ACTION: If large errors exist, take action as specified in section 3.5 above.			
7.9 Are the spectra of the mass calibration compound acceptable?			
ACTION: Use professional judgement to determine whether associated data should be	✓		

		YES	NO	N/A
	accepted, qualified, or rejected.			
8.0	**Target Compound List (TCL) Analytes (FORM I VOA)**			
8.1	Are the Organic Analysis Data Sheets (Form I VOA) present with required header information on each page, for each of the following:			
	a. Samples and/or fractions as appropriate?	[✓]	___	___
	b. Matrix spikes and matrix spike duplicates?	[✓]	___	___
	c. Blanks?	[✓]	___	___
8.2	Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant. reports) included in the sample package for each of the following:			
	a. Samples and/or fractions as appropriate?	[✓]	___	___
	b. Matrix spikes and matrix spike duplicates (mass spectra not required)?	[✓]	___	___
	c. Blanks?	[✓]	___	___
ACTION:	If any data are missing, take action specified in 3.2 above.	[✓]	___	___
8.3	Is chromatographic performance acceptable with respect to:			
	a. Baseline stability?	[✓]	___	___
	b. Resolution?	[✓]	___	___
	c. Peak shape?	[✓]	___	___
	d. Full-scale graph (attenuation)?	[✓]	___	___
	e. Other: _____?	[ ]	___	[✓]
ACTION:	Use professional judgement to determine the acceptability of the data.			
8.4	Are the lab-generated standard mass spectra of the identified VOA compounds present for each sample?			
ACTION:	If any mass spectra are missing, take action as specified in 3.2 above. If the lab does not generate its own standard spectra, document in the Contract Problems/Non-compliance section of the Data Assessment.	[✓]	___	___
8.5	Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			
8.6	Are all ions present in the standard mass spectrum at a relative			

		YES	NO	N/A
	intensity greater than 10% also present in the sample mass spectrum?			
8.7	Do sample and standard relative ion intensities agree within ±20%?	[✓]	___	___
ACTION:	Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all such data should be rejected "R", flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected "U" at the calculated detection limit. In order to be positively identified, the data must comply with the criteria listed in 8.5, 8.6, and 8.7.	[✓]	___	___
		[✓]	___	___
ACTION:	When sample carry-over is suspected, use professional judgement determine if instrument cross-contamination has affected positive compound identifications.			

9.0 Tentatively Identified Compounds (TIC)

9.1	Are all Tentatively Identified Compound Forms (Form I Part B) present; and do listed TIC's include scan number or retention time, estimated concentration and "JN" qualifier?			
9.2	Are the mass spectra for the TIC's and associated "best match" spectra included in the sample package for each of the following:	[✓]	___	___
	a. Samples and/or fractions as appropriate?			
	b. Blanks?			
	c. Are Alkanes listed in/or part of the Case Narrative?	[✓]	___	___
ACTION:	If any TIC data are missing, take action specified in 3.2 above.	[✓]	___	___
ACTION:	Add "JN" qualifier to all chemically named TIC's, if missing.	[ ]	___	[✓]
9.3	Are any TCL compounds (from any fraction including all PCB congeners) listed as TIC compounds? (Example: 1,2- dimethylbenzene is xylene, a VOA TCL analyte, and should not be reported as a TIC.)			
ACTION:	Flag with "R" only TCL compound detected in another fraction. (Except blank contamination)			
9.4	Are any TIC's reported earlier than 30 sec before the first purgeable compound, or three (3) min. after the last purgeable compound listed in Exhibit C (Volatiles)?			
ACTION:	Flag with "R" any TIC compound reported. (p. D38-VOA, sec. 11.1.2.2)	___	[✓]	___
9.5	Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			
9.6	Do TIC and "best match" standard relative ion intensities agree within ±20%?	___	[✓]	___

	YES	NO	N/A
No TIC's were detected/Reported			✓
			✓

ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined an incorrect identification was made, change the identification to "unknown," or to some less specific identification as appropriate. (Example: "C3 substituted benzene.")

Also, when a compound is not found in any blank, but is detected in a sample and is a suspected artifact of a common laboratory contaminant, the result should be qualified as unusable "R". (E.g., Common Lab Contaminants: CO_2 (M/E 44), Siloxanes (M/E 73) hexane, aldol condensation products, solvent preservatives, and related by-products.

9.7	Are TIC's with responses < 10% of the internal standard (as determined by inspection of the peak areas or height) reported?			
	ACTION: If yes, cross out questionable TIC's.			

10.0 Compound Quantitation and Reported Detection Limits

10.1	Are there any transcription/calculation errors in Form I results? (Check at least two positive values. Verify that the correct internal standards, quantitation ions, and RRF were used to calculate Form I results.) See attached Calculation checks of MW-7D-S MW-7D-D		✓	
10.2	Are the CRQL's adjusted to reflect sample dilutions and, for soils, sample moisture? All samples analyzed @ 1X		✓	
	ACTION: If errors are large, take action as specified in section 3.2 above.			
	ACTION: When a sample is analyzed at more than one dilution, the lowest CRQL's are used (unless a QC exceedance dictates the use of the higher CRQL data from the diluted sample). Replace concentrations that exceeded the calibration range in the original analysis by crossing out the "E" and its corresponding value on the original Form I and substituting the data from the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form Is not to be used, including any in the data summary package.			✓

11.0 Standards Data (GC/MS)

11.1	Are the Reconstructed Ion Chromatograms, and data system printouts			

	YES	NO	N/A
(quant. reports) present for each initial and continuing calibration? long sheets not present for Ical & C.C.			
ACTION: If any calibration standard data are missing, take action specified in 3.2 above.	☑	—	—
12.0 GC/MS Initial Calibration (Form VI)			
12.1 Are the Initial Calibration Forms (Form VI) present and complete at concentrations of 10, 20, 50, 100, 200ng for separate calibrations of low water/med soils (unheated purge) and low soils (heated purge)?			
ACTION: If any calibration standard forms are missing, take action specified in 3.2 above.			
12.2 Were all low level soil standards, blanks and samples analyzed by heated purge?	☑	—	—
ACTION: If low level soil samples were not heated during purge, qualify positive hits "J" (estimated) and non-detects "R".			
12.3 Are the % relative standard deviation (%RSD) values for VOA's ≤ 30% over the concentration range of the calibration?	☐	—	✓
NOTE: Although 23 VOA compounds have a contractual minimum RRF and no maximum %RSD, the technical acceptance criteria are the same for all analytes.			
ACTION: Circle all outliers with red pencil. 34.1% 2-butanone = no detects in samples NO Action	☐	✓	—
ACTION: If %RSD is > 30.0%, qualify associated positive results for that analyte "J" (estimated). Do not qualify non-detects. When %RSD is > 90%, flag all non-detects for that analyte "R" (unusable) and positive hits "J".			
NOTE: Analytes previously qualified "U" for blank contamination are still considered as "hits" when qualifying for initial calibration criteria.			
12.4 Are any average RRFs < 0.05?			
ACTION: Circle all outliers with red pencil.	—	☑	—
ACTION: If the average RRF is < 0.05, then qualify associated non-detects with an "R" and flag associated positive data as estimated "J".			
NOTE: Contract Requirement: The SOW allows up to two of the required analytes to fail contractual %RSD or RRF criteria, provided the %RSD is ≤ 40% and RRF is ≥ 0.010. (See Table 5, page D-61/VOA and analytes marked with a "*" on Form VI for required analytes and contractual criteria.) Technical criteria, however, are the same for all analytes.			
ACTION: If more than two analytes failed %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance.			
12.5 Are there any transcription/calculation errors in the reporting of average relative response factors (RRF) or %RSD? (Check at least 2 values, but if errors are found, check more.)			

	YES	NO	N/A

and the associated positive values "J".

NOTE: Contract Requirement: The SOW allows up to two of the required analytes to fail contractual %D and RRF criteria, provided that the %D is ≤ 40% and the RRF is ≥ 0.010. (See Table 5 pg. D-61/VOA or analytes marked with a "*" on Form VI for required analytes.) Technical criteria, however, are the same for all analytes. — ☑ —

ACTION: If more than two analytes failed %D and RRF, criteria document in the Data Assessment under contract Problems/Non-Compliance.

13.5 Are there any transcription/calculation errors in the reporting of RRF or %D between initial and continuing RRFs? (Check at least two values, but if errors are found, check more.) Acetone $\frac{1.081}{0.8418} = 1.284$ 28.4%

ACTION: Circle errors with red pencil. MEK $\frac{1.694}{2.583} = .655$ -34 — ☑ —

ACTION: If errors are large, contact the TOPO to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance.

14.0 Internal Standard (Form VIII)

14.1 Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to +100%) for each continuing calibration? ☑ — —

If no, was the sample re-analyzed? ☑ — —

ACTION: 1. Circle all outliers with red pencil.

2. List all the outliers below.

Sample #	Internal Std.	Area	Lower/Upper Limit
			/
			/
			/

(Attach additional sheets if necessary, or attach copies of Form VIIIs.)

ACTION: If any sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

ACTION: 1. If the internal standard area count is outside the upper or lower limit, flag with "J" all positive results quantitated with this internal standard.

2. Do not qualify non-detects when associated IS area counts are > 100%.

3. If the IS area in the sample is below the "lower limit," < 50%,

YES NO N/A

ACTION: Circle errors with red pencil.

ACTION: If errors are large, contact the TOPO to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance.

13.0 GC/MS Continuing Calibration (Form VII)

13.1 Are the Continuing Calibration Forms (Form VII) present and complete for separate calibration of low water/med soil and low soil samples? — ☑

13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument? — ☑

ACTION: If any forms are missing or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, contact the TOPO to request an explanation/resubmittal from the lab. If continuing calibration data are not available, flag all associated sample data as unusable "R".

ACTION: List below all sample(s) that were not analyzed within twelve hours of the previous continuing calibration.

_____

_____

_____

13.3 Do any volatile compounds have a percent difference (%D) between the initial and continuing RRF which exceeds the ±25% criteria? — ☑

NOTE: Although 23 VOA compounds have a contractual minimum RRF and no maximum %D, the technical acceptance criteria are the same for all analytes.

ACTION: Circle all outliers with red pencil.

ACTION: Qualify both positive results and non-detects for the outlier compound(s) as estimated. When %D is > 90%, qualify all non-detects for that analyte unusable (R) and positive results estimated (J) .

Acetone 28
Bromomethane 28.4
~~Methyl~~ 28.4 (FV)
MEK -34.4
UJ All Associated

13.4 Are any continuing calibration RRFs < 0.05? — ☐

ACTION: Circle all outliers with red pencil.

ACTION: If the RRF is < 0.05, qualify the associated non-detects as unusable "R"

YES NO N/A

PART B: BNA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody records or laboratory SDG Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special notations affecting the quality of the data? ___ [ ] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data should be flagged as estimated "J". If a soil sample, other than TCLP, contains more than 90% water, qualify positive hits "J" and non-detects "R".

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

2.0 Holding Times

2.1 Have any BNA technical holding times, determined from date of collection to date of extraction, been exceeded?

NOTE: Technical Holding Time: Continuous extraction of water samples for BNA analysis must be started within fourteen days of the date of collection. Soil/sediment samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of the date of extraction. ___ [ ] ___

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample Analyzed	Sample Matrix	Date Sampled	Date Lab Received	Date Extracted	Date Analyzed

ACTION: If technical holding times were exceeded, flag all positive results as estimated (J) and sample quantitation limits as estimated (UJ), and document in the Data Assessment that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon reanalysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on sample results. At a minimum, all results should be qualified "J", but the reviewer may determine that non-detect data are unusable "R". If holding times were exceeded by more than 28 days, all non-detect data must be qualified "R", unusable.

NOTE: Contractual Holding Times: Extraction of water samples must be started within 5 days VTSR. Soil/sediment samples must be extracted within 10 days of VTSR. This requirement does not apply to Performance Evaluation (PE) samples. Water and soil/sediment extracts must be analyzed within 40 days following

	YES	NO	N/A

qualify all analytes associated with that IS estimated, "J". If the area counts are extremely low, < 25% of the area in the 12 hour standard, or if performance exhibits a major abrupt drop- off, flag all associated non-detects as unusable, "R", and positive hits estimated, "J".

14.2 Are the retention times of the internal standards within 30 seconds of the associated calibration standard? [✓] ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 30 seconds.

NOTE: Contractual requirements state that if any internal standard fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

15.0 Field Duplicates

15.1 Were any field duplicates submitted for VOA analysis? [ ] ___ ___

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Connecticut Job No.: 220-6428-1

SDG No.: 220-6428

Lab Sample ID: CCVIS 220-20007/1 Calibration Date: 09/12/2008 10:28

Instrument ID: MSN Calib Start Date: 09/10/2008 16:26

GC Column: RTX-VMS ID: 0.18(mm) Calib End Date: 09/10/2008 20:59

Lab File ID: N0266.D Conc. Units: ug/L Heated Purge: (Y/N) N

Analyte	Curve Type	Ave RRF	RRF	Min RRF	Calc Amount	Ccal Amount	% D	Max % D
Monochloropentafluoroethane	Ave	0.0451	0.0383		42.0	50.0	-15.2	
1,1-Difluoroethane	Ave	1.117	1.086		49.0	50.0	-2.8	
Dichlorodifluoromethane	Ave	0.9433	0.9145	0.0100	48.0	50.0	-3.1	
Chlorodifluoromethane	Ave	5.528	5.470		49.0	50.0	-1.0	
Chloromethane	Ave	2.609	2.531	0.0100	49.0	50.0	-3.0	
Vinyl chloride	Ave	2.152	2.143	0.1000	50.0	50.0	-0.4	25.0
Bromomethane	Ave	0.6621	0.8499	0.1000	64.0	50.0	28.4*	25.0
Chloroethane	Ave	1.310	1.304	0.0100	50.0	50.0	-0.5	
Trichlorofluoromethane	Ave	1.704	1.837	0.0100	54.0	50.0	7.8	
1,1-Dichloro-1-fluoroethane	Ave	3.110	3.219		52.0	50.0	3.5	
1,1,1-Trifluoro-2,2-dichloro ethane	Ave	2.754	2.744		50.0	50.0	-0.4	
1,1-Dichloroethene	Ave	1.434	1.399	0.1000	49.0	50.0	-2.4	25.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	1.458	1.422	0.0100	49.0	50.0	-2.5	
Carbon disulfide	Ave	5.927	5.608	0.0100	47.0	50.0	-5.4	
Iodomethane	Ave	1.144	1.316		57.0	50.0	15.0	
Acrolein	Ave	0.0989	0.1577		400	250	59.4	
Methylene Chloride	Ave	2.112	1.981	0.0100	47.0	50.0	-6.2	
Acetone	Ave	0.8418	1.081	0.0100	64.0	50.0	28.4	
Methyl acetate	Ave	11.43	12.21	0.0100	53.0	50.0	6.8	
trans-1,2-Dichloroethene	Ave	1.769	1.742	0.0100	49.0	50.0	-1.5	
Methyl tert-butyl ether	Ave	6.186	6.074	0.0100	49.0	50.0	-1.8	
2-Methyl-2-propanol	Ave	0.3442	0.2866		210	250	-16.7	
1,1-Dichloroethane	Ave	4.286	4.294	0.2000	50.0	50.0	0.2	25.0
Acrylonitrile	Ave	1.147	1.158		100	100	1.0	
Vinyl acetate	Ave	1.222	1.191		49.0	50.0	-2.6	
cis-1,2-Dichloroethene	Ave	1.911	1.882	0.0100	49.0	50.0	-1.5	
Cyclohexane	Ave	0.7516	0.7513	0.0100	50.0	50.0	0.0	
Chloroform	Ave	3.274	3.281	0.2000	50.0	50.0	0.2	25.0
Carbon tetrachloride	Ave	0.3304	0.3168	0.1000	48.0	50.0	-4.1	25.0
Tetrahydrofuran	Ave	1.288	1.202		93.0	100	-6.7	
1,1,1-Trichloroethane	Ave	0.4045	0.4091	0.1000	51.0	50.0	1.1	25.0
2-Butanone (MEK)	Ave	2.583	1.694	0.0100	33.0	50.0	-34.4	
Benzene	Ave	1.400	1.392	0.5000	50.0	50.0	-0.5	25.0
1,2-Dichloroethane	Ave	2.757	2.816	0.1000	51.0	50.0	2.1	25.0
Methylcyclohexane	Ave	0.5038	0.4938	0.0100	49.0	50.0	-2.0	
Trichloroethene	Ave	0.2801	0.2805*	0.3000	50.0	50.0	0.1	25.0
Dibromomethane	Ave	1.180	1.158		49.0	50.0	-1.8	
1,2-Dichloropropane	Ave	0.4532	0.4632	0.0100	51.0	50.0	2.2	
Dichlorobromomethane	Ave	0.4130	0.4154	0.2000	50.0	50.0	0.6	25.0
Methyl methacrylate	Ave	0.3427	0.3348		98.0	100	-2.3	

Associated All samples except MW-7D-D/FB

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Connecticut Job No.: 220-6428-1

SDG No.: 220-6428

Lab Sample ID: CCVIS 220-19935/1 Calibration Date: 09/11/2008 10:41

Instrument ID: MSN Calib Start Date: 09/10/2008 16:26

GC Column: RTX-VMS ID: 0.18(mm) Calib End Date: 09/10/2008 20:59

Lab File ID: N0238.D Conc. Units: ug/L Heated Purge: (Y/N) N

Analyte	Curve Type	Ave RRF	RRF	Min RRF	Calc Amount	Ccal Amount	% D	Max % D
Monochloropentafluoroethane	Ave	0.0451	0.0415		46.0	50.0	-8.1	
1,1-Difluoroethane	Ave	1.117	1.048		47.0	50.0	-6.2	
Dichlorodifluoromethane	Ave	0.9433	0.8785	0.0100	47.0	50.0	-6.9	
Chlorodifluoromethane	Ave	5.528	5.118		46.0	50.0	-7.4	
Chloromethane	Ave	2.609	2.402	0.0100	46.0	50.0	-7.9	
Vinyl chloride	Ave	2.152	2.002	0.1000	47.0	50.0	-7.0	25.0
Bromomethane	Ave	0.6621	0.7521	0.1000	57.0	50.0	13.6	25.0
Chloroethane	Ave	1.310	1.254	0.0100	48.0	50.0	-4.2	
Trichlorofluoromethane	Ave	1.704	1.673	0.0100	49.0	50.0	-1.8	
1,1-Dichloro-1-fluoroethane	Ave	3.110	2.941		47.0	50.0	-5.4	
1,1,1-Trifluoro-2,2-dichloro ethane	Ave	2.754	2.502		45.0	50.0	-9.1	
1,1-Dichloroethene	Ave	1.434	1.326	0.1000	46.0	50.0	-7.5	25.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	1.458	1.354	0.0100	46.0	50.0	-7.2	
Carbon disulfide	Ave	5.927	5.430	0.0100	46.0	50.0	-8.4	
Iodomethane	Ave	1.144	1.368		60.0	50.0	19.5	
Acrolein	Ave	0.0989	0.1379		350	250	39.4	
Methylene Chloride	Ave	2.112	1.870	0.0100	44.0	50.0	-11.4	
Acetone	Ave	0.8418	0.7586	0.0100	45.0	50.0	-9.9	
Methyl acetate	Ave	11.43	10.82	0.0100	47.0	50.0	-5.4	
trans-1,2-Dichloroethene	Ave	1.769	1.641	0.0100	46.0	50.0	-7.2	
Methyl tert-butyl ether	Ave	6.186	5.682	0.0100	46.0	50.0	-8.1	
2-Methyl-2-propanol	Ave	0.3442	0.2661		190	250	-22.7	
1,1-Dichloroethane	Ave	4.286	4.010	0.2000	47.0	50.0	-6.4	25.0
Acrylonitrile	Ave	1.147	1.083		94.0	100	-5.6	
Vinyl acetate	Ave	1.222	1.190		49.0	50.0	-2.7	
cis-1,2-Dichloroethene	Ave	1.911	1.771	0.0100	46.0	50.0	-7.3	
Cyclohexane	Ave	0.7516	0.7120	0.0100	47.0	50.0	-5.3	
Chloroform	Ave	3.274	3.083	0.2000	47.0	50.0	-5.8	25.0
Carbon tetrachloride	Ave	0.3304	0.3079	0.1000	47.0	50.0	-6.8	25.0
Tetrahydrofuran	Ave	1.288	1.183		92.0	100	-8.2	
1,1,1-Trichloroethane	Ave	0.4045	0.3916	0.1000	48.0	50.0	-3.2	25.0
2-Butanone (MEK)	Ave	2.583	1.387	0.0100	27.0	50.0	-46.3	
Benzene	Ave	1.400	1.342	0.5000	48.0	50.0	-4.1	25.0
1,2-Dichloroethane	Ave	2.757	2.616	0.1000	47.0	50.0	-5.1	25.0
Methylcyclohexane	Ave	0.5038	0.4716	0.0100	47.0	50.0	-6.4	
Trichloroethene	Ave	0.2801	0.2704*	0.3000	48.0	50.0	-3.5	25.0
Dibromomethane	Ave	1.180	1.118		47.0	50.0	-5.2	
1,2-Dichloropropane	Ave	0.4532	0.4408	0.0100	49.0	50.0	-2.7	
Dichlorobromomethane	Ave	0.4130	0.4026	0.2000	49.0	50.0	-2.5	25.0
Methyl methacrylate	Ave	0.3427	0.3251		95.0	100	-5.1	

Associated = MW-7D-D/FB

Test America Inc

Volatile Report CLP METHOD OLM 4.2

Data file : \\consvr05\Files\chem\VOA\msn.i\N080265.b\N0272.D
Lab Smp Id: 220-6428-A-4 Client Smp ID: MW-7D-S
Inj Date : 12-SEP-2008 14:15 MS Autotune Date: 04-APR-2008 15:02
Operator : D. HUMBERT Inst ID: msn.i
Smp Info : 220-6428-A-4
Misc Info : : ;;; ; CLP ; 1 ; LLW
Comment :
Method : \\consvr05\Files\chem\VOA\msn.i\N080265.b\NCLPW42.m
Meth Date : 12-Sep-2008 10:51 dave Quant Type: ISTD
Cal Date : 12-SEP-2008 10:28 Cal File: N0266.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
*	1 Bromochloromethane	128	3.470	3.450	(1.000)	133634	50.0000	
	6 Chloromethane	50	1.224	1.224	(0.353)	4107	0.60723	0.6(M)
	25 1,1-Dichloroethane	63	2.771	2.770	(0.798)	15746	1.37191	1(M)
	26 cis-1,2-Dichloroethene	96	3.273	3.253	(0.943)	61254	12.1750	12
	30 1,2-Dichloroethane	62	4.465	4.455	(1.287)	810653	107.705	110
$	33 1,2-Dichloroethane-d4	65	4.386	4.376	(1.264)	310364	51.1011	51
*	34 1,4-Difluorobenzene	114	4.958	4.948	(1.000)	724511	50.0000	
	38 Benzene	78	4.239	4.219	(0.855)	44541	2.20818	2
	41 Trichloroethene	130	4.938	4.918	(0.996)	5817	1.43118	1
*	51 Chlorobenzene-d5	117	7.805	7.795	(1.000)	640143	50.0000	
$	53 Toluene-d8	98	6.376	6.366	(0.817)	680593	48.0909	48
$	72 Bromofluorobenzene	95	8.879	8.869	(1.138)	238648	46.2629	46
M	73 1,2-Dichloroethene (total)	100				61254	12.1750	12

QC Flag Legend

M - Compound response manually integrated.

Calculation Check
1,2 DCA
RRF50
$2.816 = \frac{810653\,(50)}{133634\,(X)}$ $X = 107.709_{ug/L}$ ✓

TC 10/31/08

Test America Inc

Volatile Report CLP METHOD OLM 4.2

Data file : \\consvr05\Files\chem\VOA\msn.i\N080265.b\N0271.D
Lab Smp Id: 220-6428-A-1 Client Smp ID: MW-7D-D
Inj Date : 12-SEP-2008 13:51 MS Autotune Date: 04-APR-2008 15:02
Operator : D. HUMBERT Inst ID: msn.i
Smp Info : 220-6428-A-1
Misc Info : : ;;; ; CLP ; 1 ; LLW
Comment :
Method : \\consvr05\Files\chem\VOA\msn.i\N080265.b\NCLPW42.m
Meth Date : 12-Sep-2008 10:51 dave Quant Type: ISTD
Cal Date : 12-SEP-2008 10:28 Cal File: N0266.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
*	1	Bromochloromethane	128	3.460	3.450	(1.000)	135395	50.0000	
	8	Bromomethane	94	1.440	1.431	(0.416)	2081	0.90420	0.9(M)
	25	1,1-Dichloroethane	63	2.780	2.770	(0.804)	8805	0.75718	0.8(M)
	26	cis-1,2-Dichloroethene	96	3.263	3.253	(0.943)	112489	22.0678	22
	30	1,2-Dichloroethane	62	4.455	4.455	(1.288)	1158856	151.965	150
$	33	1,2-Dichloroethane-d4	65	4.376	4.376	(1.265)	276028	44.8566	45
*	34	1,4-Difluorobenzene	114	4.948	4.948	(1.000)	747993	50.0000	
	38	Benzene	78	4.228	4.219	(0.855)	100719	4.83652	5
	41	Trichloroethene	130	4.938	4.918	(0.998)	6354	1.51423	2
*	51	Chlorobenzene-d5	117	7.795	7.795	(1.000)	658312	50.0000	
$	53	Toluene-d8	98	6.366	6.366	(0.817)	700307	48.1181	48
$	72	Bromofluorobenzene	95	8.878	8.869	(1.139)	243014	45.8091	46
M	73	1,2-Dichloroethene (total)	100				112489	22.0678	22

QC Flag Legend

M - Compound response manually integrated.

cis 12 DCE Calculation check

$1.911 = \frac{112489(50)}{135395\ X} = 21.737$ mg/L ✓

TC 10/31/08

ASP95-4 - LOW CONCENTRATION VOLATILES
ANALYSIS DATA SHEET

Client No.: 151 BHR

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93203

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9237.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

TC 10/31/08

ASP95-4 - LOW CONCENTRATION VOLATILES
ANALYSIS DATA SHEET

Client No.

151 BHR

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93203

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9237.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl chloride	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-05-4	Vinyl acetate	5	U
95-47-6	o-Xylene	1	U
----------	m/p-Xylenes	1	U
56-23-5	Carbon Tetrachloride	1	U

TC
10/31/08

ASP95-4 - LOW CONCENTRATION VOLATILES
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

151 BHR

Lab Name: TestAmerica Laborat Contract: NO

Lab Code: RECNY Case No.: ____ SAS No.: ____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93203

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9237.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. ____ Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: ____ (uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

TC 10/31/08

ASP95-4 - LOW CONCENTRATION VOLATILES
ANALYSIS DATA SHEET

Client No.

EMERSON

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93201

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9235.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

TC 10/31/08

ASP95-4 - LOW CONCENTRATION VOLATILES
ANALYSIS DATA SHEET

Client No.

EMERSON

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: ____ SAS No.: ____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93201

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9235.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. ____ Heated Purge: N Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: ____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl chloride	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-05-4	Vinyl acetate	5	U
95-47-6	o-Xylene	1	U
----------	m/p-Xylenes	1	U
56-23-5	Carbon Tetrachloride	1	U

TC
10/31/08

ASP95-4 - LOW CONCENTRATION VOLATILES
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

EMERSON

Lab Name: TestAmerica Laborat Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93201

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9235.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. _____ Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

TC
10/31/08

ASP95-4 - LOW CONCENTRATION VOLATILES
ANALYSIS DATA SHEET

Client No.: LIENERT

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: ____ SAS No.: ____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93202

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9236.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. ____ Heated Purge: N Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: ____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	5	U
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	1	U
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	0.2	J
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	1	U
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene chloride	~~0.2~~ 2	~~BJ~~ V
108-10-1	4-Methyl-2-pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U
108-88-3	Toluene	1	U
71-55-6	1,1,1-Trichloroethane	1	U

TC
10/31/08

ASP95-4 - LOW CONCENTRATION VOLATILES
ANALYSIS DATA SHEET

Client No.

LIENERT

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93202

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9236.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl chloride	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-05-4	Vinyl acetate	5	U
95-47-6	o-Xylene	1	U
----------	m/p-Xylenes	1	U
56-23-5	Carbon Tetrachloride	1	U

TC
10/31/08

ASP95-4 - LOW CONCENTRATION VOLATILES
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

LIENERT

Lab Name: TestAmerica Laborat Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93202

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9236.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. _____ Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

TC
10/31/08

ASP95-4 - LOW CONCENTRATION VOLATILES
ANALYSIS DATA SHEET

Client No.: SARNEY

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93204

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9238.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	2	J
71-43-2	Benzene	1	U
74-97-5	Bromochloromethane	1	U
75-27-4	Bromodichloromethane	1	U
75-25-2	Bromoform	1	U
74-83-9	Bromomethane	1	U
78-93-3	2-Butanone	5	U
75-15-0	Carbon Disulfide	1	U
108-90-7	Chlorobenzene	1	U
75-00-3	Chloroethane	1	U
67-66-3	Chloroform	1	U
74-87-3	Chloromethane	0.2	J
124-48-1	Dibromochloromethane	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
106-93-4	1,2-Dibromoethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
75-34-3	1,1-Dichloroethane	1	U
107-06-2	1,2-Dichloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
100-41-4	Ethylbenzene	1	U
591-78-6	2-Hexanone	5	U
75-09-2	Methylene chloride	2	U
108-10-1	4-Methyl-2-pentanone	5	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
127-18-4	Tetrachloroethene	1	U
108-88-3	Toluene	1	U
71-55-6	1,1,1-Trichloroethane	1	U

TC 10/3/08

ASP95-4 - LOW CONCENTRATION VOLATILES
ANALYSIS DATA SHEET

Client No.

SARNEY

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93204

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9238.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-00-5	1,1,2-Trichloroethane	1	U
79-01-6	Trichloroethene	1	U
75-01-4	Vinyl chloride	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-05-4	Vinyl acetate	5	U
95-47-6	o-Xylene	1	U
	m/p-Xylenes	1	U
56-23-5	Carbon Tetrachloride	1	U

TC
10/31/08

ASP95-4 - LOW CONCENTRATION VOLATILES
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

SARNEY

Lab Name: TestAmerica Laborat Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8A93204

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9238.RR

Level: (low/med) LOW Date Samp/Recv: 09/04/2008 09/06/2008

% Moisture: not dec. _____ Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

FORM IE - GC/MS VOA TIC

TC
10/31/08

Quantitation Report TA Buffalo (Not Reviewed) **81/155**

Data File : D:\MSDCHEM\G\DATA\091208\G9238.D Vial: 18
Acq On : 12 Sep 2008 18:47 Operator: DHC
Sample : A8A93204 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT2.P
Quant Time: Sep 16 14:40:26 2008 Results File: A8I0000678VA.RES

Quant Method : D:\MSDCHEM\G...\A8I0000678VA.M (RTE Integrator)
Title : HP5973N CLP LOW LEVEL WATER
Last Update : Tue Sep 16 14:38:12 2008
Response via : Single (D:\MSDCHEM\G\DATA\091208\G9225.D 12 Sep 2008 11:31)
DataAcq Meth : CLP
IS QA File : D:\MSDCHEM\G\DATA\091208\G9225.D (12 Sep 2008 11:31)

NB STE 9/16/08

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.92	114	404759	25.00	ng	0.00 90.41%
18) CI20	D5-Chlorobenzene	6.95	117	298481	25.00	ng	0.00 84.83%
41) CI30	D4-1,4-Dichlorobenze	8.65	152	114706	25.00	ng	0.00 76.56%

System Monitoring Compounds

39) CS10	p-Bromofluorobenzene	7.79	174	98518	25.34	ng	0.00

Spiked Amount 25.000 Range 80 - 120 Recovery = 101.36%

Target Compounds							Qvalue
2) C010	Chloromethane	1.46	50	16728	1.06	ng	92
3) C015	Bromomethane	1.88	94	471	N.D.		
4) C020	Vinyl Chloride	1.60	62	62	N.D.		
5) C025	Chloroethane	1.89	64	525	N.D.		
6) C030	Methylene Chloride	3.05	84	5920	N.D.		
7) C035	Acetone	2.70	43	26150	9.28	ng	97
8) C040	Carbon Disulfide	2.80	76	2197	N.D.		
9) C045	1,1-Dichloroethene	2.64	96	64	N.D.		
10) C050	1,1-Dichloroethane	3.64	63	57	N.D.		
11) C125	Vinyl Acetate	3.45	43	1183	N.D.		
12) C057	trans-1,2-dichloro	3.28	96	66	N.D.		
13) C056	cis-1,2-Dichloroet	4.06	96	56	N.D.		
14) C060	Chloroform	4.27	83	789	N.D.		
15) C222	Bromochloromethane	4.31	128	56	N.D.		
16) C065	1,2-Dichloroethane	4.77	62	103	N.D.		
17) C110	2-Butanone	4.08	43	4268	1.10	ng	82
19) C115	1,1,1-Trichloroeth	4.44	97	57	N.D.		
20) C120	Carbon Tetrachlori	4.36	117	57	N.D.		
21) C150	Trichloroethene	5.10	95	266	N.D.		
22) C130	Bromodichlorometha	5.45	83	59	N.D.		
23) C140	1,2-Dichloropropan	5.29	63	65	N.D.		
24) C145	cis-1,3-Dichloropr	5.78	75	125	N.D.		
25) C165	Benzene	4.65	78	490	N.D.		
26) C155	Dibromochlorometha	6.53	129	68	N.D.		
27) C170	trans-1,3-Dichloro	6.15	75	66	N.D.		
28) C160	1,1,2-Trichloroeth	6.28	97	108	N.D.		
29) C220	Tetrachloroethene	6.37	166	91	N.D.		
30) C163	1,2-Dibromoethane	6.64	107	72	N.D.		
31) C210	4-Methyl-2-Pentano	5.84	43	157	N.D.		
32) C215	2-Hexanone	6.41	43	137	N.D.		
33) C230	Toluene	5.98	91	2259	N.D.		
34) C235	Chlorobenzene	6.98	112	73	N.D.		
35) C240	Ethylbenzene	7.03	91	1208	N.D.		
36) C246	m,p-Xylene	7.12	106	297	N.D.		
37) C247	o-Xylene	7.40	106	159	N.D.		
38) C245	Styrene	7.46	104	86	N.D.		
40) C225	1,1,2,2-Tetrachlor	7.92	83	76	N.D.		
42) C180	Bromoform	7.73	173	80	N.D.		
43) C260	1,3-Dichlorobenzen	8.60	146	73	N.D.		
44) C267	1,4-Dichlorobenzen	8.67	146	1689	N.D.		
45) C249	1,2-Dichlorobenzen	8.93	146	67	N.D.		

9.28 ng / 5.00 ml = 1.856 ppb

1.10 ng / 5 ml = 0.22 ppb

TC 10/31/08

mT 9/18/08

ASP95-4 - LOW CONCENTRATION VOLATILES
ANALYSIS DATA SHEET

Client No.

VBLK36

Lab Name: TestAmerica Laboratories Inc. Contract: NO

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: 6428

Matrix: (soil/water) WATER Lab Sample ID: A8B2229302

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: G9230.RR

Level: (low/med) LOW Date Samp/Recv: _____ _____

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 09/12/2008

GC Column: ZB-624 ID: 0.18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

TC
10/31/08

YES NO N/A

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: _____ LAB: STL Buffalo

SITE NAME: Sarney Farm SDG No(s).: 6428

1.0 Chain of Custody and Sampling Trip Reports

1.1 Are the Traffic Reports/Chain-of-Custody Records present for all samples? [✓] ___ ___

ACTION: If no contact RSCC, or the TOPO to obtain replacement of missing or illegible copies from the lab.

1.2 Is the Sampling Trip Report present for all samples and all fractions? [✓] ___ ___

ACTION: If no, contact either RSCC or ask the TOPO to obtain the necessary information from the prime contractor.

2.0 Data Completeness and Deliverables

2.1 Have any missing deliverables been received and added to the data package? ___ [✓] ___

ACTION: Contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the lab. If lab cannot provide them, note the effect on the review of the data package in the Contract Problems/Non-compliance section of the Data Assessment.

2.2 Was CLASS CCS checklist included with the package? [ ] ___ [✓]

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Lab Qualifiers:

D - The positive value is the result of an analysis at a secondary dilution factor.

B - The analyte is present in the associated method blank as well as in the sample. This qualifier has a different meaning when validating inorganic data.

E - The concentration of this analyte exceeds the calibration range of the instrument.

P - Pesticide/Aroclor target analytes when the % Difference between the analyte concentrations obtained from the two dissimilar GC columns is greater than 25%.

The reviewer must prepare a detailed data assessment to be submitted along with the completed SOP checklist. The Data Assessment must list all data qualifications, reasons for qualifications, instances of missing data and contract non-compliance.

Reviewer Qualifications:

Data reviewers must possess a working knowledge of the USEPA Statement of Work OLC03.2 and National Functional Guidelines mentioned above.

	YES	NO	N/A
2.3 Are there any discrepancies between the Traffic Reports/Chain-of-Custody Records, Sampling Trip Report and Sample Tags?		✓	

ACTION: If yes, contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the laboratory.

3.0 Cover Letter SDG Narrative

3.1 Is the SDG Narrative or Cover Letter Present?	✓		
3.2 Are case number, SDG number and contract number contained in the SDG Narrative or cover letter (see SOW, Exhibit B, section 2.5.1)? EPA sample numbers in the SDG, detailed documentation of any quality control, sample, shipment, and/or analytical problems encountered in processing the samples? Corrective action taken?	✓		
3.3 Does the Narrative contain the following information (see SOW, page B-12, section 2.5.1):			
VOA: description or trap and column(s) used during sample analyses?		✓	
BNA: description of column(s) used during sample analyses?			✓
PEST: description of columns used during sample analyses?			✓

NOTE: As stated in the SOW, page D-11/PEST, section 6.10.1.3.7, packed columns cannot be used.

3.4 Does the narrative, VOA and BNA sections, contain a list of all TICs identified as alkanes and their estimated concentrations?			✓

	YES	NO	N/A
3.5 Is the temperature indicator bottle present in the cooler? If not, did the Laboratory document in the SDG Narrative the alternative technique used to determine the cooler temperature? (Exhibit A/ p. A-7 sec. 4.2.1.2.3.3)	[✓]	___	___
3.6 Does the narrative contain a list of the pH values determined for each water sample submitted for volatiles analysis (SOW, page B-13, section 2.5.1.2)?	[ ]	✓	___
3.7 Does the Case Narrative contain the "verbatim" statement as required on page B-12, section 2.5.1 of the SOW?	[ ]	✓	___

ACTION: If "No", to any question in this section, contact the TOPO to obtain necessary resubmittals. If the information is unavailable, document under the Contract Problems/Non-Compliance section of the Data Assessment.

4.0 Data Validation Checklist

4.1 Check the package for the following (see SOW reporting requirements, section 2.1, page B-10):

	YES	NO	N/A
a. Is the package paginated in ascending order starting from the SDG narrative?	[✓]	___	___
b. Are all forms and copies legible?	[✓]	___	___
c. Is each fraction assembled in the order set forth in the SOW?	[✓]	___	___

The following checklist is divided into three parts. Part A is filled out if the data package contains any Low Concentration Volatile analyses, Part B for any Low Concentration Semivolatile analyses and Part C for Low Concentration Pesticide/Aroclors.

	YES	NO	N/A
Does this package contain:			
Low Concentration Volatiles Data?	✓		
Low Concentration Semivolatiles Data?		✓	
Low Concentration Pesticides/Aroclors data?		✓	

ACTION: Complete corresponding parts of checklist.

YES NO N/A

PART A: VOA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody Records, Sampling Trip Report or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data? ___ ☑ ___

ACTION: If samples were not iced or the ice was melted upon arrival at the laboratory and the temperature of the cooler was > 10° C, then flag all positive results with a "J" and all non-detects "UJ".

ACTION: If both VOA vials for a sample have air bubbles or the VOA vial analyzed had air bubbles, flag all positive results "J" and all non-detects "R".

2.0 Holding Times

2.1 Have any VOA technical holding times, determined from date of collection to date of analysis, been exceeded? ___ ☑ ___

Technical Holding Times: The technical holding time criterion for water samples is 14 days from sample collection provided that samples are acid-preserved to pH 2 or below, and that they are stored in 4°C± 2°C. If uncertain about preservation, notify the TOPO to contact the sampler and determine whether or not samples were preserved.

ACTION: List sampling, VTSR, analysis dates and preservation for samples which missed holding time in the table below.

YES NO N/A

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample ID	Was Sample Preserved?	Date Sampled	Date Lab Received	Date Analyzed

ACTION: Qualify sample results using preservation and technical holding time information as follows:

a. If there is no evidence that the samples were properly preserved, but were analyzed within the technical holding time (14 days from sample collection), qualify all positive results for non-halogenated compounds (including ketones and aromatics) with "J" and non-detects "R".

b. If there is no evidence that the samples were properly preserved, but were analyzed within 14 days from sample collection, qualify all positive results for halogenated compounds with "J" and non-detects "UJ".

c. If there is no evidence that the samples were properly preserved, and the samples were analyzed beyond 14 days from sample collection, qualify positive results for all volatile compounds with "J" and non-detects "R".

d. If the samples were properly preserved, but were analyzed outside of the technical holding time (14 days from sample collection), qualify positive results for all volatile compounds with "J" and non-detects "R".

YES NO N/A

NOTE: Contractual Holding Times: Sample must be analyzed within 10 days from validated time of sample receipt (VTSR) at the laboratory.

3.0 Deuterated Monitoring Compound (DMC) Recovery (Form II LCV)

3.1 Are the Volatile SMC Recovery Summaries (Form II LCV-1 and LCV-2) present? [✓] ___ ___

ACTION: Call the TOPO to obtain an explanation/resubmittal from the lab. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.2 Were outliers marked correctly with an asterisk? [ ] ___ ✓

ACTION: Circle all outliers in red.

3.3 Were more than three of the fourteen (14) Deuterated Monitoring Compounds (DMC's) recoveries outside their corresponding limits? ✓ [ ] ___

If yes, were samples re-analyzed? [ ] ___ ___

Were method blanks re-analyzed? [ ] ___ ___

ACTION: If any DMC is outside the required limits (see Table below), qualify their associated target compounds (See Table below) as follows:

Only BfB was used as a Surrogate. Noted in report as per Previous Sarney Sampling Round in July 2007.

All BfB recoveries w/in limits

YES NO N/A

VOLATILE DMC AND THEIR ASSOCIATED TARGET COMPOUNDS

Chloroethane-d5 Dichlorodifluoromethane Chloromethane Bromomethane Chloroethane Carbon Disulfide	**1,2-Dichloropropane-d6** Cyclohexane Methylcyclohexane 1,2-Dichloropropane Bromodichloromethane	**1,2-Dichlorobenzene-d4** Chlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene 1,2,3-Trichlorobenzene
Bromoform-d Dibromochloromethane 1,2-Dibromoethane Bromoform	**trans-1,3-Dichloropropene-d4** cis-1,3-Dichloropropene trans-1,3-Dichloropropene 1,1,2-Trichloroethane	**Chloroform-d** 1,1-Dichloroethane Bromochloromethane Chloroform
2-Butanone-d5 Acetone 2-butanone	**1,1-dichloroethene-d2** trans-1,2-Dichloroethene cis-1,2-Dichloroethene	**2-Hexanone-d5** 4-Methyl-2-pentanone 2-Hexanone
Vinyl Chloride-d3 Vinyl Chloride	**Benzene-d6** Benzene	**1,1,2,2-Tetrachloroethane-d2** 1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-chloropropane

YES NO N/A

1,2-Dichloroethane-d4	Toluene-d8	
Trichlorofluoromethane 1,1-Dichloroethene 1,1,2-Trichloro-1,2,2-trifluoroethane Methyl Acetate Methylene Chloride Methyl tert-Butyl Ether Carbon Tetrachloride 1,2-Dichloroethane 1,1,1-Trichloroethane	Trichloroethene Toluene Tetrachloroethene Ethylbenzene Xylenes (total) Styrene Isopropylbenzene	

VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY LIMITS

DMC	%RECOVERY LIMITS	DMC	%RECOVERY LIMITS
Vinyl Chloride-d3	49-138	1,2-Dichloropropane-d6	84-123
Chloroethane-d5	60-126	Toluene-d8	77-120
DMC	%RECOVERY LIMITS	DMC	%RECOVERY LIMITS
1,1-Dichloroethene-d2	65-130	trans-1,3-Dichloropropane-d4	80-128
2-Butanone-d5	42-171	2-Hexanone-d5	37-169
Chloroform-d	80-123	Bromoform-d	76-135
1,2-Dichloroethane-d4	78-129	1,1,2,2-Tetrachloroethane-d2	75-131

YES NO N/A

Benzene-d6	78-121	1,2-Dichlorobenzene-d4	50-150

1. For any recovery greater than the upper limit:

   a. Qualify "J" all positive associated target compounds.
   b. Do not qualify associated non-detects.

2. For any recovery greater than or equal to 20%, but less than the lower limit:

   a. Qualify "J" all positive associated target compounds.
   b. Qualify "UJ" associated non-detects.

3. For any recovery less than 20%:

   a. Qualify "J" all positive associated target compounds.
   b. Qualify "R" all associated non-detects.

NOTE: Up tp three (3) DMC's per sample may fail to meet the recovery limits. (SOW OLC03.2, sec. 11.4.4, p. D-41/VOA)
As per SOW, any sample which has more than 3 DMC's outside the limits, it must be reanalyzed (sec. 11.5.1 p. d-42/VOA).

ACTION: Note in the Data Assessment under Contract Problems/ Non-Compliance if the Lab did not perform reanalysis.

3.4 Are there any transcription/calculation errors between raw data and form II? ___ ✓ ___

ACTION: If large errors exist, ask the TOPO to obtain an explanation/resubmittal from the lab, make any necessary corrections and note errors in the data assessment.

	YES	NO	N/A

4.0 Matrix Spike/Matrix Spike Duplicate Recovery (Form III LCV)

4.1 Is the MS/MSD Recovery Form (Form III LCV) present? No samples submitted [ ] ___ ✓

4.2 Was the MS/MSD analyzed at the required frequency (once per SDG, or every 20 samples, whichever is more frequent) for the Low Concentration VOA method? [ ] ___ ✓

ACTION: If any MS/MSD data are missing, take action as specified in section 3.1 above.

ACTION: No action is taken on MS/MSD data alone. However, Using professional judgement, the Validator may use the MS and MSD results in conjunction with other QC criteria and determine the need for some qualification of the data.

5.0 Method Blanks (Form IV LCV)

5.1 Is the Volatile Method Blank Summary (Form IV LCV) present? [✓] ___ ___

5.2 Frequency of Analysis: For the analysis of Low Concentration VOA TCL compounds, has a method blank been analyzed for each SDG or every 20 samples, whichever is more frequent? [✓] ___ ___

5.3 Has a VOA method blank been analyzed at least once every twelve hours for each GC/MS system used? [✓] ___ ___

5.4 Was a VOA instrument blank analyzed after each sample/dilution which contained a target compound at a concentration > 25 µg/ℓ, and ketones > 125 µg/ℓ (see SOW, page D-44/VOA, section 12.1.1.3)? [ ] ___ ✓

ACTION: If any method/instrument blank data are missing, notify the TOPO to obtain resubmittals or an

Mecl$_2$ @ 0.7 µg/L
Action = 7

YES NO N/A

explanation from the lab. If method blank data are unavailable, the reviewer may use professional judgement, or substitute field blank or trip blank data for missing method blank data.

If an instrument blank was not analyzed after a sample containing > 25 µg/ℓ, (ketones > 125 µg/ℓ) inspect the sample chromatogram acquired immediately after this sample for possible carryover. Use professional judgement to determine if carryover occurred and qualify analyte(s) accordingly.

5.5 Was a storage blank analyzed once per SDG after all the samples were analyzed? [ ] ___ ✓

ACTION: If storage blank data is missing, contact the TOPO to obtain any missing deliverables from the laboratory. If unavailable, note in the Contract Problems/Non-Compliance section of the Data Assessment.

5.6 The validator should verify that the correct identification scheme for EPA blanks was used. (See SOW page B-30, section 3.3.7.3 for more information.)

Was the correct identification scheme used for all Low Concentration VOA blanks? ✓ ___ ___

ACTION: Contact the TOPO to obtain corrections from the lab, or make the necessary corrections. Document in the "Contract Problems/Non-Compliance section of the Data Assessment all corrections made by the validator.

5.7 Chromatography: review the blank raw data - chromatograms (RICs), quant. reports, data system printouts and spectra.

Also compare the storage blank raw data with the method blank. Determine if contamination in the storage blank is also present in the method blank.

	YES	NO	N/A
Is the chromatographic performance (baseline stability) for each instrument acceptable for Low Concentration VOAs?	[✓]	___	___

ACTION: Use professional judgement to determine the effect on the data.

5.8 Are all detected hits for target compounds in method, instrument and storage blanks less than the CRQL for that analyte?	[✓]	___	___

Exception: Acetone and 2-butanone must be less than 2X times the CRQL, and Methylene Chloride and Cyclohexane must be less than 10X times its CRQL.

ACTION: If no, an explanation and laboratory's corrective actions must be addressed in the case narrative. If the narrative contains no explanation, then make a note in the Contract Problems/Non-Compliance section of the Data Assessment.

6.0 Contamination

NOTE: "Water blanks", "drill blanks", and distilled water blanks" are validated like any other sample, and are not used to qualify data. Do not confuse them with the other QC blanks discussed below.

6.1 Does the storage blank contain positive results (TCL and/or TICs) for Low Concentration VOAs?	___	[ ]	✓

ACTION: If the storage blank contains target compounds at a concentration greater than the CRQL, positive sample results for those compounds should be flagged "J". If gross contamination occurred positive sample results for that compound may be rejected (R).

6.2 Do any method/reagent/instrument blanks contain positive results (including TICs) for Low Concentration VOAs? When applied as described in

YES NO N/A

the table below, the contaminant concentration in these blanks are multiplied by the sample dilution factor. ___ [ ] ✓

NOTE: Contaminated instrument blanks are unacceptable under this SOW (see page D-46/VOA, section 12.1.6.2).

ACTION: Document in the Data Assessment under Contract Problems/Non-Compliance if a contaminated instrument blank was submitted.

ACTION: Sample analysis results after the high concentration sample must be evaluated for carryover. Sample must meet the maximum carryover criteria as listed in SOW sec. 11.4.9.2, p. D-42/VOA. ("the sample must not contain a concentration above the CRQL for the target compounds that exceeded the limit in the contaminated sample.")

6.3 Do any field/trip/rinse blanks have positive Low Concentration VOA results (including TICs)? ___ [ ] ✓

Not submitted

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated with a particular group of samples (may exceed one per case) must be used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped. Blanks may not be qualified because of contamination in another blank. Field blanks & trip blanks must be qualified for system monitoring compound, instrument performance criteria, spectral or calibration QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks. If any blanks are grossly contaminated, all associated sample data should be qualified unusable (R).

YES NO N/A

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
Methylene Chloride **Cyclohexane**	Sample conc. is > CRQL, but < 10x blank value.	Sample conc. is < CRQL and < 10x blank value.	Sample conc. is > CRQL and > 10x blank value.
Acetone **2-Butanone**	Sample conc. is > CRQL, but < 2x blank value.	Sample conc. is < CRQL and < 2x blank value.	Sample conc. is > CRQL and > 2x blank value.
Other contaminants	Sample conc. is > CRQL, but < 1x blank value.	Sample conc. is < CRQL and < 1x blank value.	Sample conc. is > CRQL and > 1x blank value.

NOTE: Analytes qualified "U" for blank contamination are treated as "hits" when qualifying for calibration criteria.

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R" (unusable).

6.4 Are there field/rinse/equipment blanks associated with every sample? [ ] ✓ ___

ACTION: Note in data assessment that there is no associated field/rinse/equipment blank.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 GC/MS Instrument Performance Check (Form V-LCV)

	YES	NO	N/A
7.1 Are the GC/MS Instrument Performance Check Forms (Form V-LCV) present for Bromofluorobenzene (BFB)?	☑		
7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the BFB provided for each twelve hour shift?	☑		
7.3 Has an instrument performance compound been analyzed for every twelve hours of sample analysis per instrument?	☑		

ACTION: List date, time, instrument ID and sample analyses for which associated GC/MS tuning data are missing.

DATE	TIME	INSTRUMENT ID	SAMPLE NUMBERS

ACTION: Notify the TOPO to obtain missing data from the lab. If the lab cannot provide missing data, reject (R) all data generated outside an acceptable twelve hour calibration interval.

	YES	NO	N/A
7.4 Have the ion abundances been normalized to m/z 95 (see SOW, page D-24/VOA)?	☑		

NOTE: All ion abundance ratios must be normalized to m/z 95, the nominal base peak, even though the ion abundance of m/z 174 may be up to 120% that of m/z 95.

ACTION: If mass assignment is in error, qualify all associated data as unusable (R).

	YES	NO	N/A
7.5 Have the ion abundance criteria been met for each instrument used?	[✓]	___	___

ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).

ACTION: If ion abundance criteria are not met, professional Judgement may be applied to determine to what extent the data may be utilized.

7.6 Are there any transcription/calculation errors between mass lists and Form Vs? (Check at least two values but if errors are found, check more.)	___	[✓]	___
7.7 Is the number of significant figures for the reported relative abundances consistent with the number given in the ion abundance criteria column on Form V LCV?	[✓]	___	___

ACTION: If large errors exist, take action as specified in section 3.1 above.

7.8 Is the spectrum of the mass calibration compound acceptable?	[✓]	___	___

ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.

8.0 Target Compound List (TCL) Analytes (Form I LCV)

8.1 Are the Organic Analysis Data Sheets (Form I LCV) present with required header information on each page, for each of the following:			
a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Laboratory Control/MS/MSD samples?	[✓]	___	___
c. Blanks?	[✓]	___	___

	YES	NO	N/A

8.2 Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following:

a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Laboratory Control/MS/MSD samples?	[ ]	___	✓
c. Blanks?	[✓]	___	___

ACTION: If any data are missing, take action specified in 3.1 above.

8.3 Is chromatographic performance acceptable with respect to:

Baseline stability?	[✓]	___	___
Resolution?	[✓]	___	___
Peak shape?	[✓]	___	___
Full-scale graph (attenuation)?	[✓]	___	___
Other: _____?	[ ]	___	✓

ACTION: Use professional judgement to determine the acceptability of the data.

8.4 Are lab-generated standard mass spectra of the identified VOA compounds present for each sample? [✓] ___ ___

ACTION: If any mass spectra are missing, take action as specified in 3.1 above. If lab does not generate their own standard spectra, make note under the "Contract Problems/Non-Compliance" section of the Data Assessment. If spectra are unavailable reject "R" the reported results.

	YES	NO	N/A
8.5 Is the RRT of each reported compound within ± 0.06 RRT units of the standard RRT in the continuing calibration?	[✓]	___	___
8.6 Are all ions present in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	[ ]	___	✓
8.7 Do sample and standard relative ion intensities agree to within ±20%?	[✓]	___	___

ACTION: Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all such data should be rejected (R) flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected (U) at the calculated detection limit. In order to be positively identified, the data must comply with the criteria listed in sections 8.4-8.7 above.

ACTION: When sample carry-over is suspected, use professional judgement to determine if instrument cross-contamination has affected positive compound identifications.

9.0 Tentatively Identified Compounds (TIC)

9.1 Are all Tentatively Identified Compound Forms (Form I LCV-TIC) present? Do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier? No TICs detected	[✓]	___	___
9.2 Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			✓
a. Samples and/or fractions as appropriate?	[ ]	___	___
b. Blanks?	[ ]	___	___

	YES	NO	N/A
b. Are Alkanes listed in/or part of the Case Narrative?	[ ]	___	✓

ACTION: If any TIC data are missing, take action specified in 3.1 above.

ACTION: Add "JN" qualifier to all chemically named TICs if missing.

9.3 Are any target compounds (from any fraction) listed as TICs? (Example: 1,2-dimethylbenzene is xylene - a VOA target analyte - and should not be reported as a TIC.)	___	[✓]	✓

ACTION: Flag with "R" only target compound detected in another fraction. (Except blank contamination)

9.4 Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	[ ]	___	✓
9.5 Do TIC and "best match" standard relative ion intensities agree within ± 20%?	[ ]	___	✓

ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined that an incorrect identification was made, change its identification to "unknown" or to some less specific identification (example: "C3 substituted benzene") as appropriate. Also, when a compound is not found in any blank, but is detected in a sample and is a suspected artifact of a common laboratory contaminant, the result should be qualified as unusable (R). (I.e., common lab contaminants such as CO_2 - M/E 44, Siloxanes - M/E 73, hexane, Aldol condensation products, solvent preservatives, and related by-products. See the National Functional Guidelines June 2001, pp. 34-35 for further guidance.)

	YES	NO	N/A

10.0 Compound Quantitation and Reported Detection Limits

10.1 Are there any transcription/calculation errors in Form I results? (Check at least two positive values. Verify that the correct internal standards, quantitation ions, and RRFs were used to calculate Form I results.) See attached — [ ] [✓] [ ]

10.2 Are the CRQLs adjusted to reflect sample dilutions? [✓] [ ] [ ]

ACTION: If errors are large, take action as specified in section 3.1 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQLs data from the diluted sample). Replace concentrations that exceed the calibration range in the original analysis by crossing out the "E" and its corresponding value on the original Form I and substituting the data from the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's not to be used, including any in the data summary package.

11.0 Standards Data (GC/MS)

11.1 Are the reconstructed ion chromatograms, and data system printouts (quant. reports) present for each initial and continuing calibration? [ ] [✓] [ ]

ACTION: If any calibration standard data are missing, take action specified in section 3.1 above.

12.0 GC/MS Initial Calibration (Form VI)

YES NO N/A

12.1 Are the Initial Calibration Forms (Form VI LCV) present and complete for the volatile fraction at concentrations of 0.5, 1, 5, 10, and 25 µg/ℓ? [✓] ___ ___

no 0.5 ppb Low std

ACTION: If any Initial Calibration forms are missing, take action as specified in section 3.1 above.

12.2 Are response factors stable for VOA's over the concentration range of the calibration (e.g., %RSD ≤ 30.0, ≤ 50 for poor performers)? [ ] [✓] ___

ACTION: Circle all outliers in red. MeCl2 41%

NOTE: There are fourteen (14) compounds (see Table below) which are poor performers. The RRF for these compounds must be greater than or equal to 0.01. The %RSD must be less than or equal to 50%.

VOLATILE COMPOUNDS WITH POOR RESPONSE

Volatile Compounds	
Acetone	1,2-Dichloropropane
2-Butanone	1,2-Dibromo-3-chloropropane
Carbon Disulfide	4-Methyl-2-pentanone
Chloroethane	2-Hexanone
Chloromethane	1,2-Dichloropropane-d6 (DMC)
Cyclohexane	2-Hexanone-d5 (DMC)
Chloroethane-d5 (DMC)	2-Butanone-d5 (DMC)

NOTE: Although 20 Low Conc. VOA compounds have no maximum %RSD and require only minimal RRF performance (see Table D-2, page D-53/VOA), the technical acceptance criteria are the same for all analytes.

YES NO N/A

ACTION: If %RSD > 30.0%, or > 50.0% for the poor performers, qualify associated positive results for that analyte "J" (estimated) and non-detects using professional judgement. If %RSD is > 90, flag all non-detects for that analyte "R" (unusable) and positive hits "J".

No detections for $MeCl_2$, therefore NO qualifiers added

NOTE: Analytes previously qualified "U" for blank contamination are still treated as "hits" when qualifying for initial calibration criteria.

12.3 Are any $\overline{RRF}$s < 0.05 or < 0.01 for poor performers? ___ ☑ ___

ACTION: Circle all outliers in red.

ACTION: If any $\overline{RRF}$ values are < 0.05 or < 0.01 for poor performers, qualify associated non-detects unusable (R) and associated positive results estimated (J).

NOTE: Contract Requirements: The SOW allows up to two of the required analytes (see compounds marked with a "*" on Form VI and Table D-2, page D-53/VOA) to fail contractual %RSD and RRF criteria, provided the %RSD is ≤ 40.0 and RRF ≥ 0.010.

ACTION: If more than two of the required analytes failed %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance.

12.4 Are there any transcription/calculation errors in the reporting of $\overline{RRF}$s, RRFs or %RSD values? (Check at least 2 values, but if errors are found, check more.) ___ ☑ ___

ACTION: Circle errors in red.

ACTION: If errors are large, contact the TOPO to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance.

13.0 GC/MS Continuing Calibration (Form VII LCV)

	YES	NO	N/A
13.1 Are the Continuing Calibration Forms (Form VII LCV) present and complete for the volatile fraction?	☑		
13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument?	☑		

ACTION: If any forms are missing or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, ask the TOPO to obtain explanation/resubmittal from the laboratory. If continuing calibration data are unavailable, flag all associated sample data as unusable (R).

ACTION: List below all sample analyses that were not within twelve hours of the previous continuing calibration analysis.

	YES	NO	N/A
13.3 Do any volatile compounds have a % Difference (%D) between the initial RRF and continuing RRF which exceeds the ± 30% , or ± 50% for the poor performers criteria?		☑	

ACTION: Circle all outliers in red.

NOTE: Although 20 Low Conc. VOA compounds have no maximum %D and require only minimal RRF performance (see Table D-2, page D-53/VOA), the technical acceptance criteria are the same for all analytes.

ACTION: Qualify both positive results and non-detects for the outlier compound(s) as estimated (J). When % D is above 90%, reject all non-detects for that analyte as unusable (R) and qualify positive results "J".

	YES	NO	N/A
13.4 Do any volatile compounds have a RRF < 0.05 or < 0.01 for the poor performers?		☑	

YES NO N/A

ACTION: Circle all outliers in red.

ACTION: If the RRF < 0.05, or < 0.01 for poor performers qualify associated positive results as estimated (J) and associated non-detects unusable (R).

NOTE: Contract Requirements: The SOW allows up to two of the required analytes (see compounds marked with a "*" on Form VI, or Table D-2, page D-53/VOA) to fail %D or RRF criteria, provided %D is within ±40.0 and RRF ≥ 0.010.

ACTION: Document in the Data Assessment under Contract Problems/Non-Compliance if more than two of the required analytes failed the above acceptance criteria.

13.5 Are there any transcription/calculation errors in the reporting of RRFs, or %D between initial RRFs and continuing RRFs? (Check at least two values but if errors are found, check more.) ___ [✓] ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, notify the TOPO to obtain explanation/resubmittals from the lab. Document errors in the Contract Problems/Non-Compliance section of the Data Assessment.

14.0 Internal Standard (Form VIII LCV)

14.1 Are the internal standard areas (Form VIII LCV) of every sample and blank within the upper and lower limits (± 40%) for each continuing calibration? [✓] ___ ___

If no, was the sample reanalyzed? [ ] ___ ✓

ACTION: 1. Circle all outliers with red pencil.

2. List all the outliers below.

Sample #	Int. Std.	Area	Lower Limit	Upper Limit

YES NO N/A

(Attach additional sheets if necessary, or attach copies of Form VIIIs.)

ACTION:

1. If the internal standard area count is outside the **upper** limit, flag with "J" all positive results quantitated with this internal standard.
2. Do not qualify non-detects when associated IS area counts are > +40%.
3. If the IS area is less than the lower limit (-40%), qualify "J" all positive results quantitated with this Internal Standard. Qualify "R" all non-detects.

INTERNAL STANDARDS ACTIONS FOR VOLATILES

CRITERIA	ACTION	
	Detected Associated Compounds	Non-detected Associated Compounds
Area counts > 40% of 12-hour standard	"J"	No Action
Area counts < 40% of 12-hour	"J"	"R"

	YES	NO	N/A
14.2 Are the retention times of the internal standards within ±20 seconds of the associated calibration standard?	[✓]	___	___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 20 seconds.

NOTE: Contract Requirements: The SOW (section 11.5.1 page D-41/VOA) states that any sample which fails the acceptance criteria for IS response must be reanalyzed.

ACTION: Document in the Data Assessment under Contract Problems/Non-Compliance any sample(s) which failed the above IS acceptance criteria.

15.0 Field Duplicates

15.1 Were any field duplicates submitted for Low Concentration VOA analysis?	[ ]	___	✓

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between duplicate results must be addressed in the reviewer narrative. If large differences exist, contact the TOPO to confirm identification of field duplicates with the sampler.

No field dups submitted

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_samp	extraction_d	analysis_dat	validation_d	validatio
220-6428-1	MW-7D-D	1,1,1-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	1,1,2,2-Tetrachloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	1,1,2-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	1,1-Dichloroethane	0.76	J	0.76	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	1,1-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	1,2-Dichloroethane	150		150		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	1,2-Dichloroethane-d4	45		45		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	1,2-Dichloropropane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	**MW-7D-D**	**2-Butanone**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-1	MW-7D-D	2-Hexanone	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	4-Bromofluorobenzene	46		46		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	4-Methyl-2-pentanone	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	**MW-7D-D**	**Acetone**	**10**	**UJ**	**10**	**U ***	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Benzene	4.8	J	4.8	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Bromodichloromethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Bromoform	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	**MW-7D-D**	**Bromomethane**	**0.9**	**J**	**0.9**	**J**	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Carbon disulfide	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Carbon tetrachloride	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Chlorobenzene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Chlorodibromomethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Chloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Chloroform	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Chloromethane	10	U	10	U *	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Cis-1,2-Dichloroethene	22		22		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	cis-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Ethyl benzene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Methylene chloride	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	o-Xylene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Styrene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Tetrachloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Toluene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Toluene-d8	48		48		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	trans-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	trans-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Trichloroethene	1.5	J	1.5	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Vinyl chloride	10	U	10	U *	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-1	MW-7D-D	Xylene, m/p	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_sam	extraction_d	analysis_dat	validation_d	validatio
220-6428-1	MW-7D-D	Xylenes, Total	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	1,1,1-Trichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	1,1,2,2-Tetrachloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	1,1,2-Trichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	1,1-Dichloroethane	0.47	J	0.47	J	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	1,1-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	1,2-Dichloroethane	110		110		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	1,2-Dichloroethane-d4	51		51		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	1,2-Dichloropropane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	**MW-9D-1**	**2-Butanone**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-10	MW-9D-1	2-Hexanone	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	4-Bromofluorobenzene	45		45		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	4-Methyl-2-pentanone	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	**MW-9D-1**	**Acetone**	**10**	**UJ**	**10**	**U ***	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Benzene	4.6	J	4.6	J	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Bromodichloromethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Bromoform	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	**MW-9D-1**	**Bromomethane**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Carbon disulfide	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Carbon tetrachloride	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Chlorobenzene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Chlorodibromomethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Chloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Chloroform	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Chloromethane	1.6	J	1.6	J *	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Cis-1,2-Dichloroethene	8.2	J	8.2	J	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	cis-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Ethyl benzene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	**MW-9D-1**	**Methylene chloride**	**10**	**U**	**0.13**	**J B**	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-10	MW-9D-1	o-Xylene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Styrene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Tetrachloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Toluene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Toluene-d8	47		47		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	trans-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	trans-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Trichloroethene	0.69	J	0.69	J	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Vinyl chloride	10	U	10	U *	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_sam	extraction_d	analysis_dat	validation_q	validatio
220-6428-10	MW-9D-1	Xylene, m/p	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-10	MW-9D-1	Xylenes, Total	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	1,1,1-Trichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	1,1,2,2-Tetrachloroethane	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	1,1,2-Trichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	1,1-Dichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	1,1-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	1,2-Dichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	1,2-Dichloroethane-d4	45		45		ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	1,2-Dichloropropane	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	2-Butanone	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	2-Hexanone	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	4-Bromofluorobenzene	45		45		ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	4-Methyl-2-pentanone	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Acetone	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Benzene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Bromodichloromethane	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Bromoform	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Bromomethane	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Carbon disulfide	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Carbon tetrachloride	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Chlorobenzene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Chlorodibromomethane	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Chloroethane	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Chloroform	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Chloromethane	10	U	10	U *	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Cis-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	cis-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Ethyl benzene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Methylene chloride	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	o-Xylene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Styrene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Tetrachloroethene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Toluene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Toluene-d8	46		46		ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	trans-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	trans-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Trichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_sam	extraction_d	analysis_dat	validation_c	validatic
220-6428-15	TRIP BLANK	Vinyl chloride	10	U	10	U *	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Xylene, m/p	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-15	TRIP BLANK	Xylenes, Total	10	U	10	U	ug/L	1	9/4/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	1,1,1-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	1,1,2,2-Tetrachloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	1,1,2-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	1,1-Dichloroethane	0.74	J	0.74	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	1,1-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	1,2-Dichloroethane	160		160		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	1,2-Dichloroethane-d4	44		44		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	1,2-Dichloropropane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	**MW-7D/DP**	**2-Butanone**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	2-Hexanone	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	4-Bromofluorobenzene	45		45		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	4-Methyl-2-pentanone	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	**MW-7D/DP**	**Acetone**	**10**	**UJ**	**10**	**U ***	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Benzene	5.1	J	5.1	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Bromodichloromethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Bromoform	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	**MW-7D/DP**	**Bromomethane**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Carbon disulfide	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Carbon tetrachloride	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Chlorobenzene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Chlorodibromomethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Chloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Chloroform	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Chloromethane	10	U	10	U *	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Cis-1,2-Dichloroethene	24		24		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	cis-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Ethyl benzene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Methylene chloride	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	o-Xylene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Styrene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Tetrachloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Toluene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Toluene-d8	47		47		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	trans-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	trans-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_sam	extraction_d	analysis_dat	validation_q	validatio
220-6428-2	MW-7D/DP	Trichloroethene	1.6	J	1.6	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Vinyl chloride	10	U	10	U *	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Xylene, m/p	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-2	MW-7D/DP	Xylenes, Total	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	1,1,1-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	1,1,2,2-Tetrachloroethane	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	1,1,2-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	1,1-Dichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	1,1-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	1,2-Dichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	1,2-Dichloroethane-d4	47		47		ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	1,2-Dichloropropane	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	2-Butanone	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	2-Hexanone	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	4-Bromofluorobenzene	45		45		ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	4-Methyl-2-pentanone	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Acetone	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Benzene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Bromodichloromethane	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Bromoform	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Bromomethane	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Carbon disulfide	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Carbon tetrachloride	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Chlorobenzene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Chlorodibromomethane	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Chloroethane	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Chloroform	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Chloromethane	10	U	10	U *	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Cis-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	cis-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Ethyl benzene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Methylene chloride	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	o-Xylene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Styrene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Tetrachloroethene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Toluene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Toluene-d8	47		47		ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	trans-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_sam	extraction_d	analysis_dat	validation_c	validatic
220-6428-3	MW-7D-D/FB	trans-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Trichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Vinyl chloride	10	U	10	U *	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Xylene, m/p	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-3	MW-7D-D/FB	Xylenes, Total	10	U	10	U	ug/L	1	9/3/2008	9/11/2008	9/11/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	1,1,1-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	1,1,2,2-Tetrachloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	1,1,2-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	1,1-Dichloroethane	1.4	J	1.4	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	1,1-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	1,2-Dichloroethane	110		110		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	1,2-Dichloroethane-d4	51		51		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	1,2-Dichloropropane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	**MW-7D-S**	**2-Butanone**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-4	MW-7D-S	2-Hexanone	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	4-Bromofluorobenzene	46		46		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	4-Methyl-2-pentanone	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	**MW-7D-S**	**Acetone**	**10**	**UJ**	**10**	**U ***	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Benzene	2.2	J	2.2	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Bromodichloromethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Bromoform	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	**MW-7D-S**	**Bromomethane**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Carbon disulfide	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Carbon tetrachloride	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Chlorobenzene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Chlorodibromomethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Chloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Chloroform	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Chloromethane	0.61	J	0.61	J *	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Cis-1,2-Dichloroethene	12		12		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	cis-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Ethyl benzene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Methylene chloride	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	o-Xylene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Styrene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Tetrachloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Toluene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Toluene-d8	48		48		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_samp	extraction_d	analysis_dat	validation_c	validatic
220-6428-4	MW-7D-S	trans-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	trans-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Trichloroethene	1.4	J	1.4	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Vinyl chloride	10	U	10	U *	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Xylene, m/p	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-4	MW-7D-S	Xylenes, Total	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	1,1,1-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	1,1,2,2-Tetrachloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	1,1,2-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	1,1-Dichloroethane	0.67	J	0.67	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	1,1-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	1,2-Dichloroethane	130		130		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	1,2-Dichloroethane-d4	43		43		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	1,2-Dichloropropane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	**MW-9D-2**	**2-Butanone**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-5	MW-9D-2	2-Hexanone	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	4-Bromofluorobenzene	46		46		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	4-Methyl-2-pentanone	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	**MW-9D-2**	**Acetone**	**10**	**UJ**	**10**	**U ***	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Benzene	0.76	J	0.76	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Bromodichloromethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Bromoform	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	**MW-9D-2**	**Bromomethane**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Carbon disulfide	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Carbon tetrachloride	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Chlorobenzene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Chlorodibromomethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Chloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Chloroform	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Chloromethane	10	U	10	U *	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Cis-1,2-Dichloroethene	12		12		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	cis-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Ethyl benzene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Methylene chloride	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	o-Xylene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Styrene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Tetrachloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Toluene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_samp	extraction_d	analysis_dat	validation_d	validatio
220-6428-5	MW-9D-2	Toluene-d8	48		48		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	trans-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	trans-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Trichloroethene	2.2	J	2.2	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Vinyl chloride	10	U	10	U *	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Xylene, m/p	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-5	MW-9D-2	Xylenes, Total	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	1,1,1-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	1,1,2,2-Tetrachloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	1,1,2-Trichloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	1,1-Dichloroethane	0.5	J	0.5	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	1,1-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	1,2-Dichloroethane	120		120		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	1,2-Dichloroethane-d4	43		43		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	1,2-Dichloropropane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	**MW-9D-3**	**2-Butanone**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-6	MW-9D-3	2-Hexanone	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	4-Bromofluorobenzene	46		46		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	4-Methyl-2-pentanone	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	**MW-9D-3**	**Acetone**	**10**	**UJ**	**10**	**U ***	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Benzene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Bromodichloromethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Bromoform	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	**MW-9D-3**	**Bromomethane**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/3/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Carbon disulfide	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Carbon tetrachloride	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Chlorobenzene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Chlorodibromomethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Chloroethane	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Chloroform	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Chloromethane	10	U	10	U *	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Cis-1,2-Dichloroethene	9.4	J	9.4	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	cis-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Ethyl benzene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Methylene chloride	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	o-Xylene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Styrene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Tetrachloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_re	final_	lab_re	lab_q	result_	dilution	field_sam	extraction_d	analysis_dat	validation_c	validatic
220-6428-6	MW-9D-3	Toluene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Toluene-d8	48		48		ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	trans-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	trans-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Trichloroethene	4	J	4	J	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Vinyl chloride	10	U	10	U *	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Xylene, m/p	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-6	MW-9D-3	Xylenes, Total	10	U	10	U	ug/L	1	9/3/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	1,1,1-Trichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	1,1,2,2-Tetrachloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	1,1,2-Trichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	1,1-Dichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	1,1-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	1,2-Dichloroethane	46		46		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	1,2-Dichloroethane-d4	47		47		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	1,2-Dichloropropane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	**MW-10D-2**	**2-Butanone**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-7	MW-10D-2	2-Hexanone	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	4-Bromofluorobenzene	45		45		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	4-Methyl-2-pentanone	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	**MW-10D-2**	**Acetone**	**10**	**UJ**	**10**	**U ***	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Benzene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Bromodichloromethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Bromoform	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	**MW-10D-2**	**Bromomethane**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Carbon disulfide	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Carbon tetrachloride	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Chlorobenzene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Chlorodibromomethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Chloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Chloroform	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Chloromethane	10	U	10	U *	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Cis-1,2-Dichloroethene	0.31	J	0.31	J	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	cis-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Ethyl benzene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Methylene chloride	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	o-Xylene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Styrene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_sam	extraction_d	analysis_dat	validation_d	validatio
220-6428-7	MW-10D-2	Tetrachloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Toluene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Toluene-d8	47		47		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	trans-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	trans-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Trichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Vinyl chloride	10	U	10	U *	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Xylene, m/p	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-7	MW-10D-2	Xylenes, Total	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	1,1,1-Trichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	1,1,2,2-Tetrachloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	1,1,2-Trichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	1,1-Dichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	1,1-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	1,2-Dichloroethane	1.1	J	1.1	J	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	1,2-Dichloroethane-d4	43		43		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	1,2-Dichloropropane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	**MW-10D-3**	**2-Butanone**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-8	MW-10D-3	2-Hexanone	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	4-Bromofluorobenzene	44		44		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	4-Methyl-2-pentanone	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	**MW-10D-3**	**Acetone**	**10**	**UJ**	**10**	**U ***	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Benzene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Bromodichloromethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Bromoform	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	**MW-10D-3**	**Bromomethane**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Carbon disulfide	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Carbon tetrachloride	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Chlorobenzene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Chlorodibromomethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Chloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Chloroform	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Chloromethane	10	U	10	U *	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Cis-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	cis-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Ethyl benzene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Methylene chloride	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	o-Xylene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_sam	extraction_d	analysis_dat	validation_c	validatic
220-6428-8	MW-10D-3	Styrene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Tetrachloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Toluene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Toluene-d8	45		45		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	trans-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	trans-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Trichloroethene	0.39	J	0.39	J	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Vinyl chloride	10	U	10	U *	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Xylene, m/p	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-8	MW-10D-3	Xylenes, Total	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	1,1,1-Trichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	1,1,2,2-Tetrachloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	1,1,2-Trichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	1,1-Dichloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	1,1-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	1,2-Dichloroethane	41		41		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	1,2-Dichloroethane-d4	48		48		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	1,2-Dichloropropane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	**MW-10D-1**	**2-Butanone**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-9	MW-10D-1	2-Hexanone	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	4-Bromofluorobenzene	46		46		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	4-Methyl-2-pentanone	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	**MW-10D-1**	**Acetone**	**10**	**UJ**	**10**	**U ***	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Benzene	0.14	J	0.14	J	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Bromodichloromethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Bromoform	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	**MW-10D-1**	**Bromomethane**	**10**	**UJ**	**10**	**U**	**ug/L**	**1**	**9/4/2008**	**9/12/2008**	**9/12/2008**	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Carbon disulfide	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Carbon tetrachloride	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Chlorobenzene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Chlorodibromomethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Chloroethane	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Chloroform	0.34	J	0.34	J	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Chloromethane	10	U	10	U *	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Cis-1,2-Dichloroethene	1.3	J	1.3	J	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	cis-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Ethyl benzene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Methylene chloride	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_re	final_	lab_re	lab_q	result_	dilution	field_samp	extraction_d	analysis_dat	validation_d	validatio
220-6428-9	MW-10D-1	o-Xylene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Styrene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Tetrachloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Toluene	0.35	J	0.35	J	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Toluene-d8	48		48		ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	trans-1,2-Dichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	trans-1,3-Dichloropropene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Trichloroethene	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Vinyl chloride	10	U	10	U *	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Xylene, m/p	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II
220-6428-9	MW-10D-1	Xylenes, Total	10	U	10	U	ug/L	1	9/4/2008	9/12/2008	9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_samp	extraction_d	analysis_dat	validation_d	validatio
A8A93201	EMERSON	1,1,1-Trichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	1,1,2,2-Tetrachloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	1,1,2-Trichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	1,1-Dichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	1,1-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	1,2-Dibromo-3-chloropropane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	1,2-Dibromoethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	1,2-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	1,2-Dichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	1,2-Dichloropropane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	1,3-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	1,4-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	2-Butanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	2-Hexanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	4-Methyl-2-pentanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Acetone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Benzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Bromochloromethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Bromodichloromethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Bromoform	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Bromomethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Carbon disulfide	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Carbon tetrachloride	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Chlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Chlorodibromomethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Chloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Chloroform	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Chloromethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Cis-1,2-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	cis-1,3-Dichloropropene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Ethyl benzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Methylene chloride	2	U	2	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	o-Xylene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Styrene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Tetrachloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Toluene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	trans-1,2-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	trans-1,3-Dichloropropene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_sam	extraction_d	analysis_dat	validation_d	validatic
A8A93201	EMERSON	Trichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Vinyl acetate	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Vinyl chloride	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93201	EMERSON	Xylene, m/p	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,1,1-Trichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,1,2,2-Tetrachloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,1,2-Trichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,1-Dichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,1-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,2-Dibromo-3-chloropropane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,2-Dibromoethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,2-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,2-Dichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,2-Dichloropropane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,3-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	1,4-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	2-Butanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	2-Hexanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	4-Methyl-2-pentanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Acetone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Benzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Bromochloromethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Bromodichloromethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Bromoform	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Bromomethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Carbon disulfide	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Carbon tetrachloride	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Chlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Chlorodibromomethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Chloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Chloroform	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Chloromethane	0.2	J	0.2	J	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Cis-1,2-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	cis-1,3-Dichloropropene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Ethyl benzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	**LIENERT**	**Methylene chloride**	**2**	**U**	**0.2**	**BJ**	**UG/L**		**9/4/2008**		**9/12/2008**	10/31/2008	Tier_II
A8A93202	LIENERT	o-Xylene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Styrene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_sam	extraction_d	analysis_dat	validation_da	validatio
A8A93202	LIENERT	Tetrachloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Toluene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	trans-1,2-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	trans-1,3-Dichloropropene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Trichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Vinyl acetate	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Vinyl chloride	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93202	LIENERT	Xylene, m/p	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,1,1-Trichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,1,2,2-Tetrachloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,1,2-Trichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,1-Dichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,1-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,2-Dibromo-3-chloropropane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,2-Dibromoethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,2-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,2-Dichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,2-Dichloropropane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,3-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	1,4-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	2-Butanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	2-Hexanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	4-Methyl-2-pentanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Acetone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Benzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Bromochloromethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Bromodichloromethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Bromoform	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Bromomethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Carbon disulfide	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Carbon tetrachloride	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Chlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Chlorodibromomethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Chloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Chloroform	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Chloromethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Cis-1,2-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	cis-1,3-Dichloropropene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_samp	extraction_d	analysis_dat	validation_da	validatio
A8A93203	151 BHR	Ethyl benzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	**151 BHR**	**Methylene chloride**	**3**	**U**	**3**	**B**	**UG/L**		**9/4/2008**		**9/12/2008**	10/31/2008	Tier_II
A8A93203	151 BHR	o-Xylene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Styrene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Tetrachloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Toluene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	trans-1,2-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	trans-1,3-Dichloropropene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Trichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Vinyl acetate	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Vinyl chloride	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93203	151 BHR	Xylene, m/p	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,1,1-Trichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,1,2,2-Tetrachloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,1,2-Trichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,1-Dichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,1-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,2-Dibromo-3-chloropropane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,2-Dibromoethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,2-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,2-Dichloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,2-Dichloropropane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,3-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	1,4-Dichlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	2-Butanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	2-Hexanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	4-Methyl-2-pentanone	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Acetone	2	J	2	J	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Benzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Bromochloromethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Bromodichloromethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Bromoform	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Bromomethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Carbon disulfide	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Carbon tetrachloride	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Chlorobenzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Chlorodibromomethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Chloroethane	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II

Validation Actions in RED

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2008 WATER SAMPLING
SARNEY FARM SUPERFUND SITE
AMENIA, NEW YORK

lab_sample_id	field_sample_id	param_name	final_res	final_	lab_re	lab_q	result_	dilution	field_samp	extraction_d	analysis_dat	validation_d	validatio
A8A93204	SARNEY	Chloroform	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Chloromethane	0.2	J	0.2	J	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Cis-1,2-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	cis-1,3-Dichloropropene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Ethyl benzene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Methylene chloride	2	U	2	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	o-Xylene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Styrene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Tetrachloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Toluene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	trans-1,2-Dichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	trans-1,3-Dichloropropene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Trichloroethene	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Vinyl acetate	5	U	5	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Vinyl chloride	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II
A8A93204	SARNEY	Xylene, m/p	1	U	1	U	UG/L		9/4/2008		9/12/2008	10/31/2008	Tier_II