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ADDENDUM NO. 1 TO THE MACHIAS GRAVEL PIT REMEDIAL INVESTIGATION REPORT SITE NUMBER 905013

1/92

January 23, 1992

Prepared for:

Motorola, Inc.
4000 Commercial Avenue
Northbrook, IL 60062

Prepared by:

Simon Hydro-Search
350 Indiana Street, Suite 300
Golden, Colorado 80401

426116032

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION

1.1 Background

Motorola, Inc. performed a Remedial Investigation/Feasibility Study (RI/FS) of the Machias Gravel Pit site (NYSDEC #905013) located on Very Road, approximately 2 miles west of the Town of Machias, Cattanagus County, New York. The RI/FS resulted in the development and submittal of the following two deliverables:

1) Machias Gravel Pit Remedial Investigation Report (August, 1991)

2) Machias Gravel Pit Draft Feasibility Study (July, 1991)

Based on the physical and chemical data generated during the RI, the following conclusions were made:

- Based on results of the geophysical survey and subsequent test pit excavation/sampling, no drums were disposed within the suspect drum burial area.
- The primary source area of contamination is confirmed to be the inactive gravel pit. There is no evidence of past waste handling/storage activities in the former maintenance garage area.
- A slug of dissolved phase volatile organic compound (VOC) contamination is migrating via the ground water system to the northeast, toward the cabin well approximately 450 feet north of the Cole residence. The primary constituents of concern are TCE and 1,1,1-TCA.
- The Cole residence does not appear to be within the migration pathway of the VOC contamination.
- The sporadic chloroform problem associated with the Cole residence well appears to be an isolated issue not related to past waste handling/storage activities at the Machias Gravel Pit site.

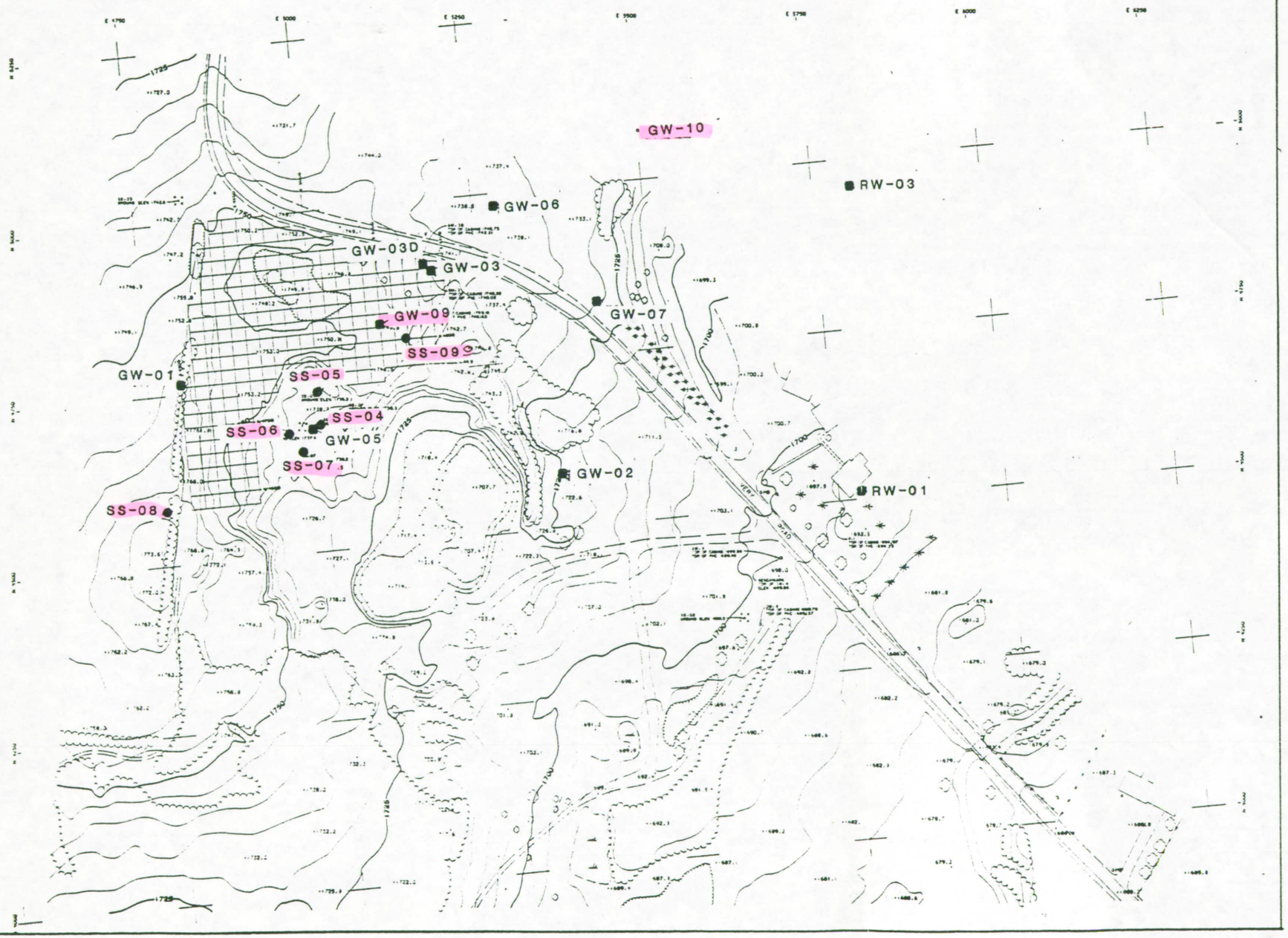
- There is no significant non-carcinogenic health threats to adults or children associated with 1,1,1-TCA in the ground water.
- The total estimate of future carcinogenic risks associated with the ground water pathway is 2.9×10^{-5}.
- There are no apparent significant health risks associated with the soil, surface water or air exposure pathways.

Prior to finalizing the FS, Motorola proposed to install two additional monitoring wells (GW-9 and GW-10) and perform additional ground water sampling to confirm or refute analytical model predictions of plume geometry and areas of maximum VOC impacts presented in the RI Report. In addition, the New York State Department of Environmental Conservation (NYSDEC) requested some additional surface and subsurface soil samples be collected and analyzed for lead since some of the soils RI lead data was rejected during third party data validation.

1.2 Additional Field Work - November, 1991

With NYSDEC approval of additional site characterization activities in support of the RI/FS, the following supplemental field activities were performed at the Machias Gravel Pit site in November, 1991:

- Drilling, construction and development of monitoring wells GW-9 and GW-10 (see Figure 1 for locations).
- Sampling of monitoring wells GW-1, GW-2, GW-3, GW-3D, GW-5, GW-6, GW-7, GW-9 and GW-10 for VOC analysis.
- Sampling of the Cole residential well (RW01) and the cabin well (RW03) for VOC analysis.
- Collection of surface soil samples SS04, SS05, SS06, SS07, SS08 and SS09 for lead analysis (see Figure 1).
- Collection of subsurface soil samples SB03 and SB04 for lead analysis.



LEGEND

GW-01 GROUND WATER MONITORING WELL

RW-01 RESIDENTIAL WELL

SS-04 SURFACE SOIL SAMPLING LOCATION

Nov 91 work

N

0 250'

SCALE: 1 1/2"=250'

Quadrangle Location

FIGURE 1

WELL AND SOIL SAMPLE LOCATIONS

PROJECT 42611603-2

DATE 1/92

REVISIONS

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RENO DENVER MILWAUKEE IRVINE

The purpose of this addendum to the RI report is to document the field activities performed, present the additional data generated, evaluate the new data with respect to previous RI interpretations and revise initial conclusions based on the new data. The remaining portions of this addendum are structured to parallel the above noted objectives.

2.0 FIELD METHODS

2.1 Monitoring Well Installation, Construction, and Development

2.1.1 Monitoring Well Installation

Two additional monitoring wells (GW-9 and GW-10) were installed at the Machias Gravel Pit site. Locations of the new monitoring wells are shown on Figure 1. The rationale for locating each well was based on the results from ground water modeling conducted during the RI. Well GW-9 was drilled to a total depth of 60 feet and screened from 50 to 60 feet below ground surface. This well was located in the area suspected, based on analytical modeling, to be within the highest anticipated TCE concentrations. Well GW-10 was drilled to a total depth of 20 feet and screened from 10 to 20 feet. This well was placed downgradient of the anticipated plume in an area predicted to be unimpacted at this time.

2.1.2 Monitoring Well Construction

Empire Soils Company of Hamburg, New York was subcontracted by Simon Hydro-Search to perform the drilling and installation of monitoring wells. Boreholes were advanced using 4.25-inch inside diameter (I.D.) hollow stem augers. All boreholes were logged using a 2-foot split spoon sampler with samples collected every five feet.

The drill rig, all drilling equipment and well construction materials were steam-cleaned prior to drilling at each well location. Well screen and riser pipe were isolated from contact with surface soils by wrapping them with visqueen immediately after decontamination. A Simon Hydro-Search geologist supervised all drilling and well construction activities. Boring logs are presented in Appendix A.

Monitoring wells were constructed of 2-inch I.D., Schedule 40 PVC riser with 10 feet of 0.010-inch machine-slot PVC screen. The annular space around the screen was backfilled with clean,

well-sorted silica sand to a depth of approximately two feet above the top of the screen. All wells were constructed with a minimum 3-foot bentonite-pellet seal placed immediately above the sand pack. The pellets were hydrated and allowed to swell. The annular space was then backfilled by allowing the natural formation to collapse around the casing to approximately ten feet below the ground surface. The remaining annular space was backfilled with a cement/bentonite grout. Each well was completed with a PVC riser pipe which extended approximately 1.5 to 2 feet above ground surface. Both GW-9 and GW-10 were covered with locking, protective metal casings and surrounded with concrete run-off aprons. Detailed well construction summaries are presented in Appendix A.

2.1.3 Well Development

Both new monitoring wells were developed using the bail and surge method. A minimum of five casing volumes of water were removed during development. Field parameters of pH, specific conductance and temperature were monitored to document stable conditions. Specific development information for each well is included with the well construction summaries in Appendix A.

2.2 Ground Water Sampling

2.2.1 Monitoring Wells

A total of 9 monitoring wells were sampled as part of additional characterization activities. Specifically wells GW-1, GW-2, GW-3, GW-3D, GW-5, GW-6, GW-7, GW-9 and GW-10 were sampled. In addition, two duplicate samples were collected for quality control (QC) purposes. These samples were labeled GW-15 and GW-16 and were duplicates of well samples GW-5 and GW-10, respectively. The following procedures were used to sample each monitoring well:

- Depth to water and total depth of each well was determined using an electric water level indicator. The volume of water in the well casing was then calculated.

- A minimum of three well volumes of water was purged from the well with a PVC bailer prior to sampling.

- Purging continued until three successive pH, specific conductance and temperature measurements showed stable conditions to ensure that the sample was representative of formation water.

- The sample was collected using a PVC bailer. Sample water was poured directly into laboratory prepared containers.

- The bailers were decontaminated between each well by scrubbing the bailer with an Alconox solution, followed by thoroughly flushing the bailer with distilled water.

Samples were collected and containerized, preserved, packaged and shipped in accordance with established U.S. EPA protocols. A completed chain of custody form accompanied each sample shipment. All ground water samples were analyzed for Target Compound List (TCL) VOCs.

2.2.2 Residential Wells

The Cole property is located to the east and downgradient of the site (Figure 1). The Cole's have two drinking water wells on their property; one for their residence and one for a cabin located north of the residence. One water sample was collected from a water spigot located inside the Cole's garage (RW01). The garage water spigot was chosen for sampling due to the lack of a water filtering unit. The other sample was collected at the cabin (RW03). The cabin has a filtering system which was turned off prior to sampling.

Before collecting the residential well samples, the size of holding tank was noted and the flow rate from the spigot were determined using a 2.5 gallon bucket. The water was allowed to flow 10 minutes past the calculated time to empty the holding tank to assure that formation water was being collected. Residential well samples were analyzed for VOCs.

2.3 Surface Soil Sampling

A total of six additional surface soil samples were collected as shown on Figure 1 (SS-04 through SS-09). Surface soil samples were collected by first removing surface vegetation and debris with a decontaminated shovel. Samples were collected with a stainless steel trowel at the four corners of a 10 foot by 10 foot square, with an additional sampling point at the center of the square. The samples were placed into a stainless steel mixing bowl and composited. Appropriate portions were then placed into wide mouth jars for total lead analysis.

2.4 Subsurface Soil Sampling

Two additional subsurface soil samples, SB03 and SB04, were collected from split spoon samples taken during the drilling of monitoring wells GW-9 and GW-10. Sample SB03 was collected 20 feet below the ground surface. Sample SB04 was collected five feet below the ground surface. It should be noted that the initial target sampling depth for SB04 was between ten and fifteen feet below the ground surface, however, ground water was encountered at approximately 10 feet below the ground surface. The target sample depth was therefore changed to five feet below the ground surface, the drill rig was moved approximately ten feet away from the actual monitoring well borehole and a sample was collected from the desired interval.

The samples were placed into laboratory prepared sampling jars. Samples were then labeled, preserved, packaged and shipped in accordance with established U.S. EPA protocols. Both samples were analyzed for total lead.

3.0 DATA PRESENTATION

In accordance with the approved additional site characterization field work for the Machias Gravel Pit, samples were collected from the following media groups:

- Soils (surface and subsurface).
- Ground water (monitoring well and residential well).

Analytical results from each of the media groups are provided separately below.

3.1 Soil Analytical Results

As discussed in Sections 2.3 and 2.4, both surface and subsurface soil samples were collected. All soil samples were analyzed for total lead. Analytical results are summarized in Table 1. Samples from the inactive pit area range from 11.7 (background) to 101 mg/kg lead. Samples from all other areas are at or below background levels.

3.2 Ground Water Analytical Results

Two types of ground water samples were collected during the RI/FS:

- Monitoring well samples.
- Residential well samples.

All ground water samples (both monitoring well and residential well) were analyzed for TCL VOCs. Table 2 summarizes the VOCs detected in both monitoring well and residential well samples. VOCs were detected in monitoring wells GW-3, GW-3D, GW-5, GW-6, GW-7, GW-9, and GW-10. No VOCs were detected in monitoring wells GW-1 and GW-2. Monitoring wells GW-4 and GW-8 were not sampled during this field effort as they are not downgradient

TABLE 1

SOIL SAMPLING RESULTS
SAMPLE DATE 11/91

Sample Location	Location	Lead (mg/Kg)
SS04-02	Inactive Pit	27.1
SS05-02	Inactive Pit	101.0
SS06-02	Inactive Pit	58.6
SS07-02	Inactive Pit	11.7
SS08-02	Background	14.6
SS09-02	Fill Area	16.5
SB03-02	Well GW-9, 20 feet below ground surface	7.3
SB04-02	Well GW-10, 5 feet below ground surface	5.2

SS Surface soil
SB Subsurface soil

TABLE 2

SUMMARY OF DETECTED GROUND WATER VOLATILE ORGANIC COMPOUNDS (VOCs)
MACHIAS, NEW YORK
SAMPLE DATE 11/91

Sample Designation Matrix	GW-01 Water	GW-02 Water	GW-03 Water	GW-03D Water	GW-05 Water	GW-5DUP Water	GW-06 Water	GW-07 Water	GW-09 Water	GW-10 Water	GW-10DUP Water	RW-01 Water	RW-03 Water
VOCs	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Methylene chloride	7 B	5 B	6 B	ND	5 B	ND	4 BJ	4 BJ	22	4 BJ	9 B	ND	11
1,1-Dichloroethene	ND	ND	25	28	19	23	4 J	ND	16	14	14	ND	ND
1,1-Dichloroethane	ND	ND	ND	8	10	9	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 J	ND
1,2-Dichloroethene (total)	**ND**	**ND**	**ND**	**ND**	**6**	**5**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
1,1,1-Trichloroethane	ND	ND	280 D	360 D	240 D	280 D	65	17	230	170	170	ND	ND
Acetone	ND	ND	ND	ND	8 J	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	34	ND	1400 D	1500 D	ND	51	33	120	120	ND	ND

Notes:
- ND - Not detected
- RW - Residential Well
- GW - Ground water
- DP - Duplicate
- J - Estimated Value
- B - Analyte found in lab blank
- D - Value calculated from a dilution

75

75

of the defined contaminant migration pathway. The NYSDEC concurred with not sampling wells GW-4 and GW-8 during this set of field activities.

The VOCs detected most frequently and in the highest concentrations were TCE and 1,1,1-TCA. TCE ranged in concentration from non-detected to approximately 1400 ug/l with the highest concentration detected at well GW-5 located within the old gravel pit area. 1,1,1-TCA concentrations ranged from non-detected to 280 ug/l with the highest concentration detected in well GW-3, approximately 300 feet downgradient of the old gravel pit area.

Other VOCs detected in trace quantities in monitoring wells include methylene chloride, 1,1 - dichloroethene, 1,1-dichloroethane, 1,2-dichloroethene and acetone. Methylene chloride was also detected in laboratory method blanks or field blanks. The concentration of methylene chloride in investigative samples did not exceed ten times that what was detected in method or field blanks. Therefore, the methylene chloride detections are believed to be artifacts and not representative of actual ground water quality (U.S. EPA, 1988, Laboratory Data Validation Functional Guidelines for Evaluating Organics Analysis).

Chloroform was also detected at approximately 3 ug/l in the Cole's residential well. Chloroform was not detected in the Cabin well or any of the monitoring wells.

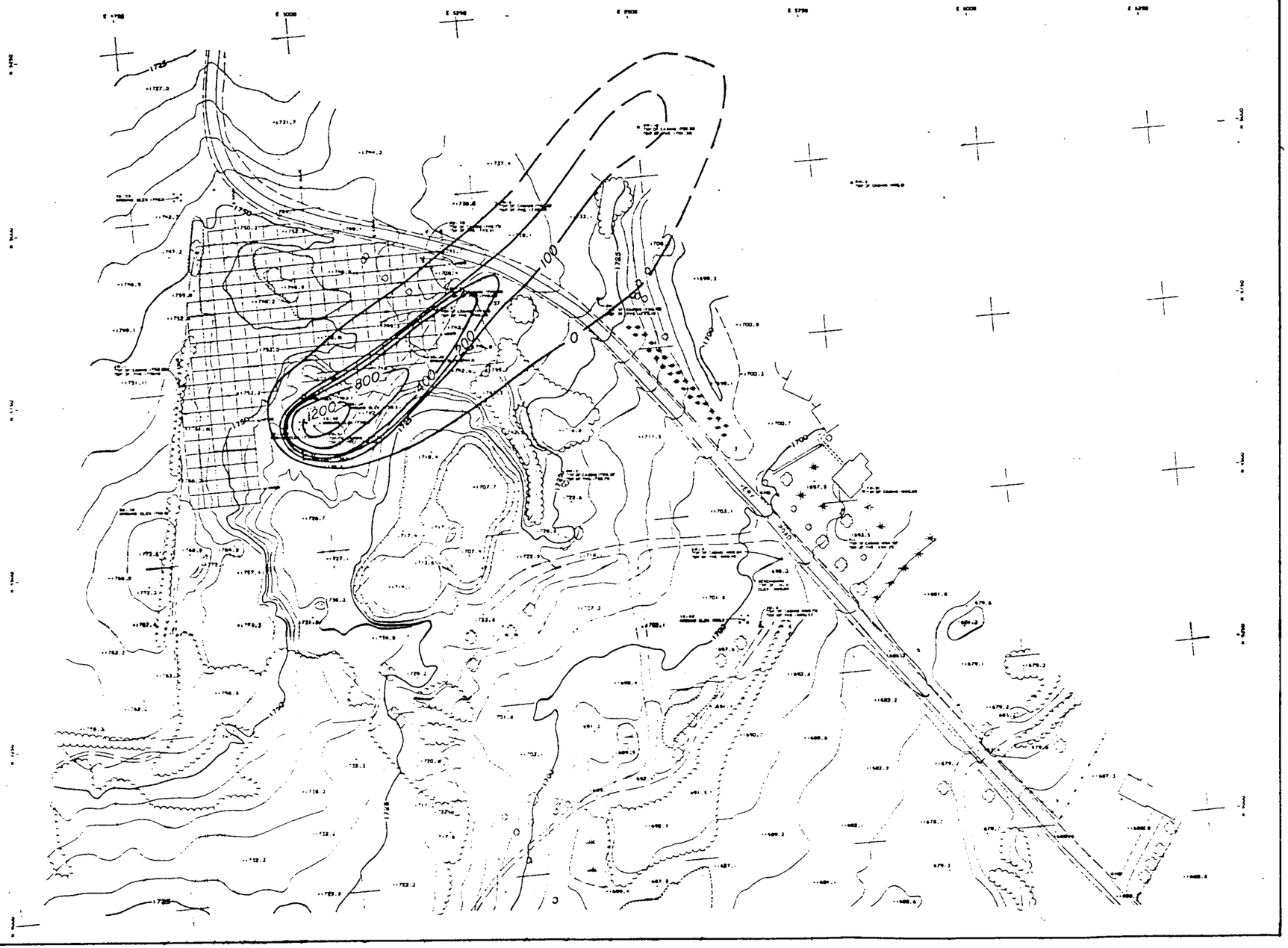
4.0 DATA INTERPRETATION

4.1 Surface/Subsurface Soils Analytical Results

Analytical results for lead indicate background levels in all samples except those located near the north wall of the inactive pit area (i.e., near GW-5 and north to the old pit wall). Surface samples SS04, SS05, SS06 and SS07 were collected in the part of the inactive gravel pit suspected of past spillage/storage. Data from this sampling indicate that the lead is in much lower concentrations than suspected after the previous sampling. While soils in the inactive pit area show lead levels ranging from background levels to a maximum of 101 mg/kg, all other surface and subsurface soil samples are at or below background levels for lead.

4.2 Ground Water Analytical Results

Analytical results for ground water data reconfirm that the ground water has been impacted by past activities and that a contaminant plume is moving downgradient in a northeasterly direction toward Ischua Creek. Modified contaminant isoconsentration contour maps are provided in Figures 2 and 3. With the addition of monitoring well GW-10, it appears that the plume has migrated slightly further than anticipated based on analytical model predictions. The levels of TCE and 1,1,1-TCA suggest that there may have been more than one spill event as evidenced by higher concentrations of both TCE and 1,1,1-TCA at wells GW-10 and GW-3 than at GW-6 which lies between them. The relative distribution of the highest areas of TCE and 1,1,1-TCA contamination as predicted by the analytical modeling performed during the RI was confirmed with the additional sampling. The highest TCE impacts are between wells GW-9 and GW-5 (i.e., very close to source area) while the highest 1,1,1-TCA concentrations are in the vicinity of well GW-3. The concentrations of TCE and 1,1,1-TCA detected during this and all previous samplings suggest that contamination is only in the dissolved phase.



NOTE: CONTOUR INTERVAL CHANGES FOR CLARITY

LEGEND

200 — ISOCONCENTRATION CONTOUR (ug/l)

— — — ESTIMATED ISOCONCENTRATION CONTOUR (ug/l)

N

0 250'

SCALE: 1 1/2" = 250'

FIGURE 2

ISOCONCENTRATION MAP OF TCE: MACHIAS GRAVEL PITS

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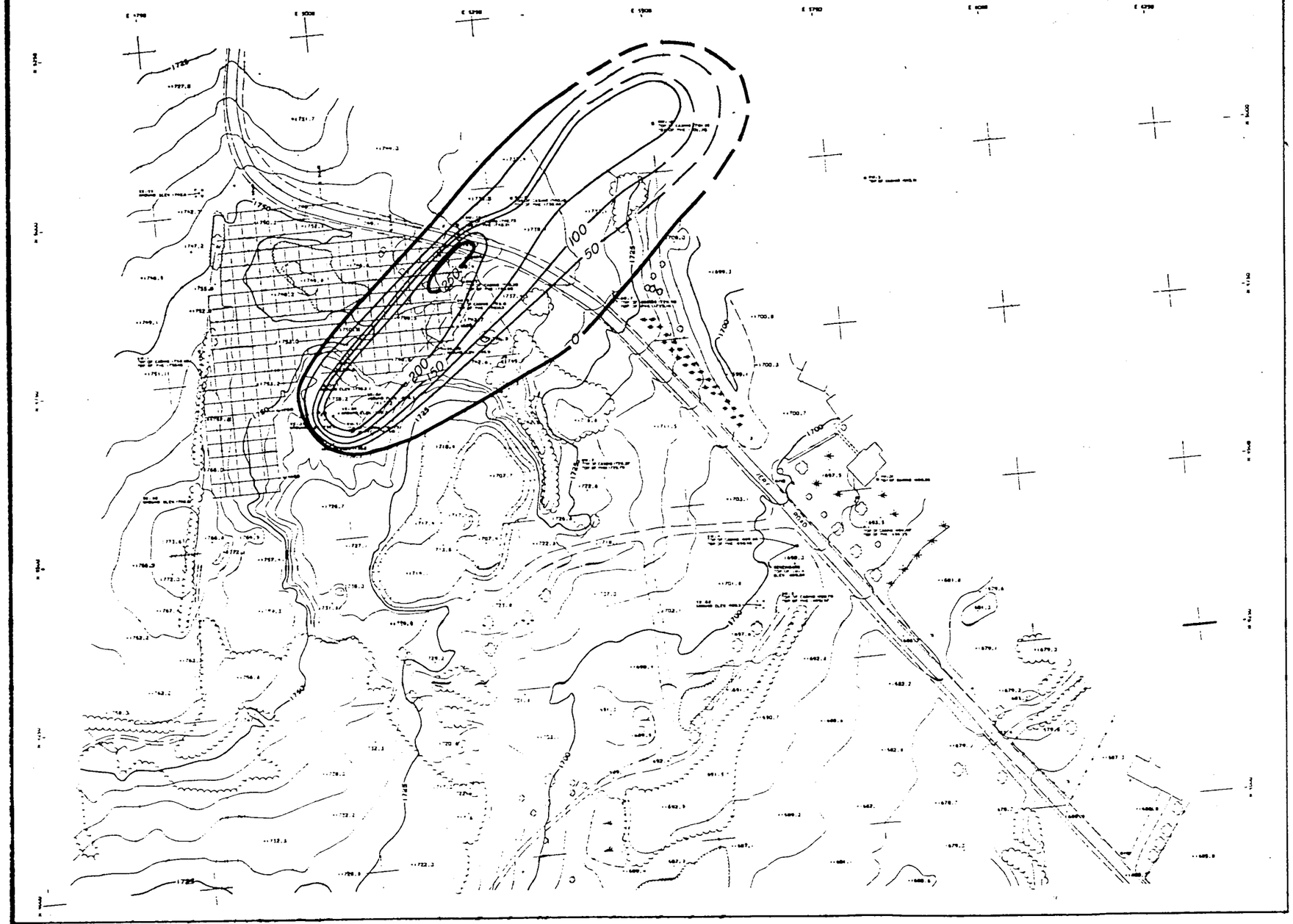

LEGEND

200 ISOCONCENTRATION CONTOUR (ug/L)

ESTIMATED ISOCONCENTRATION CONTOUR (ug/L)

N

0 250'

SCALE: 1 1/2" = 250'

NOTE: CONTOUR INTERVAL CHANGES FOR CLARITY

FIGURE 3

ISOCONCENTRATION MAP OF TCA: MACHIAS GRAVEL PITS

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The first evidence of the biodegradation was detected during this sampling event. Common biodegradation products of TCE and 1,1,1-TCA (1,1-dichloroethane, 1,1-dichloroethene and 1,2-dichloroethene) were detected in wells GW-3, GW-3D, GW-5, GW-6, GW-9 and GW-10.

Acetone was detected in monitoring well GW-5 at 8 ug/L which is above the instrument detection limit and below the method quantitation limit. Acetone is a common laboratory introduced contaminant (U.S. EPA, 1988) and although it was not detected in the laboratory method blank, at such a low concentration, being detected in only one well, and never being detected in any of the previous sampling events, it is not believed to be representative of actual site conditions.

5.0 CONCLUSIONS

Based on results of the additional site characterization activities presented in this addendum to the Machias Gravel Pit I Report, the following conclusions are forwarded in support of the overall RI investigation:

- Lead in soils impacts are limited to the inactive gravel pit area and are substantially lower than previous data suggested.
- The dissolved phase VOC plume has migrated slightly further downgradient than predicted by the initial analytical modeling performed as part of the RI report.
- More than one spill event may have occurred resulting in the noted TCE and 1,1,1-TCA distribution pattern shown on Figures 2 and 3.
- Some biodegradation of TCE and 1,1,1-TCA has begun to occur as evidenced by the first set of detections of low levels of degradation products such as the dichloroethenes and dichloroethanes.
- Continued contaminant distribution patterns indicate that there is no contaminant migration toward Bird Swamp.
- The additional data corroborates previous findings that the low level chloroform detections in the Cole residential well are an isolated incident not related to past activities at the Machias Gravel Pit site.

6.0 REFERENCES

1. Recra Research, Inc., Machias Gravel Pit, New York State Superfund Phase I Summary Report, 1983.

2. Walter B. Satterthwaite Associates, Inc., Ground Water Monitoring at the Machias Gravel Pit, 1985.

3. U.S. EPA Laboratory Data Validation Functional Guidelines for Evaluating Organics/Inorganics Analysis. February 1988.

4. Hydro-Search, Inc., Machias Gravel Pit Remedial Investigation report Site Number 905013. April, 1991.

5. Hydro-Search, Inc., Machias Gravel Pit Draft Feasibility study Site Number 905013. July 1991.

6. New York State Department of Environmental Conservation. Letter to Mr. Michael Loch - Motorola, Inc. transmitting FS comments. October 21, 1991.

Appendix A

Borehole Logs and Well Construction Summaries

FIELD LOG - SOIL BOREHOLE

SITE NAME AND LOCATION:

Machias Gravel Pits (MGP)

DRILLING METHOD: HSA Hollow Stem Auger

SAMPLE METHOD: Split Spoon

BORING NO. GW-9

SHEET 1 OF 5

WATER LEVEL				
TIME				
DATE				
CASING DEPTH				

DRILLING START	DRILLING FINISH
TIME 9:00	TIME 1:30
DATE 11/14/91	DATE 11/14/91

DATUM: ELEVATION:

DRILL RIG:

SURFACE CONDITIONS: Overcast/40-50°F

ANGLE: 90° Vertical BEARING ---

SAMPLE HAMMER TORQUE FT.-LBS

DRILLING CONTR

DEPTH IN FEET (ELEVATION)	BLOWS/6 IN. ON SAMPLER (RECOVERY)	SOIL GRAPH	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	DEPTH IN FEET FROM	DEPTH IN FEET TO	DESCRIPTION OF OPERATION AND REMARKS
2	3-7 5-4		Fill - Sandy with clay and silt. Some gravel. (Dry) (SP)	SS					Recovery 7"
3									
4									
5	7-8 8-8		Silty Sand grading to a fine sand with some gravel and clay. (Dry) (SP)	SS					Recovery- 12"
6									
7									
8									
9									
10	8-4 3-2		Gravely Sand. (Dry) (SW)	SS					Recovery 3"
11									
12									
13									

LOGGED BY

DATE

FIELD LOG - SOIL BOREHOLE

SITE NAME AND LOCATION:
Machias Gravel Pits (MGP)

DRILLING METHOD: HSA Hollow Stem Auger
SAMPLE METHOD: Split Spoon
WATER LEVEL TIME
WATER LEVEL DATE
CASING DEPTH

BORING NO. GW-9
SHEET 2 OF 5
DRILLING START TIME 9:00 DATE 11/14/91
DRILLING FINISH TIME 1:30 DATE 11/14/91

DATUM: ELEVATION:
DRILL RIG:
ANGLE: 90° Vertical BEARING ---
SAMPLE HAMMER TORQUE FT.-LBS
SURFACE CONDITIONS: Overcast/40-50°F

DEPTH IN FEET (ELEVATION)	BLOWS/ 6 IN. ON SAMPLER (RECOVERY)	SOIL GRAPH	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	DEPTH IN FEET FROM	DEPTH IN FEET TO	DESCRIPTION OF OPERATION AND REMARKS
14									
15	3-3 2-4		Angular to subrounded sand, (Moist) (SP)	SS					Recovery 3"
16									
17									
18									
19									
20	14-9 9-9		Angular Sand with some gravel, trace cobbles (Moist) (SW)	ss					Recovery 12-14" Sample collected: MGSSB03-02.
21									
22									
23									
24									
25									

DRILLING CONTR

LOGGED BY

DATE

FIELD LOG - SOIL BOREHOLE

SITE NAME AND LOCATION:
Machias Gravel Pits (MGP)

DRILLING METHOD: HSA Hollow Stem Auger
SAMPLE METHOD: Split Spoon
WATER LEVEL TIME DATE
CASING DEPTH

BORING NO. GW-9
SHEET 3 OF 5
DRILLING START TIME 9:00 DATE 11/14/91
DRILLING FINISH TIME 1:30 DATE 11/14/91

DATUM: ELEVATION:
DRILL RIG:
ANGLE: 90° Vertical BEARING ---
SAMPLE HAMMER TORQUE FT.-LBS
SURFACE CONDITIONS: Overcast/40-50°F

DRILLING CONTR
LOGGED BY
DATE

DEPTH IN FEET (ELEVATION)	BLOWS/ 6 IN. ON SAMPLER (RECOVERY)	SOIL GRAPH	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	DEPTH IN FEET FROM	DEPTH IN FEET TO	DESCRIPTION OF OPERATION AND REMARKS
26	8-13 8-13		Medium to course-grained sand with some gravel. Fine sand grades to gravel (¼-1" subrounded), trace silt. (Dry) (SW)	SS					Recovery - 14"
27									
28									
29									
30	3-9 7-9		Sandy Gravel grading to sand. (Dry) (SW)	SS					Recovery - 6"
31									
32									
33									
34									
35			Medium to course-grained sand with some gravel. Gravel subrounded to angular. (Moist) (SW)	SS					Recovery - 12"
36									
37									

FIELD LOG - SOIL BOREHOLE

SITE NAME AND LOCATION:
Machias Gravel Pits (MGP)

DRILLING METHOD: HSA Hollow Stem Auger
SAMPLE METHOD: Split Spoon
WATER LEVEL
TIME
DATE
CASING DEPTH

BORING NO. GW-9
SHEET 4 OF 5

DRILLING	START	FINISH
TIME	9:00	1:30
DATE	11/14/91	11/14/91

DATUM: ELEVATION:
DRILL RIG:
ANGLE: 90° Vertical BEARING ---
SAMPLE HAMMER TORQUE FT.-LBS
SURFACE CONDITIONS: Overcast/40-50°F

DRILLING CONTR

DEPTH IN FEET (ELEVATION)	BLOWS/ 6 IN. ON SAMPLER (RECOVERY)	SOIL GRAPH	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	DEPTH IN FEET FROM	DEPTH IN FEET TO	DESCRIPTION OF OPERATION AND REMARKS
38									
39									
40	8-14 17-16		Well sorted sand with trace silt. (Dry) (SM)	SS					Recovery 18"
41									
42									Gravels encountered.
43									
44									
45	8-18 14-20		Fine grained sand with silt. (Moist) (SM)	SS					Recovery 12"
46									
47									
48									
49									

LOGGED BY
DATE

FIELD LOG - SOIL BOREHOLE

SITE NAME AND LOCATION:
Machias Gravel Pits (MGP)

DRILLING METHOD: HSA Hollow Stem Auger
SAMPLE METHOD: Split Spoon
WATER LEVEL TIME / DATE / CASING DEPTH

BORING NO. GW-9
SHEET 5 OF 5
DRILLING START TIME 9:00 DATE 11/14/91
DRILLING FINISH TIME 1:30 DATE 11/14/91

DATUM: ELEVATION:
DRILL RIG:
ANGLE: 90° Vertical BEARING ---
SAMPLE HAMMER TORQUE FT.-LBS
SURFACE CONDITIONS: Overcast/40-50°F

DEPTH IN FEET (ELEVATION)	BLOWS/ 6 IN. ON SAMPLER (RECOVERY)	SOIL GRAPH	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT CASING TYPE	BLOWS/FOOT ON CASING	DEPTH IN FEET FROM	DEPTH IN FEET TO	DESCRIPTION OF OPERATION AND REMARKS
50	9-16 14-12		Silty Sand grading to sand with some silt (Moist) (SM)	SS				Recovery 20"
51								
52								
53								
54								
55	6-11 14-15		Silty sand. (Wet) (SM)	SS				Water level encountered 55'. Recovery 20"
56								
57								
58								
59								
60			E.O.B = 60 ft.					

DRILLING CONTR

LOGGED BY

DATE

FIELD LOG - SOIL BOREHOLE

SITE NAME AND LOCATION: Machias Gravel Pits (MGP)

DRILLING METHOD: HSA Hollow Spoon Auger

SAMPLE METHOD: Split Spoon

BORING NO. GW-10

SHEET 1 OF 1

WATER LEVEL				
TIME				
DATE				
CASING DEPTH				

DRILLING START: TIME 8:00, DATE 11/15/91

DRILLING FINISH: TIME 10:00, DATE 11/15/91

DATUM: ELEVATION:

DRILL RIG:

ANGLE: 90° BEARING ---

SAMPLE HAMMER TORQUE FT.-LBS

SURFACE CONDITIONS: Clear/ 40°-50° F

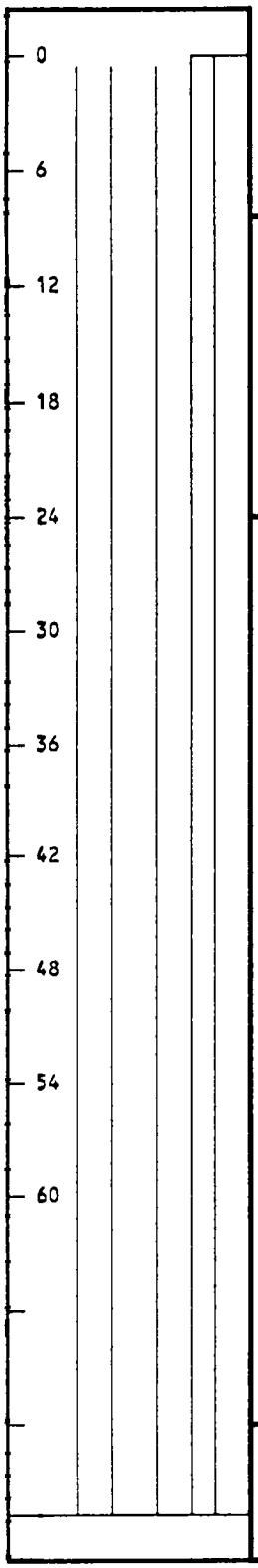
DEPTH IN FEET (ELEVATION)	BLOWS/ 6 IN. ON SAMPLER (RECOVERY)	SOIL GRAPH	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	DEPTH IN FEET FROM	DEPTH IN FEET TO	DESCRIPTION OF OPERATION AND REMARKS
1	2-2 6-5		Fill - Silt and Clay. (Dry) (ML)	SS					Recovery 4"
2									
3									
4									
5	6-10 10-12		Silty Sand, subangular to well rounded. (Dry) (SM)	SS					Recovery 12"
6									
7									
8									
9									
10	4-6 8-8		Silty Sand grading to sand. (Wet) (SM)	SS					Recovery 20"
11									
12									

DRILLING CONTR

LOGGED BY

DATE

MONITOR WELL CONSTRUCTION SUMMARY



Well No. GW-9

Boring No. X-Ref: _____

Survey Coords: 4825N, 5100E

Elevation Ground Level _____

Top of Casing 1749.15

Drilling Summary:

Total Depth: 60 feet
Borehole Diameter: 8.25 inches
Casing Stick-up Height: ± 2 feet
Driller: Empire Soils Company of Hamburg, New York
Rig: HSA Rig
Bit(s): 10' Hollow Stem Auger (HSA)
Protective Casing: Steel locking

Construction Time Log:

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling	11/14	9:00	11/14	1:30
Casing:	11/14	2:00	11/14	2:15
Filter Placement:	11/14	2:20	11/14	2:50
Cementing:	11/14	3:00	11/14	4:00
Development:	11/15	2:45	11/15	3:45

Well Design & Specifications

Basic: Geologic Log X Geophysical Log ___
Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
+2 - 50	C	_____ - _____
50 - 60	S	_____ - _____
___ - ___	_____	_____ - _____
___ - ___	_____	_____ - _____
___ - ___	_____	_____ - _____

Casing: C1: 2", Schedule 40 PVC

Casing: C2:

Screen: S1: 2", 0.010 continuous slot PVC

Filter Pack: Silica Sand (60' - 48')

Grout Seal:

Bentonite Seal: Pellets (48' - 45')

Well Development:

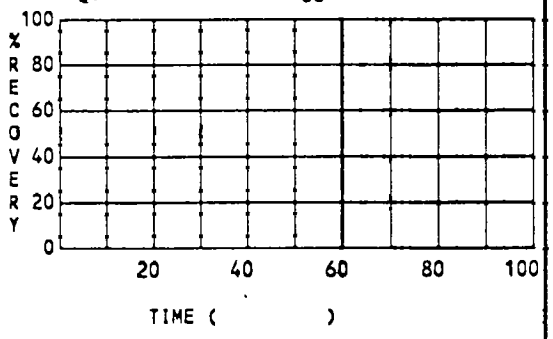
11/15/91 4 gallons, baiter

Stabilization Test Data:

Time	pH	Spec. Cond.	Temp (C)
3:50	6.73	400 µMHOs	9.1
4:00	6.88	390 µMHOs	9.0
4:10	6.79	390 µMHOs	8.9

Recovery Data:

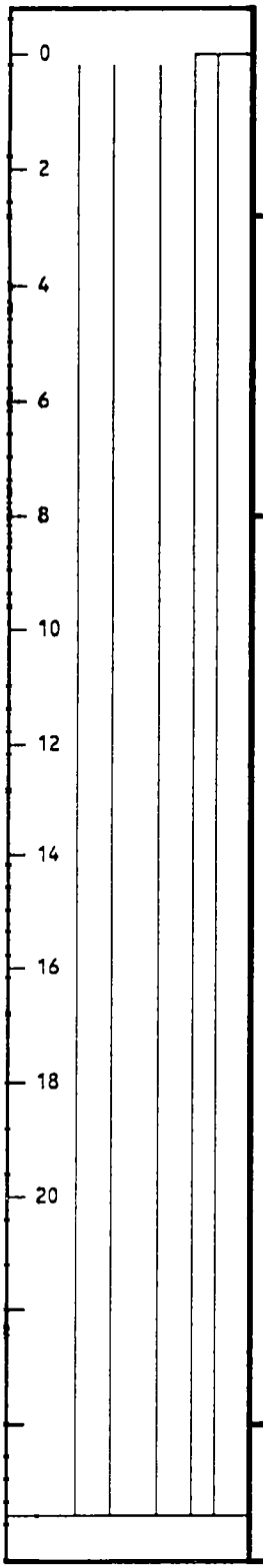
Q= So=



Comments: Natural formation case in (45' - 10'). Cement runoff apron.

Motorola - Machias, New York

MONITOR WELL CONSTRUCTION SUMMARY



Well No. GW-10

Boring No. X-Ref: _____

Survey Coords: 5075N, 5500E

Elevation Ground Level _____

Top of Casing 1701.58

Drilling Summary:

Total Depth: 20 feet
Borehole Diameter: 8.25 inches
Casing Stick-up Height: ± 2 feet
Driller: Empire Soils Company of Hamburg, New York
Rig: HSA Rig
Bit(s): 10' Hollow Stem Auger (HSA)
Protective Casing: Steel locking

Well Design & Specifications

Basic: Geologic Log X Geophysical Log ___
Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
+2 - 10	C	____ - ____
10 - 20	S	____ - ____
____ - ____	____	____ - ____
____ - ____	____	____ - ____
____ - ____	____	____ - ____

Casing: C1: 2", Schedule 40 PVC

Casing: C2: _____

Screen: S1: 2", 0.010 continuous slot PVC

Filter Pack: Silica Sand (20' - 8')

Grout Seal: (4' - 0')

Bentonite Seal: Pellets (8' - 4')

Construction Time Log:

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling	11/15	8:00	11/15	8:30
Casing:	11/15	8:30	11/15	8:45
Filter Placement:	11/15	8:45	11/15	9:00
Cementing:	11/15	9:05	11/15	9:30
Development:	11/17	11:20	11/17	12:18

Well Development:

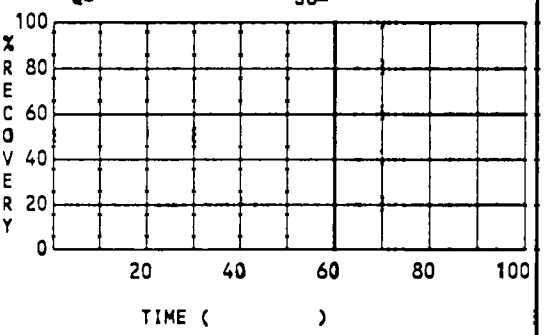
11/17/91 4¼ gallons, bailer

Stabilization Test Data:

Time	pH	Spec. Cond.	Temp (C)
11:50	7.17	680 µMHOs	8.9
11:58	7.06	650 µMHOs	8.8
12:10	6.99	650 µMHOs	8.0

Recovery Data:

Q= So=



Comments: Cement runoff apron.

Motorola - Machias, New York

Appendix B

Chemical Data

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW01

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66876

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1793

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	7	B
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW01

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66876

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1793

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW02

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66874

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1791

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	B
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW02

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66874

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1791

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW03

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66875

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1792

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	6	B
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	25	
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	290	E
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	34	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW03

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66875

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1792

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76-13-1	ETHANE, 1,1,2-TRICHLORO-1,2,	13.69	89	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW03DL

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66875DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1794

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column: (pack/cap) PACK Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50	U
74-83-9	Bromomethane	50	U
75-01-4	Vinyl chloride	50	U
75-00-3	Chloroethane	50	U
75-09-2	Methylene chloride	26	B
67-64-1	Acetone	50	U
75-15-0	Carbon disulfide	25	U
75-35-4	1,1-Dichloroethene	21	JD
75-34-3	1,1-Dichloroethane	25	U
540-59-0	1,2-Dichloroethene (total)	25	U
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
78-93-3	2-Butanone	50	U
71-55-6	1,1,1-Trichloroethane	280	D
56-23-5	Carbon tetrachloride	25	U
108-05-4	Vinyl acetate	50	U
75-27-4	Bromodichloromethane	25	U
78-87-5	1,2-Dichloropropane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
79-01-6	Trichloroethene	35	D
124-48-1	Dibromochloromethane	25	U
79-00-5	1,1,2-Trichloroethane	25	U
71-43-2	Benzene	25	U
10061-02-6	Trans-1,3-dichloropropene	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-88-3	Toluene	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
100-42-5	Styrene	25	U
1330-20-7	Total xylenes	25	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW03DL

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66875DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1794

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. _____ Date Analyzed: 11/22/91

Column (pack/cap) PACK Dilution Factor: 5.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76-13-1	ETHANE, 1,1,2-TRICHLORO-1,2,	13.69	90	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW03D

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66869

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1759

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	28	
75-34-3	1,1-Dichloroethane	8	
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	360	E
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW03D

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66869

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1759

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76-13-1	ETHANE, 1,1,2-TRICHLORO-1,2,	13.67	75	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW03DDL

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66869DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1785

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column: (pack/cap) PACK Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50	U
74-83-9	Bromomethane	50	U
75-01-4	Vinyl chloride	50	U
75-00-3	Chloroethane	50	U
75-09-2	Methylene chloride	32	BD
67-64-1	Acetone	50	U
75-15-0	Carbon disulfide	25	U
75-35-4	1,1-Dichloroethene	26	D
75-34-3	1,1-Dichloroethane	25	U
540-59-0	1,2-Dichloroethene (total)	25	U
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
78-93-3	2-Butanone	50	U
71-55-6	1,1,1-Trichloroethane	360	D
56-23-5	Carbon tetrachloride	25	U
108-05-4	Vinyl acetate	50	U
75-27-4	Bromodichloromethane	25	U
78-87-5	1,2-Dichloropropane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
79-01-6	Trichloroethene	25	U
124-48-1	Dibromochloromethane	25	U
79-00-5	1,1,2-Trichloroethane	25	U
71-43-2	Benzene	25	U
10061-02-6	Trans-1,3-dichloropropene	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-88-3	Toluene	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
100-42-5	Styrene	25	U
1330-20-7	Total xylenes	25	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW03DDL

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66869DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1785

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. _____ Date Analyzed: 11/22/91

Column (pack/cap) PACK Dilution Factor: 5.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW05

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66872

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1788

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	B
67-64-1	Acetone	8	J
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	19	
75-34-3	1,1-Dichloroethane	10	
540-59-0	1,2-Dichloroethene (total)	6	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	260	E
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	760	E
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW05

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66872

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1788

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW05DL

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66872DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1790

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. _____ Date Analyzed: 11/22/91

Column: (pack/cap) PACK Dilution Factor: 10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100	U
74-83-9	Bromomethane	100	U
75-01-4	Vinyl chloride	100	U
75-00-3	Chloroethane	100	U
75-09-2	Methylene chloride	91	BD
67-64-1	Acetone	100	U
75-15-0	Carbon disulfide	50	U
75-35-4	1,1-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
540-59-0	1,2-Dichloroethene (total)	50	U
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	240	D
56-23-5	Carbon tetrachloride	50	U
108-05-4	Vinyl acetate	100	U
75-27-4	Bromodichloromethane	50	U
78-87-5	1,2-Dichloropropane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
79-01-6	Trichloroethene	1400	D
124-48-1	Dibromochloromethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
71-43-2	Benzene	50	U
10061-02-6	Trans-1,3-dichloropropene	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-pentanone	100	U
591-78-6	2-Hexanone	100	U
127-18-4	Tetrachloroethene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
108-88-3	Toluene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
100-42-5	Styrene	50	U
1330-20-7	Total xylenes	50	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW05DL

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66872DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1790

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column (pack/cap) PACK Dilution Factor: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW06

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66871

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1787

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	4	J
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	65	
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW06

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66871

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1787

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76-13-1	ETHANE, 1,1,2-TRICHLORO-1,2,	13.84	39	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW07

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66870

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1786

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	17	
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	51	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW07

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66870

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1786

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW10

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66873

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1789

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. _____ Date Analyzed: 11/22/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	14	
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	170	
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	120	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW10

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66873

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1789

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. _____ Date Analyzed: 11/22/91

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	ETHANE, 1,1,2-TRICHLORO-1,2,	13.85	130	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW15 Dup. of 60-5

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 5825 SAS No.: SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66868

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1758

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. Date Analyzed: 11/21/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	23	
75-34-3	1,1-Dichloroethane	9	
540-59-0	1,2-Dichloroethene (total)	5	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	300	E
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	1000	E
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GW15
Dup. of GW5

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66868

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1758

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW15DL
Dup of GW-5

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66868DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1760

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column: (pack/cap) PACK Dilution Factor: 10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100	U
74-83-9	Bromomethane	100	U
75-01-4	Vinyl chloride	100	U
75-00-3	Chloroethane	100	U
75-09-2	Methylene chloride	34	JD
67-64-1	Acetone	100	U
75-15-0	Carbon disulfide	50	U
75-35-4	1,1-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
540-59-0	1,2-Dichloroethene (total)	50	U
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	280	D
56-23-5	Carbon tetrachloride	50	U
108-05-4	Vinyl acetate	100	U
75-27-4	Bromodichloromethane	50	U
78-87-5	1,2-Dichloropropane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
79-01-6	Trichloroethene	1500	D
124-48-1	Dibromochloromethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
71-43-2	Benzene	50	U
10061-02-6	Trans-1,3-dichloropropene	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-pentanone	100	U
591-78-6	2-Hexanone	100	U
127-18-4	Tetrachloroethene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
108-88-3	Toluene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
100-42-5	Styrene	50	U
1330-20-7	Total xylenes	50	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GW15DL

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66868DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1760

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column (pack/cap) PACK Dilution Factor: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW16 Dup of GW-10

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66877

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1795

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	9	B
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	14	
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	170	
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	120	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW16
Dup of GW-10

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66877

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1795

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/22/91

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76-13-1	ETHANE, 1,1,2-TRICHLORO-1,2,	13.64	130	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB11-17-91

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66878A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1753

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	11	
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB11-17-91

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5825 SAS No.: _____ SDG No.: 9

Matrix: (soil/water) WATER Lab Sample ID: 66878A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1753

Level: (low/med) LOW Date Received: 11/19/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MG-GW09-02

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5823 SAS No.: _____ SDG No.: 8

Matrix: (soil/water) WATER Lab Sample ID: 66845A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1756

Level: (low/med) LOW Date Received: 11/18/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column: (pack/cap) PACK Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20	U
74-83-9	Bromomethane	20	U
75-01-4	Vinyl chloride	20	U
75-00-3	Chloroethane	20	U
75-09-2	Methylene chloride	22	-
67-64-1	Acetone	20	U
75-15-0	Carbon disulfide	10	U
75-35-4	1,1-Dichloroethene	16	-
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	230	-
56-23-5	Carbon tetrachloride	10	U
108-05-4	Vinyl acetate	20	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	33	-
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	Trans-1,3-dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Total xylenes	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MG-GW09-02

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5823 SAS No.: _____ SDG No.: 8

Matrix: (soil/water) WATER Lab Sample ID: 66845A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1756

Level: (low/med) LOW Date Received: 11/18/91

% Moisture: not dec. _____ Date Analyzed: 11/21/91

Column (pack/cap) PACK Dilution Factor: 2.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76-13-1	ETHANE, 1,1,2-TRICHLORO-1,2,	13.64	58	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MG-RW01-02

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5823 SAS No.: _____ SDG No.: 8

Matrix: (soil/water) WATER Lab Sample ID: 66847

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1757

Level: (low/med) LOW Date Received: 11/18/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	3	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MG-RW01-02

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5823 SAS No.: _____ SDG No.: 8

Matrix: (soil/water) WATER Lab Sample ID: 66847

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1757

Level: (low/med) LOW Date Received: 11/18/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MG-RW03-02

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5823 SAS No.: _____ SDG No.: 8

Matrix: (soil/water) WATER Lab Sample ID: 66846A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1755

Level: (low/med) LOW Date Received: 11/18/91

% Moisture: not dec. _____ Date Analyzed: 11/21/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	11	
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MG-RW03-02

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5823 SAS No.: _____ SDG No.: 8

Matrix: (soil/water) WATER Lab Sample ID: 66846A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1755

Level: (low/med) LOW Date Received: 11/18/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5823 SAS No.: _____ SDG No.: 8

Matrix: (soil/water) WATER Lab Sample ID: 66844A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1752

Level: (low/med) LOW Date Received: 11/18/91

% Moisture: not dec. ____ Date Analyzed: 11/21/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	10	
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIPBLANK

I Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 5823 SAS No.: _____ SDG No.: 8

Matrix: (soil/water) WATER Lab Sample ID: 66844A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V1752

Level: (low/med) LOW Date Received: 11/18/91

% Moisture: not dec. _____ Date Analyzed: 11/21/91

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MGSB03

Lab Name: VERSAR_LABORATORIES_INC._ Contract: _____

Lab Code: VERSAR Case No.: _____ SAS No.: _____ SDG No.: MGSB03

Matrix (soil/water): SOIL_ Lab Sample ID: 66848_____

Level (low/med): LOW__ Date Received: 11/18/91

% Solids: _96.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_				NR
7440-36-0	Antimony_				NR
7440-38-2	Arsenic__				NR
7440-39-3	Barium___				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium__				NR
7440-70-2	Calcium__				NR
7440-47-3	Chromium_				NR
7440-48-4	Cobalt___				NR
7440-50-8	Copper___				NR
7439-89-6	Iron_____				NR
7439-92-1	Lead_____	7.3			F_
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury__				NR
7440-02-0	Nickel___				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium_				NR
7440-22-4	Silver___				NR
7440-23-5	Sodium___				NR
7440-28-0	Thallium_				NR
7440-62-2	Vanadium_				NR
7440-66-6	Zinc_____				NR
_____	Cyanide__				NR
_____	_____				__

Color Before: BROWN____ Clarity Before: _____ Texture: COURSE

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: YES___

Comments:

ROCKS_WERE_FOUND_IN_THIS_SAMPLE._____

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MGSB04

Lab Name: VERSAR_LABORATORIES_INC._ Contract: _____

Lab Code: VERSAR Case No.: _____ SAS No.: _____ SDG No.: MGSB03

Matrix (soil/water): SOIL_ Lab Sample ID: 66855_____

Level (low/med): LOW__ Date Received: 11/18/91

% Solids: _94.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		NR
7440-39-3	Barium___		_		NR
7440-41-7	Beryllium		_		NR
7440-43-9	Cadmium__		_		NR
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_		_		NR
7440-48-4	Cobalt___		_		NR
7440-50-8	Copper___		_		NR
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	5.2	_		F_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
7440-02-0	Nickel___		_		NR
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_		_		NR
7440-22-4	Silver___		_		NR
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_		_		NR
7440-62-2	Vanadium_		_		NR
7440-66-6	Zinc_____		_		NR
_____	Cyanide__		_		NR
_____	_____		_		___

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: YES___

Comments:

ROCKS_WERE_FOUND_IN_THIS_SAMPLE._____

_____

_____

_____

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MGSS04

Lab Name: VERSAR_LABORATORIES_INC._ Contract: _____

Lab Code: VERSAR Case No.: _____ SAS No.: _____ SDG No.: MGSB03

Matrix (soil/water): SOIL_ Lab Sample ID: 66849_____

Level (low/med): LOW__ Date Received: 11/18/91

% Solids: _94.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		NR
7440-39-3	Barium___		_		NR
7440-41-7	Beryllium		_		NR
7440-43-9	Cadmium__		_		NR
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_		_		NR
7440-48-4	Cobalt___		_		NR
7440-50-8	Copper___		_		NR
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	27.1	_		F_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
7440-02-0	Nickel___		_		NR
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_		_		NR
7440-22-4	Silver___		_		NR
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_		_		NR
7440-62-2	Vanadium_		_		NR
7440-66-6	Zinc_____		_		NR
_____	Cyanide__		_		NR
_____	_____		_		__

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: YES___

Comments:

ROCKS_WERE_FOUND_IN_THIS_SAMPLE._____

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MGSS05

Lab Name: VERSAR_LABORATORIES_INC._ Contract: _____

Lab Code: VERSAR Case No.: _____ SAS No.: _____ SDG No.: MGSB03

Matrix (soil/water): SOIL_ Lab Sample ID: 66850_____

Level (low/med): LOW__ Date Received: 11/18/91

% Solids: _91.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		NR
7440-39-3	Barium___		_		NR
7440-41-7	Beryllium		_		NR
7440-43-9	Cadmium__		_		NR
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_		_		NR
7440-48-4	Cobalt___		_		NR
7440-50-8	Copper___		_		NR
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	101	_	S	F_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
7440-02-0	Nickel___		_		NR
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_		_		NR
7440-22-4	Silver___		_		NR
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_		_		NR
7440-62-2	Vanadium_		_		NR
7440-66-6	Zinc_____		_		NR
_____	Cyanide__		_		NR
_____	_____		_		__

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: YES___

Comments:

WEEDS_WERE_FOUND_IN_THIS_SAMPLE._____

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MGSS06

Lab Name: VERSAR_LABORATORIES_INC._ Contract: _____

Lab Code: VERSAR Case No.: _____ SAS No.: _____ SDG No.: MGSB03

Matrix (soil/water): SOIL_ Lab Sample ID: 66851_____

Level (low/med): LOW__ Date Received: 11/18/91

% Solids: _89.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		NR
7440-39-3	Barium___		_		NR
7440-41-7	Beryllium		_		NR
7440-43-9	Cadmium__		_		NR
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_		_		NR
7440-48-4	Cobalt___		_		NR
7440-50-8	Copper___		_		NR
7439-89-6	Iron____		_		NR
7439-92-1	Lead____	58.6	_		F_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
7440-02-0	Nickel___		_		NR
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_		_		NR
7440-22-4	Silver___		_		NR
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_		_		NR
7440-62-2	Vanadium_		_		NR
7440-66-6	Zinc____		_		NR
_____	Cyanide__		_		NR

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: YES___

Comments:

ROCKS_WERE_FOUND_IN_THIS_SAMPLE._____

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MGSS07

Lab Name: VERSAR_LABORATORIES_INC._ Contract: _____

Lab Code: VERSAR Case No.: _____ SAS No.: _____ SDG No.: MGSB03

Matrix (soil/water): SOIL_ Lab Sample ID: 66852_____

Level (low/med): LOW__ Date Received: 11/18/91

% Solids: _92.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		NR
7440-39-3	Barium___		_		NR
7440-41-7	Beryllium		_		NR
7440-43-9	Cadmium__		_		NR
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_		_		NR
7440-48-4	Cobalt___		_		NR
7440-50-8	Copper___		_		NR
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	11.7	_		F_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
7440-02-0	Nickel___		_		NR
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_		_		NR
7440-22-4	Silver___		_		NR
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_		_		NR
7440-62-2	Vanadium_		_		NR
7440-66-6	Zinc_____		_		NR
_____	Cyanide__		_		NR
_____	_____		_		__

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: YES___

Comments:

ROCKS_WERE_FOUND_IN_THIS_SAMPLE._____

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MGSS08

Lab Name: VERSAR_LABORATORIES_INC._ Contract: _____

Lab Code: VERSAR Case No.: _____ SAS No.: _____ SDG No.: MGSB03

Matrix (soil/water): SOIL_ Lab Sample ID: 66853_____

Level (low/med): LOW__ Date Received: 11/18/91

% Solids: _87.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		NR
7440-39-3	Barium___		_		NR
7440-41-7	Beryllium		_		NR
7440-43-9	Cadmium__		_		NR
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_		_		NR
7440-48-4	Cobalt___		_		NR
7440-50-8	Copper___		_		NR
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	14.6	_	S	F_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
7440-02-0	Nickel___		_		NR
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_		_		NR
7440-22-4	Silver___		_		NR
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_		_		NR
7440-62-2	Vanadium_		_		NR
7440-66-6	Zinc_____		_		NR
_____	Cyanide__		_		NR
_____	_____		_		___

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: YES___

Comments:
ROCKS_WERE_FOUND_IN_THIS_SAMPLE._____

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MGSS09

Lab Name: VERSAR_LABORATORIES_INC._ Contract: _____

Lab Code: VERSAR Case No.: _____ SAS No.: _____ SDG No.: MGSB03

Matrix (soil/water): SOIL_ Lab Sample ID: 66854_____

Level (low/med): LOW__ Date Received: 11/18/91

% Solids: _89.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_		_		NR
7440-38-2	Arsenic__		_		NR
7440-39-3	Barium___		_		NR
7440-41-7	Beryllium		_		NR
7440-43-9	Cadmium__		_		NR
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_		_		NR
7440-48-4	Cobalt___		_		NR
7440-50-8	Copper___		_		NR
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	16.5	_		F_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__		_		NR
7440-02-0	Nickel___		_		NR
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_		_		NR
7440-22-4	Silver___		_		NR
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_		_		NR
7440-62-2	Vanadium_		_		NR
7440-66-6	Zinc_____		_		NR
_____	Cyanide__		_		NR
_____	_____		_		___

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: YES___

Comments:

ROCKS_WERE_FOUND_IN_THIS_SAMPLE._____