report. hw828076.2001-5-1.
OU2 RI OUSR

REMEDIAL INVESTIGATION

DATA USABILITY SUMMARY REPORT

WORK ASSIGNMENT
D003825-19

SCOBELL CHEMICAL SITE - OPERABLE UNIT #2
(OFFSITE GROUNDWATER)
TOWN OF BRIGHTON (T)

SITE NO. 8-28-076
MONROE (C), NY

Prepared for:
NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road, Albany, New York

Erin Crotty, Commissioner

DIVISION OF ENVIRONMENTAL REMEDIATION

URS Corporation Group Consultants
282 Delaware Avenue
Buffalo, New York 14202

Final
May 2001

G28614H

REMEDIAL INVESTIGATION

DATA USABILITY SUMMARY REPORT (DUSR)

SCOBELL CHEMICAL SITE - OPERABLE UNIT #2 (OFFSITE GROUNDWATER)

TOWN OF BRIGHTON, NEW YORK

SITE ID NO. 8-28-076

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
WORK ASSIGNMENT D003825-19

PREPARED BY

URS CORPORATION
282 DELAWARE AVENUE
BUFFALO, NEW YORK 14202

MAY 2001

TABLE OF CONTENTS

ATTACHMENTS

TABLES

I. INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, June 1999.

II. ANALYTICAL METHODOLOGIES

The data being evaluated is from the November 1-3, 2000 sampling of 16 groundwater samples, one dense non-aqueous phase liquid (DNAPL) sample, 2 matrix spike/matrix spike duplicates (MS/MSD), 2 matrix duplicates (MD) (metals only), 2 trip blanks, 1 equipment rinsate blank and one drill water sample. The analytical laboratory that performed the analyses is H2M Labs, Inc., located in Melville, New York. A summary of the samples and analyses performed is presented in Table 1.

The samples were analyzed for the following parameters (not all samples were analyzed for all parameters):

Target Compound List (TCL) Volatile Organic Compounds (VOCs) - ASP Method 95-1
TCL Semivolatile Organic Compounds (SVOCs) - ASP Method 95-2
TCL Pesticides/Polychlorinated Biphenyls (PCBs) - ASP Method 95-3
Target Analyte List (TAL) Metals and Cyanide - ASP Method CLP-M

A limited data validation was performed following the general guidelines in United States Environmental Protection Agency (USEPA) Region II, Contract Laboratory Program (CLP) Organics Data Review (CLP/SOW OLM03.1), SOP No. HW-6, Revision #11, June 1996 and Evaluation of Metals Data for the CLP, SOP Revision XI, January 1992. Qualifications applied to the data include "J"/"UJ" (estimated concentration/estimated quantitation limit), "D" (result reported from a diluted analysis), and "U" (not detected at the reported quantitation limit). Support documentation for the qualification of data is presented in Attachment A. The validated analytical results are presented in Table 2.

TABLE 1

SAMPLE AND ANALYSIS SUMMARY

NYSDEC - SCOBELL CHEMICAL

O.U. #2 (OFF-SITE) CONTINUING INVESTIGATION

Sample ID	Sample Date	TCL VOCs (ASP 95-1)	TCL SVOCs (ASP 95-2)	TCL Pesticides/ PCBs (ASP 95-3)	TAL Metals (ASP CLP-M/200.7, 245.1))	Cyanide (ASP CLP-M/335.2)	Comments
GROUNDWATER SAMPLES							
MW-8S	11/1/00	X	---	---	X	X	---
MW-8D	11/1/00	X	---	---	X	X	---
MW-1D	11/2/00	X	---	---	X	X	---
MW-3D	11/2/00	X	---	---	X	X	---
MW-2D	11/2/00	X	---	---	X	X	---
MW-6S	11/2/00	X	---	---	X	X	MS/MSD/MD
MW-6D	11/2/00	X	---	---	X	X	---
MW-4S	11/2/00	X	---	---	X	X	---
MW-4D	11/2/00	X	---	---	X	X	---
MW-5S	11/2/00	X	---	---	X	X	---
MW-5D	11/2/00	X	---	---	X	X	---
MW-7D	11/3/00	X	---	---	X	X	---
MW-7S	11/3/00	X	---	---	X	X	---
MW-OB1	11/3/00	X	---	---	X	X	---
MW-9D	11/3/00	X	---	---	X	X	---
MW-9S	11/3/00	X	---	---	X	X	---
DNAPL							
MW-3D	11/2/00	X	X	X	X	---[1]	MS/MSD[2]
FIELD QC							
SC-TB	11/2/00	X	---	---	---	---	---
SC-TB1	11/3/00	X	---	---	---	---	---
SC-RB1	11/3/00	X	---	---	X	X	---
SC-WC1	11/3/00	X	---	---	X	X	---

1 - This sample was originally scheduled to be analyzed for cyanide. However, there was insufficient sample volume for the analysis.

2 - MS/MSD analyzed for VOC fraction only. There was insufficient sample volume for the remaining parameters.

All analytical methods from New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP), October 1995.

TCL - Target Compound List
TAL - Target Analyte List
VOC - Volatile Organic Compound
SVOC - Semivolatile Organic Compound
PCB - Polychlorinated Biphenyl
CLP - Contract Laboratory Program
TB - Trip Blank
RB - Rinsate Blank
WC - Drill Water
MS/MSD/MD - Matrix Spike/Matrix Spike Duplicate/Matrix Duplicate
DNAPL - Dense Non-aqueous Phase Liquid

III. DATA DELIVERABLE COMPLETENESS

The laboratory deliverable data packages were in accordance with NYSDEC ASP, Category B requirements.

IV. HOLDING TIMES

The contractual and USEPA Region II technical holding time criteria were met for all fractions and samples.

V. QUALITY CONTROL DATA

A. QC Blanks

Methylene chloride, trichloroethene, and/or tetrachloroethene were detected at various concentrations in one or more of the volatile organic method, trip, and rinsate blanks. USEPA Region II validation guidelines state that sample concentrations of compounds less than five times the amount detected in any associated blank (less than ten times for common laboratory contaminants, including methylene chloride) be qualified "U". In accordance with these guidelines, methylene chloride was qualified "U" in all samples in which it was detected, except MW-4D (for which the sample concentration was greater than ten times the highest associated blank concentration). Trichloroethene was qualified "U" in samples MW-1D, MW-9D, MW-OB1, and SC-WC1. Tetrachloroethene was qualified "U" in samples MW-5S, MW-6S, MW-9S, and MW-OB1. In those instances where the sample concentration was greater than the quantitation limit but less than the blank action level, the quantitation limit was raised to the reported concentration.

No other qualifications were made as a result of blank contamination.

B. Instrument Tune Criteria (VOC and SVOC Only)

All NYSDEC ASP instrument tuning criteria were met for the VOC analyses.

C. Sample Extracts

All sample extraction procedures were performed in accordance with NYSDEC ASP and method requirements.

D. Initial and Continuing Calibrations

The percent difference (%D) for acetone, 2-butanone, 4-methyl-2-pentanone, ethylbenzene, dibromochloromethane, and/or bromoform exceeded the USEPA Region II QC limit of 25%D in one or more of the volatile organic continuing calibrations. In accordance with USEPA Region II validation guidelines, associated sample results for these compounds were qualified "J/UJ." The results for acetone and 2-butanone were qualified in all samples. The results for 4-methyl-2-pentanone were qualified in samples MW-1D, MW-2D, MW-3D, MW-4D, MW-5D, MW-6S, MW-8D, and MW-8S. The results for ethylbenzene were qualified in samples MW-5S and MW-9D. The results for dibromochloromethane and bromoform were qualified in samples MW-7D, MW-7S, MW-9S, MW-OB1, SC-RB1, SC-TB, SC-TB1, and SC-WC1.

The %D for 2,4-dinitrophenol and bis(2-ethylhexyl)phthalate exceeded the USEPA Region II QC limit of 25% in the semivolatile organic continuing calibration associated with the DNAPL sample (MW-3D). In accordance with USEPA Region II validation guidelines, the non-detected result for 2,4-dinitrophenol was qualified "UJ" and the detected result for bis(2-ethylhexyl)phthalate was qualified "J" in this sample.

All other initial and continuing calibration data for all matrices and fractions were compliant with USEPA Region II validation criteria. It should be noted that all NYSDEC ASP contractual calibration criteria were met.

E. Surrogate/Internal Standard Recoveries (Organics Only)

The undiluted VOC analysis of sample MW-3D also exhibited surrogate recoveries above QC limits. This sample required a diluted analysis, in which all surrogate recoveries were within QC limits. In accordance with USEPA Region II validation guidelines, the results for all detected compounds reported from the undiluted analysis were qualified "J". No qualifications were made to the non-detected results, or to those results reported from the diluted analysis.

The undiluted VOC analyses of samples MW-4S and MW-6D exhibited surrogate recoveries below QC limits. Both samples required diluted analyses, in which all surrogate recoveries were within QC limits. In accordance with USEPA Region II validation guidelines, all results reported from the undiluted analyses of these samples were qualified "J/UJ". No qualifications were made to those results reported from the diluted analyses.

All other surrogate recoveries and all internal standard recoveries were within the required control limits.

F. Matrix Spike/Matrix Spike Duplicate/Matrix Duplicate/Matrix Spike Blank Analyses

USEPA Region II does not require qualification of organic data based solely on the MS/MSD results. In the instances where groundwater MS/MSD recoveries were outside of QC criteria, the MSB recoveries were within the QC criteria. No qualifications were made to the organic groundwater data based on MS/MSD results.

The groundwater matrix spike and matrix duplicate results for all metals and cyanide were within contractual and USEPA Region II QC limits.

Due to limited sample volume, MS/MSD (MD for metals/cyanide) were not performed for the semivolatile organic, pesticide/PCB, metals, and cyanide fractions of the DNAPL sample (MW-3D). However, MSB and laboratory control sample results were compliant with contractual and USEPA Region II control limits, therefore no qualification of the data was deemed necessary.

G. Field Duplicates

No field duplicates were collected during this investigation.

H. Laboratory Control Samples (Metals Only)

The inorganic laboratory control samples (LCSs) were within EPA Region II and contractual QC limits, and no qualifications were made to the data.

I. Contract Required Detection Limit (CRDL) Standards (Metals Only)

All CRDL standard results were compliant with contractual and USEPA Region II QC requirements.

J. Serial Dilutions (Metals Only)

The %D for potassium in the ICP serial dilution analysis associated with the groundwater samples exceeded the contractual and USEPA Region II technical QC limit of 10%. In accordance with USEPA Region II validation guidelines, all groundwater sample results for potassium greater than the CRDL were qualified "J". The results for potassium in groundwater samples MW-OB1, MW-1D, MW-

3D, MW-4D, MW-5S, MW-6D, MW-7D, MW-8D, MW-9D, and MW-9S required qualification.

All other ICP serial dilution results were compliant with contractual and USEPA Region II QC requirements, and no other qualifications were made to the data.

VI. SAMPLE RESULTS

A. Raw Data vs. Reporting Forms

The final results as listed on the reporting forms were in agreement with the raw data, and no transcription/calculation errors were detected.

B. Sample Dilutions

Volatile organic compounds were detected in the initial analyses of various samples at concentrations exceeding the range of calibration (qualified "E" by the laboratory) but were not detected in the diluted analyses of these samples. In these instances, the results from the undiluted analyses were reported and qualified "J." All sample results reported from secondary dilution analyses were qualified "D."

The volatile organic fraction of sample MW-9D was diluted by a factor of two prior to analysis due to suspected high levels of target compounds. There were no significant concentrations of target compounds detected in this sample. Due to laboratory oversight, the sample was not reanalyzed undiluted. The quantitation limits are the lowest achievable at the diluted level.

The organic fractions (i.e., volatile, semivolatile, and pesticide/PCB) of the DNAPL sample (MW-3D) were extracted and analyzed as medium level samples due to the nature of the sample (i.e., not water-soluble) and the elevated levels of target

compounds and/or matrix interference. The reported quantitation limits for the non-detected compounds are the lowest achievable using these extraction techniques.

C. Quantitation Limits

All quantitation limits were reported in accordance with method requirements, and were adjusted for dilution factors. Several organic results were qualified "J" by the laboratory indicating estimated concentrations below the quantitation limits. Several metals results were qualified "B" by the laboratory indicating results greater than the instrument detection limits but less than the CRDLs.

D. Chromatography

No chromatography problems were encountered, other than those previously discussed.

VII. SUMMARY

All sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified "J/UJ" (estimated) are considered conditionally usable. URS Corporation does not recommend the recollection of any samples at this time.

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-01D	MW-02D	MW-03D	MW-04D	MW-04S
Sample ID		MW-1D-GW	MW-2D-GW	MW-3D-GW	MW-4D-GW	MW-4S-GW
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft.)		-	-	-	-	-
Date Sampled		11/02/00	11/02/00	11/02/00	11/02/00	11/02/00
Parameter	**Units**					
Volatiles						
Chloromethane	UG/L	10 U	10 U	10 U	10 U	10 UJ
Bromomethane	UG/L	10 U	10 U	10 U	10 U	10 UJ
Vinyl Chloride	UG/L	10 U	290 J	6 J	10 U	100 J
Chloroethane	UG/L	10 U	10 U	10 U	10 U	10 UJ
Methylene Chloride	UG/L	10 U	15 U	10 U	69	10 UJ
Acetone	UG/L	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Carbon Disulfide	UG/L	10 U	10 U	640 J	1300 J	4 J
1,1-Dichloroethene	UG/L	10 U	120	140 J	89	8 J
1,1-Dichloroethane	UG/L	10 U	11	8 J	2 J	10 UJ
1,2-Dichloroethene (total)	UG/L	2 J	13000 DJ	1500 J	970 J	4200 D
Chloroform	UG/L	10 U	10 U	230 J	1700 J	5 J
1,2-Dichloroethane	UG/L	10 U	10 U	10 U	10 U	10 UJ
2-Butanone	UG/L	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
1,1,1-Trichloroethane	UG/L	10 U	10 U	10 U	14	10 UJ
Carbon Tetrachloride	UG/L	10 U	10 U	10 U	37	10 UJ
Bromodichloromethane	UG/L	10 U	10 U	10 U	10 U	10 UJ
1,2-Dichloropropane	UG/L	10 U	10 U	10 U	10 U	10 UJ
1,3-Dichloropropene (cis)	UG/L	10 U	10 U	10 U	10 U	10 UJ
Trichloroethene	UG/L	10 U	300000 D	760000 D	500000 D	3500 D
Dibromochloromethane	UG/L	10 U	10 U	10 U	10 U	10 UJ
1,1,2-Trichloroethane	UG/L	10 U	10 U	10 U	200	10 UJ
Benzene	UG/L	10 U	12	10 U	23	10 UJ
1,3-Dichloropropene (trans)	UG/L	10 U	10 U	10 U	10 U	10 UJ
Bromoform	UG/L	10 U	10 U	10 U	10 U	10 UJ

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

Advanced Selection: WG_11-00
J:\35688.00\db\program\program.mde
Printed: 1/3/01 4:01:45 PM
[MATRIX] = 'WG' AND [FLDSAMPID] <> 'MW-3D-GW-DNAPL' AND [LOGDATE] >= #11/1/00#

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-01D	MW-02D	MW-03D	MW-04D	MW-04S
Sample ID		MW-1D-GW	MW-2D-GW	MW-3D-GW	MW-4D-GW	MW-4S-GW
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft.)		-	-	-	-	-
Date Sampled		11/02/00	11/02/00	11/02/00	11/02/00	11/02/00
Parameter	Units					
Volatiles						
4-Methyl-2-pentanone	UG/L	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
2-Hexanone	UG/L	10 U	10 U	10 U	10 U	10 UJ
Tetrachloroethene	UG/L	10 U	580 J	800 J	7500 DJ	140 J
Toluene	UG/L	10 U	220 J	390 J	260 J	2 J
1,1,2,2-Tetrachloroethane	UG/L	10 U	10 U	10 U	10 U	10 UJ
Chlorobenzene	UG/L	10 U	12	12 J	41	10 UJ
Ethylbenzene	UG/L	10 U	8 J	10 J	12	10 UJ
Styrene	UG/L	10 U	10 U	10 U	10 U	10 UJ
Xylene (Total)	UG/L	10 U	37	48 J	78	10 UJ
Metals						
Aluminum	UG/L	190 B	87.8 B	127 B	19.1 B	183 B
Antimony	UG/L	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Arsenic	UG/L	2.5 U	2.5 U	3.9 B	2.5 U	2.5 U
Barium	UG/L	14.0 B	34.5 B	20.1 B	13.0 B	85.5 B
Beryllium	UG/L	0.18 B	0.10 U	0.10 U	0.10 U	0.10 U
Cadmium	UG/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Calcium	UG/L	851000	261000	473000	507000	150000
Chromium	UG/L	5.6 B	10.1	7.3 B	4.3 B	3.5 U
Cobalt	UG/L	0.90 U	1.7 B	0.90 U	0.90 U	0.90 U
Copper	UG/L	2.5 B	3.5 B	4.1 B	2.5 B	4.5 B
Iron	UG/L	290	2080	858	230	353
Lead	UG/L	1.4 U	7.4	1.9 B	1.4 U	4.9
Magnesium	UG/L	188000	67000	118000	145000	30900
Manganese	UG/L	22.6	499	38.7	25.0	158

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

Advanced Selection: WG_11-00
J:\35688 00\db\program\program.mde
Printed: 1/3/01 4:01:46 PM
[MATRIX] = 'WG' AND [FLDSAMPID] <> 'MW-3D-GW-DNAPL' AND [LOGDATE] >= #11/1/00#

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-01D	MW-02D	MW-03D	MW-04D	MW-04S
Sample ID		MW-1D-GW	MW-2D-GW	MW-3D-GW	MW-4D-GW	MW-4S-GW
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft.)		-	-	-	-	-
Date Sampled		11/02/00	11/02/00	11/02/00	11/02/00	11/02/00
Parameter	**Units**					
Metals						
Mercury	UG/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nickel	UG/L	3.1 B	12.0 B	5.2 B	1.9 U	3.5 B
Potassium	UG/L	90600 J	4350 B	14800 J	33200 J	2720 B
Selenium	UG/L	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Silver	UG/L	0.60 B	0.50 U	0.50 U	0.50 U	0.50 U
Sodium	UG/L	1290000	50300	301000	636000	29800
Thallium	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Vanadium	UG/L	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Zinc	UG/L	15.2 B	162	11.6 B	4.2 B	103
Miscellaneous Parameters						
Cyanide	UG/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

Advanced Selection: WG_11-00
J:\35688.00\db\program\program.mde
Printed: 1/3/01 4:01:46 PM
[MATRIX] = 'WG' AND [FLDSAMPID] <> 'MW-3D-GW-DNAPL' AND [LOGDATE] >= #11/1/00#

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-05D	MW-05S	MW-06D	MW-06S	MW-07D
Sample ID		MW-5D-GW	MW-5S-GW	MW-6D-GW	MW-6S-GW	MW-7D-GW
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft.)		-	-	-	-	-
Date Sampled		11/02/00	11/02/00	11/02/00	11/02/00	11/03/00
Parameter	Units					
Volatiles						
Chloromethane	UG/L	10 U	10 U	10 UJ	10 U	10 U
Bromomethane	UG/L	10 U	10 U	10 UJ	10 U	10 U
Vinyl Chloride	UG/L	750 J	10 U	180 J	80	1 J
Chloroethane	UG/L	10 U	10 U	10 UJ	10 U	10 U
Methylene Chloride	UG/L	14 U	10 U	10 UJ	10 U	10 U
Acetone	UG/L	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Carbon Disulfide	UG/L	8 J	10 U	93 J	10 U	10 U
1,1-Dichloroethene	UG/L	330 J	10 U	6 J	2 J	10 U
1,1-Dichloroethane	UG/L	10 U	10 U	10 UJ	10 U	10 U
1,2-Dichloroethene (total)	UG/L	49000 DJ	39	3300 D	1200 D	140
Chloroform	UG/L	39	10 U	10 UJ	10 U	1 J
1,2-Dichloroethane	UG/L	10 U	10 U	10 UJ	10 U	10 U
2-Butanone	UG/L	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
1,1,1-Trichloroethane	UG/L	10 U	10 U	10 UJ	10 U	10 U
Carbon Tetrachloride	UG/L	10 U	10 U	10 UJ	10 U	10 U
Bromodichloromethane	UG/L	10 U	10 U	10 UJ	10 U	10 U
1,2-Dichloropropane	UG/L	10 U	10 U	10 UJ	10 U	10 U
1,3-Dichloropropene (cis)	UG/L	10 U	10 U	10 UJ	10 U	10 U
Trichloroethene	UG/L	190000 D	130	370 D	920 D	220 D
Dibromochloromethane	UG/L	10 U	10 U	10 UJ	10 U	10 UJ
1,1,2-Trichloroethane	UG/L	10 U	10 U	10 UJ	10 U	10 U
Benzene	UG/L	13	10 U	11 J	10 U	10 U
1,3-Dichloropropene (trans)	UG/L	10 U	10 U	10 UJ	10 U	10 U
Bromoform	UG/L	10 U	10 U	10 UJ	10 U	10 UJ

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

Advanced Selection: WG_11-00
J:\35688.00\db\program\program.mde
Printed: 1/3/01 4:01:46 PM
[MATRIX] = 'WG' AND [FLDSAMPID] <> 'MW-3D-GW-DNAPL' AND [LOGDATE] >= #11/1/00#

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-05D	MW-05S	MW-06D	MW-06S	MW-07D
Sample ID		MW-5D-GW	MW-5S-GW	MW-6D-GW	MW-6S-GW	MW-7D-GW
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft.)		-	-	-	-	-
Date Sampled		11/02/00	11/02/00	11/02/00	11/02/00	11/03/00
Parameter	**Units**					
Volatiles						
4-Methyl-2-pentanone	UG/L	10 UJ	10 U	10 UJ	10 UJ	10 U
2-Hexanone	UG/L	10 U	10 U	10 UJ	10 U	10 U
Tetrachloroethene	UG/L	21000 DJ	10 U	28 J	10 U	7 J
Toluene	UG/L	76	10 U	12 J	10 U	10 U
1,1,2,2-Tetrachloroethane	UG/L	10 U	10 U	10 UJ	10 U	10 U
Chlorobenzene	UG/L	72	10 U	10 UJ	10 U	10 U
Ethylbenzene	UG/L	25	10 UJ	1 J	10 U	10 U
Styrene	UG/L	10 U	10 U	10 UJ	10 U	10 U
Xylene (Total)	UG/L	100	10 U	9 J	10 U	10 U
Metals						
Aluminum	UG/L	660	281	56.6 B	118 B	70.1 B
Antimony	UG/L	1.7 U	1.7 U	1.7 U	1.7 B	1.7 U
Arsenic	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Barium	UG/L	48.3 B	185 B	89.8 B	73.7 B	449
Beryllium	UG/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Cadmium	UG/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Calcium	UG/L	154000	167000	132000	131000	250000
Chromium	UG/L	3.5 U	3.5 U	7.6 B	5.7 B	8.4 B
Cobalt	UG/L	1.6 B	0.90 U	1.3 B	2.7 B	2.2 B
Copper	UG/L	4.2 B	7.1 B	1.5 U	5.0 B	5.7 B
Iron	UG/L	2600	23000	2090	1300	232
Lead	UG/L	1.4 U	8.1	1.4 U	3.0 B	1.4 U
Magnesium	UG/L	38200	32200	27100	29600	343 B
Manganese	UG/L	247	333	937	520	21.8

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

Advanced Selection: WG_11-00
J:\35688.00\db\program\program.mde
Printed: 1/3/01 4:01:46 PM
[MATRIX] = 'WG' AND [FLDSAMPID] <> 'MW-3D-GW-DNAPL' AND [LOGDATE] >= #11/1/00#

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-05D	MW-05S	MW-06D	MW-06S	MW-07D
Sample ID		MW-5D-GW	MW-5S-GW	MW-6D-GW	MW-6S-GW	MW-7D-GW
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft.)		-	-	-	-	-
Date Sampled		11/02/00	11/02/00	11/02/00	11/02/00	11/03/00
Parameter	**Units**					
Metals						
Mercury	UG/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nickel	UG/L	1.9 U	1.9 U	8.9 B	21.2 B	14.6 B
Potassium	UG/L	3280 B	6160 J	6330 J	3900 B	75300 J
Selenium	UG/L	1.7 U	1.8 B	1.7 U	2.6 B	1.7 U
Silver	UG/L	0.62 B	0.55 B	0.50 U	0.50 U	0.84 B
Sodium	UG/L	23700	47600	43700	37000	830000
Thallium	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Vanadium	UG/L	0.70 U	0.82 B	0.70 U	0.70 U	0.70 U
Zinc	UG/L	5.4 B	66.6	19.1 B	108	4.4 B
Miscellaneous Parameters						
Cyanide	UG/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-07S	MW-08D	MW-08S	MW-09D	MW-09S
Sample ID		MW-7S-GW	MW-8D-GW	MW-8S-GW	MW-9D-GW	MW-9S-GW
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft.)		-	-	-	-	-
Date Sampled		11/03/00	11/01/00	11/01/00	11/03/00	11/03/00
Parameter	Units					
Volatiles						
Chloromethane	UG/L	10 U	10 U	10 U	20 U	10 U
Bromomethane	UG/L	10 U	10 U	10 U	20 U	10 U
Vinyl Chloride	UG/L	57	10 U	10 U	20 U	10 U
Chloroethane	UG/L	10 U	10 U	10 U	20 U	10 U
Methylene Chloride	UG/L	10 U	10 U	10 U	20 U	10 U
Acetone	UG/L	96 J	10 UJ	10 UJ	46 J	250 DJ
Carbon Disulfide	UG/L	10 U	190	10 U	20 U	10 U
1,1-Dichloroethene	UG/L	3 J	10 U	10 U	20 U	10 U
1,1-Dichloroethane	UG/L	10 U	10 U	10 U	20 U	10 U
1,2-Dichloroethene (total)	UG/L	900 D	10 U	10 U	20 U	3 J
Chloroform	UG/L	10 U	2 J	10 U	20 U	10 U
1,2-Dichloroethane	UG/L	10 U	10 U	10 U	20 U	10 U
2-Butanone	UG/L	10 UJ	14 J	10 UJ	30 J	10 UJ
1,1,1-Trichloroethane	UG/L	10 U	10 U	10 U	20 U	10 U
Carbon Tetrachloride	UG/L	10 U	10 U	10 U	20 U	10 U
Bromodichloromethane	UG/L	10 U	10 U	10 U	20 U	10 U
1,2-Dichloropropane	UG/L	10 U	10 U	10 U	20 U	10 U
1,3-Dichloropropene (cis)	UG/L	10 U	10 U	10 U	20 U	10 U
Trichloroethene	UG/L	1500 D	10 U	10 U	20 U	140
Dibromochloromethane	UG/L	10 UJ	10 U	10 U	20 U	10 UJ
1,1,2-Trichloroethane	UG/L	10 U	10 U	10 U	20 U	10 U
Benzene	UG/L	10 U	180 D	10 U	14 J	10 U
1,3-Dichloropropene (trans)	UG/L	10 U	10 U	10 U	20 U	10 U
Bromoform	UG/L	10 UJ	10 U	10 U	20 U	10 UJ

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

Advanced Selection: WG_11-00
J:\35688.00\db\program\program.mde
Printed: 1/3/01 4:01:46 PM
[MATRIX] = 'WG' AND [FLDSAMPID] <> 'MW-3D-GW-DNAPL' AND [LOGDATE] >= #11/1/00#

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-07S	MW-08D	MW-08S	MW-09D	MW-09S
Sample ID		MW-7S-GW	MW-8D-GW	MW-8S-GW	MW-9D-GW	MW-9S-GW
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft.)		-	-	-	-	-
Date Sampled		11/03/00	11/01/00	11/01/00	11/03/00	11/03/00
Parameter	**Units**					
Volatiles						
4-Methyl-2-pentanone	UG/L	10 U	10 UJ	10 UJ	20 U	10 U
2-Hexanone	UG/L	10 U	10 U	10 U	20 U	10 U
Tetrachloroethene	UG/L	34	10 U	10 U	20 U	10 U
Toluene	UG/L	10 U	10	10 U	13 J	10 U
1,1,2,2-Tetrachloroethane	UG/L	10 U	10 U	10 U	20 U	10 U
Chlorobenzene	UG/L	10 U	10 U	10 U	20 U	10 U
Ethylbenzene	UG/L	10 U	11	10 U	20 UJ	10 U
Styrene	UG/L	10 U	10 U	10 U	20 U	10 U
Xylene (Total)	UG/L	10 U	57	10 U	12 J	10 U
Metals						
Aluminum	UG/L	630	272	69.2 B	251	364
Antimony	UG/L	1.7 U	4.0 B	1.7 U	3.0 B	1.7 U
Arsenic	UG/L	2.5 U	6.0 B	2.5 U	2.9 B	2.5 U
Barium	UG/L	114 B	319	166 B	228	122 B
Beryllium	UG/L	0.11 B	0.25 B	0.10 U	0.31 B	0.10 U
Cadmium	UG/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Calcium	UG/L	223000	2220000	175000	1860000	154000
Chromium	UG/L	7.5 B	138	3.5 U	69.9	22.4
Cobalt	UG/L	2.6 B	1.4 B	2.1 B	6.1 B	5.4 B
Copper	UG/L	10.8 B	45.8	3.9 B	10.1 B	8.9 B
Iron	UG/L	3510	1120	2170	1480	3490
Lead	UG/L	21.1	1.4 U	12.5	1.4 B	31.1
Magnesium	UG/L	66000	374000	60200	705000	44800
Manganese	UG/L	981	47.6	199	131	96.4

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

Advanced Selection: WG_11-00
J:\35688.00\db\program\program mde
Printed: 1/3/01 4:01:47 PM
[MATRIX] = 'WG' AND [FLDSAMPID] <> 'MW-3D-GW-DNAPL' AND [LOGDATE] >= #11/1/00#

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-07S	MW-08D	MW-08S	MW-09D	MW-09S
Sample ID		MW-7S-GW	MW-8D-GW	MW-8S-GW	MW-9D-GW	MW-9S-GW
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft.)		-	-	-	-	-
Date Sampled		11/03/00	11/01/00	11/01/00	11/03/00	11/03/00
Parameter	Units					
Metals						
Mercury	UG/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nickel	UG/L	8.8 B	11.5 B	3.4 B	44.6 U	15.5 B
Potassium	UG/L	2980 B	429000 J	1790 B	313000 J	47400 J
Selenium	UG/L	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Silver	UG/L	0.50 U	7.0 B	0.50 U	15.6	2.8 B
Sodium	UG/L	22700	15500000	85300	46400000	245000
Thallium	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Vanadium	UG/L	2.1 B	0.70 U	0.70 U	0.70 U	1.0 B
Zinc	UG/L	75.4	13.7 B	67.4	38.5	31.3
Miscellaneous Parameters						
Cyanide	UG/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		OB-01
Sample ID		MW-OB1-GW
Matrix		Groundwater
Depth Interval (ft.)		-
Date Sampled		11/03/00
Parameter	Units	
Volatiles		
Chloromethane	UG/L	10 U
Bromomethane	UG/L	10 U
Vinyl Chloride	UG/L	10 U
Chloroethane	UG/L	10 U
Methylene Chloride	UG/L	10 U
Acetone	UG/L	10 UJ
Carbon Disulfide	UG/L	10 U
1,1-Dichloroethene	UG/L	10 U
1,1-Dichloroethane	UG/L	10 U
1,2-Dichloroethene (total)	UG/L	9 J
Chloroform	UG/L	10 U
1,2-Dichloroethane	UG/L	10 U
2-Butanone	UG/L	10 UJ
1,1,1-Trichloroethane	UG/L	10 U
Carbon Tetrachloride	UG/L	10 U
Bromodichloromethane	UG/L	10 U
1,2-Dichloropropane	UG/L	10 U
1,3-Dichloropropene (cis)	UG/L	10 U
Trichloroethene	UG/L	86 U
Dibromochloromethane	UG/L	10 UJ
1,1,2-Trichloroethane	UG/L	10 U
Benzene	UG/L	10 U
1,3-Dichloropropene (trans)	UG/L	10 U
Bromoform	UG/L	10 UJ

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		OB-01
Sample ID		MW-OB1-GW
Matrix		Groundwater
Depth Interval (ft.)		-
Date Sampled		11/03/00
Parameter	**Units**	
Volatiles		
4-Methyl-2-pentanone	UG/L	10 U
2-Hexanone	UG/L	10 U
Tetrachloroethene	UG/L	10 U
Toluene	UG/L	10 U
1,1,2,2-Tetrachloroethane	UG/L	10 U
Chlorobenzene	UG/L	10 U
Ethylbenzene	UG/L	10 U
Styrene	UG/L	10 U
Xylene (Total)	UG/L	10 U
Metals		
Aluminum	UG/L	2140
Antimony	UG/L	1.7 U
Arsenic	UG/L	2.5 U
Barium	UG/L	66.6 B
Beryllium	UG/L	0.36 B
Cadmium	UG/L	0.40 U
Calcium	UG/L	248000
Chromium	UG/L	48.8
Cobalt	UG/L	147
Copper	UG/L	58.0
Iron	UG/L	3370
Lead	UG/L	39.6
Magnesium	UG/L	68600
Manganese	UG/L	572

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED GROUNDWATER SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		OB-01
Sample ID		MW-OB1-GW
Matrix		Groundwater
Depth Interval (ft.)		-
Date Sampled		11/03/00
Parameter	**Units**	
Metals		
Mercury	UG/L	0.10 U
Nickel	UG/L	72.3
Potassium	UG/L	9280 J
Selenium	UG/L	1.7 U
Silver	UG/L	0.50 U
Sodium	UG/L	15700
Thallium	UG/L	2.3 U
Vanadium	UG/L	9.3 B
Zinc	UG/L	90.5
Miscellaneous Parameters		
Cyanide	UG/L	51.5

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

Advanced Selection: WG_11-00
J:\35688.00\db\program\program.mde
Printed: 1/3/01 4:01:47 PM
[MATRIX] = 'WG' AND [FLDSAMPID] <> 'MW-3D-GW-DNAPL' AND [LOGDATE] >= #11/1/00#

TABLE 2
VALIDATED DNAPL SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-03D
Sample ID		MW-3D-GW-DNAPL
Matrix		DNAPL
Depth Interval (ft.)		-
Date Sampled		11/02/00
Parameter	**Units**	
Volatiles		
Chloromethane	UG/KG	100000 U
Bromomethane	UG/KG	100000 U
Vinyl chloride	UG/KG	100000 U
Chloroethane	UG/KG	100000 U
Methylene chloride	UG/KG	100000 U
Acetone	UG/KG	100000 UJ
Carbon disulfide	UG/KG	100000 U
1,1-Dichloroethene	UG/KG	100000 U
1,1-Dichloroethane	UG/KG	100000 U
1,2-Dichloroethene (total)	UG/KG	100000 U
Chloroform	UG/KG	100000 U
1,2-Dichloroethane	UG/KG	100000 U
2-Butanone	UG/KG	100000 UJ
1,1,1-Trichloroethane	UG/KG	100000 U
Carbon Tetrachloride	UG/KG	100000 U
Bromodichloromethane	UG/KG	100000 U
1,2-Dichloropropane	UG/KG	100000 U
1,3-Dichloropropene (cis)	UG/KG	100000 U
Trichloroethene	UG/KG	780000
Dibromochloromethane	UG/KG	100000 U
1,1,2-Trichloroethane	UG/KG	100000 U
Benzene	UG/KG	100000 U
1,3-Dichloropropene (trans)	UG/KG	100000 U
Bromoform	UG/KG	100000 U

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED DNAPL SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-03D
Sample ID		MW-3D-GW-DNAPL
Matrix		DNAPL
Depth Interval (ft.)		-
Date Sampled		11/02/00
Parameter	**Units**	
Volatiles		
4-Methyl-2-pentanone	UG/KG	100000 U
2-Hexanone	UG/KG	100000 U
Tetrachloroethene	UG/KG	100000 U
Toluene	UG/KG	100000 U
1,1,2,2-Tetrachloroethane	UG/KG	100000 U
Chlorobenzene	UG/KG	100000 U
Ethylbenzene	UG/KG	100000 U
Styrene	UG/KG	100000 U
Xylene (Total)	UG/KG	100000 U
Semivolatiles		
Phenol	UG/KG	1000000 U
bis(2-chloroethyl)ether	UG/KG	1000000 U
2-Chlorophenol	UG/KG	1000000 U
1,3-Dichlorobenzene	UG/KG	1000000 U
1,4-Dichlorobenzene	UG/KG	1000000 U
1,2-Dichlorobenzene	UG/KG	1000000 U
2-Methylphenol	UG/KG	1000000 U
2,2'-oxybis(1-Chloropropane)	UG/KG	1000000 U
4-Methylphenol	UG/KG	1000000 U
N-Nitroso-di-n-propylamine	UG/KG	1000000 U
Hexachloroethane	UG/KG	1000000 U
Nitrobenzene	UG/KG	1000000 U
Isophorone	UG/KG	1000000 U
2-Nitrophenol	UG/KG	1000000 U

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED DNAPL SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-03D
Sample ID		MW-3D-GW-DNAPL
Matrix		DNAPL
Depth Interval (ft.)		-
Date Sampled		11/02/00
Parameter	**Units**	
Semivolatiles		
2,4-Dimethylphenol	UG/KG	1000000 U
bis(2-chloroethoxy)methane	UG/KG	1000000 U
2,4-Dichlorophenol	UG/KG	1000000 UJ
1,2,4-Trichlorobenzene	UG/KG	1000000 U
Naphthalene	UG/KG	120000 J
4-Chloroaniline	UG/KG	1000000 U
Hexachlorobutadiene	UG/KG	1000000 U
4-Chloro-3-methylphenol	UG/KG	1000000 U
2-Methylnaphthalene	UG/KG	270000 J
Hexachlorocyclopentadiene	UG/KG	1000000 U
2,4,6-Trichlorophenol	UG/KG	1000000 U
2,4,5-Trichlorophenol	UG/KG	2500000 U
2-Chloronaphthalene	UG/KG	1000000 U
2-Nitroaniline	UG/KG	2500000 U
Dimethylphthalate	UG/KG	1000000 U
Acenaphthylene	UG/KG	1000000 U
2,6-Dinitrotoluene	UG/KG	1000000 U
3-Nitroaniline	UG/KG	2500000 U
Acenaphthene	UG/KG	1000000 U
2,4-Dinitrophenol	UG/KG	2500000 UJ
4-Nitrophenol	UG/KG	2500000 U
Dibenzofuran	UG/KG	1000000 U
2,4-Dinitrotoluene	UG/KG	1000000 U
Diethylphthalate	UG/KG	1000000 U

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED DNAPL SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-03D
Sample ID		MW-3D-GW-DNAPL
Matrix		DNAPL
Depth Interval (ft.)		-
Date Sampled		11/02/00
Parameter	**Units**	
Semivolatiles		
4-Chlorophenyl-phenylether	UG/KG	1000000 U
Fluorene	UG/KG	1000000 U
4-Nitroaniline	UG/KG	2500000 U
4,6-Dinitro-2-methylphenol	UG/KG	2500000 U
N-Nitrosodiphenylamine	UG/KG	1000000 U
4-Bromophenyl-phenylether	UG/KG	1000000 U
Hexachlorobenzene	UG/KG	1000000 U
Pentachlorophenol	UG/KG	2500000 U
Phenanthrene	UG/KG	1000000 U
Anthracene	UG/KG	1000000 U
Carbazole	UG/KG	1000000 U
di-n-Butylphthalate	UG/KG	1000000 U
Fluoranthene	UG/KG	1000000 U
Pyrene	UG/KG	1000000 U
Butylbenzylphthalate	UG/KG	1000000 U
3,3'-Dichlorobenzidine	UG/KG	1000000 U
Benzo(a)anthracene	UG/KG	1000000 U
Chrysene	UG/KG	1000000 U
bis(2-ethylhexyl)phthalate	UG/KG	110000 J
di-n-Octylphthalate	UG/KG	1000000 U
Benzo(b)fluoranthene	UG/KG	1000000 U
Benzo(k)fluoranthene	UG/KG	1000000 U
Benzo(a)pyrene	UG/KG	1000000 U
Indeno(1,2,3-cd)pyrene	UG/KG	1000000 U

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED DNAPL SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-03D
Sample ID		MW-3D-GW-DNAPL
Matrix		DNAPL
Depth Interval (ft.)		-
Date Sampled		11/02/00
Parameter	**Units**	
Semivolatiles		
Dibenz(a,h)anthracene	UG/KG	1000000 U
Benzo(g,h,i)perylene	UG/KG	1000000 U
Pesticides		
alpha-BHC	UG/KG	500 U
beta-BHC	UG/KG	500 U
delta-BHC	UG/KG	500 U
gamma-BHC (Lindane)	UG/KG	500 U
Heptachlor	UG/KG	500 U
Aldrin	UG/KG	500 U
Heptachlor epoxide	UG/KG	500 U
Endosulfan I	UG/KG	500 U
Dieldrin	UG/KG	1000 U
4,4'-DDE	UG/KG	1000 U
Endrin	UG/KG	1000 U
Endosulfan II	UG/KG	1000 U
4,4'-DDD	UG/KG	1000 U
Endosulfan sulfate	UG/KG	1000 U
4,4'-DDT	UG/KG	1000 U
Methoxychlor	UG/KG	5000 U
Endrin ketone	UG/KG	1000 U
Endrin aldehyde	UG/KG	1000 U
alpha-Chlordane	UG/KG	500 U
gamma-Chlordane	UG/KG	500 U
Toxaphene	UG/KG	50000 U

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED DNAPL SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-03D
Sample ID		MW-3D-GW-DNAPL
Matrix		DNAPL
Depth Interval (ft.)		-
Date Sampled		11/02/00
Parameter	**Units**	
PCBs		
Aroclor 1016	UG/KG	10000 U
Aroclor 1221	UG/KG	20000 U
Aroclor 1232	UG/KG	10000 U
Aroclor 1242	UG/KG	10000 U
Aroclor 1248	UG/KG	10000 U
Aroclor 1254	UG/KG	10000 U
Aroclor 1260	UG/KG	10000 U
Metals		
Aluminum	MG/KG	20.6 B
Antimony	MG/KG	0.34 U
Arsenic	MG/KG	0.50 U
Barium	MG/KG	2.4 B
Beryllium	MG/KG	0.021 B
Cadmium	MG/KG	0.080 U
Calcium	MG/KG	563 B
Chromium	MG/KG	6.1
Cobalt	MG/KG	0.18 U
Copper	MG/KG	2.9 B
Iron	MG/KG	94.1
Lead	MG/KG	2.9
Magnesium	MG/KG	136 B
Manganese	MG/KG	0.33 B
Mercury	MG/KG	0.043 U
Nickel	MG/KG	0.38 U

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED DNAPL SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		MW-03D
Sample ID		MW-3D-GW-DNAPL
Matrix		DNAPL
Depth Interval (ft.)		-
Date Sampled		11/02/00
Parameter	**Units**	
Metals		
Potassium	MG/KG	13.0 B
Selenium	MG/KG	0.57 B
Silver	MG/KG	0.16 B
Sodium	MG/KG	349 B
Thallium	MG/KG	0.46 U
Vanadium	MG/KG	0.14 U
Zinc	MG/KG	8.6

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

Advanced Selection: LF
J:\35688.00\db\program\program.mde
Printed: 1/3/01 3:15:28 PM
[FLDSAMPID] = 'MW-3D-GW-DNAPL'

TABLE 2
VALIDATED FIELD QC SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		FIELDQC	FIELDQC	FIELDQC
Sample ID		SC-TB	SC-RB-1	SC-TB-1
Matrix		Quality Control	Quality Control	Quality Control
Depth Interval (ft.)		-	-	-
Date Sampled		11/02/00	11/03/00	11/03/00
Parameter	Units	Trip Blank (1-1)	Material Rinse Blank (1-1)	Trip Blank (1-1)
Volatiles				
Chloromethane	UG/L	10 U	10 U	10 U
Bromomethane	UG/L	10 U	10 U	10 U
Vinyl Chloride	UG/L	10 U	10 U	10 U
Chloroethane	UG/L	10 U	10 U	10 U
Methylene Chloride	UG/L	10 U	10 U	10 U
Acetone	UG/L	10 UJ	10 UJ	10 UJ
Carbon Disulfide	UG/L	10 U	10 U	10 U
1,1-Dichloroethene	UG/L	10 U	10 U	10 U
1,1-Dichloroethane	UG/L	10 U	10 U	10 U
1,2-Dichloroethene (total)	UG/L	10 U	10 U	10 U
Chloroform	UG/L	10 U	10 U	10 U
1,2-Dichloroethane	UG/L	10 U	10 U	10 U
2-Butanone	UG/L	10 UJ	10 UJ	10 UJ
1,1,1-Trichloroethane	UG/L	10 U	10 U	10 U
Carbon Tetrachloride	UG/L	10 U	10 U	10 U
Bromodichloromethane	UG/L	10 U	10 U	10 U
1,2-Dichloropropane	UG/L	10 U	10 U	10 U
1,3-Dichloropropene (cis)	UG/L	10 U	10 U	10 U
Trichloroethene	UG/L	5 J	24	4 J
Dibromochloromethane	UG/L	10 UJ	10 UJ	10 UJ
1,1,2-Trichloroethane	UG/L	10 U	10 U	10 U
Benzene	UG/L	10 U	10 U	10 U
1,3-Dichloropropene (trans)	UG/L	10 U	10 U	10 U
Bromoform	UG/L	10 UJ	10 UJ	10 UJ

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		FIELDQC	FIELDQC	FIELDQC
Sample ID		SC-TB	SC-RB-1	SC-TB-1
Matrix		Quality Control	Quality Control	Quality Control
Depth Interval (ft.)		-	-	-
Date Sampled		11/02/00	11/03/00	11/03/00
Parameter	Units	Trip Blank (1-1)	Material Rinse Blank (1-1)	Trip Blank (1-1)
Volatiles				
4-Methyl-2-pentanone	UG/L	10 U	10 U	10 U
2-Hexanone	UG/L	10 U	10 U	10 U
Tetrachloroethene	UG/L	10 U	1 J	10 U
Toluene	UG/L	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	UG/L	10 U	10 U	10 U
Chlorobenzene	UG/L	10 U	10 U	10 U
Ethylbenzene	UG/L	10 U	10 U	10 U
Styrene	UG/L	10 U	10 U	10 U
Xylene (Total)	UG/L	10 U	10 U	10 U
Metals				
Aluminum	UG/L	NA	30.9 B	NA
Antimony	UG/L	NA	1.7 U	NA
Arsenic	UG/L	NA	2.5 U	NA
Barium	UG/L	NA	0.40 U	NA
Beryllium	UG/L	NA	0.10 U	NA
Cadmium	UG/L	NA	0.40 U	NA
Calcium	UG/L	NA	176 B	NA
Chromium	UG/L	NA	3.5 U	NA
Cobalt	UG/L	NA	0.90 U	NA
Copper	UG/L	NA	1.5 U	NA
Iron	UG/L	NA	27.1 B	NA
Lead	UG/L	NA	1.4 U	NA
Magnesium	UG/L	NA	19.7 B	NA
Manganese	UG/L	NA	0.30 U	NA

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		FIELDQC	FIELDQC	FIELDQC
Sample ID		SC-TB	SC-RB-1	SC-TB-1
Matrix		Quality Control	Quality Control	Quality Control
Depth Interval (ft.)		-	-	-
Date Sampled		11/02/00	11/03/00	11/03/00
Parameter	Units	Trip Blank (1-1)	Material Rinse Blank (1-1)	Trip Blank (1-1)
Metals				
Mercury	UG/L	NA	0.10 U	NA
Nickel	UG/L	NA	1.9 U	NA
Potassium	UG/L	NA	6.0 U	NA
Selenium	UG/L	NA	1.7 U	NA
Silver	UG/L	NA	0.50 U	NA
Sodium	UG/L	NA	431 B	NA
Thallium	UG/L	NA	2.3 U	NA
Vanadium	UG/L	NA	0.70 U	NA
Zinc	UG/L	NA	2.2 U	NA
Miscellaneous Parameters				
Cyanide	UG/L	NA	10.0 U	NA

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		FIELDQC
Sample ID		SC-WC-1
Matrix		Drilling Water
Depth Interval (ft.)		-
Date Sampled		11/03/00
Parameter	Units	(1-1)
Volatiles		
Chloromethane	UG/L	10 U
Bromomethane	UG/L	10 U
Vinyl Chloride	UG/L	10 U
Chloroethane	UG/L	10 U
Methylene Chloride	UG/L	10 U
Acetone	UG/L	10 UJ
Carbon Disulfide	UG/L	10 U
1,1-Dichloroethene	UG/L	10 U
1,1-Dichloroethane	UG/L	10 U
1,2-Dichloroethene (total)	UG/L	10 U
Chloroform	UG/L	10 U
1,2-Dichloroethane	UG/L	10 U
2-Butanone	UG/L	10 UJ
1,1,1-Trichloroethane	UG/L	10 U
Carbon Tetrachloride	UG/L	10 U
Bromodichloromethane	UG/L	8 J
1,2-Dichloropropane	UG/L	10 U
1,3-Dichloropropene (cis)	UG/L	10 U
Trichloroethene	UG/L	10 U
Dibromochloromethane	UG/L	3 J
1,1,2-Trichloroethane	UG/L	10 U
Benzene	UG/L	10 U
1,3-Dichloropropene (trans)	UG/L	10 U
Bromoform	UG/L	10 UJ

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		FIELDQC
Sample ID		SC-WC-1
Matrix		Drilling Water
Depth Interval (ft.)		-
Date Sampled		11/03/00
Parameter	Units	(1-1)
Volatiles		
4-Methyl-2-pentanone	UG/L	10 U
2-Hexanone	UG/L	10 U
Tetrachloroethene	UG/L	10 U
Toluene	UG/L	10 U
1,1,2,2-Tetrachloroethane	UG/L	10 U
Chlorobenzene	UG/L	10 U
Ethylbenzene	UG/L	10 U
Styrene	UG/L	10 U
Xylene (Total)	UG/L	10 U
Metals		
Aluminum	UG/L	48.9 B
Antimony	UG/L	1.7 U
Arsenic	UG/L	2.5 U
Barium	UG/L	18.2 B
Beryllium	UG/L	0.10 U
Cadmium	UG/L	1.6 B
Calcium	UG/L	29100
Chromium	UG/L	3.5 U
Cobalt	UG/L	0.90 U
Copper	UG/L	272
Iron	UG/L	45.3 B
Lead	UG/L	1.4 U
Magnesium	UG/L	7230
Manganese	UG/L	2.7 B

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE RESULTS
SCOBELL CHEMICAL

Location ID		FIELDQC
Sample ID		SC-WC-1
Matrix		Drilling Water
Depth Interval (ft.)		-
Date Sampled		11/03/00
Parameter	Units	(1-1)
Metals		
Mercury	UG/L	0.10 U
Nickel	UG/L	1.9 U
Potassium	UG/L	1460 B
Selenium	UG/L	1.7 U
Silver	UG/L	0.58 B
Sodium	UG/L	12000
Thallium	UG/L	2.3 U
Vanadium	UG/L	0.70 U
Zinc	UG/L	310
Miscellaneous Parameters		
Cyanide	UG/L	10.0 U

Flags assigned during chemistry validation are shown.

MADE BY __JJL__1/2/01_
CHECKED BY _DKF__1/3/01_

Detection Limits shown are PQL

ATTACHMENT A

SUPPORT DOCUMENTATION

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: H2M LABS INC. Contract: _____

Lab Code: 10478 Case No.: _____ SAS No.: _____ SDG No.: URS106

	EPA SAMPLE NO.	SMC1 (DCE) #	SMC2 (TOL) #	SMC3 (BFB) #	TOT OUT
01	VBLK11/7/00	94	95	91	0
02	MW8DGW	101	98	91	0
03	MW8DGWDL	95	100	95	0
04	MW8SGW	94	101	93	0
05	MW6SGW	95	100	95	0
06	MW1DGW	95	99	91	0
07	MW2DGW	100	93	86	0
08	MW3DGW	97	92	144 *	1
09	MW4DGW	98	96	88	0
10	MW4SGW	96	98	85 *	1
11	MW5DGW	105	102	114	0
12	MW6DGW	94	100	86 *	1
13	VBLK11/8/00	102	99	99	0
14	MSB11/8/00	103	102	102	0
15	MW6SGWDL	103	99	100	0
16	MW6SGWDLMS	106	101	101	0
17	MW6SGWDLMSD	105	99	101	0
18	SC-TB	107	102	105	0
19	SC-RB1	108	101	103	0
20	SC-TB1	107	99	100	0
21	SC-WC1	106	99	103	0
22	MW7DGW	103	100	102	0
23	MW7SGW	105	94	98	0
24	MW9SGW	103	98	100	0
25	MWOB1GW	106	100	101	0
26	VBLK11/9/00	100	99	97	0
27	MW7DGWDL	99	100	99	0
28	MW4SGWDL	99	101	98	0
29	MW5DGWDL	100	98	99	0
30	MW6DGW DL	101	99	98	0
31	MW2DGWDL	99	100	100	0
32	MW3DGWDL	100	102	101	0
33	MW4DGWDL	101	100	96	0

11/24/00

12/5/00

				QC LIMITS
SMC1	(DCE)	=	1,2-Dichloroethane-d4	(76-114)
SMC2	(TOL)	=	Toluene-d8	(88-110)
SMC3	(BFB)	=	Bromofluorobenzene	(86-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC. Contract:

Lab Code: 10478 Case No.: SAS No.: SDG No.: URS106

Instrument ID: H5973 Calibration Date: 11/07/00 Time: 12:06

Lab File ID: P17256.D Init. Calib. Date(s): 10/21/00 10/21/00

Heated Purge: (Y/N) N Init. Calib. Times: 15:25 19:39

GC Column: HP-VOCOL ID: 0.20 (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX % D
Chloromethane	0.373	0.370		0.7	
Bromomethane	0.766	0.600	0.100	21.7	25.0
Vinyl Chloride	0.537	0.509	0.100	5.4	25.0
Chloroethane	0.340	0.370		-8.8	
Methylene Chloride	0.963	1.002		-4.0	
Acetone	0.084	0.127		-51.3	
Carbon Disulfide	1.964	2.152		-9.6	
1,1-Dichloroethene	0.833	0.893	0.100	-7.2	25.0
1,1-Dichloroethane	1.609	1.627	0.200	-1.1	25.0
1,2-Dichloroethene (total)	1.053	1.145		-8.7	
2-Butanone	0.163	0.224		-37.0	
Chloroform	2.359	2.312	0.200	2.0	25.0
1,2-Dichloroethane	1.465	1.234	0.100	15.8	25.0
1,1,1-Trichloroethane	0.554	0.458	0.100	17.3	25.0
Carbon Tetrachloride	0.492	0.399	0.100	18.9	25.0
Bromodichloromethane	0.759	0.665	0.200	12.4	25.0
1,2-Dichloropropane	0.286	0.277		2.9	
cis-1,3-Dichloropropene	0.482	0.435	0.200	9.8	25.0
Trichloroethene	0.421	0.403	0.300	4.1	25.0
Benzene	0.642	0.629	0.500	2.1	25.0
Dibromochloromethane	0.838	0.753	0.100	10.2	25.0
trans-1,3-Dichloropropene	0.433	0.339	0.100	21.6	25.0
1,1,2-Trichloroethane	0.367	0.338	0.100	7.9	25.0
Bromoform	0.677	0.580	0.100	14.3	25.0
4-Methyl-2-Pentanone	0.414	0.302		27.0	
2-Hexanone	0.150	0.136		9.4	
Tetrachloroethene	0.379	0.377	0.200	0.6	25.0
1,1,2,2-Tetrachloroethane	0.667	0.607	0.300	9.0	25.0
Toluene	0.871	0.850	0.400	2.4	25.0
Chlorobenzene	0.834	0.831	0.500	0.3	25.0
Ethylbenzene	0.260	0.275	0.100	-6.0	25.0
Styrene	0.680	0.683	0.300	-0.4	25.0
Xylene (total)	0.370	0.383	0.300	-3.4	25.0
1,2-Dichloroethane-d4	1.241	1.051		15.3	
Toluene-d8	0.974	1.006		-3.2	
Bromofluorobenzene	0.904	0.856	0.200	5.4	25.0

OK 12/5/00

All other compounds must meet a minimum RRF of 0.010.

V 0394

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC. Contract:

Lab Code: 10478 Case No.: SAS No.: SDG No.: URS106

Instrument ID: H5973 Calibration Date: 11/08/00 Time: 19:48

Lab File ID: P17302.D Init. Calib. Date(s): 10/21/00 10/21/00

Heated Purge: (Y/N) N Init. Calib. Times: 15:25 19:39

GC Column: HP-VOCOL ID: 0.20 (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX % D
Chloromethane	0.373	0.433		-16.1	
Bromomethane	0.766	0.611	0.100	20.2	25.0
Vinyl Chloride	0.537	0.593	0.100	-10.2	25.0
Chloroethane	0.340	0.420		-23.6	
Methylene Chloride	0.963	1.106		-14.8	
Acetone	0.084	0.118		-39.7	
Carbon Disulfide	1.964	2.330		-18.6	
1,1-Dichloroethene	0.833	0.959	0.100	-15.2	25.0
1,1-Dichloroethane	1.609	1.793	0.200	-11.4	25.0
1,2-Dichloroethene (total)	1.053	1.172		-11.3	
2-Butanone	0.163	0.241		-47.8	
Chloroform	2.359	2.201	0.200	6.7	25.0
1,2-Dichloroethane	1.465	1.189	0.100	18.8	25.0
1,1,1-Trichloroethane	0.554	0.447	0.100	19.4	25.0
Carbon Tetrachloride	0.492	0.418	0.100	15.0	25.0
Bromodichloromethane	0.759	0.600	0.200	21.0	25.0
1,2-Dichloropropane	0.286	0.296		-3.7	
cis-1,3-Dichloropropene	0.482	0.428	0.200	11.2	25.0
Trichloroethene	0.421	0.446	0.300	-6.1	25.0
Benzene	0.642	0.661	0.500	-2.8	25.0
Dibromochloromethane	0.838	0.623	0.100	25.7	25.0
trans-1,3-Dichloropropene	0.433	0.330	0.100	23.7	25.0
1,1,2-Trichloroethane	0.367	0.322	0.100	12.3	25.0
Bromoform	0.677	0.457	0.100	32.5	25.0
4-Methyl-2-Pentanone	0.414	0.328		20.7	
2-Hexanone	0.150	0.135		9.9	
Tetrachloroethene	0.379	0.400	0.200	-5.7	25.0
1,1,2,2-Tetrachloroethane	0.667	0.608	0.300	8.8	25.0
Toluene	0.871	0.929	0.400	-6.7	25.0
Chlorobenzene	0.834	0.835	0.500	-0.1	25.0
Ethylbenzene	0.260	0.305	0.100	-17.5	25.0
Styrene	0.680	0.715	0.300	-5.1	25.0
Xylene (total)	0.370	0.416	0.300	-12.3	25.0
1,2-Dichloroethane-d4	1.241	0.988		20.3	
Toluene-d8	0.974	1.039		-6.7	
Bromofluorobenzene	0.904	0.794	0.200	12.2	25.0

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC. Contract:

Lab Code: 10478 Case No.: SAS No.: SDG No.: URS106

Instrument ID: H5973 Calibration Date: 11/09/00 Time: 14:16

Lab File ID: P17333.D Init. Calib. Date(s): 10/21/00 10/21/00

Heated Purge: (Y/N) N Init. Calib. Times: 15:25 19:39

GC Column: HP-VOCOL ID: 0.20 (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX % D
Chloromethane	0.373	0.375		-0.7	
Bromomethane	0.766	0.601	0.100	21.5	25.0
Vinyl Chloride	0.537	0.498	0.100	7.4	25.0
Chloroethane	0.340	0.377		-10.9	
Methylene Chloride	0.963	1.008		-4.6	
Acetone	0.084	0.138		-63.9	
Carbon Disulfide	1.964	1.910		2.7	
1,1-Dichloroethene	0.833	0.837	0.100	-0.5	25.0
1,1-Dichloroethane	1.609	1.673	0.200	-4.0	25.0
1,2-Dichloroethene (total)	1.053	1.089		-3.3	
2-Butanone	0.163	0.249		-52.8	
Chloroform	2.359	2.182	0.200	7.5	25.0
1,2-Dichloroethane	1.465	1.195	0.100	18.4	25.0
1,1,1-Trichloroethane	0.554	0.427	0.100	22.9	25.0
Carbon Tetrachloride	0.492	0.385	0.100	21.8	25.0
Bromodichloromethane	0.759	0.605	0.200	20.3	25.0
1,2-Dichloropropane	0.286	0.303		-6.1	
cis-1,3-Dichloropropene	0.482	0.438	0.200	9.2	25.0
Trichloroethene	0.421	0.420	0.300	0.2	25.0
Benzene	0.642	0.652	0.500	-1.5	25.0
Dibromochloromethane	0.838	0.667	0.100	20.4	25.0
trans-1,3-Dichloropropene	0.433	0.337	0.100	22.2	25.0
1,1,2-Trichloroethane	0.367	0.344	0.100	6.2	25.0
Bromoform	0.677	0.511	0.100	24.6	25.0
4-Methyl-2-Pentanone	0.414	0.353		14.8	
2-Hexanone	0.150	0.138		8.0	
Tetrachloroethene	0.379	0.419	0.200	-10.5	25.0
1,1,2,2-Tetrachloroethane	0.667	0.661	0.300	0.9	25.0
Toluene	0.871	0.970	0.400	-11.4	25.0
Chlorobenzene	0.834	0.916	0.500	-9.9	25.0
Ethylbenzene	0.260	0.332	0.100	-27.6	25.0
Styrene	0.680	0.822	0.300	-20.9	25.0
Xylene (total)	0.370	0.460	0.300	-24.1	25.0
1,2-Dichloroethane-d4	1.241	1.002		19.2	
Toluene-d8	0.974	1.050		-7.8	
Bromofluorobenzene	0.904	0.803	0.200	11.2	25.0

All other compounds must meet a minimum RRF of 0.010.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK11/7/00

Lab Name: H2M LABS INC. Contract:

Lab Code: 10478 Case No.: SAS No.: SDG No.: URS106

Matrix: (soil/water) WATER Lab Sample ID: VBLK11/7/00

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: P17257.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/07/00

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
75-35-4	1,1-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
56-23-5	Carbon Tetrachloride	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-34-4	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
71-55-6	1,1,1-Trichloroethane	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
124-48-1	Dibromochloromethane	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK11/8/00

Lab Name: H2M LABS INC. Contract:

Lab Code: 10478 Case No.: SAS No.: SDG No.: URS106

Matrix: (soil/water) WATER Lab Sample ID: VBLK11/8/00

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: P17304.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/08/00

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
75-35-4	1,1-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
56-23-5	Carbon Tetrachloride	10	U
79-01-6	Trichloroethene	7	J
71-43-2	Benzene	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-34-4	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
71-55-6	1,1,1-Trichloroethane	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
124-48-1	Dibromochloromethane	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK11/9/00

Lab Name: H2M LABS INC. Contract:

Lab Code: 10478 Case No.: SAS No.: SDG No.: URS106

Matrix: (soil/water) WATER Lab Sample ID: VBLK11/9/00

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: P17334.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/09/00

GC Column: HP-VOC ID: 0.20 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
75-35-4	1,1-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
56-23-5	Carbon Tetrachloride	10	U
79-01-6	Trichloroethene	3	J
71-43-2	Benzene	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-34-4	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
71-55-6	1,1,1-Trichloroethane	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
124-48-1	Dibromochloromethane	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

V 0431

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS, INC Contract:

Lab Code: 10478 Case No.: SAS No.: SDG No.: URS107

Instrument ID: H5970-3 Calibration Date: 11/10/00 Time: 14:03

Lab File ID: P17359.D Init. Calib. Date(s): 10/21/00 10/21/00

Heated Purge: (Y/N) N Init. Calib. Times: 15:25 19:39

GC Column: RTX502.2 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX % D
Chloromethane	0.373	0.316		15.3	
Bromomethane	0.766	0.677	0.100	11.6	25.0
Vinyl Chloride	0.537	0.453	0.100	15.8	25.0
Chloroethane	0.340	0.340		0.0	
Methylene Chloride	0.963	0.926		3.9	
Acetone	0.084	0.122		-45.6	
Carbon Disulfide	1.964	1.780		9.4	
1,1-Dichloroethene	0.833	0.809	0.100	2.9	25.0
1,1-Dichloroethane	1.609	1.508	0.200	6.3	25.0
1,2-Dichloroethene (total)	1.053	1.027		2.5	
2-Butanone	0.163	0.223		-36.5	
Chloroform	2.359	2.069	0.200	12.3	25.0
1,2-Dichloroethane	1.465	1.135	0.100	22.5	25.0
1,1,1-Trichloroethane	0.554	0.451	0.100	18.7	25.0
Carbon Tetrachloride	0.492	0.436	0.100	11.4	25.0
Bromodichloromethane	0.759	0.584	0.200	23.2	25.0
1,2-Dichloropropane	0.286	0.257		10.1	
cis-1,3-Dichloropropene	0.482	0.392	0.200	18.7	25.0
Trichloroethene	0.421	0.407	0.300	3.2	25.0
Benzene	0.642	0.585	0.500	8.9	25.0
Dibromochloromethane	0.838	0.669	0.100	20.3	25.0
trans-1,3-Dichloropropene	0.433	0.315	0.100	27.3	25.0
1,1,2-Trichloroethane	0.367	0.324	0.100	11.7	25.0
Bromoform	0.677	0.530	0.100	21.8	25.0
4-Methyl-2-Pentanone	0.414	0.345		16.5	
2-Hexanone	0.150	0.129		14.3	
Tetrachloroethene	0.379	0.451	0.200	-19.0	25.0
1,1,2,2-Tetrachloroethane	0.667	0.594	0.300	10.9	25.0
Toluene	0.871	0.896	0.400	-2.9	25.0
Chlorobenzene	0.834	0.857	0.500	-2.8	25.0
Ethylbenzene	0.260	0.302	0.100	-16.4	25.0
Styrene	0.680	0.721	0.300	-6.1	25.0
Xylene (total)	0.370	0.420	0.300	-13.5	25.0
1,2-Dichloroethane-d4	1.241	1.049		15.4	
Toluene-d8	0.974	1.050		-7.8	
Bromofluorobenzene	0.904	0.813	0.200	10.1	25.0

12/7/00 TT

All other compounds must meet a minimum RRF of 0.010.

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC. Contract:

Lab Code: 10478 Case No.: SAS No.: SDG No.: URS107

Instrument ID: H5970D Calibration Date: 11/06/00 Time: 16:53

Lab File ID: D07670.D Init. Calib. Date(s): 11/02/00 11/02/00

Init. Calib. Times: 19:04 22:54

COMPOUND	RRF	RRF50	MIN RRF	% D	MAX % D
Phenol	1.802	2.003	0.800	-11.1	25.0
bis(2-Chloroethyl)ether	1.436	1.500	0.700	-4.5	25.0
2-Chlorophenol	1.314	1.350	0.800	-2.7	25.0
1,3-Dichlorobenzene	1.300	1.343	0.600	-3.3	25.0
1,4-Dichlorobenzene	1.325	1.383	0.500	-4.4	25.0
1,2-Dichlorobenzene	1.164	1.256	0.400	-7.8	25.0
2-Methylphenol	1.195	1.226	0.700	-2.6	25.0
2,2'-oxybis(1-Chloropropane)	2.150	2.407		-11.9	
4-Methylphenol	1.174	1.302	0.600	-10.9	25.0
N-Nitroso-di-n-propylamine	1.047	1.140	0.500	-8.8	25.0
Hexachloroethane	0.555	0.557	0.300	-0.2	25.0
Nitrobenzene	0.427	0.437	0.200	-2.4	25.0
Isophorone	0.781	0.767	0.400	1.7	25.0
2-Nitrophenol	0.243	0.245	0.100	-0.8	25.0
2,4-Dimethylphenol	0.375	0.368	0.200	1.7	25.0
bis(2-Chloroethoxy)methane	0.475	0.504	0.300	-6.3	25.0
2,4-Dichlorophenol	0.301	0.307	0.200	-1.9	25.0
1,2,4-Trichlorobenzene	0.309	0.313	0.200	-1.0	25.0
Naphthalene	0.953	1.019	0.700	-6.9	25.0
4-Chloroaniline	0.464	0.487		-4.9	
Hexachlorobutadiene	0.157	0.151		3.6	
4-Chloro-3-methylphenol	0.343	0.354	0.200	-3.3	25.0
2-Methylnaphthalene	0.576	0.583	0.400	-1.2	25.0
Hexachlorocyclopentadiene	0.260	0.209		19.8	
2,4,6-Trichlorophenol	0.376	0.375	0.200	0.2	25.0
2,4,5-Trichlorophenol	0.370	0.401	0.200	-8.5	25.0
2-Chloronaphthalene	1.024	1.072	0.800	-4.7	25.0
2-Nitroaniline	0.466	0.486		-4.5	
Dimethylphthalate	1.219	1.269		-4.1	
Acenaphthylene	1.678	1.751	1.300	-4.4	25.0
2,6-Dinitrotoluene	0.346	0.332	0.200	4.0	25.0
3-Nitroaniline	0.374	0.410		-9.6	
Acenaphthene	0.986	1.082	0.800	-9.7	25.0
2,4-Dinitrophenol	0.208	0.149		28.3	
4-Nitrophenol	0.166	0.147		11.5	
Dibenzofuran	1.336	1.419	0.800	-6.3	25.0
2,4-Dinitrotoluene	0.462	0.436	0.200	5.6	25.0
Diethylphthalate	1.149	1.247		-8.5	
Fluorene	1.082	1.164	0.900	-7.6	25.0

12-1-00 JM

All other compounds must meet a minimum RRF of 0.010.

NYSDEC - ASP
9
ICP SERIAL DILUTIONS

EPA SAMPLE NC

MW-6S-GWL

Lab Name: H2M_LABS,_INC._____ Contract: _____

b Code: 10478_ Case No.: _____ SAS No.: _____ SDG No.: URS1C

Matrix (soil/water): WATER__ Level (low/med): LOW__

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	117.67	B	89.40	B	24.0		P
Antimony	1.73	B	8.50	U	100.0		P
Arsenic	2.50	U	12.50	U			P
Barium	73.69	B	73.90	B	0.3		P
Beryllium	0.10	U	0.50	U			P
Cadmium	0.40	U	2.00	U			P
Calcium	131420.20		134357.95		2.2		P
Chromium	5.68	B	17.50	U	100.0		P
Cobalt	2.74	B	4.50	U	100.0		P
Copper	4.99	B	7.50	U	100.0		P
Iron	1304.08		1341.13		2.8		P
Lead	2.96	B	7.00	U	100.0		P
Magnesium	29638.70		30235.83		2.0		P
Manganese	519.99		535.13		2.9		P
Mercury							NR
Nickel	21.19	B	20.28	B	4.3		P
Potassium	3903.71	B	3322.72	B	14.9	E	P
Selenium	2.64	B	8.50	U	100.0		P
Silver	0.50	U	2.50	U			P
Sodium	36954.32		38465.65		4.1		P
Thallium	2.30	U	11.50	U			P
Vanadium	0.70	U	3.50	U			P
Zinc	108.30		108.82		0.5		P

12/6/00 JM