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1.0 INTRODUCTION

MAC CONSULTANTS, INC. (MAC) conducted a subsurface investigation on behalf of Mairoll Inc. to delineate the Old Recharge Basin (ORB) bottom sediment confined and re-buried during closure. An area of buried chromium soil was delineated and a soil gas survey was also performed as part of the investigation. The field work was conducted from June 17 to June 20, 2002. The work was performed in accordance with the New York State Department of Environmental Conservation (NYSDEC) approved "Old Recharge Basin Bottom Sediment Investigation Work Plan, May 2002"(Work Plan).

This delineation was discussed as one of two items the NYSDEC and the New York State Department of Health (NYSDOH) are seeking to support the institutional controls requirement of the closure. The other item is the deed notice NYSDEC has been working on internally with Department legal staff. The purpose of this investigation was to provide NYSDEC with the information that the Department has specifically requested and it is not intended as a pre-construction document. In the event that construction activities are undertaken by any party, it may be necessary for those parties to conduct an independent investigation where construction is to occur, in order to insure compliance with site-specific and general environmental regulations by Federal, State or local agencies.

In summary, the bottom sediment rose to the surface as the higher density sand and gravel fill was placed in the area shown on Figure 1, prepared by Savik & Murray. The sediment was confined by surrounding it with an earthen berm to prevent spreading the sediment over a wider area. The sediment was placed in trenches shown on Figure 1 and were allowed to dry as much as possible before being buried beneath clean sand and gravel fill. The limits of the buried sediment, including the trenches, were staked and surveyed by Savik & Murray, as shown on Figure 1.

When the sediment first rose to the surface of the ORB, **MAC** collected two soil samples and one

water sample on August 25, 1997. The analytical results indicated elevated concentrations of metals, PCBs and semi-volatile organic compounds (SVOCs). NYSDEC reviewed these results and concurred with the decision to bury the sediments onsite. Since the site may be developed in the future, it was recommended that the area and depth of these sediments below grade be delineated so that if these soils are encountered, they can be properly managed.

2.0 BOTTOM SEDIMENT INVESTIGATION

2.1 Soil Sampling Procedures

A Geoprobe direct-push device was used to bore through the soil and buried bottom sediment and collect discrete soil samples for inspection and laboratory analyses. No composite samples were collected. A four foot long by 2-inch outside diameter soil sampler ("macro core") was driven from grade to the 12 feet below grade. Soil samples were collected continuously at the 0 to 4 foot, 4 to 8 foot, and 8 to 12 foot intervals at each of the designated locations. Soil descriptions from the macro cores were noted on geologic logs by a **MAC** hydrogeologist. The geologic logs are provided in Appendix A. The boring locations are shown on Figure 1 and described in detail below.

2.1.1 Buried Chromium Soil

Soils containing elevated levels of chromium are buried beneath a berm along the western boundary of the site. Twenty-eight borings were drilled in the vicinity of the buried chromium soil to delineate the presence and depth of total chromium in the soil. The number and spacing of the borings were based upon proposed utilities in the vicinity of the buried chromium soil. The buried chromium soil and soil boring locations are shown on Figure 1. Three soil samples per boring were collected for laboratory analysis at the 0 to 4 foot, 4 to 8 foot, and 8 to 12 foot intervals. Two soil samples were collected from buried chromium borings BC-14 and BC-21 due to Geoprobe refusal at 8.5 feet and 6.5 feet, respectively.

2.1.2 Buried Bottom Sediment

The Work Plan included seventeen borings that would be drilled to delineate the presence and depth of buried bottom sediment. An additional three borings (BS-25, BS-26, BS-27) were drilled to provide further delineation of the buried bottom sediment based on discussions with NYSDEC. The

location of the buried bottom sediment and bottom sediment boring locations are shown on Figure 1. These boring locations were based on 1997 surveyed boundaries of bottom sediment at grade. Soil samples were collected from the macro core which contained obvious bottom sediment material that is easily identified by its dark gray to black color and silty characteristics. If bottom sediment was readily identified, a boring was stopped at the depth the bottom sediment is found, and a sample was collected for laboratory analysis. If no clearly identifiable bottom sediment was found, soil samples were collected from each cored interval to confirm absence of bottom sediment.

Soil samples were not collected from borings BS-1, BS-17, or BS-26 because soil samples collected from these borings did not contain obvious bottom sediment material and these locations are assumed to be within the boundary of the buried bottom sediment. Soil samples were collected from borings BS-25 and BS-27 in substitute for the proposed samples from borings BS-1 and BS-17. Boring BS-25 was drilled an additional four feet and a soil sample was collected at 12 to 16 feet below grade. A soil sample was collected from BS-27 at 8 to 12 feet below grade.

2.1.3 Additional Soil Sampling

The ORB has been sectioned into 13 grids. NYSDEC required one boring to be drilled in each grid (with the exception of grids 1, 4, 5, 6, 7, and 8 that were sampled for buried chromium soil and buried bottom sediment) to determine if the bottom sediment material is present. An additional two borings (BS-28 and BS-29) were drilled in grid 7 to further delineate possible bottom sediment material identified in buried chromium boring BC-5 and buried bottom sediment boring BS-13. The grid locations and additional soil sampling borings are shown on Figure 1. If bottom sediment was readily identified, a boring was stopped at the depth the bottom sediment is found, and a sample was collected for laboratory analysis. If no clearly identifiable bottom sediment was found, soil samples were collected from each cored interval to confirm absence of bottom sediment.

2.1.4 Soil Disposal

Unused soil sample from the cores were placed back in the boring from which it was recovered.

2.1.5 Decontamination

The Geoprobe drill rods and other equipment which came in contact with the soil were cleaned with Alconox and double rinsed between each use.

2.2 Soil Gas Survey

A soil gas survey was performed to address the potential presence of volatile organic compounds (VOCs) in the soil gas. One soil gas sample was collected from each grid as shown on Figure 1. A vehicle-mounted Geoprobe unit was used to perform the soil gas survey at the respective locations.

The probe rods and an expendable drive point were driven to 6 feet below grade. Once the drive point is set at the 6 foot depth, the probe rods were retracted approximately 3 to 4 inches to create a void which will allow the migration of the soil vapor sample into the bottom of the borehole. A clean, ¼" Teflon tubing was then attached to the bottom of the lead probe rod. The line was purged by drawing soil gas / vapor through the tubing using a vacuum pump.

The tubing was then disconnected from the vacuum pump and attached to a Photoionization Detector (PID) to detect the presence of VOC vapors. The PID readings were recorded on geologic logs provided in Appendix A. The Teflon tubing was then fitted to a Summa canister which collected a soil gas sample using negative pressure the canister was placed under by the laboratory.

The probe rods and sample equipment were cleaned with Alconox and double rinsed between each use.

2.3 Laboratory Analysis

Chemtech Laboratories of Mountainside, New Jersey analyzed the samples collected from the Geoprobe borings and soil gas survey locations. A Data Usability Summary Report (DUSR) was prepared under the requirement for the NYSDEC ASP Catagory B deliverables. Chemtech is a ELAP and CLP New York State certified laboratory. The Chemtech Electronic Data is included in Appendix B and the DUSR report is included in Appendix C.

2.3.1 Buried Chromium Soil

Soil samples collected as part of the buried chromium soil investigation were analyzed for total chromium. Additional sample was collected and the ten highest total chromium samples were analyzed for TCLP chromium. Total chromium results are presented in Table 1 and the TCLP chromium results are presented in Table 2.

2.3.2 Buried Bottom Sediment

Soil samples collected as part of the buried bottom sediment investigation were analyzed for VOCs using USEPA Method 8260, SVOCs using USEPA Method 8270, PCBs using Method 8082, and Target Analyte List metals using Method 6010. The soil VOC results are shown in Table 3, SVOCs in Table 4, PCBs in Table 5, and Target Analyte List metals results are shown in Table 6.

2.3.3 Additional Soil Sampling

Soil samples collected as part of the additional soil sampling investigation were analyzed for PCBs using Method 8082. PCB results are shown in Table 5.

2.3.4 Soil Gas

Air samples collected during the soil gas survey were analyzed for VOCs using Method TO + 14. The air analytical results are shown in Table 7.

2.4 Quality Assurance Project Plan

The quality assurance (QA) objective was to develop and implement procedures for sampling, laboratory analyses, field measurements, and reporting that will provide quality data consistent with it's intended use. This section defines the goals for levels of quality control (QC) effort.

2.4.1 Quality Control

Duplicate samples, rinse blanks, and trip blanks were collected and submitted to the analytical laboratory to provide a means to assess the quality of the data resulting from the field sampling program. A field duplicate sample was analyzed for sampling and analytical reproducibility. Trip blank samples were analyzed to assess cross-contamination caused by VOC migration during shipment and storage. QC effort consisted of one duplicate sample for every 20 samples and a trip blank with each shipment of soil samples to the laboratory. Deionized water used for trip blanks was demonstrated analyte-free for parameters of interest by laboratory analysis.

2.4.2 Quality Control Requirements

Field quality control was maintained during all field activities. All field quality control procedures were carried out according to this Quality Assurance Project Plan and were documented in bound ledgers.

2.4.2.1 Field Duplicates

A duplicate sample, Matrix Spike (MS) sample, and a Matrix Spike Duplicate (MSD) sample were collected for every 20 samples collected, a field rinse blank analysis of the decontaminated Geoprobe tools was collected once a day.

2.4.2.2 Trip Blanks

Each sample shipment containing aqueous samples for VOC analysis contained one trip blank for VOC analysis. The trip blank consisted of two 40 ml VOA vials with laboratory grade distilled water, prepared by the laboratory, transported to the field, and shipped with the other samples to the laboratory without being opened.

3.0 LABORATORY RESULTS

3.1 Soil Analytical Results

3.1.1 Chromium

Total chromium results are presented in Table 1 and TCLP chromium results are presented in Table 2. Eighty three samples were collected from the buried chromium borings and analyzed for total chromium. Twenty one samples exceeded eastern U.S.A. background levels. Samples which exceeded eastern U.S.A. background levels were collected from cores retrieved at 4 to 8 feet and 8 to 12 feet below grade. No samples collected from 0 to 4 feet below grade exceeded eastern U.S.A. background levels.

Samples collected from buried chromium borings BC-1, BC-6, and BC-14 exceeded eastern U.S.A. background levels and were beyond the limit of the buried chromium soil as shown on Figure 1.

The ten highest total chromium samples were analyzed for TCLP chromium. Table 2 presents the TCLP chromium results. The ten samples were within United States Environmental Protection Agency (USEPA) leachability standards.

3.1.2 Volatile Organic Compounds

VOC results are shown in Table 3. Forty five soil samples were collected from the bottom sediment borings and analyzed for VOCs. No VOCs were detected except for acetone in samples from BS-4 at 8 to 12 feet below grade, and BS-13 at 4 to 8 and 8 to 12 feet below grade. Acetone is known to be a common laboratory contaminant and the above results were below NYSDEC soil cleanup guidelines.

3.1.3 Semi-Volatile Organic Compounds

SVOC results are shown in Table 4. Forty five soil samples were collected from the bottom sediment borings and analyzed for SVOCs. Thirty eight samples exceeded NYSDEC soil cleanup guidelines for one or more SVOC. Compounds which exceeded NYSDEC soil cleanup guidelines were mainly benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene. These compounds are petroleum hydrocarbons that are commonly found in asphalt material, which was encountered in a majority of the borings. The presence and concentration of these compounds in also consistent with soil samples collected by **MAC** in August 1997 and soil samples collected by Eder Associates in October 1992 as part of the Remedial Investigation (RI).

3.1.4 PCBs

PCBs results are shown in Table 5. Sixty seven soil samples were collected from the bottom sediment and additional soil sample borings and analyzed for PCBs. Two samples exceeded NYSDEC soil cleanup guidelines of 10,000 ug/kg for one or more PCB. The presence of PCBs in these soil samples can be associated with the buried bottom sediment material that was encountered in the area where bottom sediment had been buried. None of the surface soil samples (0 to 4 feet below grade) contained PCBs above the 1,000 ug/kg NYSDEC cleanup guidance value for surface soils.

3.1.5 Target Analyte List Metals

Target Analyte List metals results are shown in Table 6. Forty five soil samples were collected from the bottom sediment borings and analyzed for Target Analyte List metals. Ten samples exceeded eastern U.S.A. background levels.

The samples collected from bottom sediment borings BS-25 at 12 to 16 feet below grade and BS-27 at 8 to 12 feet below grade detected elevated concentrations of cadmium, chromium, copper, nickel,

and zinc which exceeded eastern U.S.A. background levels. The 8 to 12 foot sample from BS-4 detected elevated concentrations of cadmium, chromium, and copper above eastern U.S.A. background levels. No samples collected from 0 to 4 feet below grade exceeded U.S.A. background and other samples which exceeded background levels were close to eastern U.S.A. background levels.

3.2 Air Analytical Results

The air analytical results are shown in Table 7. Thirteen air samples were collected from the soil gas survey locations (one in each grid). Tetrachloroethene was detected at over 16 mg/m^3 in the soil gas sample collected at SG-1. This sample location is adjacent to the East Farmingdale Fire District where a groundwater monitoring well is located which in known to contain high concentrations of tetrachloroethene. Other soil gas survey samples detected trace amounts of trichloroethene, tetrachloroethene, and 1,2,4-trimethylbenzene.

4.0 CONCLUSIONS

The conclusions of the Bottom Sediment Investigation are summarized below:

1. Samples collected from the buried chromium borings did not detect total chromium levels over eastern U.S.A. background levels from samples collected at 0 to 4 feet below grade. Samples collected at 4 to 8 and 8 to 12 feet below grade that exceeded eastern U.S.A. background levels were within the limit of the surveyed buried chromium soil are except for samples collected from buried chromium borings BC-1, BC-6, and BC-14. The ten highest total chromium samples were analyzed for TCLP chromium and results were below USEPA standards for leachable chromium.

2. No VOCs were detected in soil samples except for acetone, a common laboratory contaminant, in samples from BS-4 at 8 to 12 feet below grade, and BS-13 at 4 to 8 feet and 8 to 12 feet below grade. Acetone concentrations were below NYSDEC soil cleanup guidelines.

3. SVOCs detected in soil samples included benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene. These compounds are commonly found in asphalt material, which was encountered in a majority of the borings. The presence and concentration of these compounds in also consistent with soil samples collected in August 1997 and soil samples collected in October 1992 as part of the RI.

4. The presence of PCBs detected in soil samples is most likely associated with the buried bottom sediment material. The only two samples containing PCBs above NYSDEC soil cleanup guidelines were at depths of 8 to 12 and 12 to 16 feet below grade respectively within the area where bottom sediments rose to the surface.

5. Samples collected from bottom sediment borings BS-25 at 12 to 16 feet below grade and BS-27 at 8 to 12 feet below grade detected elevated concentrations of cadmium, chromium, copper, nickel, and zinc which exceeded eastern U.S.A. background levels. The 8 to 12 foot sample from BS-4 detected elevated concentrations of cadmium, chromium, and copper above eastern U.S.A. background levels. None of the shallow (0 to 4 feet below grade) soil samples exceeded Eastern U.S.A. background levels.

6. Tetrachloroethene was detected at over 16 mg/m^3 in the soil gas sample collected at SG-1. This sample location is adjacent to the East Farmingdale Fire District where a groundwater monitoring well is located which in known to contain high concentrations of tetrachloroethene.

7. The purpose of this investigation was to provide NYSDEC with the information that the Department has specifically requested and it is not intended as a pre-construction document. In the event that construction activities are undertaken by any party, it may be necessary for those parties to conduct an independent investigation where construction is to occur, in order to insure compliance with site-specific and general environmental regulations by Federal, State or local agencies.

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Old Recharge Basin
East Farmingdale, New York
Bottom Sediment Investigation

Table 1
Soil Analytical Results (mg/kg): Total Chromium

Sample ID	BC-1	BC-1	BC-1	BC-2	BC-2	BC-2	BC-3	BC-3	BC-3	Eastern USA
Sample Depth	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	Background
Sample Date	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	(mg/kg)
PARAMETER - mg/kg										
Chromium as Cr	3.7	80.3	115	6.1	5.4	6.6	4.2	3.3	4.5	1.5 - 40

Sample ID	BC-4	BC-4	BC-4	BC-5	BC-5	BC-5	BC-6	BC-6	BC-6	Eastern USA
Sample Depth	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	Background
Sample Date	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	(mg/kg)
PARAMETER - mg/kg										
Chromium as Cr	4.8	4	13.4	9.5	25.2	5.8	5.7	1180	108	1.5 - 40

Sample ID	BC-7	BC-7	BC-7	BC-8	BC-8	BC-8	BC-9	BC-9	BC-9	Eastern USA
Sample Depth	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	Background
Sample Date	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	(mg/kg)
PARAMETER - mg/kg										
Chromium as Cr	3.2	5.8	4.9	2.6	8	16.4	8.3	6	4.6	1.5 - 40

Sample ID	BC-10	BC-10	BC-10	BC-11	BC-11	BC-11	BC-12	BC-12	BC-12	Eastern USA
Sample Depth	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	Background
Sample Date	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	(mg/kg)
PARAMETER - mg/kg										
Chromium as Cr	8.2	6.6	6.7	14.9	8.2	2	3.7	4.6	4.4	1.5 - 40

Old Recharge Basin
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Table 1 (Cont'd)
Soil Analytical Results (mg/kg): Total Chromium

Sample ID	BC-13	BC-13	BC-13	BC-14	BC-14	BC-15	BC-15	BC-15	BC-16	Eastern USA
Sample Depth	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	Background
Sample Date	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	(mg/kg)
PARAMETER - mg/kg										
Chromium as Cr	14.5	13.6	6.2	13.5	46.3	8.2	38.2	13	12.7	1.5 - 40

Sample ID	BC-16	BC-16	BC-17	BC-17	BC-17	BC-18	BC-18	BC-18	BC-19	Eastern USA
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	Background
Sample Date	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	(mg/kg)
PARAMETER - mg/kg										
Chromium as Cr	209	101	9.7	61	55.7	6.6	5.3	78.8	5.8	1.5 - 40

Sample ID	BC-19	BC-19	BC-20	BC-20	BC-20	BC-21	BC-21	BC-22	BC-22	Eastern USA
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	0-4 ft	4-8 ft	Background
Sample Date	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	(mg/kg)
PARAMETER - mg/kg										
Chromium as Cr	32.9	87.9	5.8	47.4	72.2	4	16.9	37.8	3.3	1.5 - 40

Sample ID	BC-22	BC-23	BC-23	BC-23	BC-24	BC-24	BC-24	BC-25	BC-25	Eastern USA
Sample Depth	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	Background
Sample Date	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	(mg/kg)
PARAMETER - mg/kg										
Chromium as Cr	2.8	13.5	13.8	1.5	5.7	46	5.7	28.4	119	1.5 - 40

Old Recharge Basin
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Table 1 (Cont'd)
Soil Analytical Results (mg/kg): Total Chromium

Sample ID	BC-25	BC-26	BC-26	BC-26	BC-27	BC-27	BC-27	BC-28	BC-28	Eastern USA
Sample Depth	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	Background
Sample Date	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	(mg/kg)
PARAMETER - mg/kg										
Chromium as Cr	1210	5.3	52.7	876	5.5	91.1	14.2	15.2	416	1.5 - 40

Sample ID	BC-28	Eastern USA
Sample Depth	8-12 ft	Background
Sample Date	6/17/2002	(mg/kg)
PARAMETER - mg/kg		
Chromium as Cr	74.6	1.5 - 40

Old Recharge Basin
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Table 2
Soil Analytical Results (ug/l): TCLP Chromium

Sample ID	BC-1	BC-6	BC-6	BC-16	BC-16	BC-19	BC-25	BC-25	BC-26	BC-28	USEPA
Sample Depth	8-12 ft	4-8 ft	8-12 ft	4-8 ft	8-12 ft	8-12 ft	4-8 ft	8-12 ft	8-12 ft	4-8 ft	Groundwater
Sample Date	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/17/2002	6/18/2002	6/18/2002	6/18/2002	6/18/2002	Standards (ug/l)
PARAMETER - ug/l											
Chromium as Cr	39.4	386	366	64.5	49.6	20.9	26.1	53.2	38.4	39.4	5000

Old Recharge Basin
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Table 3
Soil Analytical Results (ug/kg)
Volatile Organic Compounds: USEPA Method 8260

Sample ID	BS-2	BS-2	BS-2	BS-3	BS-3	BS-3	BS-4	BS-4	BS-5	NYSDEC
Sample Depth	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	8-12 ft	0-4 ft	Soil Cleanup
Sample Date	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Chloromethane	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	*[3]
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	1900
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Acetone	ND	ND	ND	ND	ND	ND	ND	20	ND	200
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	2700
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	800
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Trichloroethene	ND	ND	1.4	ND	ND	ND	ND	ND	ND	700
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	60
t-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1400
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1500
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1700
Ethyl Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	5500
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
m/p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200

Notes:

1. TAGM 4046 guidence values are listed where applicable.
2. ND - Not Deteeted
3. No TAGM soil guidence value for this compound.

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Table 3 (cont'd)
Soil Analytical Results (ug/kg)
Volatile Organic Compounds: USEPA Method 8260

Sample ID	BS-5	BS-5	BS-6	BS-6	BS-6	BS-7	BS-7	BS-7	BS-8	NYSDEC
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	Soil Cleanup
Sample Date	6/20/2002	6/20/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Chloromethane	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	*[3]
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	1900
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	2700
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	800
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	2	700
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	60
t-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1400
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1500
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1700
Ethyl Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	5500
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
m/p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200

Notes:

1. TAGM 4046 guidence values are listed where applicable.
2. ND - Not Detected
3. No TAGM soil guidence value for this compound.

Old Recharge Basin
East Farmingdale, New York
Bottom Sediment Investigation

Table 3 (cont'd)
Soil Analytical Results (ug/kg)
Volatile Organic Compounds: USEPA Method 8260

Sample ID	BS-8	BS-8	BS-9	BS-9	BS-9	BS-10	BS-10	BS-10	BS-11	NYSDEC
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	Soil Cleanup
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Chloromethane	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	*[3]
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	1900
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	2700
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	800
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	1.8	ND	700
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	60
t-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1400
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1500
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1700
Ethyl Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	5500
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
m/p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200

Notes:

1. TAGM 4046 guidence values are listed where applicable.
2. ND - Not Detected
3. No TAGM soil guidence value for this compound.

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Table 3 (cont'd)
Soil Analytical Results (ug/kg)
Volatile Organic Compounds: USEPA Method 8260

Sample ID	BS-11	BS-11	BS-12	BS-12	BS-12	BS-13	BS-13	BS-14	BS-14	NYSDEC
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	Soil Cleanup
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/20/2002	6/20/2002	6/19/2002	6/19/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Chloromethane	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	*[3]
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	1900
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Acetone	ND	ND	ND	ND	ND	23	11	ND	ND	200
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	2700
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	800
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	700
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	60
t-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1400
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1500
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1700
Ethyl Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	5500
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
m/p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200

Notes:

1. TAGM 4046 guidence values are listed where applicable.
2. ND - Not Detected
3. No TAGM soil guidence value for this compound.

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Table 3 (cont'd)
Soil Analytical Results (ug/kg)
Volatile Organic Compounds: USEPA Method 8260

Sample ID	BS-14	BS-15	BS-15	BS-15	BS-16	BS-16	BS-16	BS-25	BS-27	NYSDEC
Sample Depth	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	12-16 ft	8-12 ft	Soil Cleanup
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Chloromethane	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	*[3]
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	1900
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	2700
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	800
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	700
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	60
t-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1400
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1500
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1700
Ethyl Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	5500
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
m/p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200
o-Xylene	ND	ND	ND	ND	ND	ND	ND	6	ND	1200

Notes:

1. TAGM 4046 guidence values are listed where applicable.
2. ND - Not Detected
3. No TAGM soil guidence value for this compound.

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Table 4
Soil Analytical Results (ug/kg)
Semi-Volatile Organic Compounds: USEPA Method 8270

Sample ID	BS-2	BS-2	BS-2	BS-3	BS-3	BS-3	BS-4	BS-4	BS-5	NYSDEC
Sample Depth	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	8-12 ft	0-4 ft	Soil Cleanup
Sample Date	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Phenol	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	30
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	800
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	7900
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1600
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	8500
2-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2,2-oxybis(1-Chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
3+4-Methylphenols	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
n-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	4400
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	330
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	3400
Naphthalene	ND	ND	65	1300	ND	70	290	ND	ND	13000
4-Chloroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	220
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	240
2-Methylnaphthalene	ND	ND	ND	280	ND	ND	140	ND	ND	36400
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	430
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	2000
Acenaphthylene	ND	ND	ND	1600	ND	ND	300	ND	ND	41000
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	500
Acenaphthene	ND	46	110	620	69	160	1000	100	ND	50000
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Dibenzofuran	ND	ND	54	1000	ND	88	470	41	ND	6200
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	7100
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Fluorene	ND	ND	100	1700	70	160	830	80	ND	50000
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	410
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
Phenanthrene	1800	420	990	11000	940	1700	5000	700	240	50000
Anthracene	ND	100	240	2200	210	370	1400	160	61	50000
Carbazole	ND	61	120	1400	100	190	780	120	ND	*
Di-n-butylphthalate	130000	ND	ND	ND	ND	ND	ND	ND	68	8100
Fluoranthene	3000	620	1600	13000	1900	2600	4100	1200	440	50000
Pyrene	7400	1000	4600	18000	3000	4800	4500	1000	900	50000
Butylbenzylphthalate	ND	ND	ND	57	ND	510	ND	ND	ND	50000
3,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Benzo(a)anthracene	1800	400	790	7100	1000	1200	1700	510	280	224
Chrysene	1000	200	490	6800	680	900	1600	410	130	400
Bis(2-ethylhexyl)phthalate	390	49	72	92	77	36	66	480	48	50000
Di-n-octyl phthalate	ND	ND	ND	96	110	ND	ND	ND	ND	50000
Benzo(b)fluoranthene	ND	730	2000	96000	4300	3600	4900	710	320	1100
Benzo(k)fluoranthene	ND	290	650	18000	1800	1400	2600	260	88	1100
Benzo(a)pyrene	ND	370	700	51000	930	1400	2600	360	150	61
Indeno(1,2,3-cd)pyrene	ND	ND	ND	98	ND	ND	ND	ND	ND	3200
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	14
Benzo(g,h,i)perylene	ND	ND	ND	1700	ND	ND	ND	ND	ND	50000

Notes:
1. TAGM 4046 guidence values are listed where applicable.
2. ND - Not Detected
3. No TAGM soil guidence value for this compound.

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Table 4 (cont'd)
Soil Analytical Results (ug/kg)
Semi-Volatile Organic Compounds: USEPA Method 8270

Sample ID	BS-5	BS-5	BS-6	BS-6	BS-6	BS-7	BS-7	BS-7	BS-8	NYSDEC
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	Soil Cleanup
Sample Date	6/20/2002	6/20/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Phenol	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	30
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	800
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	7900
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1600
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	8500
2-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2,2-oxybis(1-Chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
3+4-Methylphenols	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
n-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	4400
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	330
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	3400
Naphthalene	ND	49	ND	ND	ND	150	2100	ND	ND	13000
4-Chloroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	220
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	240
2-Methylnaphthalene	ND	53	ND	ND	ND	85	430	ND	ND	36400
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	430
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	2000
Acenaphthylene	ND	ND	ND	ND	ND	ND	210	ND	ND	41000
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	500
Acenaphthene	80	160	ND	97	ND	1000	3200	ND	ND	50000
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Dibenzofuran	34	86	ND	ND	ND	460	1800	ND	ND	6200
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	7100
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Fluorene	97	200	ND	83	ND	1100	3400	ND	ND	50000
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	410
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
Phenanthrene	740	1400	370	840	320	8500	26000	110	740	50000
Anthracene	180	370	74	200	96	2500	7200	ND	ND	50000
Carbazole	73	120	39	100	ND	710	3300	ND	ND	*
Di-n-butylphthalate	ND	120	ND	ND	ND	ND	ND	ND	ND	8100
Fluoranthene	1300	1600	340	1200	500	12000	38000	130	1100	50000
Pyrene	1900	2600	500	3900	1000	9900	34000	300	1700	50000
Butylbenzylphthalate	ND	ND	ND	ND	260	ND	ND	ND	ND	50000
3,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Benzo(a)anthracene	710	790	210	660	290	6600	19000	64	580	224
Chrysene	520	460	120	390	220	5000	17000	ND	ND	400
Bis(2-ethylhexyl)phthalate	51	310	74	40	86	200	20000	ND	ND	50000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	50000
Benzo(b)fluoranthene	990	1600	430	1700	340	44000	160000	ND	ND	1100
Benzo(k)fluoranthene	320	320	230	1000	200	26000	44000	ND	ND	1100
Benzo(a)pyrene	580	640	120	690	190	24000	81000	ND	ND	61
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	69	ND	ND	ND	3200
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	360	850	ND	ND	14
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	280	1100	ND	ND	50000

Notes:
1. TAGM 4046 guidence values are listed where applicable.
2. ND - Not Detected
3. No TAGM soil guidence value for this compound.

Old Recharge Basin
East Farmingdale, New York
Bottom Sediment Investigation

Table 4 (cont'd)
Soil Analytical Results (ug/kg)
Semi-Volatile Organic Compounds: USEPA Method 8270

Sample ID	BS-8	BS-8	BS-9	BS-9	BS-9	BS-10	BS-10	BS-10	BS-11	NYSDEC
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	Soil Cleanup
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Phenol	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	30
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	800
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	7900
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1600
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	8500
2-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2,2-oxybis(1-Chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
3+4-Methylphenols	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
n-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	4400
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	330
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	3400
Naphthalene	420	ND	ND	ND	ND	ND	340	ND	ND	13000
4-Chloroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	220
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	240
2-Methylnaphthalene	120	ND	ND	ND	ND	ND	ND	ND	ND	36400
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	430
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	2000
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	41000
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	500
Acenaphthene	620	ND	ND	ND	ND	110	1300	59	ND	50000
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Dibenzofuran	340	ND	ND	ND	ND	ND	530	ND	ND	6200
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	7100
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Fluorene	650	ND	ND	ND	ND	81	1200	52	ND	50000
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	410
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
Phenanthrene	4500	ND	340	100	280	920	13000	560	57	50000
Anthracene	1100	ND	74	ND	54	190	3200	110	ND	50000
Carbazole	730	ND	52	ND	ND	130	2000	51	ND	*
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	8100
Fluoranthene	6300	720	720	170	420	1700	24000	560	68	50000
Pyrene	6200	1300	2000	520	1100	3500	28000	770	190	50000
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	50000
3,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Benzo(a)anthracene	3100	390	450	150	210	780	12000	390	47	224
Chrysene	2700	410	360	ND	100	440	12000	410	ND	400
Bis(2-ethylhexyl)phthalate	41	ND	ND	140	84	ND	ND	130	ND	50000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	50000
Benzo(b)fluoranthene	19000	200	940	520	150	1500	84000	1300	790	1100
Benzo(k)fluoranthene	7600	300	230	700	ND	640	19000	450	670	1100
Benzo(a)pyrene	8500	110	300	ND	51	560	33000	340	ND	61
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	3200
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	14
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	50000

Notes:
1. TAGM 4046 guidence values are listed where applicable.
2. ND - Not Detected
3. No TAGM soil guidence value for this compound.

Old Recharge Basin
East Farmingdale, New York
Bottom Sediment Investigation

Table 4 (cont'd)
Soil Analytical Results (ug/kg)
Semi-Volatile Organic Compounds: USEPA Method 8270

Sample ID	BS-11	BS-11	BS-12	BS-12	BS-12	BS-13	BS-13	BS-14	BS-14	NYSDEC
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	Soil Cleanup
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/20/2002	6/20/2002	6/19/2002	6/19/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Phenol	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	30
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	800
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	7900
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1600
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	8500
2-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2,2-oxybis(1-Chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
3+4-Methylphenols	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
n-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	4400
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	330
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	3400
Naphthalene	90	250	ND	ND	ND	ND	ND	ND	5700	13000
4-Chloroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	220
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	240
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	1900	36400
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
?,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	430
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	2000
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	41000
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	500
Acenaphthene	230	420	93	ND	99	ND	ND	ND	9500	50000
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Dibenzofuran	110	210	ND	ND	ND	ND	ND	ND	5300	6200
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	7100
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Fluorene	200	460	80	ND	100	ND	ND	ND	9800	50000
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	410
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
Phenanthrene	2000	4700	940	ND	1100	110	ND	2800	57000	50000
Anthracene	390	1100	210	ND	250	ND	ND	420	20000	50000
Carbazole	220	440	130	ND	110	ND	ND	180	9900	*
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	8100
Fluoranthene	2400	6800	2200	ND	1700	210	35	6700	78000	50000
Pyrene	6400	10000	4000	68	3900	270	67	5300	55000	50000
Butylbenzylphthalate	ND	120	ND	ND	ND	ND	ND	ND	ND	50000
3,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Benzo(a)anthracene	1200	3200	1000	ND	710	93	ND	2400	36000	224
Chrysene	610	2500	620	ND	490	80	ND	2400	31000	400
Bis(2-ethylhexyl)phthalate	160	560	ND	ND	ND	220	ND	ND	ND	50000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	50000
Benzo(b)fluoranthene	5400	17000	3100	300	760	130	ND	2400	120000	1100
Benzo(k)fluoranthene	1100	8400	1000	340	1400	ND	ND	3000	100000	1100
enzo(a)pyrene	ND	5000	800	ND	ND	60	ND	2700	97000	61
deno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	930	3200
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	1600	14
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	2100	50000

Notes:
1. TAGM 4046 guidence values are listed where applicable.
2. ND - Not Detected
3. No TAGM soil guidence value for this compound.

Old Recharge Basin
East Farmingdale, New York
Bottom Sediment Investigation

Table 4 (cont'd)
Soil Analytical Results (ug/kg)
Semi-Volatile Organic Compounds: USEPA Method 8270

Sample ID	BS-14	BS-15	BS-15	BS-15	BS-16	BS-16	BS-16	BS-25	BS-27	NYSDEC
Sample Depth	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	12-16 ft	8-12 ft	Soil Cleanup
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Phenol	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	30
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	800
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	7900
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1600
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	8500
2-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2,2-oxybis(1-Chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
3+4-Methylphenols	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
n-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	4400
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	330
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	3400
Naphthalene	ND	ND	ND	ND	ND	520	ND	ND	ND	13000
4-Chloroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	220
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	240
2-Methylnaphthalene	ND	ND	ND	550	ND	ND	ND	ND	ND	36400
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	430
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	2000
Acenaphthylene	ND	ND	1500	ND	ND	ND	ND	ND	ND	41000
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	500
Acenaphthene	62	ND	ND	1000	420	2900	280	ND	ND	50000
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Dibenzofuran	ND	ND	ND	300	ND	940	ND	ND	ND	6200
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	7100
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Fluorene	59	ND	ND	1500	370	2100	340	ND	ND	50000
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	410
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
Phenanthrene	530	1600	1300	8400	4100	60000	6100	1300	710	50000
Anthracene	100	370	370	2100	890	6200	910	ND	690	50000
Carbazole	57	ND	ND	200	450	2300	460	ND	410	*
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	8100
Fluoranthene	720	3000	3500	5400	7200	69000	8900	3000	5500	50000
Pyrene	1600	3800	7600	14000	9300	67000	8400	2600	6100	50000
Butylbenzylphthalate	710	ND	ND	ND	ND	ND	ND	ND	ND	50000
3,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Benzo(a)anthracene	290	1500	2900	2400	3200	13000	3200	1100	2100	224
Chrysene	150	960	2300	1500	2000	12000	3100	1600	2100	400
Bis(2-ethylhexyl)phthalate	36	ND	ND	190	ND	ND	ND	8300	3100	50000
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	50000
Benzo(b)fluoranthene	1300	1600	6300	3500	6000	8000	2800	2300	5900	1100
Benzo(k)fluoranthene	200	ND	8000	ND	2200	14000	3400	1300	3700	1100
Benzo(a)pyrene	ND	860	5200	1500	3000	8900	2600	700	1300	61
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	900	ND	ND	ND	3200
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	14
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	6700	ND	ND	ND	50000

Notes:
1. TAGM 4046 guidence values are listed where applicable.
2. ND - Not Detected
3. No TAGM soil guidence value for this compound.

Old Recharge Basin
East Farmingdale, New York
Bottom Sediment Investigation

Table 5
Soil Analytical Results (ug/kg)
PCBs: USEPA Method 8082

Sample ID	BS-2	BS-2	BS-2	BS-3	BS-3	BS-3	BS-4	BS-4	BS-5	NYSDEC
Sample Depth	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	8-12 ft	0-4 ft	Soil Cleanup
Sample Date	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Aroclor-1016	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1248	ND	ND	ND	ND	780	ND	ND	5900	ND	10,000
Aroclor-1254	ND	ND	ND	ND	530	ND	ND	2500	120	10,000
Aroclor-1260	300	ND	65	2100	270	50	23	ND	33	10,000

Sample ID	BS-5	BS-5	BS-6	BS-6	BS-6	BS-7	BS-7	BS-7	BS-8	NYSDEC
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	Soil Cleanup
Sample Date	6/20/2002	6/20/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Aroclor-1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1242	ND	ND	ND	ND	ND	ND	1600	ND	ND	10,000
Aroclor-1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1254	ND	120	ND	ND	ND	820	ND	ND	ND	10,000
Aroclor-1260	15	ND	ND	ND	180	ND	ND	ND	ND	10,000

Notes:
1. TAGM 4046 guidence values
2. ND - Not Detected

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East Farmingdale, New York
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Table 5 (cont'd)
Soil Analytical Results (ug/kg)
PCBs: USEPA Method 8082

Sample ID	BS-8	BS-8	BS-9	BS-9	BS-9	BS-10	BS-10	BS-10	BS-11	NYSDEC
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	Soil Cleanup
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Aroclor-1016	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1254	74	ND	ND	ND	ND	ND	660	ND	110	10,000
Aroclor-1260	ND	ND	ND	38	40	140	310	120	ND	10,000

Sample ID	BS-11	BS-11	BS-12	BS-12	BS-12	BS-13	BS-13	BS-14	BS-14	NYSDEC
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	Soil Cleanup
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/20/2002	6/20/2002	6/19/2002	6/19/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Aroclor-1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1248	ND	ND	ND	ND	ND	3400	2600	ND	ND	10,000
Aroclor-1254	120	ND	ND	ND	380	1600	1400	ND	ND	10,000
Aroclor-1260	110	ND	ND	260	150	ND	ND	450	58	10,000

Notes:
1. TAGM 4046 guidence values
2. ND - Not Detected

Old Recharge Basin
East Farmingdale, New York
Bottom Sediment Investigation

Table 5 (cont'd)
Soil Analytical Results (ug/kg)
PCBs: USEPA Method 8082

Sample ID	BS-14	BS-15	BS-15	BS-15	BS-16	BS-16	BS-16	BS-18	BS-18	NYSDEC
Sample Depth	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	Soil Cleanup
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/18/2002	6/18/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Aroclor-1016	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1254	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1260	57	220	ND	340	490	92	120	ND	46	10,000

Sample ID	BS-19	BS-19	BS-19	BS-20	BS-20	BS-20	BS-21	BS-21	BS-21	NYSDEC
Sample Depth	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	Soil Cleanup
Sample Date	6/18/2002	6/18/2002	6/18/2002	6/18/2002	6/18/2002	6/18/2002	6/18/2002	6/18/2002	6/18/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Aroclor-1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1254	130	ND	ND	ND	280	1400	680	ND	3200	10,000
Aroclor-1260	ND	150	68	ND	ND	ND	ND	47	ND	10,000

Notes:
1. TAGM 4046 guidence values
2. ND - Not Detected

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Table 5 (cont'd)
Soil Analytical Results (ug/kg)
PCBs: USEPA Method 8082

Sample ID	BS-22	BS-22	BS-22	BS-23	BS-23	BS-23	BS-24	BS-24	BS-24	NYSDEC
Sample Depth	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	Soil Cleanup
Sample Date	6/18/2002	6/18/2002	6/18/2002	6/18/2002	6/18/2002	6/18/2002	6/18/2002	6/18/2002	6/18/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg										
Aroclor-1016	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	10,000
Aroclor-1248	ND	ND	ND	ND	80	ND	ND	ND	ND	10,000
Aroclor-1254	ND	ND	ND	ND	ND	170	ND	160	ND	10,000
Aroclor-1260	37	22	ND	130	ND	ND	72	ND	80	10,000

Sample ID	BS-25	BS-27	BS-28	BS-29	NYSDEC
Sample Depth	12-16 ft	8-12 ft	8-12 ft	8-12 ft	Soil Cleanup
Sample Date	6/19/2002	6/19/2002	6/20/2002	6/20/2002	Guidelines (ug/kg)[1]
PARAMETER - ug/kg					
Aroclor-1016	ND	ND	ND	ND	10,000
Aroclor-1221	ND	ND	ND	ND	10,000
Aroclor-1232	ND	ND	ND	ND	10,000
Aroclor-1242	ND	ND	ND	ND	10,000
Aroclor-1248	37000	260000	ND	ND	10,000
Aroclor-1254	22000	110000	ND	ND	10,000
Aroclor-1260	ND	ND	ND	18	10,000

Notes:
1. TAGM 4046 guidence values
2. ND - Not Detected

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East Farmingdale, New York
Bottom Sediment Investigation

Table 6
Soil Analytical Results (mg/kg)
Target Analyte List Metals: USEPA Method 6010

Sample ID	BS-2	BS-2	BS-2	BS-3	BS-3	BS-3	BS-4	BS-4	BS-5	Eastern USA
Sample Depth	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	8-12 ft	0-4 ft	Background
Sample Date	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	(mg/kg)
PARAMETER - mg/kg										
Aluminum	4970	6230	6440	8540	3650	4620	5360	8950	4810	33000
Antimony	ND[1]	ND	ND	ND	ND	0.57	ND	ND	ND	*[2]
Arsenic	3.8	4.1	3.7	6	2.4	3.4	3.7	5.6	6	3 - 12 **[3]
Barium	31.5	27.7	29.4	41.2	31.3	24.2	20.7	47.9	18.4	15 - 600
Beryllium	0.2	0.28	0.26	0.32	0.17	0.24	0.24	0.5	0.2	0 - 1.75
Cadmium	0.06	ND	0.1	ND	ND	ND	ND	8.5	ND	0.1 - 1
Calcium	10400	16000	11300	5240	4400	17800	9550	20100	4130	130 - 35000 **
Chromium	12.9	10.9	14.1	17.5	11.5	11.4	7.9	1530	9.5	1.5 - 40
Cobalt	2.7	3.6	3.6	4.1	2.1	2.8	2.7	4.7	2.5	2.5 - 60
Copper	8.7	9.6	10.5	20.3	7.2	13	7.8	106	6.3	1 - 50
Iron	7110	10200	9480	11900	5990	7540	8060	11700	8240	2000 - 550000
Lead	25.2	26.9	25.1	38.4	22.1	13.9	10.4	55.2	17	***[4]
Magnesium	1370	1350	1820	1560	789	1190	1070	1700	844	100 - 5000
Manganese	90.2	273	135	116	93.9	125	94.4	182	74	50 - 5000
Mercury	0.02	0.01	0.12	0.13	ND	0.06	0.07	0.16	0.02	0.0001 - 0.2
Nickel	5.3	4.9	5.3	6.9	3.4	4.4	4.7	9.8	3.5	0.5 - 25
Potassium	302	445	433	349	256	281	231	402	217	8500 - 43000
Selenium	ND	0.54	ND	0.57	ND	ND	ND	ND	ND	0.1 - 3.9
Silver	ND	ND	0.21	0.4	0.14	0.22	0.12	10.4	ND	*
Sodium	60.5	128	117	72.3	88.4	72.8	ND	126	ND	6000 - 8000
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Vanadium	11.6	13.2	16.1	19.4	9.2	10.8	11.5	24.5	10.1	1 - 300
Zinc	41.2	29.8	36.5	60.3	24.2	22	20.3	317	30.3	9 -50

Notes:

1. ND - Not Detected
2. No TAGM soil guidence value for this compound.
3. New York State background
4. Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4 - 61 ppm. Average levels in metropolitan or surburban areas or near highways are much higher and typically range from 200 - 500 ppm.

Old Recharge Basin
East Farmingdale, New York
Bottom Sediment Investigation

Table 6 (cont'd)
Soil Analytical Results (mg/kg)
Target Analyte List Metals: USEPA Method 6010

Sample ID	BS-5	BS-5	BS-6	BS-6	BS-6	BS-7	BS-7	BS-7	BS-8	Eastern USA
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	Background
Sample Date	6/20/2002	6/20/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	(mg/kg)
PARAMETER - mg/kg										
Aluminum	2560	2810	4600	5070	7340	17200	5280	4000	4410	33000
Antimony	ND[1]	ND	ND	ND	0.95	ND	1.2	ND	8	*[2]
Arsenic	2	2.2	3.2	4	4.8	5.3	7.7	2.4	4.7	3 - 12 **[3]
Barium	13.5	14.6	23.2	16.6	25.4	31.7	178	12.4	18	15 - 600
Beryllium	0.16	0.16	0.23	0.19	0.29	0.5	0.23	0.19	0.2	0 - 1.75
Cadmium	ND	ND	ND	ND	0.23	ND	3.9	ND	0.29	0.1 - 1
Calcium	2160	3680	14600	2460	1920	2170	21900	1450	1670	130 - 35000 **
Chromium	6	15	8.1	7.2	15.7	18.8	14.6	6.2	14.5	1.5 - 40
Cobalt	2	2	2.9	2.4	3.6	6.1	4	2.4	2.6	2.5 - 60
Copper	4.5	6.4	6	7.1	9.8	8.1	26.4	5.6	16.7	1 - 50
Iron	6230	7040	7740	6770	9810	19300	9130	7610	7620	2000 - 550000
Lead	11.6	9.9	18.5	8.2	21.5	10.4	48.7	7	283	***[4]
Magnesium	480	635	987	776	1260	1900	2180	652	623	100 - 5000
Manganese	93.4	85	146	71.5	83.6	134	133	117	100	50 - 5000
Mercury	ND	ND	0.02	ND	0.1	0.04	0.21	0.03	0.05	0.0001 - 0.2
Nickel	2.3	3.5	3.5	2.6	6.3	12.1	9.6	2.4	3.6	0.5 - 25
Potassium	164	227	373	250	454	659	502	235	233	8500 - 43000
Selenium	ND	ND	ND	ND	0.52	ND	ND	ND	ND	0.1 - 3.9
Silver	ND	ND	ND	0.14	0.15	0.15	0.22	ND	0.15	*
Sodium	39.8	83.6	121	84	97.8	106	164	109	115	6000 - 8000
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Vanadium	6.3	6.9	10.4	10.6	18.1	29	29.2	8.4	15.5	1 - 300
Zinc	17.5	21.3	22.5	17.8	29.8	23.9	154	13.5	28.6	9 -50

Notes:

1. ND - Not Detected
2. No TAGM soil guidence value for this compound.
3. New York State background
4. Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4 - 61 ppm. Average levels in metropolitan or surburban areas or near highways are much higher and typically range from 200 - 500 ppm.

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East Farmingdale, New York
Bottom Sediment Investigation

Table 6 (cont'd)
Soil Analytical Results (mg/kg)
Target Analyte List Metals: USEPA Method 6010

Sample ID	BS-8	BS-8	BS-9	BS-9	BS-9	BS-10	BS-10	BS-10	BS-11	Eastern USA
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	Background
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	(mg/kg)
PARAMETER - mg/kg										
Aluminum	6320	10400	3360	2540	2790	6570	5480	4850	2460	33000
Antimony	ND[1]	ND	0.67	ND	ND	0.73	1.1	0.86	ND	*[2]
Arsenic	3.1	5.6	1.9	1.9	1.9	3.6	3	4.2	1.5	3 - 12 **[3]
Barium	35.5	37.5	23.3	11.9	9.9	28.5	144	19.4	10.9	15 - 600
Beryllium	0.26	0.37	0.17	0.14	0.15	0.26	0.25	0.2	0.14	0 - 1.75
Cadmium	0.7	0.44	0.46	ND	ND	ND	0.49	ND	ND	0.1 - 1
Calcium	1650	3380	17200	4660	2430	11600	24100	15100	1030	130 - 35000 **
Chromium	11.1	13.8	11.4	5.6	4.9	10.4	31.4	9.6	4.9	1.5 - 40
Cobalt	3.6	5	1.9	1.6	2.1	3.1	2.9	3.1	1.8	2.5 - 60
Copper	11.9	15.4	5.2	3.8	6.5	8.5	12	7.5	3.6	1 - 50
Iron	9730	13500	5300	4110	10600	8360	7650	6890	4930	2000 - 550000
Lead	12.3	27.7	8.4	5.7	4.4	17.9	122	13.4	3.3	***[4]
Magnesium	892	2000	1360	564	647	1360	3390	2310	556	100 - 5000
Manganese	108	166	86.6	79.7	106	118	153	88.6	93.1	50 - 5000
Mercury	0.05	0.23	0.01	0.03	0.01	0.23	0.07	0.05	0.05	0.0001 - 0.2
Nickel	12.9	7	4.2	2	3.3	4.3	4.4	4.5	1.5	0.5 - 25
Potassium	262	460	405	201	301	403	497	433	186	8500 - 43000
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 - 3.9
Silver	ND	ND	ND	ND	0.28	0.12	0.23	ND	ND	*
Sodium	94.1	91.5	149	110	78.8	114	146	137	99.1	6000 - 8000
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Vanadium	12.5	21.1	6.9	6.1	7.1	13.8	13.4	10.3	5.6	1 - 300
Zinc	19.7	32	16.3	9.1	10.9	27.5	180	24	9.2	9 -50

Notes:

1. ND - Not Detected
2. No TAGM soil guidence value for this compound.
3. New York State background
4. Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4 - 61 ppm. Average levels in metropolitan or surburban areas or near highways are much higher and typically range from 200 - 500 ppm.

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Table 6 (cont'd)
Soil Analytical Results (mg/kg)
Target Analyte List Metals: USEPA Method 6010

Sample ID	BS-11	BS-11	BS-12	BS-12	BS-12	BS-13	BS-13	BS-14	BS-14	Eastern USA
Sample Depth	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	Background
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/20/2002	6/20/2002	6/19/2002	6/19/2002	(mg/kg)
PARAMETER - mg/kg										
Aluminum	5650	3110	2770	5620	2980	3740	1780	6260	2720	33000
Antimony	ND[1]	ND	ND	ND	ND	ND	ND	ND	ND	*[2]
Arsenic	4.4	1.8	1.4	2.6	1.7	2	2.4	5	2.3	3 - 12 **[3]
Barium	67.9	26.7	24.8	19.3	21.3	18.1	7.2	59.4	28.2	15 - 600
Beryllium	0.26	0.16	0.18	0.21	0.14	0.27	0.2	0.24	0.15	0 - 1.75
Cadmium	0.08	0.1	ND	ND	0.1	4.4	ND	ND	ND	0.1 - 1
Calcium	20200	15700	9460	3080	5360	3630	1260	6280	17300	130 - 35000 **
Chromium	11.3	9.6	4.6	7.5	52.7	493	19.9	10.3	6.1	1.5 - 40
Cobalt	3.5	2.1	1.8	5.7	1.8	2.3	1.7	3.3	1.7	2.5 - 60
Copper	13.7	6	6.6	5.7	9	32.6	4.8	12.4	8.8	1 - 50
Iron	8560	4980	4140	7590	5060	6160	6970	8640	4080	2000 - 550000
Lead	32.3	9.7	20.7	7.7	23	24.8	7.4	26.5	24.6	***[4]
Magnesium	1540	1200	1000	2240	1220	701	360	3170	2350	100 - 5000
Manganese	122	90.2	127	201	76.1	139	92.1	134	87.4	50 - 5000
Mercury	0.16	0.09	0.07	0.02	0.05	0.11	0.03	0.06	0.07	0.0001 - 0.2
Nickel	4.4	2.2	1.8	3.3	3.5	4.4	2	5.1	2.2	0.5 - 25
Potassium	543	221	215	290	234	169	108	320	294	8500 - 43000
Selenium	0.41	ND	ND	ND	ND	ND	ND	0.61	ND	0.1 - 3.9
Silver	0.66	ND	ND	ND	0.6	8.6	0.34	ND	ND	*
Sodium	207	155	142	101	102	57.8	103	115	226	6000 - 8000
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
Vanadium	13.5	6.4	6	11.3	7	10.5	5.4	14.7	6.2	1 - 300
Zinc	67.2	20.1	32.1	16.2	27.9	114	14.2	41.9	47.2	9 -50

Notes:

1. ND - Not Detected
2. No TAGM soil guidence value for this compound.
3. New York State background
4. Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4 - 61 ppm. Average levels in metropolitan or surburban areas or near highways are much higher and typically range from 200 - 500 ppm.

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Table 6 (cont'd)
Soil Analytical Results (mg/kg)
Target Analyte List Metals: USEPA Method 6010

Sample ID	BS-14	BS-15	BS-15	BS-15	BS-16	BS-16	BS-16	BS-25	BS-27	Eastern USA
Sample Depth	8-12 ft	0-4 ft	4-8 ft	8-12 ft	0-4 ft	4-8 ft	8-12 ft	12-16 ft	8-12 ft	Background
Sample Date	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	6/19/2002	(mg/kg)
PARAMETER - mg/kg										
Aluminum	3220	5540	5350	4510	6680	3750	5600	16300	26000	33000
Antimony	ND[1]	0.88	ND	ND	ND	ND	ND	ND	ND	*[2]
Arsenic	2.4	3.6	7	3.7	5.3	2.3	4.1	ND	7.3	3 - 12 **[3]
Barium	15.5	27.5	30.6	24.6	35	13.8	34.4	161	189	15 - 600
Beryllium	0.2	0.21	0.23	0.2	0.26	0.16	0.22	1.5	3.2	0 - 1.75
Cadmium	ND	0.09	ND	ND	ND	ND	0.13	77.6	74.9	0.1 - 1
Calcium	7830	3100	15500	27700	15700	3080	16400	17700	20100	130 - 35000 **
Chromium	8.9	12.9	7.3	12	12.6	8	13	20200	12600	1.5 - 40
Cobalt	2	2.6	2.3	2.5	3.1	2.1	2.9	27.1	21.5	2.5 - 60
Copper	5.5	13.5	13	9.9	13.4	5.9	16.2	539	1070	1 - 50
Iron	6900	7200	7460	7330	9090	5520	8000	106000	54800	2000 - 550000
Lead	10.6	24.4	51.3	27.5	65.2	12.4	44	354	429	***[4]
Magnesium	1230	1200	6170	14200	1570	831	1820	4780	6770	100 - 5000
Manganese	97	53.8	89.7	114	116	77.4	110	1200	1190	50 - 5000
Mercury	0.1	0.03	0.22	0.08	0.07	0.14	0.22	0.1	0.1	0.0001 - 0.2
Nickel	2.4	4.2	3.3	4	4.8	2.3	4.2	46.4	61.1	0.5 - 25
Potassium	291	242	226	374	313	189	322	305	502	8500 - 43000
Selenium	ND	ND	ND	0.38	0.47	ND	ND	0.71	ND	0.1 - 3.9
Silver	ND	0.17	ND	0.29	0.14	0.17	ND	201	150	*
Sodium	150	133	137	131	113	80.1	147	558	851	6000 - 8000
Thallium	ND	ND	ND	ND	ND	ND	ND	2	ND	*
Vanadium	8.5	12.9	12.3	11.3	16.7	9.2	13.4	85.4	108	1 - 300
Zinc	21.1	41.6	25.4	28.3	36.1	18.1	54.2	2670	3890	9 -50

Notes:

1. ND - Not Detected
2. No TAGM soil guidence value for this compound.
3. New York State background
4. Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4 - 61 ppm. Average levels in metropolitan or surburban areas or near highways are much higher and typically range from 200 - 500 ppm.

Old Recharge Basin
East Farmingdale, New York
Bottom Sediment Investigation

Table 7
Air Analytical Results (ug/m^3)
Volatile Organic Compounds: USEPA Method TO + 14

Sample ID	SG-1	SG-2	SG-3	SG-4	SG-5	SG-6	SG-7
Sample Depth	6 ft	6 ft	6 ft	6 ft	6 ft	6 ft	6 ft
Sample Date	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002
PARAMETER - mg/m^3							
Chloromethane	U	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U	U
Vinyl Chloride	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U
Methylene Chloride	U	U	U	U	U	U	U
1,1-Dichloroethene	U	U	U	U	U	U	U
1,1-Dichloroethane	U	0.179	U	U	U	U	U
trans-1,2-Dichloroethene	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	U	0.044	U	0.013	U	U	U
Chloroform	U	U	U	U	U	U	U
1,2-Dichloroethane	U	U	U	U	U	U	U
1,1,1-Trichloroethane	U	0.021	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U	U
Trichloroethene	0.223	0.239	0.058	0.009	0.075	U	0.027
Trichloroflouromethane	U	0.543	0.466	U	0.057	0.006	U
Benzene	U	0.006	0.005	U	U	0.007	U
cis-1,3-Dichloropropene	U	U	U	U	U	U	U
Dibromochloromethane	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	U	U	U	U	U	U	U
1,1,2-Trichloroethane	U	0.041	U	U	U	U	U
Tetrachloroethene	16.869	0.024	0.107	0.008	0.025	0.003	0.264
Toluene	U	U	0.007	U	U	U	U
Chlorobenzene	U	U	U	U	U	U	U
Ethylbenzene	U	U	U	U	U	U	U
o-Xylene	U	0.012	0.004	U	U	U	U
m+pXylene	U	0.007	U	U	U	U	U
Styrene	U	U	U	U	U	U	U
1,2-Dichlorobenzene	U	U	U	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U	U
Methyl Tert-butyl Ether	U	U	U	U	U	U	U
Tert-butyl Alcohol	U	U	U	U	U	U	U
Isopropylbenzene	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	U	0.013	0.007	U	0.005	0.009	0.007
1,3,5-Trimethylbenzene	U	U	U	U	U	U	U
2-Chlorotoluene	U	U	U	U	U	U	U
4-Chlorotoluene	U	U	U	U	U	U	U
Dichlorodifluoromethane	U	U	U	U	U	U	U

Notes:
U - Undetected

Old Recharge Basin
East Farmingdale, New York
Bottom Sediment Investigation

Table 7 (cont'd)
Air Analytical Results (ug/m^3)
Volatile Organic Compounds: USEPA Method TO + 14

Sample ID	SG-8	SG-9	SG-10	SG-11	SG-12	SG-13
Sample Depth	6 ft	6 ft	6 ft	6 ft	6 ft	6 ft
Sample Date	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002	6/20/2002
PARAMETER - ug/m^3						
Chloromethane	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U
Vinyl Chloride	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U
Methylene Chloride	U	U	U	U	U	U
1,1-Dichloroethene	U	U	U	U	U	U
1,1-Dichloroethane	U	U	U	U	U	U
trans-1,2-Dichloroethene	U	U	U	U	U	U
cis-1,2-Dichloroethene	U	U	U	U	0.004	U
Chloroform	U	U	U	U	U	U
1,2-Dichloroethane	U	U	U	U	U	U
1,1,1-Trichloroethane	U	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U
Trichloroethene	0.016	0.071	0.012	U	0.004	0.005
Trichloroflouromethane	0.013	0.004	U	U	U	U
Benzene	0.005	U	U	U	0.006	U
cis-1,3-Dichloropropene	U	U	U	U	U	U
Dibromochloromethane	U	U	U	U	U	U
trans-1,3-Dichloropropene	U	U	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U	U	U
Tetrachloroethene	0.01	0.034	0.008	U	0.004	0.03
Toluene	U	U	U	U	0.005	U
Chlorobenzene	U	U	U	U	U	U
Ethylbenzene	U	U	U	U	U	U
o-Xylene	U	U	U	U	U	U
m+pXylene	U	U	U	U	U	U
Styrene	U	U	U	U	U	U
1,2-Dichlorobenzene	U	U	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U
Methyl Tert-butyl Ether	U	U	U	U	U	U
Tert-butyl Alcohol	U	U	U	U	U	U
Isopropylbenzene	U	U	U	U	U	U
1,2,4-Trimethylbenzene	0.005	0.005	0.005	0.005	0.005	0.004
1,3,5-Trimethylbenzene	U	U	U	U	U	U
2-Chlorotoluene	U	U	U	U	U	U
4-Chlorotoluene	U	U	U	U	U	U
Dichlorodifluoromethane	U	U	U	U	U	U

Notes:
U - Undetected

Appendix A

Geologic Logs

'IAC CONSULTANTS, INC.
222 Middle Country Road, Suite 209
Smithtown, New York 11787

GEOLOGIC LOG

Well/Boring No.	BC-1	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		Duplicate, Matrix Spike, and Matrix Spike Duplicate collected from 0-4 ft core.
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow wet sand and cobble.
	1	60	0-4			4	
						6	Dark brown wet sand and cobble with wood debris.
	2	60	4-8			8	
						10	Yellow sand and cobble with wood and concrete.
	3	80	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BC-2	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow sand, cobble, and pebbles.
	1	50	0-4			4	
						6	Yellow sand and cobble.
	2	45	4-8			8	
						10	Yellow sand and cobble.
	3	80	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BC-3	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow sand, cobble, and pebbles.
	1	40	0-4			4	
						6	Yellow sand, cobble, and concrete.
	2	30	4-8			8	
						10	Yellow sand, cobble, and concrete.
	3	20	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BC-4	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow sand and gravel.
	1	60	0-4			4	
						6	Dark brown sand, cobble, and concrete.
	2	65	4-8			8	
						10	Dark brown sand and cobble.
	3	60	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BC-5	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Wet yellow sand, cobble, and pebble.
	1	60	0-4			4	
						6	Dark brown wet sand, and cobble. 6 inch band of dark black silt with petroluem type odor at 8ft.
	2	60	4-8			8	
						10	Light to dark brown wet sand with fill material.
	3	80	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BC-6	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow sand, cobble, and pebble.
	1	60	0-4			4	
						6	Yellow sand, cobble, and pebble. 6 inch band of dark black silt with petroluem type odor at 8ft to 9ft.
2.8	2	70	4-8			8	
						10	Wet dark brown sand and cobble 6 inch band of dark black silt at 9 ft.
	3	85	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BC-7	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow wet sand, cobble, and pebble.
	1	50	0-4			4	
						6	Yellow wet sand, cobble, and pebble.
	2	50	4-8			8	
						10	Wet yellow sand and cobble.
	3	30	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BC-8	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow wet sand and pebbles.
	1	85	0-4			4	
						6	Yellow wet sand and pebbles.
	2	90	4-8			8	
						10	Yellow wet sand and pebbles.
	3	60	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BC-9	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown sand, pebbles, cobble, concrete, and brick.
	1	50	0-4			4	
						6	Light brown sand, pebbles, and concrete.
	2	50	4-8			8	
						10	Yellow wet sand, some asphalt, and concrete.
	3	60	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BC-10	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow wet sand and cobble.
	1	45	0-4			4	
						6	Wet sand, cobble, and concrete.
	2	30	4-8			8	
						10	Yellow wet sand, cobble, and concrete.
	3	20	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BC-11	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Dark brown wet sand, pebbles and cobble.
	1	55	0-4			4	
						6	Dark brown wet sand, some black streaks in soil, and some clay.
	2	70	4-8			8	
						10	Dark brown sand and cobble from 8 to 10 ft. Yellow wet sand and cobble 10 to 12 ft.
	3	70	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BC-12	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow wet sand and cobble.
	1	60	0-4			4	
						6	Yellow wet sand and cobble.
	2	50	4-8			8	
						10	Wet sand and cobble. Fine wet black silt from 11 to 12ft.
	3	60	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-13	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		Duplicate, Matrix Spike, and Matrix Spike Duplicate
Driller:			collected from 8-12 ft core.
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow wet sand and cobble.
	1	40	0-4			4	
						6	Dark brown wet sand, cobble, and pebbles.
	2	40	4-8			8	
						10	Wet sand and cobble with some concrete.
	3	70	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Boring No.	BC-14	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	8.5
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, and 4-8 ft. cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow wet sand, cobble, and pebble.
	1	55	0-4			4	
						6	Dark brown sand, black silt, and cobble.
	2	55	4-8			8	
						10	Dark brown sand, glass, and cobble. Refusal @ 8.5 ft.
						12	End of Boring @ 8.5 ft.
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-15	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Sand, cobble, concrete, and brick.
	1	90	0-4			4	
						6	Dark brown sand, cobble, concrete, asphalt, and brick.
	2	75	4-8			8	
						10	Dark brown sand, cobble, concrete, asphalt, and brick.
	3	60	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-16	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Dark brown sand, cobble, concrete, and brick.
	1	60	0-4			4	
						6	Dark brown sand, cobble, concrete, and brick.
	2	60	4-8			8	
						10	Dark brown sand, cobble, and concrete.
	3	50	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-17	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Dark brown sand, cobble, concrete, and brick.
	1	45	0-4			4	
						6	Dark brown sand, cobble, concrete, and brick.
	2	75	4-8			8	
						10	Yellow sand, cobble, and concrete.
	3	75	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-18	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Light brown sand and cobble 0 to 2 ft. Dark brown sand and cobble 3 to 4 ft.
	1	30	0-4			4	
						6	Light brown sand and cobble.
	2	60	4-8			8	
						10	Light brown sand and cobble.
	3	55	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-19	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Medium sand, cobble, and concrete.
	1	50	0-4			4	
						6	Medium sand, cobble, and concrete.
	2	55	4-8			8	
						10	Medium sand, cobble, and concrete.
	3	60	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-20	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		Duplicate, Matrix Spike, and Matrix Spike Duplicate collected from 8-12 ft core.
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Medium sand and cobble.
	1	20	0-4			4	
						6	Medium sand and cobble.
	2	60	4-8			8	
						10	Medium sand and cobble.
	3	90	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-21	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	6.5
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/17/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, and 4-8 ft. cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Dark brown sand, cobble, and conctrete.
	1	40	0-4			4	
	2	30	4-6.5			6	Fine brown silt, concrete, asphalt, and cobble. Refusal @ 6.5 ft.
						8	End of Boring @ 6.5 ft.
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-22	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Dark brown med. sand, cobble, concrete, and asphalt.
	1	95	0-4			4	
						6	Dark brown med. sand, cobble, concrete, and asphalt.
	2	40	4-8			8	1 inch of black sediment @ 7 ft.
						10	Yellow med. sand.
	3	80	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-23	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		Rinse blank collected after decontamination.
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow med. sand, concrete, and cobble.
	1	60	0-4			4	
						6	Yellow med. sand, concrete, and cobble.
	2	80	4-8			8	
						10	Dark brown medium sand, cobble, and concrete from 8 to 9 ft.
	3	100	8-12			12	Clean yellow sand and pebbles from 9 to 12 ft.
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-24	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow med. sand, concrete, and cobble.
	1	60	0-4			4	
						6	Yellow med. sand, concrete, and cobble.
	2	75	4-8			8	
						10	Yellow med. sand, pebble, and cobble.
	3	85	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-25	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow med. sand, concrete, and cobble.
	1	60	0-4			4	
						6	Dark brown med. sand, concrete, and cobble.
	2	60	4-8			8	
						10	Yellow med. sand, cobble, and asphalt.
	3	85	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-26	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		Duplicate, Matrix Spike, and Matrix Spike Duplicate collected from 8-12 ft core.
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow med. sand and cobble.
	1	40	0-4			4	
						6	Dark brown med. sand, concrete, and cobble.
	2	50	4-8			8	
						10	Dark brown sand and cobble @ 9 ft. Concrete @ 10 ft.
	3	90	8-12			12	Med. sand and cobble 11 to 12 ft.
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-27	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow med. sand and cobble.
	1	40	0-4			4	
						6	Dark brown med. sand, concrete, and cobble.
	2	40	4-8			8	
						10	Dark brown sand and cobble 8 to 9 ft. Light sand and cobble 9 to 10 ft.
	3	60	8-12			12	Asphalt 11 to 12 ft.
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BC-28	**Bore Hole Data**	
Location:	Buried Chromium Soil	Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Yellow med. sand and cobble. Brown clayey silt at 4 ft.
	1	40	0-4			4	
						6	Dark brown med. sand and cobble.
	2	40	4-8			8	
						10	Yellow med. sand.
	3	60	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BS-1	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	20
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Keith Milano / Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown med. sand with brick, concrete debris, and coarse gravel.
	1	55	0-4			4	
					Wet at 6 ft.	6	Dark brown med. sand with red brick and gravel.
	2	60	4-8			8	
						10	Light brown med. sand with red brick and coarse gravel. Dark black silty material at 13 ft. with slight petroluem odor.
	3	45	8-12			12	
						14	Med. and fine wet brown sand Black bottom sediment at 14ft. with streaks throughout core.
	4	45	12-16			16	
						18	Wet brown sand.
	5	60	16-20			20	
						22	End of Boring @ 20 ft.
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-2	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/20/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Dark brown med. sand, concrete, asphalt, and cobble.
	1	40	0-4			4	Fine brown sand at 4ft.
						6	Med. and fine sand, concrete, and asphalt.
	2	50	4-8			8	
						10	Dark brown fine to medium sand, asphalt, concrete, and brick.
	3	60	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-3	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/20/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores. Duplicate, Matrix Spike, and Matrix Spike Duplicate collected from 8-12 ft core.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Dark brown med. sand, concrete, and cobble.
	1	40	0-4			4	
						6	Dark brown med. sand, concrete, and cobble.
	2	50	4-8			8	
						10	Dark brown fine to medium sand, concrete and asphalt.
	3	60	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-4	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/20/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4 and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Dark brown med. sand, concrete, and cobble.
	1	60	0-4			4	
						6	Dark brown med. sand, concrete, and cobble.
	2	40	4-8			8	
						10	Dark brown med. sand, concrete, and cobble.
	3	25	8-12			12	Black bottom sediment from 11.5 to 12 ft.
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-5	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/20/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown fine to med. sand, concrete, and brick.
	1	80	0-4			4	Wet at 4 ft.
						6	Yellow med. sand, concrete, brick, and cobble.
	2	80	4-8			8	
						10	Dark brown med. sand and cobble.
	3	70	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-6	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown fine to med. sand, concrete, and cobble.
	1	50	0-4			4	
						6	Brown med. sand, concrete, brick, and cobble.
	2	50	4-8			8	
						10	Brown med. sand, concrete, brick and cobble. Wet at 10 ft.
	3	50	8-12			12	Streaks of black bottom sediment throughout core.
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-7	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown fine to med. sand, concrete, and asphalt.
	1	80	0-4			4	Brown clay from 3 to 4 ft.
						6	Brown med. sand, concrete, brick, cobble, and asphalt.
	2	50	4-8			8	
						10	Brown med. sand, concrete, brick, cobble, and asphalt.
	3	50	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-8	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown fine to med. sand, concrete, and cobble.
	1	60	0-4			4	Dark brown sand at 4 ft.
						6	Brown med. sand, concrete, and asphalt.
	2	55	4-8			8	
						10	Brown med. sand.
	3	50	8-12			12	Yellow sand at 12 ft.
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-9	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown fine to med. sand, concrete, cobble, and asphalt.
	1	80	0-4			4	
						6	Brown fine to med. sand, concrete, cobble, and asphalt.
	2	40	4-8			8	
						10	Brown fine to med. sand, concrete, cobble, and asphalt.
	3	30	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments Refusal on first boring at 5 feet. Second boring moved 2 ft. to the east.

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GEOLOGIC LOG

Well/Boring No.	BS-10	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown fine to med. sand, concrete, and cobble.
	1	50	0-4			4	
						6	Brown fine to med. sand, concrete, cobble, and asphalt.
	2	40	4-8		Wet at 7 ft.	8	
						10	Brown fine to med. sand, concrete, cobble, and asphalt.
	3	60	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-11	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown fine to med. sand, asphalt, and cobble.
	1	60	0-4			4	
						6	Brown fine to med. sand, concrete, cobble, and asphalt.
	2	50	4-8		Wet at 8 ft.	8	
						10	Brown fine to med. sand, concrete, cobble, and asphalt.
	3	25	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-12	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		Duplicate, Matrix Spike, and Matrix Spike Duplicate collected from 8-12 ft core.
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown fine to med. sand, concrete, and brick.
	1	80	0-4			4	
						6	Brown fine to med. sand, concrete, and brick.
	2	60	4-8			8	
						10	Brown fine to med. sand, concrete, brick, Fine silty clay at 10 ft.
	3	90	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-13	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/20/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 4-8 and 8-12 ft cores. Rinse blank collected after decontamination.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown fine to med. sand and cobble.
	1	80	0-4			4	
						6	Brown fine to med. sand and cobble. Bottom sediment from 7 to 8 ft.
	2	60	4-8			8	
						10	Brown fine to med. sand and cobble. Bottom sediment from 10 to 12 ft and streaks of sediment throughout core.
	3	60	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-14	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	10.5
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown fine to med. sand, cobble, brick, and asphalt.
	1	80	0-4			4	Fine brown sand at 4 ft.
						6	Brown fine to med. sand, cobble, and brick. Most of core is concrete.
	2	80	4-8			8	
						10	Brown fine to med. sand, cobble, concrete, and asphalt. Refusal at 10.5 ft.
	3	40	8-10.5			12	End of Boring @ 10.5 ft.
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-15	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Dark brown wet sand, asphalt, and concrete.
	1	50	0-4			4	
						6	Brown sand, concrete, and asphalt.
	2	50	4-8			8	
						10	Brown sand, concrete, and asphalt.
	3	65	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-16	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Med. brown sand, asphalt, concrete, and cobble.
	1	60	0-4			4	
						6	Brown med. sand, asphalt, brick, and cobble.
	2	40	4-8			8	
						10	Brown med. sand, asphalt, brick, cobble, and concrete. Wet sample.
	3	80	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-17	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	10
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Keith Milano	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Fine brown sand with red brick and concrete debris.
	1	70	0-4			4	
						6	Light brown fine sand with asphalt, crushed concrete and coarse gravel.
	2	60	4-8			8	
						10	Med. brown sand with crushed concrete and coarse gravel. Refusal at 10 ft.
	3	50	8-12			12	End of Boring @ 10 ft.
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-18	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	8.5
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4 and 4-8 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Med. brown sand, brick, and concrete.
	1	95	0-4			4	
						6	Concrete and brick with brown med. sand.
	2	50	4-8			8	Refusal at 8.5 ft.
						10	End of Boring @ 8.5 ft.
	3	10	8-8.5			12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	BS-19	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown fine to med. sand, concrete, and cobble.
	1	60	0-4			4	
						6	Brown fine to med. sand and concrete
	2	30	4-8			8	
						10	Brown fine to med. sand and concrete with some silt.
	3	40	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BS-20	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		Duplicate, Matrix Spike, and Matrix Spike Duplicate collected from 4-8 ft core.
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	SAMPLE Recovery (%)	SAMPLE Depth (ft.)	SAMPLE Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Med. sand, cobble, and concrete. 6 inch band of black sediment at 4 ft.
	1	75	0-4			4	
						6	Dark brown med. sand, wood, and cobble from 6 to 7 ft.
	2	75	4-8			8	Yellow med. sand from 7 to 8 ft.
						10	Brown fine to med. sand and cobble.
	3	75	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BS-21	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Med. sand, cobble, and concrete.
	1	80	0-4			4	
						6	Wet brown sand from 5 to 7 ft. Med. sand, concrete, and cobble from 7 to 8 ft.
	2	70	4-8			8	
						10	Reddish brown clayey sand, concrete, and cobble.
	3	50	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BS-22	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	11
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Light brown med. sand, cobble, and asphalt.
	1	50	0-4			4	
						6	Dark brown med. sand, cobble, and asphalt.
	2	75	4-8			8	
						10	Dark brown wet sand and cobble with some black sediment streaks throughout core. Refusal at 11 ft.
	3	75	8-11			12	End of Boring @ 11 ft.
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BS-23	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Light brown med. sand, cobble, and concrete.
	1	60	0-4			4	
						6	Light brown med. sand, cobble, and concrete.
	2	60	4-8			8	
						10	Reddish brown med. sand, cobble, and concrete.
	3	80	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BS-24	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/18/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil samples collected from 0-4, 4-8, and 8-12 ft cores.
Drilling Started:	Ended:		Rinse blank collected after decontamination.
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Dark brown wet med. sand, asphalt, concrete, and cobble.
	1	60	0-4			4	
						6	Dark brown wet med. sand, asphalt, concrete, and cobble.
	2	60	4-8			8	
						10	Dark brown wet med. sand, asphalt, concrete, and cobble.
	3	70	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BS-25	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	16
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil sample collected from 12 to 16 ft. core.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Dark brown wet med. sand, asphalt, concrete, brick, and cobble.
	1	60	0-4			4	
						6	Dark brown wet med. sand, brick, concrete, and cobble.
	2	40	4-8			8	6 inch band of black sediment at 8 ft.
						10	Dark brown wet med. sand, cobble and some brick.
	3	70	8-12			12	Black bottom sediment from 11 to 12 ft.
						14	Wet brown sand, sludge, and cobble.
	4	55	12-16			16	Black bottom sediment at 16 ft.
						18	End of Boring @ 16 ft.
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BS-26	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	16
Project.	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Brown med. sand, concrete, and cobble. Some black bottom sediment at 4 ft.
	1	70	0-4			4	
						6	Brown med. sand, concrete, and cobble. Some black sediment streaks throughout core.
	2	50	4-8			8	
						10	Dark brown wet med. sand, cobble, concrete, and some brick. Some black sediment streaks throughout core.
	3	60	8-12			12	
						14	Dark brown med. sand and cobble. Some black sediment streaks 12 to 14 ft. Yellow sand and cobble 14 to 16 ft.
	4	90	12-16			16	
						18	End of Boring @ 16 ft.
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BS-27	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/19/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil sample collected from 8-12 ft core.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Med. sand, cobble, brick, and concrete. 6 inch band of black sediment at 4 ft.
	1	75	0-4			4	Dried black bottom sediment at 3.5 ft.
						6	Med. to fine brown sand and cobble. Yellow med. sand from 7 to 8 ft.
	2	80	4-8		Wet at 7 ft.	8	
						10	Wet brown sand and sludge. Black bottom sediment at 11 ft.
	3	85	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BS-28	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/20/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil sample collected from 8-12 ft core.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Med. sand, cobble, and concrete.
	1	60	0-4			4	
						6	Med. to fine brown sand and asphalt.
	2	60	4-8			8	
						10	Med. to fine brown sand and cobble.
	3	55	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	BS-29	**Bore Hole Data**	
Location:		Hole diameter (inches):	2
M.P. Elevation:		Total Depth (ft):	12
Project:	ORB Bottom Sediment Investigation	**Sampler**	
Date:	6/20/2002	Type:	Macro core 48" x 1.5" ID sampler
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	Soil sample collected from 8-12 ft core.
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	Light brown med. sand and cobble.
	1	60	0-4			4	
						6	Light brown med. sand and cobble.
	2	70	4-8			8	
						10	Light brown med. sand and cobble.
	3	55	8-12			12	
						14	End of Boring @ 12 ft.
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	SG-1	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE				Strata Change	Depth	SAMPLE
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	General Description	(feet)	DESCRIPTION
						2	
						4	
0.9	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	SG-2	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
1.0	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	SG-3	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Deseription	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
0.1	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	SG-4	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
0.0	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	SG-5	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
0.0	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	SG-6	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
0.0	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	SG-7	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
0.0	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	SG-8	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
0.0	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	SG-9	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
0.0	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

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GEOLOGIC LOG

Well/Boring No.	SG-10	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
0.0	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

MAC CONSULTANTS, INC.
222 Middle Country Road, Suite 209
Smithtown, New York 11787

GEOLOGIC LOG

Well/Boring No.	SG-11	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

PID/OVA (ppm)	SAMPLE No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
0.0	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	SG-12	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
0.0	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

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GEOLOGIC LOG

Well/Boring No.	SG-13	**Bore Hole Data**	
Location:		Hole diameter (inches):	1
M.P. Elevation:		Total Depth (ft):	6
Project:	ORB Bottom Sediment Investigation - Soil Gas Survey	**Sampler**	
Date:	6/20/2002	Type:	Summa Canister
Page	1 of 1	Hammer:	Pounds:
Logged By:	Frank Mancini	Fall (inches):	
Company:	Zebra Environmental, Inc.	**Remarks:**	
Drilling Started:	Ended:		
Driller:			
Type of Rig:	Geoprobe		

	SAMPLE						
PID/OVA (ppm)	No.	Recovery (%)	Depth (ft.)	Blows/6"	Strata Change General Description	Depth (feet)	SAMPLE DESCRIPTION
						2	
						4	
0.0	1		5.5-6			6	
						8	
						10	
						12	
						14	
						16	
						18	
						20	
						22	
						24	
						26	
						28	
						30	
						32	

Comments

Appendix B

Chemtech Electronic Data

Appendix C

Data Usability Validation Report

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3045**

Prepared By: Carole Collins

Laboratory Name: Chemtech Date: August 7, 2002

Laboratory Project #: P3045

Sample (s) Taken: June 17, 2002

Sample Matrix: Soil

Client Sample ID:

BC-1 0`-4`	BC-4 0`-4`
BC-1 0`-4`DUP	BC-4 4`-8``
BC-1 0`-4` MS	BC-4 8`-12`
BC-1 0-`4` MSD	BC-5 0`-4`
BC-1 4`-8`	BC-5 4`-8`
BC-1 8`-12`	BC-5 8`-12
BC-2 0`-4``	BC-6 0`-4`
BC-2 4`-8`	BC-6 4`-8`
BC-2 8`-12`	BC-6 8`-12`
BC-3 0`-4`	BC-7 0`-4`
BC-3 4`-8`	BC-7 4`-8`
BC-3 8`-12`	

Analytical Parameters: Total Chromium

The DUSR was prepared by reviewing and evaluating the analytical data per the Region II guidelines from USEPA, Revision II/January 92 Inorganics analysis and NYSDEC ASP guidelines. The following checklist has been designed to ensure a thorough ad complete review of the analytical results based on the requirements in these guidelines. The analytical results are considered valid and usable for the purpose of this project, with any exceptions addressed in the Data Deficiencies comments section below.

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3045**

Data Verification Parameters		**Circle One**		
1.	Were all chain of custody records present and completed?	(Yes)	No	NA
2.	Were statements made in the analytical data case narrative supported by the analytical data?	(Yes)	No	NA
3.	Were the analysis performed as per method requested?	(Yes)	No	NA
4.	Was the data package complete as defined under the requirements for the NYSDEC ASP or USEPA CLP deliverables?	(Yes)	No	NA
5.	Were the required holing times met for all matrices and analytical parameter (metals, mercury, cyanide)?	(Yes)	No	NA
6.	Were samples correctly preserved?	Yes	(No)	NA
7.	Was sample preservation documented?	(Yes)	No	NA
8.	Was % solids greater than 50% for all soils samples?	(Yes)	No	NA
9.	Were preparation log/distillation log provided for all the analytes?	(Yes)	No	NA
10.	Did the preservation/distillation log include all the information about weight/volume and preparation date(s)?	(Yes)	No	NA
11.	Were there raw data included for all the analytes?	(Yes)	No	NA
12.	Were the instrument(s) calibrated correctly using proper standards?	(Yes)	No	NA
13.	Were the initial and continuing calibrations performed at the required frequency?	(Yes)	No	NA
14.	Were the initial and continuing calibration within the acceptance criteria?	(Yes)	No	NA
15.	Were CRDL standard(s) run at the beginning and end of each run?	(Yes)	No	NA
16.	Were percent recoveries (%R) for CRDL standard within the acceptance criteria?	(Yes)	No	NA
17.	Were the calibration blanks less than CRDL?	(Yes)	No	NA
18.	Were the preparation blanks free of contaminants?	(Yes)	No	NA
19.	Were the field blank free of contaminants?	Yes	No	(NA)
20.	Were ICP Interference Check Samples (ICS) analyzed at the beginning and end of each ICP run?	(Yes)	No	NA
21.	Were percent recoveries (%R) for ICS within the acceptance criteria?	(Yes)	No	NA
22.	Was the matrix spike (MS) analysis performed at the required frequency?	(Yes)	No	NA
23.	Did the MS meet the percent recovery (%R) criteria?	(Yes)	No	NA
24.	Was the post digestion spike sample analysis performed when required?	(Yes)	No	NA
25.	Was the laboratory duplicate analysis performed at the required frequency?	(Yes)	No	NA

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3045**

26.	Did the duplicate analysis meet the Relative Percent Difference (RPD) acceptance criteria?	Yes	(No)	NA
27.	Did the results for any field duplicate samples meet expected precision requirements?	Yes	(No)	NA
28.	Was the Laboratory Control Sample analysis performed for each matrix and analysis at the required frequency?	(Yes)	No	NA
29.	Did the LCS meet the percent recovery (%R) criteria?	(Yes)	No	NA
30.	Was ICP Serial Dilution analysis preformed at the required frequency?	(Yes)	No	NA
31.	Did the ICP serial dilution analysis meet the percent difference (%D) criteria?	(Yes)	No	NA
32.	Was proper quantitation procedure followed for Method of Standard Addition (MSA) analysis?	Yes	No	(NA)
33.	Was coefficient of correlation greater than 0.0995 for MSA analysis?	Yes	No	(NA)
34.	Were there any analysis performed for dissolved as total analysis?	Yes	No	(NA)
35.	Was the concentration of any dissolved analyte greater than its total concentration by 10%?	Yes	No	(NA)
36.	Did the laboratory submit Instrument Detection Limit (IDL), ICP linear ranges and ICP Interelement Correction Factors?	(Yes)	No	NA
37.	Were dilutions made appropriately when required?	(Yes)	No	NA
38.	No discrepancies were noted when review of raw data (instrument printouts) was performed.	(Yes)	No	NA
39.	Were results reported in correct units and soil samples corrected for % solid?	(Yes)	No	NA

If NO for any of the above questions, give further explanation in the comments section:

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3045**

COMMENTS:

Samples were not received within the Temperature QC range, but were preserved once received in the laboratory.

The Duplicates for sample # 1 did not meet QC criteria for Chromium. The samples associated with the duplicate are flagged with an "*".

The Duplicates are field sampled. The non-homogenous nature of the soil sample is the suspected cause, duplicate sample results should be considered estimated concentrations.

Samples are flagged with a "J" qualifier.

All other data met QC requirements. Data usability is acceptable.

R= Rejected
E= Estimated

Reviewer Signature: Carol Cairns **Date** 8/16/02

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-01 **Client ID:** BC-10-4

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 90.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	3.7	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-02 **Client ID:** BC-10-4DUP

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 88.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	7.5	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-05 **Client ID:** BC-14-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 86.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	80.3	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-06 **Client ID:** BC-18-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 71.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	115	mg/Kg		*	P	0.10	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-07 **Client ID:** BC-20-4

Contract: MAC Consultants Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 89.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	6.1	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-08 **Client ID:** BC-24-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 90.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	5.4	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-09 **Client ID:** BC-28-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	6.6	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants. Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-10 **Client ID:** BC-30-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	4.2	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-11 **Client ID:** BC-34-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	3.3	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-12 **Client ID:** BC-38-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 88.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	4.5	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-13 **Client ID:** BC-40-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	4.8	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-14 **Client ID:** BC-44-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 86.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	4.0	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-15 **Client ID:** BC-48-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 89.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	13.4	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-16 **Client ID:** BC-50-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 87.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	9.5	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-17 **Client ID:** BC-54-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 91.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	25.2	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-18 **Client ID:** BC-58-12

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 93.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	5.8	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-19 **Client ID:** BC-60-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 93.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	5.7	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-20 **Client ID:** BC-64-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 67.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	1180	mg/Kg		*	P	0.10	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-21 **Client ID:** BC-68-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 65.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	108	mg/Kg		*	P	0.11	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-22 **Client ID:** BC-70-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 86.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	3.2	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3045 **Method Type:** SW846

Sample ID: P3045-23 **Client ID:** BC-74-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3045

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 87.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	5.8	mg/Kg			P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3046**

Prepared By: Carole Collins

Laboratory Name: Chemtech Date: August 7, 2002

Laboratory Project #: P3046

Sample (s) Taken: June 17, 2002

Sample Matrix: Soil

Client Sample ID:

BC-7 8`-12`	BC-11 8`-12`
BC-8 0`-4`	BC-12 0`-4`
BC-8 4`-8`	BC-12 4`-8`
BC-8 8`-12`	BC-12 8`-12`
BC-9 0`-4``	BC-13 0`-4`
BC-9 4`-8`	BC-13 4`-8`
BC-9 8`-12`	BC-13 8`-12`
BC-10 0`-4`	BC-13 8`-12`DUP
BC-10 4`-8`	BC-13 8`-12`MS
BC-10 8`-12`	BC-13 8`-12` MSD
BC-11 0`-4`	BC-14 0`-4`
BC-11 4`-8`	BC-14 4`-8`

Analytical Parameters: Total Chromium

The DUSR was prepared by reviewing and evaluating the analytical data per the Region II guidelines from USEPA, Revision II/January 92 Inorganics analysis and NYSDEC ASP guidelines. The following checklist has been designed to ensure a thorough ad complete review of the analytical results based on the requirements in these guidelines. The analytical results are considered valid and usable for the purpose of this project, with any exceptions addressed in the Data Deficiencies comments section below.

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3046**

Data Verification Parameters		**Circle One**		
1.	Were all chain of custody records present and completed?	(Yes)	No	NA
2.	Were statements made in the analytical data case narrative supported by the analytical data?	(Yes)	No	NA
3.	Were the analysis performed as per method requested?	(Yes)	No	NA
4.	Was the data package complete as defined under the requirements for the NYSDEC ASP or USEPA CLP deliverables?	(Yes)	No	NA
5.	Were the required holing times met for all matrices and analytical parameter (metals, mercury, cyanide)?	(Yes)	No	NA
6.	Were samples correctly preserved?	Yes	(No)	NA
7.	Was sample preservation documented?	(Yes)	No	NA
8.	Was % solids greater than 50% for all soils samples?	(Yes)	No	NA
9.	Were preparation log/distillation log provided for all the analytes?	(Yes)	No	NA
10.	Did the preservation/distillation log include all the information about weight/volume and preparation date(s)?	(Yes)	No	NA
11.	Were there raw data included for all the analytes?	(Yes)	No	NA
12.	Were the instrument(s) calibrated correctly using proper standards?	(Yes)	No	NA
13.	Were the initial and continuing calibrations performed at the required frequency?	(Yes)	No	NA
14.	Were the initial and continuing calibration within the acceptance criteria?	(Yes)	No	NA
15.	Were CRDL standard(s) run at the beginning and end of each run?	(Yes)	No	NA
16.	Were percent recoveries (%R) for CRDL standard within the acceptance criteria?	(Yes)	No	NA
17.	Were the calibration blanks less than CRDL?	(Yes)	No	NA
18.	Were the preparation blanks free of contaminants?	(Yes)	No	NA
19.	Were the field blank free of contaminants?	Yes	No	(NA)
20.	Were ICP Interference Check Samples (ICS) analyzed at the beginning and end of each ICP run?	(Yes)	No	NA
21.	Were percent recoveries (%R) for ICS within the acceptance criteria?	(Yes)	No	NA
22.	Was the matrix spike (MS) analysis performed at the required frequency?	(Yes)	No	NA
23.	Did the MS meet the percent recovery (%R) criteria?	(Yes)	No	NA
24.	Was the post digestion spike sample analysis performed when required?	(Yes)	No	NA
25.	Was the laboratory duplicate analysis performed at the required frequency?	(Yes)	No	NA

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3046**

26.	Did the duplicate analysis meet the Relative Percent Difference (RPD) acceptance criteria?	Yes	(No)	NA
27.	Did the results for any field duplicate samples meet expected precision requirements?	Yes	(No)	NA
28.	Was the Laboratory Control Sample analysis performed for each matrix and analysis at the required frequency?	(Yes)	No	NA
29.	Did the LCS meet the percent recovery (%R) criteria?	(Yes)	No	NA
30.	Was ICP Serial Dilution analysis preformed at the required frequency?	(Yes)	No	NA
31.	Did the ICP serial dilution analysis meet the percent difference (%D) criteria?	(Yes)	No	NA
32.	Was proper quantitation procedure followed for Method of Standard Addition (MSA) analysis?	Yes	No	(NA)
33.	Was coefficient of correlation greater than 0.0995 for MSA analysis?	Yes	No	(NA)
34.	Were there any analysis performed for dissolved as total analysis?	Yes	No	(NA)
35.	Was the concentration of any dissolved analyte greater than its total concentration by 10%?	Yes	No	(NA)
36.	Did the laboratory submit Instrument Detection Limit (IDL), ICP linear ranges and ICP Interelement Correction Factors?	(Yes)	No	NA
37.	Were dilutions made appropriately when required?	(Yes)	No	NA
38.	No discrepancies were noted when review of raw data (instrument printouts) was performed.	(Yes)	No	NA
39.	Were results reported in correct units and soil samples corrected for % solid?	(Yes)	No	NA

If NO for any of the above questions, give further explanation in the comments section:

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3046**

COMMENTS:

Samples were not received within the acceptable Temperature range, but were preserved once received in the laboratory.

The Matrix spike and Matrix spike duplicate for sample P3046-19 did not meet QC requirements. The samples associated with the spike sample are flagged with an "N" qualifier.

The Duplicates for sample P3046-19 did not meet QC criteria for Chromium. The samples associated with the spike sample are flagged with an "*".

The serial dilution for sample P3046-23 did not meet QC criteria. A chemical of physical interference effect is suspected. The samples associated with serial dilution are flagged with an "E" qualifier.

The MS/MSD and Duplicate for sample P3046-19 were field sampled. The non-homogeneous nature of the soil sample is the suspected cause.

Samples are qualified with "J".

All other QC met requirements. Data usability is acceptable.

R= Rejected
E= Estimated

Reviewer Signature: Carol Collins **Date** 8/1/02

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-01 **Client ID:** BC-78-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 84.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	4.9	mg/Kg		N*	P	0.07	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-02 **Client ID:** BC-80-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 91.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	2.6	mg/Kg		N*	P	0.07	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-03 **Client ID:** BC-84-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 88.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	8.0	mg/Kg		N*	P	0.07	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-04 **Client ID:** BC-88-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 86.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	16.4	mg/Kg		N*	P	0.07	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-05 **Client ID:** BC-90-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	8.3	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-06 **Client ID:** BC-94-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 88.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	6.0	mg/Kg		N*	P	0.07	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-07 **Client ID:** BC-98-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 93.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	4.6	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-08 **Client ID:** BC-100-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 90.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	8.2	mg/Kg		N*	P	0.07	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-09 **Client ID:** BC-104-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	6.6	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-10 **Client ID:** BC-108-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	6.7	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-11 **Client ID:** BC-110-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 91.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	14.9	mg/Kg		N*	P	0.07	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-12 **Client ID:** BC-114-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	8.2	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-13 **Client ID:** BC-118-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	2.0	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-14 **Client ID:** BC-120-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	3.7	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-15 **Client ID:** BC-124-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	4.6	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-16 **Client ID:** BC-128-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	4.4	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-17 **Client ID:** BC-130-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	14.5	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-18 **Client ID:** BC-134-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	13.6	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-19 **Client ID:** BC-138-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	6.2	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-20 **Client ID:** BC-138-12DUP

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	8.7	mg/Kg		N*	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-23 **Client ID:** BC-140-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	13.5	mg/Kg		E	P	0.06	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3046 **Method Type:** SW846

Sample ID: P3046-24 **Client ID:** BC-144-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3046

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 81.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	46.3	mg/Kg		E	P	0.07	P2	P260621

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3047**

Prepared By: Carole Collins

Laboratory Name: Chemtech Date: August 7, 2002

Laboratory Project #: P3047

Sample (s) Taken: June 17, 2002

Sample Matrix: Soil

Client Sample ID:

BC-15 0`-4`	BC-19 0`-4`
BC-15 4`-8`	BC-19 4`-8`
BC-15 8`-12`	BC-19 8`-12`
BC-16 0`-4`	BC-20 0`-4`
BC-16 4`-8`	BC-20 4`-8`
BC-16 8`-12`	BC-20 8`-12`
BC-17 0`-4`	BC-20 8`-12`DUP
BC-17 4`-8`	BC-20 8`-12`MS
BC-17 8`-12`	BC-20 8`-12`MSD
BC-18 0`-4`	BC-21 0`-4`
BC-18 4`-8`	BC-21 4`-8`
BC-18 8`-12`	

Analytical Parameters: Total Chromium

The DUSR was prepared by reviewing and evaluating the analytical data per the Region II guidelines from USEPA, Revision II/January 92 Inorganics analysis and NYSDEC ASP guidelines. The following checklist has been designed to ensure a thorough ad complete review of the analytical results based on the requirements in these guidelines. The analytical results are considered valid and usable for the purpose of this project, with any exceptions addressed in the Data Deficiencies comments section below.

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3047**

Data Verification Parameters		**Circle One**		
1.	Were all chain of custody records present and completed?	(Yes)	No	NA
2.	Were statements made in the analytical data case narrative supported by the analytical data?	(Yes)	No	NA
3.	Were the analysis performed as per method requested?	(Yes)	No	NA
4.	Was the data package complete as defined under the requirements for the NYSDEC ASP or USEPA CLP deliverables?	(Yes)	No	NA
5.	Were the required holing times met for all matrices and analytical parameter (metals, mercury, cyanide)?	(Yes)	No	NA
6.	Were samples correctly preserved?	Yes	(No)	NA
7.	Was sample preservation documented?	(Yes)	No	NA
8.	Was % solids greater than 50% for all soils samples?	(Yes)	No	NA
9.	Were preparation log/distillation log provided for all the analytes?	(Yes)	No	NA
10.	Did the preservation/distillation log include all the information about weight/volume and preparation date(s)?	(Yes)	No	NA
11.	Were there raw data included for all the analytes?	(Yes)	No	NA
12.	Were the instrument(s) calibrated correctly using proper standards?	(Yes)	No	NA
13.	Were the initial and continuing calibrations performed at the required frequency?	(Yes)	No	NA
14.	Were the initial and continuing calibration within the acceptance criteria?	(Yes)	No	NA
15.	Were CRDL standard(s) run at the beginning and end of each run?	(Yes)	No	NA
16.	Were percent recoveries (%R) for CRDL standard within the acceptance criteria?	(Yes)	No	NA
17.	Were the calibration blanks less than CRDL?	(Yes)	No	NA
18.	Were the preparation blanks free of contaminants?	(Yes)	No	NA
19.	Were the field blank free of contaminants?	Yes	No	(NA)
20.	Were ICP Interference Check Samples (ICS) analyzed at the beginning and end of each ICP run?	(Yes)	No	NA
21.	Were percent recoveries (%R) for ICS within the acceptance criteria?	(Yes)	No	NA
22.	Was the matrix spike (MS) analysis performed at the required frequency?	(Yes)	No	NA
23.	Did the MS meet the percent recovery (%R) criteria?	Yes	(No)	NA
24.	Was the post digestion spike sample analysis performed when required?	(Yes)	No	NA
25.	Was the laboratory duplicate analysis performed at the required frequency?	(Yes)	No	NA

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3047**

26.	Did the duplicate analysis meet the Relative Percent Difference (RPD) acceptance criteria?	Yes	(No)	NA
27.	Did the results for any field duplicate samples meet expected precision requirements?	Yes	(No)	NA
28.	Was the Laboratory Control Sample analysis performed for each matrix and analysis at the required frequency?	(Yes)	No	NA
29.	Did the LCS meet the percent recovery (%R) criteria?	(Yes)	No	NA
30.	Was ICP Serial Dilution analysis preformed at the required frequency?	(Yes)	No	NA
31.	Did the ICP serial dilution analysis meet the percent difference (%D) criteria?	(Yes)	No	NA
32.	Was proper quantitation procedure followed for Method of Standard Addition (MSA) analysis?	Yes	No	(NA)
33.	Was coefficient of correlation greater than 0.0995 for MSA analysis?	Yes	No	(NA)
34.	Were there any analysis performed for dissolved as total analysis?	Yes	No	(NA)
35.	Was the concentration of any dissolved analyte greater than its total concentration by 10%?	Yes	No	(NA)
36.	Did the laboratory submit Instrument Detection Limit (IDL), ICP linear ranges and ICP Interelement Correction Factors?	(Yes)	No	NA
37.	Were dilutions made appropriately when required?	(Yes)	No	NA
38.	No discrepancies were noted when review of raw data (instrument printouts) was performed.	(Yes)	No	NA
39.	Were results reported in correct units and soil samples corrected for % solid?	(Yes)	No	NA

If NO for any of the above questions, give further explanation in the comments section:

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3047**

COMMENTS:

Samples were not received within the acceptable Temperature range, but were preserved once received in the laboratory.

The Matrix spike and Matrix spike duplicate for sample P3046-18 did not meet QC requirements. The samples associated with the spike sample are flagged with an "N" qualifier.

The Duplicates for sample P3046-18 did not meet QC criteria for Chromium. The samples associated with the spike sample are flagged with an "*".

The MS/MSD and Duplicate for sample P3046-18 were field sampled. The non-homogeneous nature of the soil sample is the suspected cause.

Samples are qualified with "J".

All other QC met requirements. Data usability is acceptable.

R= Rejected
E= Estimated

Reviewer Signature: Carole Collins **Date** 8/16/02

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-01 **Client ID:** BC-150-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	8.2	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-02 **Client ID:** BC-154-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 92.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	38.2	mg/Kg		N*	P	0.08	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-03 **Client ID:** BC-158-12

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	13.0	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-04 **Client ID:** BC-160-4

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	12.7	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-05 **Client ID:** BC-164-8

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	209	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. SDG No.: P3047 Method Type: SW846

Sample ID: P3047-06 Client ID: BC-168-12

Contract: MAC Consultants, Inc. Lab Code: CHEMED Case No.: SAS No.: P3047

Matrix: SOIL Date Received: 6/19/02 Level: LOW

% Solids: 93.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	101	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-07 **Client ID:** BC-170-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	9.7	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-08 **Client ID:** BC-174-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	61.0	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-09 **Client ID:** BC-178-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	55.7	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-10 **Client ID:** BC-180-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	6.6	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-11 **Client ID:** BC-184-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	5.3	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-12 **Client ID:** BC-188-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	78.8	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-13 **Client ID:** BC-190-4

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	5.8	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-14 **Client ID:** BC-194-8

Contract: MAC Consultants Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	32.9	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-15 **Client ID:** BC-198-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	87.9	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-16 **Client ID:** BC-200-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	5.8	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-17 **Client ID:** BC-204-8

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	47.4	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-18 **Client ID:** BC-208-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	72.2	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-19 **Client ID:** BC-208-12DUP

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	12.0	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-22 **Client ID:** BC-210-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	4.0	mg/Kg		N*	P	0.07	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3047 **Method Type:** SW846

Sample ID: P3047-23 **Client ID:** BC-214-8

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3047

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 92.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	16.9	mg/Kg			P	0.08	P1	P161902

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3048**

Prepared By: Carole Collins

Laboratory Name: Chemtech Date: August 7, 2002

Laboratory Project #:P3048

Sample (s) Taken: June 18, 2002

Sample Matrix: Soil and Water

Client Sample ID:

BC-22 0`-4`	BC-26 0`-4`
BC-22 4`-8`	BC-26 4`-8`
BC-22 8`-12`	BC-26 8`-12`
BC-23 0`-4`	BC-26 8`-12` DUP
BC-23 4`-8`	BC-26 8`-12` MS
BC-23 8`-12`	BC-26 8`-12` MSD
BC-24 0`-4`	BC-27 0`-4`
BC-24 4`-8`	BC-27 4`-8`
BC-24 8`-12`	BC-27 8`-12`
BC-25 0`-4`	BC-28 0`-4`
BC-25 4`-8`	BC-28 4`-8`
BC-25 8`-12`	BC-28 8`-12`
	RINSE BLANK

Analytical Parameters: Total Chromium

The DUSR was prepared by reviewing and evaluating the analytical data per the Region II guidelines from USEPA, Revision II/January 92 Inorganics analysis and NYSDEC ASP guidelines. The following checklist has been designed to ensure a thorough ad complete review of the analytical results based on the requirements in these guidelines. The analytical results are considered valid and usable for the purpose of this project, with any exceptions addressed in the Data Deficiencies comments section below.

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3048**

Data Verification Parameters		Circle One		
1.	Were all chain of custody records present and completed?	(Yes)	No	NA
2.	Were statements made in the analytical data case narrative supported by the analytical data?	(Yes)	No	NA
3.	Were the analysis performed as per method requested?	(Yes)	No	NA
4.	Was the data package complete as defined under the requirements for the NYSDEC ASP or USEPA CLP deliverables?	(Yes)	No	NA
5.	Were the required holing times met for all matrices and analytical parameter (metals, mercury, cyanide)?	(Yes)	No	NA
6.	Were samples correctly preserved?	Yes	(No)	NA
7.	Was sample preservation documented?	(Yes)	No	NA
8.	Was % solids greater than 50% for all soils samples?	(Yes)	No	NA
9.	Were preparation log/distillation log provided for all the analytes?	(Yes)	No	NA
10.	Did the preservation/distillation log include all the information about weight/volume and preparation date(s)?	(Yes)	No	NA
11.	Were there raw data included for all the analytes?	(Yes)	No	NA
12.	Were the instrument(s) calibrated correctly using proper standards?	(Yes)	No	NA
13.	Were the initial and continuing calibrations performed at the required frequency?	(Yes)	No	NA
14.	Were the initial and continuing calibration within the acceptance criteria?	(Yes)	No	NA
15.	Were CRDL standard(s) run at the beginning and end of each run?	(Yes)	No	NA
16.	Were percent recoveries (%R) for CRDL standard within the acceptance criteria?	(Yes)	No	NA
17.	Were the calibration blanks less than CRDL?	(Yes)	No	NA
18.	Were the preparation blanks free of contaminants?	(Yes)	No	NA
19.	Were the field blank free of contaminants?	Yes	No	(NA)
20.	Were ICP Interference Check Samples (ICS) analyzed at the beginning and end of each ICP run?	(Yes)	No	NA
21.	Were percent recoveries (%R) for ICS within the acceptance criteria?	(Yes)	No	NA
22.	Was the matrix spike (MS) analysis performed at the required frequency?	(Yes)	No	NA
23.	Did the MS meet the percent recovery (%R) criteria?	(Yes)	No	NA
24.	Was the post digestion spike sample analysis performed when required?	(Yes)	No	NA
25.	Was the laboratory duplicate analysis performed at the required frequency?	(Yes)	No	NA

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3048**

26.	Did the duplicate analysis meet the Relative Percent Difference (RPD) acceptance criteria?	Yes	(No)	NA
27.	Did the results for any field duplicate samples meet expected precision requirements?	Yes	(No)	NA
28.	Was the Laboratory Control Sample analysis performed for each matrix and analysis at the required frequency?	(Yes)	No	NA
29.	Did the LCS meet the percent recovery (%R) criteria?	(Yes)	No	NA
30.	Was ICP Serial Dilution analysis preformed at the required frequency?	(Yes)	No	NA
31.	Did the ICP serial dilution analysis meet the percent difference (%D) criteria?	(Yes)	No	NA
32.	Was proper quantitation procedure followed for Method of Standard Addition (MSA) analysis?	Yes	No	(NA)
33.	Was coefficient of correlation greater than 0.0995 for MSA analysis?	Yes	No	(NA)
34.	Were there any analysis performed for dissolved as total analysis?	Yes	No	(NA)
35.	Was the concentration of any dissolved analyte greater than its total concentration by 10%?	Yes	No	(NA)
36.	Did the laboratory submit Instrument Detection Limit (IDL), ICP linear ranges and ICP Interelement Correction Factors?	(Yes)	No	NA
37.	Were dilutions made appropriately when required?	(Yes)	No	NA
38.	No discrepancies were noted when review of raw data (instrument printouts) was performed.	(Yes)	No	NA
39.	Were results reported in correct units and soil samples corrected for % solid?	(Yes)	No	NA

If NO for any of the above questions, give further explanation in the comments section:

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3048**

COMMENTS:

Samples were not received within the acceptable QC Temperature range, but were preserved once received in the laboratory.

The Duplicates for sample # 15 did not meet QC criteria for Chromium. The duplicates were field sampled. The samples associated with the duplicate sample are flagged with an "*".

The MS/MSD and Duplicate for sample P3048-15 were field sampled. The non-homogeneous nature of the soil sample is the suspected cause.

The samples are flagged with a "J" qualifier.

All other QC data met requirements. Data usability is acceptable.

R= Rejected
E= Estimated

Reviewer Signature: Carole Collins **Date** 8/16/02

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-01 **Client ID:** BC-220-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 93.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	37.8	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-02 **Client ID:** BC-224-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	3.3	mg/Kg		*	P	0.07	PI	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-03 **Client ID:** BC-228-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	2.8	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-04 **Client ID:** BC-230-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	13.5	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-05 **Client ID:** BC-234-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	13.8	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-06 **Client ID:** BC-238-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	1.5	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-07 **Client ID:** BC-240-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	5.7	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-08 **Client ID:** BC-244-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	46.0	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-09 **Client ID:** BC-248-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	5.7	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-10 **Client ID:** BC-250-4

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	28.4	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-11 **Client ID:** BC-254-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	119	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-12 **Client ID:** BC-258-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 86.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	1210	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-13 **Client ID:** BC-260-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	5.3	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-14 **Client ID:** BC-264-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 90.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	52.7	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-15 **Client ID:** BC-268-12

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	876	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-16 **Client ID:** BC-268-12DUP

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	1230	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-19 **Client ID:** BC-270-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	5.5	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-20 **Client ID:** BC-274-8

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 97.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	91.1	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-21 **Client ID:** BC-278-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 94.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	14.2	mg/Kg		*	P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-22 **Client ID:** BC-280-4

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 91.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	15.2	mg/Kg		*	P	0.08	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-23 **Client ID:** BC-284-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 96.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	416	mg/Kg			P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-24 **Client ID:** BC-288-12

Contract: MAC Consultants. Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: SOIL **Date Received:** 6/19/02 **Level:** LOW

% Solids: 95.0

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	74.6	mg/Kg			P	0.07	P1	P162402

Color Before: BROWN **Clarity Before:** **Texture:** MEDIUM

Color After: YELLOW **Clarity After:** **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3048 **Method Type:** SW846

Sample ID: P3048-25 **Client ID:** RINSEBLANK

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3048

Matrix: WATER **Date Received:** 6/19/02 **Level:** LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	1.4	ug/L	U		P	1.4	P1	P162402

Color Before: COLORLESS **Clarity Before:** CLEAR **Texture:**

Color After: COLORLESS **Clarity After:** CLEAR **Artifacts:**

Comments:

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3190**

Prepared By: Carole Collins

Laboratory Name: Chemtech Date: August 7, 2002

Laboratory Project #: P3190

Sample (s) Taken: June 17 & 18, 2002

Sample Matrix: Soil

Client Sample ID:

BC-1 8`-12`	BC-19 8`-12`
BC-6 4`-8`	BC-25 4`-8`
BC-6 8`-12`	BC-25 8`-12`
BC-16 4`-8`	BC-26 8`-12`
BC-16 8`-12`	BC-28 4`-8`

Analytical Parameters: TCLP Chromium

The DUSR was prepared by reviewing and evaluating the analytical data per the Region II guidelines from USEPA, Revision II/January 92 Inorganics analysis and NYSDEC ASP guidelines. The following checklist has been designed to ensure a thorough ad complete review of the analytical results based on the requirements in these guidelines. The analytical results are considered valid and usable for the purpose of this project, with any exceptions addressed in the Data Deficiencies comments section below.

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3190**

Data Verification Parameters		**Circle One**		
1.	Were all chain of custody records present and completed?	(Yes)	No	NA
2.	Were statements made in the analytical data case narrative supported by the analytical data?	(Yes)	No	NA
3.	Were the analysis performed as per method requested?	(Yes)	No	NA
4.	Was the data package complete as defined under the requirements for the NYSDEC ASP or USEPA CLP deliverables?	(Yes)	No	NA
5.	Were the required holing times met for all matrices and analytical parameter (metals, mercury, cyanide)?	(Yes)	No	NA
6.	Were samples correctly preserved?	Yes	(No)	NA
7.	Was sample preservation documented?	(Yes)	No	NA
8.	Was % solids greater than 50% for all soils samples?	(Yes)	No	NA
9.	Were preparation log/distillation log provided for all the analytes?	(Yes)	No	NA
10.	Did the preservation/distillation log include all the information about weight/volume and preparation date(s)?	(Yes)	No	NA
11.	Were there raw data included for all the analytes?	(Yes)	No	NA
12.	Were the instrument(s) calibrated correctly using proper standards?	(Yes)	No	NA
13.	Were the initial and continuing calibrations performed at the required frequency?	(Yes)	No	NA
14.	Were the initial and continuing calibration within the acceptance criteria?	(Yes)	No	NA
15.	Were CRDL standard(s) run at the beginning and end of each run?	(Yes)	No	NA
16.	Were percent recoveries (%R) for CRDL standard within the acceptance criteria?	(Yes)	No	NA
17.	Were the calibration blanks less than CRDL?	(Yes)	No	NA
18.	Were the preparation blanks free of contaminants?	(Yes)	No	NA
19.	Were the field blank free of contaminants?	Yes	No	(NA)
20.	Were ICP Interference Check Samples (ICS) analyzed at the beginning and end of each ICP run?	(Yes)	No	NA
21.	Were percent recoveries (%R) for ICS within the acceptance criteria?	(Yes)	No	NA
22.	Was the matrix spike (MS) analysis performed at the required frequency?	(Yes)	No	NA
23.	Did the MS meet the percent recovery (%R) criteria?	(Yes)	No	NA
24.	Was the post digestion spike sample analysis performed when required?	(Yes)	No	NA
25.	Was the laboratory duplicate analysis performed at the required frequency?	(Yes)	No	NA

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3190**

26.	Did the duplicate analysis meet the Relative Percent Difference (RPD) acceptance criteria?	(Yes)	No	NA
27.	Did the results for any field duplicate samples meet expected precision requirements?	Yes	No	(NA)
28.	Was the Laboratory Control Sample analysis performed for each matrix and analysis at the required frequency?	(Yes)	No	NA
29.	Did the LCS meet the percent recovery (%R) criteria?	(Yes)	No	NA
30.	Was ICP Serial Dilution analysis preformed at the required frequency?	(Yes)	No	NA
31.	Did the ICP serial dilution analysis meet the percent difference (%D) criteria?	(Yes)	No	NA
32.	Was proper quantitation procedure followed for Method of Standard Addition (MSA) analysis?	Yes	No	(NA)
33.	Was coefficient of correlation greater than 0.0995 for MSA analysis?	Yes	No	(NA)
34.	Were there any analysis performed for dissolved as total analysis?	Yes	No	(NA)
35.	Was the concentration of any dissolved analyte greater than its total concentration by 10%?	Yes	No	(NA)
36.	Did the laboratory submit Instrument Detection Limit (IDL), ICP linear ranges and ICP Interelement Correction Factors?	(Yes)	No	NA
37.	Were dilutions made appropriately when required?	(Yes)	No	NA
38.	No discrepancies were noted when review of raw data (instrument printouts) was performed.	(Yes)	No	NA
39.	Were results reported in correct units and soil samples corrected for % solid?	(Yes)	No	NA

If NO for any of the above questions, give further explanation in the comments section:

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3190**

COMMENTS:

Samples were not received within the Temperature QC range, but preserved once received in the laboratory.

All QC meet QC requirements. Data usability acceptable.

R= Rejected
E= Estimated

Reviewer Signature: Carole Collins **Date** 2/10/02

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3190 **Method Type:** SW846

Sample ID: P3190-01 **Client ID:** BC-18-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3190

Matrix: TCLP **Date Received:** 7/1/02 **Level:** LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	39.4	ug/L	B		P	14.0	P1	P170902

Color Before: COLORLESS **Clarity Before:** CLEAR **Texture:**

Color After: COLORLESS **Clarity After:** CLEAR **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3190 **Method Type:** SW846

Sample ID: P3190-02 **Client ID:** BC-64-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3190

Matrix: TCLP **Date Received:** 7/1/02 **Level:** LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	386	ug/L			P	14.0	P1	P170902

Color Before: COLORLESS **Clarity Before:** CLEAR **Texture:**

Color After: COLORLESS **Clarity After:** CLEAR **Artifacts:**

Comments:

METALS

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3190 **Method Type:** SW846

Sample ID: P3190-03 **Client ID:** BC-68-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3190

Matrix: TCLP **Date Received:** 7/1/02 **Level:** LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	366	ug/L			P	14.0	P1	P170902

Color Before: COLORLESS **Clarity Before:** CLEAR **Texture:**

Color After: COLORLESS **Clarity After:** CLEAR **Artifacts:**

Comments:

METALS

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3190 **Method Type:** SW846

Sample ID: P3190-04 **Client ID:** BC-164-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3190

Matrix: TCLP **Date Received:** 7/1/02 **Level:** LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	64.5	ug/L	B		P	14.0	P1	P170902

Color Before: COLORLESS **Clarity Before:** CLEAR **Texture:**

Color After: COLORLESS **Clarity After:** CLEAR **Artifacts:**

Comments:

METALS

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3190 **Method Type:** SW846

Sample ID: P3190-05 **Client ID:** BC-168-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3190

Matrix: TCLP **Date Received:** 7/1/02 **Level:** LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	49.6	ug/L	B		P	14.0	P1	P170902

Color Before: COLORLESS **Clarity Before:** CLEAR **Texture:**

Color After: COLORLESS **Clarity After:** CLEAR **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3190 **Method Type:** SW846

Sample ID: P3190-06 **Client ID:** BC-198-12

Contract: MAC Consultants, inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3190

Matrix: TCLP **Date Received:** 7/1/02 **Level:** LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	20.9	ug/L	B		P	14.0	P1	P170902

Color Before: COLORLESS **Clarity Before:** CLEAR **Texture:**

Color After: COLORLESS **Clarity After:** CLEAR **Artifacts:**

Comments:

METALS

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3190 **Method Type:** SW846

Sample ID: P3190-07 **Client ID:** BC-254-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3190

Matrix: TCLP **Date Received:** 7/1/02 **Level:** LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	26.1	ug/L	B		P	14.0	P1	P170902

Color Before: COLORLESS **Clarity Before:** CLEAR **Texture:**

Color After: COLORLESS **Clarity After:** CLEAR **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3190 **Method Type:** SW846

Sample ID: P3190-08 **Client ID:** BC-258-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3190

Matrix: TCLP **Date Received:** 7/1/02 **Level:** LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	53.2	ug/L	B		P	14.0	P1	P170902

Color Before: COLORLESS **Clarity Before:** CLEAR **Texture:**

Color After: COLORLESS **Clarity After:** CLEAR **Artifacts:**

Comments:

METALS

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3190 **Method Type:** SW846

Sample ID: P3190-09 **Client ID:** BC-268-12

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3190

Matrix: TCLP **Date Received:** 7/1/02 **Level:** LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	38.4	ug/L	B		P	14.0	P1	P170902

Color Before: COLORLESS **Clarity Before:** CLEAR **Texture:**

Color After: COLORLESS **Clarity After:** CLEAR **Artifacts:**

Comments:

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: MAC Consultants, Inc. **SDG No.:** P3190 **Method Type:** SW846

Sample ID: P3190-10 **Client ID:** BC-284-8

Contract: MAC Consultants, Inc. **Lab Code:** CHEMED **Case No.:** **SAS No.:** P3190

Matrix: TCLP **Date Received:** 7/1/02 **Level:** LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7440-47-3	Chromium	39.4	ug/L	B		P	14.0	P1	P170902

Color Before: COLORLESS **Clarity Before:** CLEAR **Texture:**

Color After: COLORLESS **Clarity After:** CLEAR **Artifacts:**

Comments:

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3097**

Prepared by: Carole Collins

Laboratory Name: Chemtech Date: August 8, 2002

Laboratory Project: P3097

Analytical parameters: Volatile Organics by method 8260- SW846

Sample (s) Taken: June 19, 2002

Sample Matrix: Soil

Client Sample ID:

BS-6 0`-4`	BS-10 0`-4`
BS-6 4`-8`	BS-10 4`-8`
BS-6 8`-12`	BS-10 8`-12`
BS-7 0`-4`	BS-11 0`-4`
BS-7 4`-8`	BS-11 4`-8`
BS-7 8`-12`	BS-11 8`-12`
BS-8 0`-4`	BS-12 0`-4`
BS-8 4`-8`	BS-12 4`-8`
BS-8 8`-12`	BS-12 8`-12
BS-9 0`-4`	BS-12 8`-12` DUP
BS-9 4`-8`	BS-12 8`-12` MS
BS-9 8`-12`	BS-12 8`-12` MSD

The DUSR was prepared by reviewing and evaluating the analytical data per the method 8260, SW846 and NYSDEC ASP guidelines. The following checklist has been designed to ensure a thorough and complete review of the analytical results based on the requirements in these guidelines. The analytical results are considered valid and usable for the purpose of this project, with any exceptions addressed in the Data Deficiencies comments section below.

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3097**

Data Verification Parameters

		Circle One		
1.	Were all chain of custody records present and completed?	(Yes)	No	NA
2.	Were statements made in the analytical data case narrative supported by the analytical data?	(Yes)	No	NA
3.	Were the analysis performed as per method requested?	(Yes)	No	NA
4.	Was the data package complete as defined under the requirements for the NYSDEC ASP or USEPA CLP deliverables?	(Yes)	No	NA
5.	Were the required holding times met for all matrices and analytical parameter?	(Yes)	No	NA
6.	Were samples correctly preserved?	(Yes)	No	NA
7.	Was sample preservation documented?	(Yes)	No	NA
8.	Was % moisture less than 50 % for all soil samples?	(Yes)	No	NA
9.	Were the initial and continuing calibrations performed at the required frequency?	(Yes)	No	NA
10.	Were the initial calibration within the acceptance criteria?	(Yes)	No	NA
11.	Were the midpoint check std. within the acceptance criteria?	(Yes)	No	NA
12.	Were the method blanks free of contaminants?	(Yes)	No	NA
13.	Were the field blank free of contaminants?	Yes	No	(NA)
14.	Were system monitoring compounds within the acceptance limits?	(Yes)	No	NA
15.	Were matrix spike/matrix spike duplicate (MS/MSD) Analyzed at the correct frequency?	(Yes)	No	NA
16.	Did the MS/MSD met the percent recovery (%R) and Relative percent difference (RPD) acceptance criteria?	(Yes)	No	NA
17.	Was the matrix spike blank sample (MSB) analysis performed at the required frequency?	(Yes)	No	NA
18.	Did the MSB meet the percent recovery (%R) criteria?	(Yes)	No	NA
19.	Did the result for any field duplicate samples meet expected precision requirements?	(Yes)	No	NA
20.	Were dilutions made appropriately?	(Yes)	No	NA
21.	No discrepancies were noted when the review of raw data (instrument printouts and chromatograms was performed.	(Yes)	No	NA
22.	Were results reported in correct units and soil samples corrected for % moisture?	(Yes)	No	NA

If no answered for any of the above questions, give further explanation in the comments section:

CHEMTECH

Data Usability Summary Report (DUSR)

Project of Site Name: **ORB** SDG # : **P3097**

COMMENTS:

The following samples did not meet surrogates QC requirements. The samples were rerun to confirm that the surrogates were not within QC requirements. Samples are flagged with "J" qualifiers.

BS-8 0`-4'	BS-9 8`-12`
BS-9 4`-8`	BS-11 8`-12`

All other data met requirements. All data is usable.

R= Rejected
E= Estimated

Reviewer Signature: Carol Collins **Date** 8/16/02

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-01 Client ID: BS-60-4

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/26/02 Matrix: SOIL
File ID: VA062620.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0626S3
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 2

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.7	U	5.1	1.7	ug/Kg
Bromomethane	74-83-9	< 1.0	U	5.1	1.0	ug/Kg
Vinyl chloride	75-01-4	< 1.0	U	5.1	1.0	ug/Kg
Chloroethane	75-00-3	< 1.3	U	5.1	1.3	ug/Kg
Methylene Chloride	75-09-2	< 1.3	U	5.1	1.3	ug/Kg
Acetone	67-64-1	< 3.6	U	5.1	3.6	ug/Kg
Carbon disulfide	75-15-0	< 1.3	U	5.1	1.3	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.1	U	5.1	1.1	ug/Kg
1,1-Dichloroethane	75-34-3	< 0.92	U	5.1	0.92	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.1	U	5.1	1.1	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.92	U	5.1	0.92	ug/Kg
Chloroform	67-66-3	< 1.0	U	5.1	1.0	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.1	U	5.1	1.1	ug/Kg
2-Butanone	78-93-3	< 5.5	U	5.1	5.5	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.0	U	5.1	1.0	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.1	U	5.1	2.1	ug/Kg
Bromodichloromethane	75-27-4	< 0.82	U	5.1	0.82	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.82	U	5.1	0.82	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.92	U	5.1	0.92	ug/Kg
Trichloroethene	79-01-6	< 1.0	U	5.1	1.0	ug/Kg
Dibromochloromethane	124-48-1	< 0.92	U	5.1	0.92	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.1	U	5.1	1.1	ug/Kg
Benzene	71-43-2	< 1.0	U	5.1	1.0	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.0	U	5.1	1.0	ug/Kg
Bromoform	75-25-2	< 1.1	U	5.1	1.1	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.1	U	5.1	4.1	ug/Kg
2-Hexanone	591-78-6	< 6.1	U	5.1	6.1	ug/Kg
Tetrachloroethene	127-18-4	< 1.2	U	5.1	1.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	U	5.1	1.0	ug/Kg
Toluene	108-88-3	< 1.1	U	5.1	1.1	ug/Kg
Chlorobenzene	108-90-7	< 1.1	U	5.1	1.1	ug/Kg
Ethyl Benzene	100-41-4	< 1.0	U	5.1	1.0	ug/Kg
Styrene	100-42-5	< 1.4	U	5.1	1.4	ug/Kg
m/p-Xylenes	136777-61-2	< 2.9	U	5.1	2.9	ug/Kg

07/01

Chemtech Consulting Group

Volatiles
SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-01 Client ID: BS-60-4

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/26/02 Matrix: SOIL
File ID: VA062620.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0626S3
Sample Wt/Wol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 2

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.1	U	5.1	1.1	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	45.11	90 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	51.43	103 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	39.33	79 %	74 - 121		SPK: 50
Dibromofluoromethane		50.82	102 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	3089374	6.02			
1,4-Difluorobenzene	540-36-3	3250280	7.82			
obenzene-d5	3114-55-4	2648886	14.04			
Dichlorobenzene-d4	3855-82-1	1593953	19.54			

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-02 Client ID: BS-64-8

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/26/02 Matrix: SOIL
File ID: VA062621.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0626S3
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 11

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.9	U	5.6	1.9	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.6	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.6	1.1	ug/Kg
Chloroethane	75-00-3	< 1.5	U	5.6	1.5	ug/Kg
Methylene Chloride	75-09-2	< 1.5	U	5.6	1.5	ug/Kg
Acetone	67-64-1	< 3.9	U	5.6	3.9	ug/Kg
Carbon disulfide	75-15-0	< 1.5	U	5.6	1.5	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.6	1.2	ug/Kg
ichloroethane	75-34-3	< 1.0	U	5.6	1.0	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.6	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.0	U	5.6	1.0	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.6	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.6	1.2	ug/Kg
2-Butanone	78-93-3	< 6.1	U	5.6	6.1	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.6	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.4	U	5.6	2.4	ug/Kg
Bromodichloromethane	75-27-4	< 0.90	U	5.6	0.90	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.90	U	5.6	0.90	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.0	U	5.6	1.0	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.6	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 1.0	U	5.6	1.0	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.6	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.6	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.6	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.6	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.5	U	5.6	4.5	ug/Kg
2-Hexanone	591-78-6	< 6.7	U	5.6	6.7	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.6	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.6	1.1	ug/Kg
Tc e	108-88-3	< 1.2	U	5.6	1.2	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.6	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.6	1.1	ug/Kg
Styrene	100-42-5	< 1.6	U	5.6	1.6	ug/Kg
m/p-Xylenes	136777-61-2	< 3.1	U	5.6	3.1	ug/Kg

07/01

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-02 Client ID: BS-64-8

Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/26/02	Matrix:	SOIL
File ID:	VA062621.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0626S3
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	11

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.6	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	41.62	83 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	51.63	103 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	38.57	77 %	74 - 121		SPK: 50
Dibromofluoromethane		51.46	103 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	3150420	6.07			
1,4-Difluorobenzene	540-36-3	3182911	7.85			
obenzene-d5	3114-55-4	2552568	14.06			
1,4-Dichlorobenzene-d4	3855-82-1	1556237	19.57			

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-03	Client ID:	BS-68-12
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062804.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	9

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.9	U	5.5	1.9	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.5	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.5	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.5	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.5	1.4	ug/Kg
Acetone	67-64-1	< 3.8	U	5.5	3.8	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.5	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.5	1.2	ug/Kg
ichloroethane	75-34-3	< 0.99	U	5.5	0.99	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.5	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.99	U	5.5	0.99	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.5	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.5	1.2	ug/Kg
2-Butanone	78-93-3	< 5.9	U	5.5	5.9	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.5	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.3	U	5.5	2.3	ug/Kg
Bromodichloromethane	75-27-4	< 0.88	U	5.5	0.88	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.88	U	5.5	0.88	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.99	U	5.5	0.99	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.5	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.99	U	5.5	0.99	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.5	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.5	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.5	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.5	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.4	U	5.5	4.4	ug/Kg
2-Hexanone	591-78-6	< 6.6	U	5.5	6.6	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.5	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.5	1.1	ug/Kg
T e	108-88-3	< 1.2	U	5.5	1.2	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.5	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.5	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.5	1.5	ug/Kg
m/p-Xylenes	136 777-61-2	< 3.1	U	5.5	3.1	ug/Kg

7/01

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-03 Client ID: BS-68-12

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/28/02 Matrix: SOIL
File ID: VA062804.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0628S1
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 9

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.5	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	44.99	90 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	54.71	109 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	41.34	83 %	74 - 121		SPK: 50
Dibromofluoromethane		54.35	109 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2955186	6.05			
1,4-Difluorobenzene	540-36-3	3306121	7.82			
obenzene-d5	3114-55-4	2642875	14.06			
1,2-Dichlorobenzene-d4	3855-82-1	1543324	19.60			
TENTITIVE IDENTIFIED COMPOUNDS						
Coulmn Bleed	74779616	6.1	J	20.62		ug/kg

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-04	Client ID:	BS-70-4
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062805.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	24

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 2.2	U	6.6	2.2	ug/Kg
Bromomethane	74-83-9	< 1.3	U	6.6	1.3	ug/Kg
Vinyl chloride	75-01-4	< 1.3	U	6.6	1.3	ug/Kg
Chloroethane	75-00-3	< 1.7	U	6.6	1.7	ug/Kg
Methylene Chloride	75-09-2	< 1.7	U	6.6	1.7	ug/Kg
Acetone	67-64-1	< 4.6	U	6.6	4.6	ug/Kg
Carbon disulfide	75-15-0	< 1.7	U	6.6	1.7	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.4	U	6.6	1.4	ug/Kg
ichloroethane	75-34-3	< 1.2	U	6.6	1.2	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.4	U	6.6	1.4	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.2	U	6.6	1.2	ug/Kg
Chloroform	67-66-3	< 1.3	U	6.6	1.3	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.4	U	6.6	1.4	ug/Kg
2-Butanone	78-93-3	< 7.1	U	6.6	7.1	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.3	U	6.6	1.3	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.8	U	6.6	2.8	ug/Kg
Bromodichloromethane	75-27-4	< 1.1	U	6.6	1.1	ug/Kg
1,2-Dichloropropane	78-87-5	< 1.1	U	6.6	1.1	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.2	U	6.6	1.2	ug/Kg
Trichloroethene	79-01-6	< 1.3	U	6.6	1.3	ug/Kg
Dibromochloromethane	124-48-1	< 1.2	U	6.6	1.2	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.4	U	6.6	1.4	ug/Kg
Benzene	71-43-2	< 1.3	U	6.6	1.3	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.3	U	6.6	1.3	ug/Kg
Bromoform	75-25-2	< 1.4	U	6.6	1.4	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 5.3	U	6.6	5.3	ug/Kg
2-Hexanone	591-78-6	< 7.9	U	6.6	7.9	ug/Kg
Tetrachloroethene	127-18-4	< 1.6	U	6.6	1.6	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.3	U	6.6	1.3	ug/Kg
T ne	108-88-3	< 1.4	U	6.6	1.4	ug/Kg
Chlorobenzene	108-90-7	< 1.4	U	6.6	1.4	ug/Kg
Ethyl Benzene	100-41-4	< 1.3	U	6.6	1.3	ug/Kg
Styrene	100-42-5	< 1.8	U	6.6	1.8	ug/Kg
m/p-Xylenes	136777-61-2	< 3.7	U	6.6	3.7	ug/Kg

07/01

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-04	Client ID:	BS-70-4
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062805.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	24

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	1.4	U	5.0	1.4	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	45.19	90 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	55.1	110 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	39.3	79 %	74 - 121		SPK: 50
Dibromofluoromethane		53.35	107 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	3157976	6.02			
1,4-Difluorobenzene	540-36-3	3560072	7.82			
obenzene-d5	3114-55-4	2725586	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1574581	19.57			
TENTITIVE IDENTIFIED COMPOUNDS						
Column Bleed	7385106	10	J	20.58		ug/kg

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-05 Client ID: BS-74-8

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/27/02 Matrix: SOIL
File ID: VA062624.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA062683
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 1

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.7	U	5.1	1.7	ug/Kg
Bromomethane	74-83-9	< 1.0	U	5.1	1.0	ug/Kg
Vinyl chloride	75-01-4	< 1.0	U	5.1	1.0	ug/Kg
Chloroethane	75-00-3	< 1.3	U	5.1	1.3	ug/Kg
Methylene Chloride	75-09-2	< 1.3	U	5.1	1.3	ug/Kg
Acetone	67-64-1	< 3.5	U	5.1	3.5	ug/Kg
Carbon disulfide	75-15-0	< 1.3	U	5.1	1.3	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.1	U	5.1	1.1	ug/Kg
ichloroethane	75-34-3	< 0.91	U	5.1	0.91	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.1	U	5.1	1.1	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.91	U	5.1	0.91	ug/Kg
Chloroform	67-66-3	< 1.0	U	5.1	1.0	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.1	U	5.1	1.1	ug/Kg
2-Butanone	78-93-3	< 5.5	U	5.1	5.5	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.0	U	5.1	1.0	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.1	U	5.1	2.1	ug/Kg
Bromodichloromethane	75-27-4	< 0.81	U	5.1	0.81	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.81	U	5.1	0.81	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.91	U	5.1	0.91	ug/Kg
Trichloroethene	79-01-6	< 1.0	U	5.1	1.0	ug/Kg
Dibromochloromethane	124-48-1	< 0.91	U	5.1	0.91	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.1	U	5.1	1.1	ug/Kg
Benzene	71-43-2	< 1.0	U	5.1	1.0	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.0	U	5.1	1.0	ug/Kg
Bromoform	75-25-2	< 1.1	U	5.1	1.1	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.0	U	5.1	4.0	ug/Kg
2-Hexanone	591-78-6	< 6.1	U	5.1	6.1	ug/Kg
Tetrachloroethene	127-18-4	< 1.2	U	5.1	1.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	U	5.1	1.0	ug/Kg
T e	108-88-3	< 1.1	U	5.1	1.1	ug/Kg
Chlorobenzene	108-90-7	< 1.1	U	5.1	1.1	ug/Kg
Ethyl Benzene	100-41-4	< 1.0	U	5.1	1.0	ug/Kg
Styrene	100-42-5	< 1.4	U	5.1	1.4	ug/Kg
m/p-Xylenes	136777-61-2	< 2.8	U	5.1	2.8	ug/Kg

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants. Inc.

Sample ID: P3097-05 — Client ID: BS-74-8

Date Collected: 6/19/02 — Date Received: 6/21/02
Date Analyzed: 6/27/02 — Matrix: SOIL
File ID: VA062624.D — Analytical Run ID: VA061202
Dilution: 1 — Instrument ID: MSVOAA
Analytical Method: 8260 — Associated Blank: VBA0626S3
Sample Wt/Vol: 5.0 Units: g — Soil Extract Vol:
Soil Aliquot Vol: — % Moisture: 1

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.1	U	5.1	1.1	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	43.25	87 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	51.2	102 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	40.15	80 %	74 - 121		SPK: 50
Dibromofluoromethane		47.72	95 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2823505	6.07			
1,4-Difluorobenzene	540-36-3	2935344	7.85			
obenzene-d5	3114-55-4	2315317	14.06			
1,4-Dichlorobenzene-d4	3855-82-1	1414400	19.57			
TENTITIVE IDENTIFIED COMPOUNDS						
Octane, 2,3,7-trimethyl-	62016346	6.6	J	24.59		ug/kg
Tridecane	629505	7.2	J	25.38		ug/kg
Dodecane, 2,6,10-trimethyl-	3891983	6.0	J	27.08		ug/kg
Eicosane	112958	11	J	27.73		ug/kg
Heptadecane, 2,6,10,14-tetramethy	18344371	6.0	J	28.96		ug/kg

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-06	Client ID:	BS-78-12
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/27/02	Matrix:	SOIL
File ID:	VA062626.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0626S3
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	6

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.8	U	5.3	1.8	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.3	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.3	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.3	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.3	1.4	ug/Kg
Acetone	67-64-1	< 3.7	U	5.3	3.7	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.3	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.3	1.2	ug/Kg
[illegible]ichloroethane	75-34-3	< 0.96	U	5.3	0.96	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.3	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.96	U	5.3	0.96	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.3	1.2	ug/Kg
2-Butanone	78-93-3	< 5.7	U	5.3	5.7	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.3	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.3	2.2	ug/Kg
Bromodichloromethane	75-27-4	< 0.85	U	5.3	0.85	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.85	U	5.3	0.85	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.96	U	5.3	0.96	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.3	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.96	U	5.3	0.96	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.3	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.3	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.3	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.3	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.3	U	5.3	4.3	ug/Kg
2-Hexanone	591-78-6	< 6.4	U	5.3	6.4	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.3	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.3	1.1	ug/Kg
T[illegible]ne	108-88-3	< 1.2	U	5.3	1.2	ug/Kg
C[illegible]robenzene	108-90-7	< 1.2	U	5.3	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.3	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.3	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 3.0	U	5.3	3.0	ug/Kg

07/01
SG

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-06 Client ID: BS-78-12

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/27/02 Matrix: SOIL
File ID: VA062626.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0626S3
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 6

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.5	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	44.35	89 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	49.21	98 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	36.85	74 %	74 - 121		SPK: 50
Dibromofluoromethane		49.94	100 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	3125595	6.10			
1,4-Difluorobenzene	540-36-3	3318740	7.87			
[illegible]obenzene-d5	3114-55-4	2702719	14.12			
1,4-Dichlorobenzene-d4	3855-82-1	1540669	19.63			

Chemtech Consulting Group

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-07	Client ID:	BS-80-4
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/27/02	Matrix:	SOIL
File ID:	VA062625.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA062683
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	8

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.8	U	5.4	1.8	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.4	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.4	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.4	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.4	1.4	ug/Kg
Acetone	67-64-1	< 3.8	U	5.4	3.8	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.4	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.4	1.2	ug/Kg
ichloroethane	75-34-3	< 0.98	U	5.4	0.98	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.4	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.98	U	5.4	0.98	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.4	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.4	1.2	ug/Kg
2-Butanone	78-93-3	< 5.9	U	5.4	5.9	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.4	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.3	U	5.4	2.3	ug/Kg
Bromodichloromethane	75-27-4	< 0.87	U	5.4	0.87	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.87	U	5.4	0.87	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.98	U	5.4	0.98	ug/Kg
Trichloroethene	79-01-6	2.0	J	5.4	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.98	U	5.4	0.98	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.4	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.4	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.4	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.4	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.3	U	5.4	4.3	ug/Kg
2-Hexanone	591-78-6	< 6.5	U	5.4	6.5	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.4	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.4	1.1	ug/Kg
T e	108-88-3	< 1.2	U	5.4	1.2	ug/Kg
Ch obenzene	108-90-7	< 1.2	U	5.4	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.4	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.4	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 3.0	U	5.4	3.0	ug/Kg

Volatiles
SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-07	Client ID:	BS-80-4
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/27/02	Matrix:	SOIL
File ID:	VA062625.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0626S3
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	8

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.4	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	45.45	91 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	51.77	104 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	36.65	73 %	74 - 121		SPK: 50
Dibromofluoromethane		50.81	102 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2480334	6.07			
1,4-Difluorobenzene	540-36-3	2653396	7.85			
obenzene-d5	3114-55-4	2084394	14.06			
1,4-Dichlorobenzene-d4	3855-82-1	1169085	19.57			

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-08 Client ID: BS-84-8

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/27/02 Matrix: SOIL
File ID: VA062704.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0627S1
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 11

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.9	U	5.6	1.9	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.6	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.6	1.1	ug/Kg
Chloroethane	75-00-3	< 1.5	U	5.6	1.5	ug/Kg
Methylene Chloride	75-09-2	< 1.5	U	5.6	1.5	ug/Kg
Acetone	67-64-1	< 3.9	U	5.6	3.9	ug/Kg
Carbon disulfide	75-15-0	< 1.5	U	5.6	1.5	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.6	1.2	ug/Kg
[illegible]ichloroethane	75-34-3	< 1.0	U	5.6	1.0	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.6	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.0	U	5.6	1.0	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.6	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.6	1.2	ug/Kg
2-Butanone	78-93-3	< 6.1	U	5.6	6.1	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.6	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.4	U	5.6	2.4	ug/Kg
Bromodichloromethane	75-27-4	< 0.90	U	5.6	0.90	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.90	U	5.6	0.90	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.0	U	5.6	1.0	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.6	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 1.0	U	5.6	1.0	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.6	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.6	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.6	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.6	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.5	U	5.6	4.5	ug/Kg
2-Hexanone	591-78-6	< 6.7	U	5.6	6.7	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.6	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.6	1.1	ug/Kg
To[illegible]ne	108-88-3	< 1.2	U	5.6	1.2	ug/Kg
C[illegible]obenzene	108-90-7	< 1.2	U	5.6	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.6	1.1	ug/Kg
Styrene	100-42-5	< 1.6	U	5.6	1.6	ug/Kg
m/p-Xylenes	136777-61-2	< 3.1	U	5.6	3.1	ug/Kg

6/27/02

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-08	Client ID:	BS-84-8
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/27/02	Matrix:	SOIL
File ID:	VA062704.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0627S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	11

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.0	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	38.59	77 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	50.22	100 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	39.54	79 %	74 - 121		SPK: 50
Dibromofluoromethane		48.55	97 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	3034199	6.13			
1,4-Difluorobenzene	540-36-3	3155498	7.93			
obenzene-d5	3114-55-4	2602733	14.17			
1,4-Dichlorobenzene-d4	3855-82-1	1589529	19.68			

Volatiles
SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-09	Client ID:	BS-88-12
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/27/02	Matrix:	SOIL
File ID:	VA062705.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0627S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	17

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 2.0	U	6.0	2.0	ug/Kg
Bromomethane	74-83-9	< 1.2	U	6.0	1.2	ug/Kg
Vinyl chloride	75-01-4	< 1.2	U	6.0	1.2	ug/Kg
Chloroethane	75-00-3	< 1.6	U	6.0	1.6	ug/Kg
Methylene Chloride	75-09-2	< 1.6	U	6.0	1.6	ug/Kg
Acetone	67-64-1	< 4.2	U	6.0	4.2	ug/Kg
Carbon disulfide	75-15-0	< 1.6	U	6.0	1.6	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.3	U	6.0	1.3	ug/Kg
ichloroethane	75-34-3	< 1.1	U	6.0	1.1	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.3	U	6.0	1.3	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.1	U	6.0	1.1	ug/Kg
Chloroform	67-66-3	< 1.2	U	6.0	1.2	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.3	U	6.0	1.3	ug/Kg
2-Butanone	78-93-3	< 6.5	U	6.0	6.5	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.2	U	6.0	1.2	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.5	U	6.0	2.5	ug/Kg
Bromodichloromethane	75-27-4	< 0.96	U	6.0	0.96	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.96	U	6.0	0.96	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.1	U	6.0	1.1	ug/Kg
Trichloroethene	79-01-6	< 1.2	U	6.0	1.2	ug/Kg
Dibromochloromethane	124-48-1	< 1.1	U	6.0	1.1	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.3	U	6.0	1.3	ug/Kg
Benzene	71-43-2	< 1.2	U	6.0	1.2	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.2	U	6.0	1.2	ug/Kg
Bromoform	75-25-2	< 1.3	U	6.0	1.3	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.8	U	6.0	4.8	ug/Kg
2-Hexanone	591-78-6	< 7.2	U	6.0	7.2	ug/Kg
Tetrachloroethene	127-18-4	< 1.4	U	6.0	1.4	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.2	U	6.0	1.2	ug/Kg
T ne	108-88-3	< 1.3	U	6.0	1.3	ug/Kg
Chlorobenzene	108-90-7	< 1.3	U	6.0	1.3	ug/Kg
Ethyl Benzene	100-41-4	< 1.2	U	6.0	1.2	ug/Kg
Styrene	100-42-5	< 1.7	U	6.0	1.7	ug/Kg
m/p-Xylenes	136777-61-2	< 3.4	U	6.0	3.4	ug/Kg

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-09	Client ID:	BS-88-12
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/27/02	Matrix:	SOIL
File ID:	VA062705.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0627S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	17

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.5	U	6.0	1.5	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	41.76	84 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	50.28	101 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	39.4	79 %	74 - 121		SPK: 50
Dibromofluoromethane		48.77	98 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	3082702	6.13			
1,4-Difluorobenzene	540-36-3	3293365	7.93			
obenzene-d5	3114-55-4	2770148	14.14			
1,4-Dichlorobenzene-d4	3855-82-1	1680860	19.65			

Chemtech Consulting Group

Volatiles
SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-10 Client ID: BS-90-4

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/27/02 Matrix: SOIL
File ID: VA062725.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0627S2
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.8	U	5.2	1.8	ug/Kg
Bromomethane	74-83-9	< 1.0	U	5.2	1.0	ug/Kg
Vinyl chloride	75-01-4	< 1.0	U	5.2	1.0	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.2	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.2	1.4	ug/Kg
Acetone	67-64-1	< 3.6	U	5.2	3.6	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.2	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.1	U	5.2	1.1	ug/Kg
ichloroethane	75-34-3	< 0.94	U	5.2	0.94	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.1	U	5.2	1.1	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.94	U	5.2	0.94	ug/Kg
Chloroform	67-66-3	< 1.0	U	5.2	1.0	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.1	U	5.2	1.1	ug/Kg
2-Butanone	78-93-3	< 5.6	U	5.2	5.6	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.0	U	5.2	1.0	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.2	2.2	ug/Kg
Bromodichloromethane	75-27-4	< 0.83	U	5.2	0.83	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.83	U	5.2	0.83	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.94	U	5.2	0.94	ug/Kg
Trichloroethene	79-01-6	< 1.0	U	5.2	1.0	ug/Kg
Dibromochloromethane	124-48-1	< 0.94	U	5.2	0.94	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.1	U	5.2	1.1	ug/Kg
Benzene	71-43-2	< 1.0	U	5.2	1.0	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.0	U	5.2	1.0	ug/Kg
Bromoform	75-25-2	< 1.1	U	5.2	1.1	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.2	U	5.2	4.2	ug/Kg
2-Hexanone	591-78-6	< 6.2	U	5.2	6.2	ug/Kg
Tetrachloroethene	127-18-4	< 1.2	U	5.2	1.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	U	5.2	1.0	ug/Kg
T ne	108-88-3	< 1.1	U	5.2	1.1	ug/Kg
Chlorobenzene	108-90-7	< 1.1	U	5.2	1.1	ug/Kg
Ethyl Benzene	100-41-4	< 1.0	U	5.2	1.0	ug/Kg
Styrene	100-42-5	< 1.5	U	5.2	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 2.9	U	5.2	2.9	ug/Kg

07/01
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Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-10	Client ID:	BS-90-4
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/27/02	Matrix:	SOIL
File ID:	VA062725.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0627S2
Sample Wt/Wol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.1	U	5.2	1.1	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	38.06	76 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	49.97	100 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	40.09	80 %	74 - 121		SPK: 50
Dibromofluoromethane		47.74	95 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	3502658	6.10			
1,4-Difluorobenzene	540-36-3	3885119	7.88			
obenzene-d5	3114-55-4	3352565	14.09			
1,4-Dichlorobenzene-d4	3855-82-1	1980548	19.57			

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Volatiles
SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-11 Client ID: BS-94-8

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/27/02 Matrix: SOIL
File ID: VA062707.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0627S1
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.8	U	5.2	1.8	ug/Kg
Bromomethane	74-83-9	< 1.0	U	5.2	1.0	ug/Kg
Vinyl chloride	75-01-4	< 1.0	U	5.2	1.0	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.2	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.2	1.4	ug/Kg
Acetone	67-64-1	< 3.6	U	5.2	3.6	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.2	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.1	U	5.2	1.1	ug/Kg
[illegible]ichloroethane	75-34-3	< 0.94	U	5.2	0.94	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.1	U	5.2	1.1	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.94	U	5.2	0.94	ug/Kg
Chloroform	67-66-3	< 1.0	U	5.2	1.0	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.1	U	5.2	1.1	ug/Kg
2-Butanone	78-93-3	< 5.6	U	5.2	5.6	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.0	U	5.2	1.0	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.2	2.2	ug/Kg
Bromodichloromethane	75-27-4	< 0.83	U	5.2	0.83	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.83	U	5.2	0.83	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.94	U	5.2	0.94	ug/Kg
Trichloroethene	79-01-6	< 1.0	U	5.2	1.0	ug/Kg
Dibromochloromethane	124-48-1	< 0.94	U	5.2	0.94	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.1	U	5.2	1.1	ug/Kg
Benzene	71-43-2	< 1.0	U	5.2	1.0	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.0	U	5.2	1.0	ug/Kg
Bromoform	75-25-2	< 1.1	U	5.2	1.1	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.2	U	5.2	4.2	ug/Kg
2-Hexanone	591-78-6	< 6.2	U	5.2	6.2	ug/Kg
Tetrachloroethene	127-18-4	< 1.2	U	5.2	1.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	U	5.2	1.0	ug/Kg
T[illegible]e	108-88-3	< 1.1	U	5.2	1.1	ug/Kg
Ch[illegible]obenzene	108-90-7	< 1.1	U	5.2	1.1	ug/Kg
Ethyl Benzene	100-41-4	< 1.0	U	5.2	1.0	ug/Kg
Styrene	100-42-5	< 1.5	U	5.2	1.5	ug/Kg
m/p-Xylenes	13677[illegible]-61-2	< 2.9	U	5.2	2.9	ug/Kg

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-11	Client ID:	BS-94-8
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/27/02	Matrix:	SOIL
File ID:	VA062707.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0627S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.1	U	5.2	1.1	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	38.52	77 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	44.43	89 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	36.26	73 %	74 - 121		SPK: 50
Dibromofluoromethane		22.56	45 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	3146885	6.10			
1,4-Difluorobenzene	540-36-3	3332438	7.90			
obenzene-d5	3114-55-4	2738590	14.12			
1,4-Dichlorobenzene-d4	3855-82-1	1725040	19.65			

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Volatiles
SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-12RE	Client ID:	BS-98-12RE
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062807.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.8	U	5.2	1.8	ug/Kg
Bromomethane	74-83-9	< 1.0	U	5.2	1.0	ug/Kg
Vinyl chloride	75-01-4	< 1.0	U	5.2	1.0	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.2	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.2	1.4	ug/Kg
Acetone	67-64-1	< 3.6	U	5.2	3.6	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.2	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.1	U	5.2	1.1	ug/Kg
ichloroethane	75-34-3	< 0.94	U	5.2	0.94	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.1	U	5.2	1.1	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.94	U	5.2	0.94	ug/Kg
Chloroform	67-66-3	< 1.0	U	5.2	1.0	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.1	U	5.2	1.1	ug/Kg
2-Butanone	78-93-3	< 5.6	U	5.2	5.6	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.0	U	5.2	1.0	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.2	2.2	ug/Kg
Bromodichloromethane	75-27-4	< 0.83	U	5.2	0.83	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.83	U	5.2	0.83	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.94	U	5.2	0.94	ug/Kg
Trichloroethene	79-01-6	< 1.0	U	5.2	1.0	ug/Kg
Dibromochloromethane	124-48-1	< 0.94	U	5.2	0.94	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.1	U	5.2	1.1	ug/Kg
Benzene	71-43-2	< 1.0	U	5.2	1.0	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.0	U	5.2	1.0	ug/Kg
Bromoform	75-25-2	< 1.1	U	5.2	1.1	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.2	U	5.2	4.2	ug/Kg
2-Hexanone	591-78-6	< 6.2	U	5.2	6.2	ug/Kg
Tetrachloroethene	127-18-4	< 1.2	U	5.2	1.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	U	5.2	1.0	ug/Kg
T e	108-88-3	< 1.1	U	5.2	1.1	ug/Kg
Chlorobenzene	108-90-7	< 1.1	U	5.2	1.1	ug/Kg
Ethyl Benzene	100-41-4	< 1.0	U	5.2	1.0	ug/Kg
Styrene	100-42-5	< 1.5	U	5.2	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 2.9	U	5.2	2.9	ug/Kg

07/01

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-12RE	Client ID:	BS-98-12RE
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062807.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.1	U	5.2	1.1	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	46.45	93 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	55.98	112 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	46.11	92 %	74 - 121		SPK: 50
Dibromofluoromethane		17.51	35 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	3021647	6.02			
1,4-Difluorobenzene	540-36-3	3138540	7.82			
Chlorobenzene-d5	3114-55-4	2787303	14.08			
1,4-Dichlorobenzene-d4	3855-82-1	1663526	19.61			
TENTITIVE IDENTIFIED COMPOUNDS						
Column Bleed	14629664	13	J	20.59		ug/kg

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-13	Client ID:	BS-100-4
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062808.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	8

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.8	U	5.4	1.8	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.4	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.4	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.4	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.4	1.4	ug/Kg
Acetone	67-64-1	< 3.8	U	5.4	3.8	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.4	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.4	1.2	ug/Kg
)ichloroethane	75-34-3	< 0.98	U	5.4	0.98	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.4	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.98	U	5.4	0.98	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.4	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.4	1.2	ug/Kg
2-Butanone	78-93-3	< 5.9	U	5.4	5.9	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.4	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.3	U	5.4	2.3	ug/Kg
Bromodichloromethane	75-27-4	< 0.87	U	5.4	0.87	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.87	U	5.4	0.87	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.98	U	5.4	0.98	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.4	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.98	U	5.4	0.98	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.4	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.4	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.4	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.4	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.3	U	5.4	4.3	ug/Kg
2-Hexanone	591-78-6	< 6.5	U	5.4	6.5	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.4	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.4	1.1	ug/Kg
T ie	108-88-3	< 1.2	U	5.4	1.2	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.4	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.4	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.4	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 3.0	U	5.4	3.0	ug/Kg

Volatiles
SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-13 Client ID: BS-100-4

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/28/02 Matrix: SOIL
File ID: VA062808.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0628S1
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 8

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.4	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	48.57	97 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	58.77	118 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	43.94	88 %	74 - 121		SPK: 50
Dibromofluoromethane		54.27	109 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2776695	6.05			
1,4-Difluorobenzene	540-36-3	3201951	7.82			
obenzene-d5	3114-55-4	2700858	14.06			
1,4-Dichlorobenzene-d4	3855-82-1	1483918	19.60			
TENTITIVE IDENTIFIED COMPOUNDS						
Column Bleed	1000493	5.5	JB	20.61		ug/kg

Chemtech Consulting Group

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-14 Client ID: BS-104-8

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/28/02 Matrix: SOIL
File ID: VA062809.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0628S1
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 9

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.9	U	5.5	1.9	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.5	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.5	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.5	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.5	1.4	ug/Kg
Acetone	67-64-1	< 3.8	U	5.5	3.8	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.5	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.5	1.2	ug/Kg
[illegible]ichloroethane	75-34-3	< 0.99	U	5.5	0.99	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.5	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.99	U	5.5	0.99	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.5	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.5	1.2	ug/Kg
2-Butanone	78-93-3	< 5.9	U	5.5	5.9	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.5	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.3	U	5.5	2.3	ug/Kg
Bromodichloromethane	75-27-4	< 0.88	U	5.5	0.88	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.88	U	5.5	0.88	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.99	U	5.5	0.99	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.5	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.99	U	5.5	0.99	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.5	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.5	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.5	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.5	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.4	U	5.5	4.4	ug/Kg
2-Hexanone	591-78-6	< 6.6	U	5.5	6.6	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.5	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.5	1.1	ug/Kg
T[illegible]ne	108-88-3	< 1.2	U	5.5	1.2	ug/Kg
C[illegible]obenzene	108-90-7	< 1.2	U	5.5	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.5	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.5	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 3.1	U	5.5	3.1	ug/Kg

7/1/02

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-14	Client ID:	BS-104-8
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062809.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	9

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.5	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	47.42	95 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	55.9	112 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	40.27	81 %	74 - 121		SPK: 50
Dibromofluoromethane		55.03	110 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2825862	6.05			
1,4-Difluorobenzene	540-36-3	3173766	7.82			
Chlorobenzene-d5	3114-55-4	2494425	14.08			
1,4-Dichlorobenzene-d4	3855-82-1	1408454	19.59			
TENTITIVE IDENTIFIED COMPOUNDS						
Column Bleed	14629664	22	J	20.60		ug/kg

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-15 Client ID: BS-108-12

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/28/02 Matrix: SOIL
File ID: VA062810.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0628S1
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 8

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.8	U	5.4	1.8	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.4	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.4	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.4	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.4	1.4	ug/Kg
Acetone	67-64-1	< 3.8	U	5.4	3.8	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.4	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.4	1.2	ug/Kg
[illegible]ichloroethane	75-34-3	< 0.98	U	5.4	0.98	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.4	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.98	U	5.4	0.98	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.4	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.4	1.2	ug/Kg
2-Butanone	78-93-3	< 5.9	U	5.4	5.9	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.4	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.3	U	5.4	2.3	ug/Kg
Bromodichloromethane	75-27-4	< 0.87	U	5.4	0.87	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.87	U	5.4	0.87	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.98	U	5.4	0.98	ug/Kg
Trichloroethene	79-01-6	1.8	J	5.4	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.98	U	5.4	0.98	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.4	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.4	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.4	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.4	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.3	U	5.4	4.3	ug/Kg
2-Hexanone	591-78-6	< 6.5	U	5.4	6.5	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.4	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.4	1.1	ug/Kg
T[illegible]e	108-88-3	< 1.2	U	5.4	1.2	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.4	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.4	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.4	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 3.0	U	5.4	3.0	ug/Kg

07/01

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-15	Client ID:	BS-108-12
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062810.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	8

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.4	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	48.76	98 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	56.25	113 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	41.2	82 %	74 - 121		SPK: 50
Dibromofluoromethane		55.32	111 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2693587	6.02			
1,4-Difluorobenzene	540-36-3	3062609	7.85			
Chlorobenzene-d5	3114-55-4	2409374	14.09			
1,4-Dichlorobenzene-d4	3855-82-1	1358116	19.62			
TENTITIVE IDENTIFIED COMPOUNDS						
Column Bleed	14629664	18	J	20.66		ug/kg

Chemtech Consulting Group

Volatiles
SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-16 Client ID: BS-110-4

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/28/02 Matrix: SOIL
File ID: VA062811.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0628S1
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.8	U	5.2	1.8	ug/Kg
Bromomethane	74-83-9	< 1.0	U	5.2	1.0	ug/Kg
Vinyl chloride	75-01-4	< 1.0	U	5.2	1.0	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.2	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.2	1.4	ug/Kg
Acetone	67-64-1	< 3.6	U	5.2	3.6	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.2	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.1	U	5.2	1.1	ug/Kg
ichloroethane	75-34-3	< 0.94	U	5.2	0.94	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.1	U	5.2	1.1	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.94	U	5.2	0.94	ug/Kg
Chloroform	67-66-3	< 1.0	U	5.2	1.0	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.1	U	5.2	1.1	ug/Kg
2-Butanone	78-93-3	< 5.6	U	5.2	5.6	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.0	U	5.2	1.0	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.2	2.2	ug/Kg
Bromodichloromethane	75-27-4	< 0.83	U	5.2	0.83	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.83	U	5.2	0.83	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.94	U	5.2	0.94	ug/Kg
Trichloroethene	79-01-6	< 1.0	U	5.2	1.0	ug/Kg
Dibromochloromethane	124-48-1	< 0.94	U	5.2	0.94	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.1	U	5.2	1.1	ug/Kg
Benzene	71-43-2	< 1.0	U	5.2	1.0	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.0	U	5.2	1.0	ug/Kg
Bromoform	75-25-2	< 1.1	U	5.2	1.1	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.2	U	5.2	4.2	ug/Kg
2-Hexanone	591-78-6	< 6.2	U	5.2	6.2	ug/Kg
Tetrachloroethene	127-18-4	< 1.2	U	5.2	1.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	U	5.2	1.0	ug/Kg
T e	108-88-3	< 1.1	U	5.2	1.1	ug/Kg
Chlorobenzene	108-90-7	< 1.1	U	5.2	1.1	ug/Kg
Ethyl Benzene	100-41-4	< 1.0	U	5.2	1.0	ug/Kg
Styrene	100-42-5	< 1.5	U	5.2	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 2.9	U	5.2	2.9	ug/Kg

Chemtech Consulting Group

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-16	Client ID:	BS-110-4
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062811.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.1	U	5.2	1.1	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	51.71	103 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	58.9	115 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	43.13	86 %	74 - 121		SPK: 50
Dibromofluoromethane		57.33	115 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2734137	6.05			
1,4-Difluorobenzene	540-36-3	3078567	7.85			
Chlorobenzene-d5	3114-55-4	2432940	14.09			
1,4-Dichlorobenzene-d4	3855-82-1	1392726	19.62			
TENTITIVE IDENTIFIED COMPOUNDS						
Column Bleed	14629664	18	J	20.63		ug/Kg

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-17 Client ID: BS-114-8

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/28/02 Matrix: SOIL
File ID: VA062812.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0628S1
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 11

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.9	U	5.6	1.9	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.6	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.6	1.1	ug/Kg
Chloroethane	75-00-3	< 1.5	U	5.6	1.5	ug/Kg
Methylene Chloride	75-09-2	< 1.5	U	5.6	1.5	ug/Kg
Acetone	67-64-1	< 3.9	U	5.6	3.9	ug/Kg
Carbon disulfide	75-15-0	< 1.5	U	5.6	1.5	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.6	1.2	ug/Kg
ichloroethane	75-34-3	< 1.0	U	5.6	1.0	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.6	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.0	U	5.6	1.0	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.6	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.6	1.2	ug/Kg
2-Butanone	78-93-3	< 6.1	U	5.6	6.1	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.6	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.4	U	5.6	2.4	ug/Kg
Bromodichloromethane	75-27-4	< 0.90	U	5.6	0.90	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.90	U	5.6	0.90	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.0	U	5.6	1.0	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.6	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 1.0	U	5.6	1.0	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.6	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.6	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.6	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.6	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.5	U	5.6	4.5	ug/Kg
2-Hexanone	591-78-6	< 6.7	U	5.6	6.7	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.6	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.6	1.1	ug/Kg
T e	108-88-3	< 1.2	U	5.6	1.2	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.6	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.6	1.1	ug/Kg
Styrene	100-42-5	< 1.6	U	5.6	1.6	ug/Kg
m/p-Xylenes	136777-61-2	< 3.1	U	5.6	3.1	ug/Kg

07/01

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-17	Client ID:	BS-114-8
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062812.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	11

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.6	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	48.51	97 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	55.66	111 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	38.52	77 %	74 - 121		SPK: 50
Dibromofluoromethane		55.38	111 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2555666	6.07			
1,4-Difluorobenzene	540-36-3	2876146	7.87			
obenzene-d5	3114-55-4	2290052	14.12			
1,4-Dichlorobenzene-d4	3855-82-1	1119325	19.62			

Chemtech Consulting Group

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-18RE	Client ID:	BS-118-12RE
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062813.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	14

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 2.0	U	5.8	2.0	ug/Kg
Bromomethane	74-83-9	< 1.2	U	5.8	1.2	ug/Kg
Vinyl chloride	75-01-4	< 1.2	U	5.8	1.2	ug/Kg
Chloroethane	75-00-3	< 1.5	U	5.8	1.5	ug/Kg
Methylene Chloride	75-09-2	< 1.5	U	5.8	1.5	ug/Kg
Acetone	67-64-1	< 4.1	U	5.8	4.1	ug/Kg
Carbon disulfide	75-15-0	< 1.5	U	5.8	1.5	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.3	U	5.8	1.3	ug/Kg
ichloroethane	75-34-3	< 1.0	U	5.8	1.0	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.3	U	5.8	1.3	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.0	U	5.8	1.0	ug/Kg
Chloroform	67-66-3	< 1.2	U	5.8	1.2	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.3	U	5.8	1.3	ug/Kg
2-Butanone	78-93-3	< 6.3	U	5.8	6.3	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.2	U	5.8	1.2	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.4	U	5.8	2.4	ug/Kg
Bromodichloromethane	75-27-4	< 0.93	U	5.8	0.93	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.93	U	5.8	0.93	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.0	U	5.8	1.0	ug/Kg
Trichloroethene	79-01-6	< 1.2	U	5.8	1.2	ug/Kg
Dibromochloromethane	124-48-1	< 1.0	U	5.8	1.0	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.3	U	5.8	1.3	ug/Kg
Benzene	71-43-2	< 1.2	U	5.8	1.2	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.2	U	5.8	1.2	ug/Kg
Bromoform	75-25-2	< 1.3	U	5.8	1.3	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.7	U	5.8	4.7	ug/Kg
2-Hexanone	591-78-6	< 7.0	U	5.8	7.0	ug/Kg
Tetrachloroethene	127-18-4	< 1.4	U	5.8	1.4	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.2	U	5.8	1.2	ug/Kg
T e	108-88-3	< 1.3	U	5.8	1.3	ug/Kg
Chlorobenzene	108-90-7	< 1.3	U	5.8	1.3	ug/Kg
Ethyl Benzene	100-41-4	< 1.2	U	5.8	1.2	ug/Kg
Styrene	100-42-5	< 1.6	U	5.8	1.6	ug/Kg
m/p-Xylenes	136777-61-2	< 3.3	U	5.8	3.3	ug/Kg

07/01

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-18RE	Client ID:	BS-118-12RE
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062813.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	14

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.5	U	5.8	1.5	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	51.15	102 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	55.08	110 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	42.05	84 %	74 - 121		SPK: 50
Dibromofluoromethane		12.2	24 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2408601	6.07			
1,4-Difluorobenzene	540-36-3	2768527	7.87			
Chlorobenzene-d5	3114-55-4	2221236	14.12			
1,4-Dichlorobenzene-d4	3855-82-1	1315404	19.62			
TENTITIVE IDENTIFIED COMPOUNDS						
Column Bleed	1000493	6.0	JB	20.63		ug/kg

Chemtech Consulting Group

Volatiles
SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-19 Client ID: BS-120-4

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/28/02 Matrix: SOIL
File ID: VA062814.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0628S1
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.8	U	5.3	1.8	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.3	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.3	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.3	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.3	1.4	ug/Kg
Acetone	67-64-1	< 3.7	U	5.3	3.7	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.3	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.3	1.2	ug/Kg
ichloroethane	75-34-3	< 0.95	U	5.3	0.95	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.3	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.95	U	5.3	0.95	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.3	1.2	ug/Kg
2-Butanone	78-93-3	< 5.7	U	5.3	5.7	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.3	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.3	2.2	ug/Kg
Bromodichloromethane	75-27-4	< 0.84	U	5.3	0.84	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.84	U	5.3	0.84	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.95	U	5.3	0.95	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.3	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.95	U	5.3	0.95	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.3	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.3	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.3	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.3	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.2	U	5.3	4.2	ug/Kg
2-Hexanone	591-78-6	< 6.3	U	5.3	6.3	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.3	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.3	1.1	ug/Kg
T e	108-88-3	< 1.2	U	5.3	1.2	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.3	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.3	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.3	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 2.9	U	5.3	2.9	ug/Kg

Chemtech Consulting Group

Volatiles
SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-19	Client ID:	BS-120-4
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062814.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.5	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	49.16	98 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	54.15	108 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	40	80 %	74 - 121		SPK: 50
Dibromofluoromethane		53.79	108 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2455403	6.07			
1,4-Difluorobenzene	540-36-3	2787644	7.87			
obenzene-d5	3114-55-4	2191209	14.12			
1,4-Dichlorobenzene-d4	3855-82-1	1208756	19.65			
TENTITIVE IDENTIFIED COMPOUNDS						
Column Bleed	1000493	11	JB	20.63		ug/kg

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-20	Client ID:	BS-124-8
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/27/02	Matrix:	SOIL
File ID:	VA062716.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0627S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	7

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.8	U	5.4	1.8	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.4	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.4	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.4	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.4	1.4	ug/Kg
Acetone	67-64-1	< 3.8	U	5.4	3.8	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.4	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.4	1.2	ug/Kg
ichloroethane	75-34-3	< 0.97	U	5.4	0.97	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.4	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.97	U	5.4	0.97	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.4	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.4	1.2	ug/Kg
2-Butanone	78-93-3	< 5.8	U	5.4	5.8	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.4	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.3	U	5.4	2.3	ug/Kg
Bromodichloromethane	75-27-4	< 0.86	U	5.4	0.86	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.86	U	5.4	0.86	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.97	U	5.4	0.97	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.4	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.97	U	5.4	0.97	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.4	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.4	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.4	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.4	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.3	U	5.4	4.3	ug/Kg
2-Hexanone	591-78-6	< 6.5	U	5.4	6.5	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.4	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.4	1.1	ug/Kg
To e	108-88-3	< 1.2	U	5.4	1.2	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.4	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.4	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.4	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 3.0	U	5.4	3.0	ug/Kg

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-20 Client ID: BS-124-8

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/27/02 Matrix: SOIL
File ID: VA062716.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0627S1
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 7

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.4	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	41.23	82 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	51.73	103 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	38.07	76 %	74 - 121		SPK: 50
Dibromofluoromethane		47.58	95 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	3024248	6.18			
1,4-Difluorobenzene	540-36-3	3387429	7.96			
[illegible]obenzene-d5	3114-55-4	2864440	14.20			
1,4-Dichlorobenzene-d4	3855-82-1	1548216	19.71			

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-21 Client ID: BS-128-12

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/27/02 Matrix: SOIL
File ID: VA062720.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0627S2
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.8	U	5.3	1.8	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.3	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.3	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.3	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.3	1.4	ug/Kg
Acetone	67-64-1	< 3.7	U	5.3	3.7	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.3	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.3	1.2	ug/Kg
[illegible]ichloroethane	75-34-3	< 0.95	U	5.3	0.95	ug/Kg
[illegible]-1,2-Dichloroethene	156-60-5	< 1.2	U	5.3	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.95	U	5.3	0.95	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.3	1.2	ug/Kg
2-Butanone	78-93-3	< 5.7	U	5.3	5.7	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.3	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.3	2.2	ug/Kg
Bromodichloromethane	75-27-4	< 0.84	U	5.3	0.84	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.84	U	5.3	0.84	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.95	U	5.3	0.95	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.3	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.95	U	5.3	0.95	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.3	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.3	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.3	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.3	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.2	U	5.3	4.2	ug/Kg
2-Hexanone	591-78-6	< 6.3	U	5.3	6.3	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.3	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.3	1.1	ug/Kg
To[illegible]ne	108-88-3	< 1.2	U	5.3	1.2	ug/Kg
C[illegible]obenzene	108-90-7	< 1.2	U	5.3	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.3	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.3	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 2.9	U	5.3	2.9	ug/Kg

6/27/02

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-21 Client ID: BS-128-12

Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/27/02	Matrix:	SOIL
File ID:	VA062720.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0627S2
Sample Wt/Wol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.5	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	41.95	84 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	49.63	99 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	38.38	77 %	74 - 121		SPK: 50
Dibromofluoromethane		46.82	94 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2893957	6.16			
1,4-Difluorobenzene	540-36-3	3327374	7.96			
[illegible]obenzene-d5	3114-55-4	2765841	14.20			
[illegible]Dichlorobenzene-d4	3855-82-1	1576465	19.68			

Chemtech Consulting Group

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID: P3097-22 Client ID: BS-128-12DUP

Date Collected: 6/19/02 Date Received: 6/21/02
Date Analyzed: 6/28/02 Matrix: SOIL
File ID: VA062815.D Analytical Run ID: VA061202
Dilution: 1 Instrument ID: MSVOAA
Analytical Method: 8260 Associated Blank: VBA0628S1
Sample Wt/Vol: 5.0 Units: g Soil Extract Vol:
Soil Aliquot Vol: % Moisture: 10

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chloromethane	74-87-3	< 1.9	U	5.6	1.9	ug/Kg
Bromomethane	74-83-9	< 1.1	U	5.6	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.6	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.6	1.4	ug/Kg
Methylene Chloride	75-09-2	< 1.4	U	5.6	1.4	ug/Kg
Acetone	67-64-1	< 3.9	U	5.6	3.9	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.6	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.6	1.2	ug/Kg
ichloroethane	75-34-3	< 1.0	U	5.6	1.0	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.6	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.0	U	5.6	1.0	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.6	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.6	1.2	ug/Kg
2-Butanone	78-93-3	< 6.0	U	5.6	6.0	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.6	1.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.3	U	5.6	2.3	ug/Kg
Bromodichloromethane	75-27-4	< 0.89	U	5.6	0.89	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.89	U	5.6	0.89	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.0	U	5.6	1.0	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.6	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 1.0	U	5.6	1.0	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.6	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.6	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.6	1.1	ug/Kg
Bromoform	75-25-2	< 1.2	U	5.6	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.4	U	5.6	4.4	ug/Kg
2-Hexanone	591-78-6	< 6.7	U	5.6	6.7	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.6	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.6	1.1	ug/Kg
T e	108-88-3	< 1.2	U	5.6	1.2	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.6	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.6	1.1	ug/Kg
Styrene	100-42-5	< 1.6	U	5.6	1.6	ug/Kg
m/p-Xylenes	136777-61-2	< 3.1	U	5.6	3.1	ug/Kg

07/01

Volatiles

SW-846

SDG No.: P3097

Client: MAC Consultants, Inc.

Sample ID:	P3097-22	Client ID:	BS-128-12DUP
Date Collected:	6/19/02	Date Received:	6/21/02
Date Analyzed:	6/28/02	Matrix:	SOIL
File ID:	VA062815.D	Analytical Run ID:	VA061202
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBA0628S1
Sample Wt/Vol:	5.0 Units: g	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	10

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
o-Xylene	95-47-6	< 1.2	U	5.6	1.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	49.24	98 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	54.3	109 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	37.28	75 %	74 - 121		SPK: 50
Dibromofluoromethane		53.97	108 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2512828	6.10			
1,4-Difluorobenzene	540-36-3	2883659	7.87			
obenzene-d5	3114-55-4	2228323	14.12			
1,4-Dichlorobenzene-d4	3855-82-1	1135028	19.65			
TENTITIVE IDENTIFIED COMPOUNDS						
Column Bleed	1000493	8.5	JB	20.66		ug/kg