LOCKHEED MARTIN

Date	August 10, 2000
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From	Robert Evangelista, REAC Task Leader
Subject	Trip Report for the Barker Chemical Site, WA # 0-153

SUMMARY

The sampling locations and analyses are shown in Figures 2 to 5 and listed in Table 1. Figures 4 and 5 differ only on the aerial photo used as the base map. Selected analytical results of the New York State Department of Environmental Conservation (NYSDEC) investigations are shown in Figure 1.

Tables 3 through 6 contain a tabular summary of the analytical data. Table 2 contains the list of the individual compounds for each analytical parameter. The summary tables (3 through 6) only contain the concentrations of individual compounds that were detected (positive hits). If an individual compound was not detected in all of the samples in a particular table, the compound was not listed in the respective table. The analytical data has not gone through the Lockheed Martin Response Engineering and Analytical Contract (REAC) data validation process and must be considered preliminary. Raw data are in Appendix C.

For sediment and waste/soil samples, the four criteria for action levels were: 1) NYSDEC Technical and Administrative Guidance Memorandum (TAGM) #4046 Determination of Soil Cleanup Objectives and Cleanup Levels; 2) U.S.EPA Region III risk based concentrations (RBCs), for a cancer ratio of 1:1,000, 000 or a health index of 1, in EPA Region III RBC Table, 4/13/2000; 3) U.S. EPA Health Based cleanup criteria in TAGM 4046 and 4) the U.S.EPA RCRA (Resource Conservation and Recovery Act) criteria for characteristic hazardous waste in 40 CFR Sec.261. For surface water, State of New York action levels used were from 6NYCRR Sec.703.5, Table 1, Water Quality Standards, Surface Water and Groundwater.

All waste/soil and sediment passed TCLP analyses.

No samples were reactive, ignitable, or contained PCBs.

Only the sediment from the Trough with a pH of 2.0 could be considered corrosive. However, the solid

sediment is not a RCRA characteristic hazardous waste with the characteristic of corrosivity (D002) because the U.S.EPA regulations for corrosivity apply if the waste "is aqueous and has a pH of less than or equal to pH 2.0" (40 CFR 261.22).

Herbicides exceeded the NYSDEC TAGM 4046 criteria in one sample, which was from the Process Area.

Pesticides were only found in the South Lagoon and Process Area samples; however, pesticide concentrations only slightly exceeded the U.S. EPA Health Based criteria (in TAGM 4046) and the NYSDEC TAGM 4046 criteria.

For sediment and waste/soil samples from the Waste Pile, Layer 4 in the Filled Lagoon, the Chip Area, the Lead Arsenate Area and the Process Building, only the TAL metal arsenic exceeded the U.S.EPA RBC Table criteria. Most sediment and waste/soil samples and all surface water samples have TAL metals that exceeded NYSDEC TAGM 4046 criteria.

The Chip Area, north of the North Lagoon, had TAL metals that exceeded TAGM 4046 and U.S.EPA RBC criteria; however, the area appeared to contain native soil, and not a waste material as is present in much of the rest of the site. Furthermore, it was visually difficult to see the chips and, therefore, to discern the physical boundaries of this area.

Two sampling locations in the Operations Area (Process Building and Lead Arsenate Area) had waste/soil exceeding federal and/or state cleanup criteria. The Horizontal (fuel) Tank results exceeded only state criteria. The Process Building sample contained concentrations of VOCs (alkyl benzenes), BNAs, and herbicides that exceeded NYSDEC TAGM 4046 criteria. The Horizontal (fuel) Tank area sample exceeded NYSDEC TAGM 4046 for the TAL metals copper and iron contained almost 9% total petroleum hydrocarbons (TPH). The Lead Arsenate Area had BNAs and TAL metals (but not lead) that exceeded federal and state criteria. The contaminated material associated with the Process Building, the Horizontal (fuel) Tank, and the Lead Arsenate Area needs to be removed and additional sampling should be performed, possibly during removal, to determine the extent of contamination in the Operations Area.

Waste/soil and sediment samples north of the Operations Area (except the Chip Area) had sulfur concentrations as high as 55%, by weight. The Lead Arsenate Area sample, in the Operations Area, contained 153,000 mg/kg sulfur. TAGM 4046 and RBC Table I had no cleanup criteria for sulfur. These high sulfur materials are not a Resource Conservation and Recovery Act (RCRA) hazardous waste per 40 CFR Sec 261.

Only the U.S. EPA RBC Table has an action level for boron. No sample had a concentration of boron exceeding this level.

All surface water samples had a pH approximately four units below the New York State Water Quality Standard (6 NYCRR Sec. 703.5 Table 1) of 6.5. Sulfate was found in all surface water samples. The acidic surface water is probably due to sulfuric acid. It is highly probable that the sulfuric acid was formed from the sulfur present in the waste/soil materials and the lagoon sediments. The acidic waters from the site are entering the surrounding environment via the Trough and the Drainage Ditch, which flow into the East Boundary Creek and then flow into the Railroad Creek north of the site.

The subsurface stratigraphy for the Waste Pile and Filled Lagoon, located west of the South Lagoon, are similar. These areas should be considered as one contiguous area.

INTRODUCTION

Purpose. The United States Environmental Protection Agency (U.S. EPA) Region II office requested the assistance of the U.S. EPA Environmental Response Team Center (ERTC) to perform sampling, at the Barker Chemical Site, a former agricultural chemical blending facility, and associated areas, and then analyses of the samples. The purposes of this work assignment are 1) to determine the extent of contamination of TAL metals, sulfur, boron, TCLP metals, herbicides, pesticides, polychlorinated biphenyls (PCBs), and other compounds at the site, and 2) to obtain chemical, physical, and environmental data necessary to complete a Generator's Waste Profile Sheet for potential off-site disposal.

Background. The source of the background information was an undated draft memo from Michael J. O'Toole, Jr., Director, Division of Environmental Remediation, New York State Department of Environmental Conservation (NYSDEC).

The Barker Chemical Site is the location of the former Barker Chemical facility located at 8473 West Somerset Road, Village of Barker, Town of Somerset, NY. At this site, Barker Chemical formulated, warehoused, and distributed a wide variety of agricultural chemicals for local wholesale and retail sales, including: herbicides, fungicides, insecticides, and rodenticides The company ceased operations in the early 1970s.

The products potentially handled at Barker Chemical were:

- Phosalone <acaricide, insecticide; fish toxicity> Bromoxynil (3,5-dibromo-4-hydroxybenzonitrile; 3,5-dibromo-4-hydroxyphenyl cyanide)
 https://www.secticacid Butyricacid
 2,4-D (2,4-dichlorophenoxyaceticacid) herbicide> Sodium chlorophenoxyaceticacid) herbicide> Sodium chlorate (NaClO₃) herbicide> Sodium chlorate (NaClO₃) herbicide> Sodium arsenate <insecticide> Asulam (methyl sulfanilyl carbamate; methyl 4-aminobenzenesulphonylcarbamate) ">herbicide> Sodium metaborate ">herbicide> Sodium metaborate ">herbicide> Sodium metaborate ">herbicide> Sodium metaborate ">herbicide>
- 2,4,5-T (2,4,5-trichlorophenoxyacetic acid) <herbicide>
- Sevin (Carbaryl; 1-naphthyl methylcarbamate) <insecticide>
- Silvex (Fenoprop; 2,4,5-TP; 2-(2,4,5-trichlorophenoxy)proprionic acid) <herbicide>
- Proprionic acid (2-(2,4-dichlorophenoxy)) [note: correct spelling is propionic acid]
- Sulfur (sulphur) <fungicide, acaricide>
- Dimethyl 4,4'-o-phenylenebis (3-thioallophanate) Alkylaryl polyoxy ethylene
- Thiram (Thirame; Thiuram; tetramethylthiuram disulfide; bis(dimethylthiocarbamoyl)disulfide) <fungicide; seed protectant; animal repellent>

[Sources: Site inspections and interviews by the Niagara County Health Department (NCHD) on July 20, 1970 and July 1, 1972; Farm Chemicals Handbook 2000, Meister Publishing Company; The

Agrochemicals Handbook, Second Edition, The Royal Society of Chemistry, June 1990].

In addition to the above list, an area resident claimed that lead arsenate, a rodenticide, was manufactured at the site.

The approximately 10 acre site presently consists of several abandoned and decaying buildings, two larger lagoons/ponds, an above-ground tank areas of bare soil areas of heavy brush, and shallow water north of the buildings. Investigations by the NYSDEC also revealed a third lagoon, suspected to be filled with a lime-sulfur slurry, generated by a fungicide blending process. The site appears to have been unused and fallow for many years. The Niagara County Brownfields Committee included the site in its inventory of potential brownfield sites.

NYSDEC staff conducted reconnaissance inspections, collected several soil/sediment samples, and conducted in-field pH measurements during December 1999 and January 2000. See attached REAC map *Figure 1, Results of the NYSDEC Reconnaissance Inspections 12/99 & 1/00.* Results NYSDEC reconnaissance inspections indicated that low pH conditions existed in the surface waters. The lagoons (pH range 2.2 - 3.0) and surface water adjacent to the site building (pH range 1.7 - 2.5) exhibited the lowest pH measurements found.

The NCHD and the New York State Department of Health (NYSDOH) have determined that a public health risk exists through direct contact with the low pH waters at the site. In January 2000, the county issued a public health advisory to nearby residents cautioning against entry onto the site.

Work Assignment Objective. The objectives of this work assignment were to provide technical support to the ERTC Work Assignment Manager (WAM) and the Region II On Scene Coordinator (OSC) by evaluating the extent of contamination at the Barker Chemical Site and surrounding environs and to determine off-site disposal requirements for site materials.

TECHNICAL APPROACH

Scope of Work. The scope of work was divided into 2 phases: 1) a preliminary reconnaissance phase and 2) a sampling, analysis and requirements of disposal phase. The preliminary reconnaissance phase consisted of a site inspection by the ERTC WAM, the Region II OSC, and the Lockheed Martin Response Engineering and Analytical Contract (REAC) Task Leader (TL) to assist in the development of a work plan. The second phase of the project included an evaluation of the extent of contamination via subsurface soil and sediment borings; soil, sediment and surface water sampling; and chemical analyses. Furthermore, the second phase determined off-site disposal requirements for site materials.

Preliminary Reconnaissance Phase Activities. The preliminary phase involved a site reconnaissance visit by a 3-person team consisting of the OSC, the WAM and the TL on June 6, 2000.

The reconnaissance team walked around the perimeters of both the North and the South Lagoons, the Waste Pile (southeast of the lagoons), the aboveground Horizontal (fuel) Tank, the Trough Area, the Wet Area (on the west side of the site), the Chip Area (north of the North Lagoon), and the woodlands in the eastern and northern portions of the site.

The team also walked through the East and West Warehouses, the Office Building, and the Process

Building. The East and West Warehouses did not contain any pesticide materials; the East Warehouse contained a stack of wood pallets. The Office Building contained pieces of abandoned office furniture and strewn papers. The shipping and receiving area of the Process Building contained a stack of pallets and a pallet of empty bags for product. The process area of the Process Building contained only the cement foundations where process equipment once resided. For a two-piece cement foundation, wooden planks covered the floor between the two pieces. The roof of the process area was partly caved in.

The team took samples for visual observation only from four areas: the bottom sediment from both lagoons, the Waste Pile, and the Chip Area.

The team examined the surface waters of the site. The team walked by the creek on the eastern boundary of the site as well as the larger stream, Golden Hill Creek, approximately one-half mile north of the site. The team took pH readings from the surface waters of both lagoons, the Trough, and the East Boundary Creek both upstream and downstream of the confluence with the Trough. The pH readings ranged between 2 and 3, except for the surface water in the East Boundary Creek upstream of the confluence with the Trough which had pH of approximately 6.

Sampling and Analyses Phase Activities. The following components comprised the basic approach to the sampling portion of the second (sampling and analytical) phase:

create a map showing selected contaminants on the site, from the results of the December 1999 and January 2000 NYSDEC reconnaissance inspections (previous to the ERTC/REAC site reconnaissance) create a site map from the aerial photos divide the site into areas for sampling apply a sampling strategy for each media in each of the areas determine which contaminants of concern would be analyzed, and apply an archival strategy for each of the areas.

Site Contamination Map. The TL and the REAC Geographic Information Systems/Computer Aided Drafting Specialist, created a map titled Figure 1, Results of the NYSDEC Reconnaissance Inspections 12/99 & 1/00 (Appendix A). This map depicts known site contamination. The site contamination map was based on the September 2, 1958 aerial photo (PIC200023015). All of the NYSDEC soil, sediment, and surface water sampling locations were placed on the map. Concentrations, in mg/L or mg/kg, of selected indicator metals—arsenic, chromium, copper, and lead—were placed on the map for all NYSDEC samples. The metals selected are indicator compounds for contamination in the media based on the pesticide products produced at the site. The concentrations were obtained from three tables of the NYSDEC analyses titled: Summary of Surface Water Analytical Results for the Former Barker Chemical Site, Summary of Sediment Analytical Results for the Former Barker Chemical Site, and Summary of Waste Sample Analytical Results for the Former Barker Chemical Site.

Site Map. Creating the site map was a multi-step process. First, four preliminary site maps were created from the following four aerial photos of the site: September 2, 1958 (PIC 20002301S); April 17, 1968 (PIC 20002301S); May 17, 1972 (PIC 20002301S); and April 13, 2000 (PIC 20002301S). Then the four preliminary site maps and the four aerial photographs were placed side-to-side to observe the changes in the site over the 42 year time period. The TL and the REAC GIS/CAD Specialist determined that the September 2, 1958 aerial photograph should be used as the working site map because the September 2,

1958 map showed features of the operating Barker Chemical facility either not evident or that had changed in the subsequent (later) aerial photographs. Lastly, the GIS/CAD Specialist added final details to the site map, such as the five sampling areas.

The site map, based on the 1958 aerial photo, is the basis for Figures 2, 3, and 4 in Appendix A Figure 5 was created from the 2000 aerial photo (Appendix A).

<u>Site clearing and grubbing</u>. The site was not used for nearly thirty years and was extensively overgrown with tall grass, thick brush, and small trees. This vegetation made it difficult to move around many areas of the site during the preliminary reconnaissance. Therefore, extensive site clearing and grubbing were required during the initial portion of the sampling and analytical phase to make room for the equipment trailer, the Geoprobe trailer, and general field sampling operations.

Sampling Areas. The site was initially divided into several sampling areas : North Lagoon, South Lagoon, Surface Water Drainage Areas, Filled Lagoon, Filled-in Area of the North Lagoon (FANL), Waste Pile, Chip Area, and Operations Area (Figures 2, 3, and 4). The North and South Lagoons are the two surface water impoundments on site. The Surface Water Drainage Areas are five discrete locations on or near the site, which move water from the site and surrounding environs toward Lake Ontario. The Surface Water Drainage Areas consists of: the Trough, the Drainage Ditch, the East Boundary Creek, the Railroad Drainage Creek, and Golden Hill Creek. The Filled Lagoon and the Waste Pile are three contiguous areas located west of the two lagoons and north of the Operations Area (site buildings). The Chip Area is located north of the western half of the North Lagoon. The NYSDEC reconnaissance inspections refers to this area as Green Pieces, from the green chips of material present in the soil (refer to Figure 1). The Operations Area, located in the southern portion of the site, consists of two warehouse buildings, the Process Building, an aboveground horizontal tank to the west of the Process Building.

The sample locations are shown in Figure 2, Sediment Sample Locations and Analyses; Figure 3, Surface Water Sample Locations and Analyses; and Figure 4, Waste and Soil Sample Locations and Analyses (Appendix A). For a detailed account of each sample, refer to the Field Data Sheets in Appendix B.

North Lagoon and the South Lagoon. The sampling strategy was identical at both the North Lagoon and the South Lagoon. Two types of samples were obtained from each lagoon, sediment and surface water samples. One composite sediment sample was removed from each lagoon. The North and South Lagoon sediment samples were each a composite of nine locations within the lagoons. The rationale for this sediment sampling strategy was the assumption that the sediment within each lagoon was relatively homogeneous.

One composite surface water sample was taken from the surface of each lagoon. It was assumed that the water in each lagoon is homogeneous.

Surface Water Drainage Areas. The Surface Water Drainage Areas consisted of five discrete locations: the Trough, the Drainage Ditch, the East Boundary Creek, the Railroad Drainage Creek, and Golden Hill Creek (Figure 3, Golden Hill Creek is off scale to the north of the Railroad Drainage Creek). The surface waters of the Trough and the Drainage Ditch each flow east into the East Boundary Creek. The East Boundary Creek flows north into the Railroad Drainage Creek. The Railroad Drainage Creek, located north of the site, flows east. Golden Hill Creek is north of the Railroad Drainage Creek; however, a

hydraulic connection was not found between site surface water and Golden Hill Creek in the vicinity of the site.

The locations of the sediment samples are shown in Figure 2. One composite sediment sample was taken the from Trough. Another composite sediment sample was removed from the Drainage Ditch. Two composite sediment samples were taken from the East Boundary Creek. One sediment sample was obtained approximately fifty feet downstream from the confluence of the Trough with the creek; another sample just upstream from the confluence of the Trough and the creek, but downstream of the confluence of the Drainage Ditch and the creek. Another composite sediment sample was taken from the Railroad Drainage Creek immediately downstream from its confluence with the East Boundary Creek. Since a hydraulic connection was not found between the East Boundary Creek and Golden Hill Creek in the vicinity of the site, no sediment sample was taken from Golden Hill Creek.

One surface water sample was taken from the Trough, just upstream from its confluence with the East Boundary Creek (Figure 3).

Filled Lagoon and Waste Pile Areas. The sampling locations of the Filled Lagoon, the FANL, and the Waste Pile were determined by the WAM and the REAC hydrogeologist and are shown in Figure 4. A track-mounted Geoprobe was used to take core samples (i.e., direct push samples) in acetate sleeves at the various sampling locations. Based on field observations, certain waste/soil samples were selected for analysis. Geographic Positioning System (GPS) measurements were taken at each of these sampling locations.

Chip Area. One waste/soil sample was taken from the Chip Area. This area was located north of the western half of the North Lagoon. The Chip Area was in the general location that the NYSDEC called Green Pieces, and where the NYSDEC obtained a soil sample during their preliminary reconnaissance (Figure 4).

Operations Area. The Operations Area consists of the Horizontal (fuel) Tank, the Process Building, the Lead Arsenate Area, the office building, and two warehouses. One waste/soil sample was taken from each of the following locations: Horizontal (fuel) Tank, Process Building, and Lead Arsenate Area. Core samples were removed from the soil between the office building and the two warehouses, but not taken for analysis (Figure 4).

Direct Push Soil Sampling. Direct push waste/soil sampling was conducted at 20 locations, 19 within or near the Waste Pile and the Filled Lagoon areas (WP-1 through WP-19), and one at the Lead Arsenate (designated PbAs in the Field Data Sheets) Area (Figure 4). The waste/soil samples were collected in accetate sleeves pushed into the subsurface within a steel tube attached to expendable drive points. Sampling was performed in accordance with ERTC/REAC Standard Operating Procedure (SOP) #2050, *Model 5400 Geoprobe Operation*. The push samples were used to visually characterize subsurface material. Additionally, several subsurface waste/soil samples were collected and submitted for laboratory analysis.

Hand Auger Soil Sampling. A hand auger served as a backup to direct push soil sampling. Hand auger sampling was conducted at six locations, in accordance with ERTC/REAC SOP #2012, Soil Sampling. Waste/soil samples collected at three of the six locations (H-1, H-2, and H-3, Figure 4) were used only to visually characterize subsurface materials. Additionally, waste/soil samples were collected and submitted

for laboratory analysis at locations near the Horizontal Fuel Tank, in the Process Building, and within the Chip Area (sample # 22268, not shown in the actual location), as well as for visual inspection and characterization (refer to Figure 4).

<u>Surface Sediment Sampling</u>. Surface sediment samples in the Surface Water Drainage Areas were collected with stainless steel trowels and/or stainless steel spoons, following the procedures outlined in the ERTC/REAC standard operating procedure (SOP) #2012, *Soil Sampling*.

<u>Deep Sediment Sampling</u>. Deep sediment samples (under one to three feet of surface water) were extracted from the lagoons using an acetate sleeve sampler. Hence, it was possible to observe the sample before placing it into the sample container. Samples were observed to distinguish between waste material(s) and the presumed underlying native material. Only samples of the waste material were desired for analysis.

All sediment samples, surface and deep, were placed into a stainless-steel container and homogenized. After the sample was thoroughly mixed, aliquots for laboratory analyses were dispensed into appropriate sample containers.

<u>Surface Water Sampling</u>. One surface water sample was taken from each of the two lagoons using the procedures outlined in SOP #2013, *Surface Water Sampling*.

<u>Sample Archiving</u>. All archived samples were shipped under a separate Chain of Custody and are presently stored at REAC.

<u>Sample Analyses</u>. The types of analyses performed on each sample depended on the type and location of the sample. There were three types of samples: sediment, surface water, and waste/soil. Each sample was assigned a unique sample ID number. Table 1 lists the analyses performed per sample. Samples are grouped with other samples having the same analytical parameters. For a plan-view representation of this information, see Figures 2 to 5.

<u>Calculated Waste Volumes</u>. Waste volumes were estimated for the sediment of the North and South Lagoons, and for the waste/soil of the combined Filled Lagoon and Waste Pile areas. The volume of surface water was calculated for each of the two lagoons.

The sediment volumes for both the North and South Lagoons were calculated from the 9 sediment depth measurements made in each lagoon. A grid, having 20 foot by 20 foot sides, was placed over an aerial photograph showing both lagoons. Known sediment depths were placed in the proper grid box. Sediment depths in adjacent grid boxes were estimated using ascending or descending linear values to the next known grid box value. The product of the x and y (surface area), and z (depth) values for each grid box was calculated. Then, these values were summed across the entire grid.

To calculate the waste volumes for the waste/soil within the combined Filled Lagoon and Waste Pile areas, first the areas' surface area was measured in the north-south and east-west directions; then the average depth of material was estimated. The area of waste/soil to be removed extended northward from the Process Building to the North Lagoon. In the east-west direction, the area to be removed extended westward from of the South Lagoon to the Wet Area (on the western border of the Filled Lagoon). Waste/soil volume estimates are based on observations made through the direct push sampling in the

Waste Pile and Filled Lagoon. The waste/soil depth estimate was the sum of the thicknesses of the materials in Layers 4 and 3 (upper most, non-native material), and Layer 2 (the black stained portion of native glacial till).

The surface water volumes for both the North and South Lagoons were calculated from the water depth measurements made in each lagoon. Calculations were similar to those made for the sediment volumes. A grid, having 20 foot by 20 foot sides, was placed over an aerial photograph of each lagoon. Known surface water depths were placed in the proper grid box. Water depths in the adjacent grid boxes were estimated using ascending or descending linear values to the next known grid box value. The product of the x, y, and z values for each grid box was calculated. Then, these values were summed across the entire grid.

RESULTS

Analytical Parameters. General analytical parameters and a list of each parameter's individual compounds are presented in Table 2. This table is essentially a master list of all the individual analytes.

Tables 3, 4, 5, and 6 summarize the analytical results. They contain only the concentrations of individual compounds that were detected (positive hits). If an individual compound was not detected in any of the samples in a particular summary table, the compound was not shown in that summary table.

For tentatively identified compounds (total TICs), only the total concentration are listed in Tables 3 to 6. Individual tentatively identified compounds (TICs) are not listed in Tables 3 to 6.

Summary of the Preliminary Data. The preliminary analytical data have been summarized in Tables 3, 4, 5 and 6. Table 3 contains summarized data from sediment samples. Table 4 has data from surface water samples. Table 5 contains summarized data from waste/soil samples in the Waste Pile and Filled Lagoon. Table 6 contains summarized data from waste/soil samples in the Chip and Operations areas.

All tables contain the NYSDEC and U.S. EPA action level criteria. For waste/soil and sediment samples, the state action criteria used are the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) #4046, titled *Determination of Soil Cleanup Objectives and Cleanup Levels*. The U.S.EPA action levels for waste/soil and sediment are based on three criteria: 1) the risk based concentrations (RBCs) for a cancer ratio of 1:1,000, 000 or a health index of 1 in *EPA Region III RBC Table, 4/13/2000*; 2) U.S. EPA Health Based cleanup criteria in TAGM 4046; and 3) the Resource Conservation and Recovery Act (RCRA) criteria for the hazardous waste characteristics of ignitability, corrosivity, reactivity, and toxicity (TCLP) in 40 CFR Sec 261.

TAGM 4046 treats heavy metals somewhat differently compared to organic compounds. The TAGM 4046 *Table 4, Recommended Soil Cleanup Objectives (mg/kg or ppm), Heavy Metals* listed a heavy metal compound's soil cleanup criteria in one of three different ways: 1) concentration only, i.e., mercury, 0.1; 2) a listed concentration and site background (SB), i.e., arsenic, 7.5 or SB; or 3) SB only, i.e., thallium, SB. Therefore, background soil samples from the Barker Chemical Site should also be evaluated to determine the values for SB. Additionally, U.S. EPA Health Based cleanup criteria are not listed in TAGM 4046 for heavy metals.

For surface water, the state action levels used are from 6 NYCRR Sec. 703.5, Table 1, Water Quality

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Standards, Surface Water and Groundwater. All analytical results were compared against the above state and federal criteria.

Cleanup criteria did not exist for sulfur in the NYSDEC TAGM 4046, the RBC table, U.S. EPA Health Based criteria (in TAGM 4046), and 40 CFR Sec.261. Criteria exist for boron in the RBC table, but not in TAGM 4046, U.S. EPA Health Based criteria (in TAGM 4046), and 40 CFR Sec.261.

The raw (unsummarized) data are attached in Appendix C. Because of project scheduling and cost and with the approval of the WAM, the data have not been validated; therefore, all results should be considered preliminary.

Paint filter tests for the solid materials (sediments and waste/soil) were not complete at the time of this report. Those results will be sent under a different cover.

The results are segregated by site location: North Lagoon; South Lagoon; Surface Water Drainage Areas; Filled Lagoon and Waste Pile Area; Chip Area; and Operations Area.

North Lagoon. <u>Sediment</u>. The sediment sample from the North Lagoon exceeded the NYSDEC TAGM 4046 criteria because of the results for the TAL metals copper (29 mg/kg) and iron (5010 mg/kg). The sediment sample results were below the action level for selected 8151A herbicides, TCLP, BNA (semi-volatile), and PCB/pesticide compounds. The pH of the sediment was 3.4. The sample contained a sulfur concentration of 116,000 mg/kg.

The calculated sediment volume for the North Lagoon is 1500 cubic yards.

<u>Surface Water</u>. The surface water sample exceeded NYSDEC Water Quality Standards for the TAL metals aluminum (51,200 mg/L), cobalt (75 mg/L), copper (347 mg/L), iron (77,300 mg/L), lead (72 mg/L), magnesium (38,400 mg/L), manganese (5270 mg/L), nickel (127 mg/L), thallium (11 mg/L), and vanadium (57 mg/L). Sulfate (1470 mg/L) and pH (2.7) also exceeded standards.

The calculated surface water volume for the North Lagoon is 300,000 gallons

South Lagoon. <u>Sediment</u>. The South Lagoon's sediment sample exceeded the NYSDEC TAGM 4046 criteria because of the TAL metal beryllium (0.2 mg/kg). The sample results for p,p-DDE and p,p-DDT (7 and 6 mg/kg, respectively) exceeded the U.S. EPA Health Based criteria (in TAGM 4046) and the NYSDEC TAGM 4046 pesticide criterea. The results were below the action levels for selected 8151A herbicides, TCLP metals, and BNA (semi-volatile) compounds. The pH of the sediment is 8.2. The sulfur concentration of the sample was 581,000 mg/kg (almost 60%).

The calculated sediment volume for the South Lagoon was 1200 cubic yards.

<u>Surface Water</u>. The surface water sample exceeded NYSDEC water quality standards for surface water and groundwater due to concentrations of the TAL metals aluminum (40,500 mg/L), cobalt (14 mg/L), iron (24,600 mg/L), magnesium (40,600 mg/L), and manganese (2660 mg/L). The surface water sample also exceeded NYSDEC water quality standards for sulfate (1480 mg/L) and pH (3.1). Analyses found that the concentration of sulfur (1430 mg/l) are similar to that for sulfate (1480 mg/L); hence, much of the sulfur in the surface water was in the sulfate form. And since tested waters had a low pH, much of the

sulfate may have been in the form of sulfuric acid. This hypothesis applies to all surface waters at the site.

The calculated surface water volume for the South Lagoon is 200,000 gallons

Surface Water Drainage Areas. <u>Sediment</u>. The five sediment samples from the Trough, the Drainage Ditch, the East Boundary Creek upstream of its confluence with the Trough, the East Boundary Creek downstream, and the Railroad Creek downstream of its confluence with the East Boundary Creek exceeded NYSDEC TAGM 4046 criteria because of the TAL metals arsenic beryllium, chromium, copper, iron, mercury, and zinc. The Trough had 158,000 mg/kg sulfur in the sediment sample; the other four samples ranged from 1010 to 2530 mg/kg sulfur. The results for the sediment samples were below the action levels for selected 8151A herbicides and TCLP compounds. Analyses for PCB/pesticides and BNA (semi-volatile compounds) were not performed.

The pH of the (solid) sediment sample from the Trough was 2.0. For a characteristic hazardous waste, the RCRA criteria for corrosivity is a pH of 2.0 or below. This value could be used as an action level for site cleanup; however, the sediment was not a RCRA hazardous waste with the characteristic of corrosivity (D002) because the U.S.EPA regulations for corrosivity apply if the waste "is aqueous and has a pH of less than or equal to pH 2.0" (40 CFR 261.22).

No sediment volumes were calculated

<u>Surface Water</u>. One surface water sample was taken from the Trough. The surface water samples exceeded NYSDEC water quality standards for surface water and groundwater due to concentrations of the TAL metals aluminum (30,200 mg/L), arsenic (204 mg/L), cobalt (23 mg/L), copper (355 mg/L), iron (67,400 mg/L), lead (222 mg/L), magnesium (78,700 mg/L), manganese (2050 mg/L), and vanadium (49 mg/L). The surface water sample also exceeded NYSDEC water quality standards for sulfate (2250 mg/l) and pH (2.1). As in the South Lagoon, the concentration of sulfur (1950 mg/L) was similar to that for sulfate (2250 mg/L); hence, the water leaving the site probably contains sulfuric acid.

The surface waters in these areas are running waters. A calculated surface water volume is not applicable.

Waste Pile and Filled Lagoon. <u>Subsurface Stratigraphy</u>. Subsurface soil samples were collected continuously from the ground surface to the native glacial till at most of the 19 locations within the Waste Pile, FANL, and the Filled Lagoon. The locations of these soil borings are illustrated on Figures 4 and 5; the subsurface stratigraphy is in Table 7. Above the native glacial till (layer 1, the lowermost layer), three stratigraphic layers were present, although not all layers were observed at all locations. These layers included a black stained glacial till (layer 2), a dark green pond muck material (layer 3), and a layer of light-colored, loose waste material (layer 4, the uppermost layer).

Most of the soil recoveries from the direct push cores within the Waste Pile and Filled Lagoon varied between 50% and 75%. In order to account for the entire depth interval sampled at each location, estimates of the true intervals of each layer were made, assuming that the till layers were nearly 100% recovered, and recoveries of the looser layers (Layer 3 and Layer 4) were under-represented in the cores. Table 7 presents a summary of the best estimated vertical intervals of the units noted per location. The following are descriptions of these units.

Layer 1, Native Glacial Till. The lowermost stratigraphic unit observed at depth was a dark red native glacial till. This material was intact and undisturbed. The till was comprised of unsorted, glacially-transported material, mainly a mixture of silt and clay, with varying amounts of sand and small non-rounded pebbles.

Layer 2, Undisturbed Black-Stained Native Glacial Till. At most of the 19 locations, the uppermost portion of the native glacial till had been stained black. At several of these locations a black fluid was observed above the till. This fluid is likely the material responsible for the black staining of the till, where present. At this time, the composition of the fluid is unknown; additional samples are being analyzed at present.

Layer 3, Dark Green Pond Muck. At many locations, above either Layer 1 or Layer 2, a very loose, almost fluid-like, very fine grained, wet, dark green material was observed. This material appears to have been deposited in standing water. This layer does not appear to have been naturally deposited; it was likely the result of former operations at the site.

Layer 4, Light Colored, Loose, Waste Material. Above either the pond muck (where present) or glacial till, a very loose waste material was present covering the waste pile and filled lagoon areas. This material was light colored, mostly yellow, with grey, white, orange, and black components. This material was thickest within the waste pile, and appeared to have been vertically piled in this area. Within the Filled Lagoon, this material may have been mechanically spread. However, the vertical layering observed at several locations suggested that this material may have been fluvially transported to these locations.

<u>Selection of Subsurface Soil Samples for Analysis</u>. Five samples were sent for analyses from the 19 direct push soil samples (acetate core) in this area. Multiple cores were collected at each sample location, in order to obtain sufficient sample to fill the required laboratory glassware. The Layer 2, Layer 3, and Layer 4 samples were collected at direct push location WP-13. The Layer 1 sample was obtained at direct push location WP-6. Additionally, the thick accumulation of Layer 4 material at the Waste Pile was also sampled for laboratory analysis.

<u>Waste/Soil Samples</u>. The Waste Pile sample (#22261) did not exceed soil cleanup criteria for the TAL metals, selected herbicides, TCLP metals, BNAs, or PCB/pesticides. TPH was 87 mg/kg. However, this sample had nearly 20% sulfur by weight. As mentioned above, there are no action levels for sulfur.

Four samples were taken in the Filled Lagoon; one in each of the four distinct layers. The results for Layer 4, the uppermost layer, exceeded NYSDEC TAGM 4046 for beryllium and iron (0.2 and 3450 mg/kg, respectively). Layer 4 had a concentration of 352,000 mg/kg sulfur and a pH of 6.8. Layer 4 did not exceed criteria for selected 8151A herbicides, boron, and TCLP metals.

The Layer 3 sample had concentrations below all action levels; however, sulfur comprised over 55% of this material. The pH was 11.5.

Layer 2 exceeded NYSDEC TAGM 4046 for TAL metals beryllium (0.2 mg/kg), iron (9690 mg/kg), and zinc (22 mg/kg). Sulfur comprised nearly 20% of this material. Because Layer 2 had black coloration, it was analyzed for TPH and BNAs. The results for TPH was 131 mg/kg; the BNAs phenanthrene and bis(2-ethylhexyl)phthalate had concentrations 3 and 0.8 mg/kg, respectively. The material had a pH of

12.0. Layer 2 did not exceed the criteria for selected 8151A herbicides, boron, TCLP metals, and BNAs.

Layer 1 exceeded NYSDEC TAGM 4046 for TAL metals beryllium (0.4 mg/kg), iron (8780 mg/kg), and zinc (31 mg/kg). Even the native glacial till (layer 1) had nearly 2% sulfur by weight. It is likely that the sulfur from the above layers had migrated downward under the influence of rain water. The material had a pH of 8.6. TPH was not performed on the Layer 1sample. Layer 1 did not exceed the criteria for selected 8151A herbicides, boron, TCLP metals, and BNAs.

The estimated volume of the Waste Pile and Filled Lagoon is 14,000 cubic yards.

Chip Area. <u>Waste/Soil Samples</u>. The results for the Chip Area waste/soil sample exceeded the NYSDEC TAGM 4046 criteria for the TAL metals arsenic (286 mg/kg), beryllium (0.5 mg/kg), copper (364mg/kg), iron (11,700 mg/kg), mercury (0.1 mg/kg) and zinc (36 mg/kg); the RBC criteria was also exceeded for arsenic. The pH of the sample taken from this area was 5.1. These results confirm the previous NYSDEC analyses shown in Figure 1. However, the sample appeared to be till-like material that had been weathered into a native soil horizon, and not a waste material. Although the NYSDEC site plan labeled this area "Green Pieces," the area appeared to be a normal woods environment. It was difficult to visually detect the green pieces and visually discern the physical boundaries of this area.

Operations Area. In the Operations Area, the results varied widely depending on the sample. See Figures 4 and 5 for the boundaries of this area.

Lead Arsenate Area. The results for the Lead Arsenate Area sample (#22263) exceeded the U.S. EPA Health Based (in TAGM 4046), the U.S. EPA RBC Table, and the NYSDEC TAGM 4046 criteria for the BNA benzo(a)anthracene (9 mg/kg). The results of the sample also exceeded the U.S. EPA RBC Table and the NYSDEC TAGM 4046 criteria for the BNA pentachlorophenol (130 mg/kg). Lastly, the material exceeded the NYSDEC TAGM 4046 criteria for the BNAs napthalene (19 mg/kg), 3-nitroaniline (49 mg/kg), dibenzofuran (29 mg/kg), fluoranthene (51 mg/kg), and chrysene (9 mg/kg).

This sample exceeded the U.S. EPA RBC Table and the NYSDEC TAGM 4046 criteria for the TAL metal arsenic (15 mg/kg). The material also exceeded the NYSDEC TAGM 4046 criteria for the TAL metals copper (75mg/kg), iron (14,300 mg/kg), mercury (0.3 mg/kg) and zinc (27 mg/kg). However, the results for the lead arsenate area did not surpass the criteria for lead (95 mg/kg). The sulfur concentration was over 15% by weight. The pH value was 2.6. The results for selected herbicides, TCLP, PCBs, and pesticides were below state and federal criteria.

<u>Horizontal (fuel) Tank</u>. The results for the Horizontal (fuel) Tank area sample exceeded NYSDEC TAGM 4046 criteria for copper (28 mg/kg) and iron (2000 mg/kg). The pH value was 3.0. This sample contained almost 9% by weight TPH; the state and federal action levels do not address TPH. A BNA analysis, to determine the individual compounds found only 3 mg/kg butylbenzylphthalate above detection. Since the TPHs in this sample contain minimal BNAs, it is assumed that the tank was used for storing fuel oil.

<u>Process Building</u>. The sample from the Process Building had significant criteria contamination. The results for this sample exceeded the U.S. EPA RBC Table and the NYSDEC TAGM 4046 criteria for the TAL metal arsenic (11 mg/kg). It is the only sample taken with concentrations that exceeded the U.S. EPA Health Based (in TAGM 4046) and the NYSDEC TAGM 4046 criteria for the selected 8151A

herbicides 2,4-D (7,000 ug/kg) and 2,4,5-T (3,500 ug/kg)

It is also one of only two samples (the other is the South Lagoon sediment) that exceeded pesticide criteria. The pesticide heptachlor (0.2 mg/kg) exceeded the U.S. EPA Health Based (in TAGM 4046) and the NYSDEC TAGM 4046 criteria; eldrin (0.2 mg/kg) exceeded the NYSDEC TAGM 4046 criteria.

The pH value was 3.9. The concentration of total BNA tentatively identified compounds (total TICs) was 1003 mg/kg, with only 2,4-dinitrophenol (7 mg/kg) exceeding the NYSDEC TAGM 4046 criteria.

Due to the glue-like smell of the sample, a VOC analysis was performed. It was the only sample analyzed for VOCs. The results exceeded the NYSDEC TAGM 4046 criteria for the alkyl benzenes p&m-xylene (79 mg/kg) and o-xylene (22 mg/kg), and total VOCs (3142 mg/kg). The other detected VOCs did not exceed federal and state criteria. It can be hypothesized from the concentrations of alkyl benzenes in this sample that this area was used to blend concentrated herbicides or pesticides with a general petroleum distillate solvent. The list of products potentially handled at Barker Chemical contained at least one emulsifier. So it is likely that the herbicide-petroleum distillate blend was mixed with an emulsifier, and this formulation was sold to local farmers as a herbicide concentrate to be diluted with water for application.

Because of the high VOC results, a TCLP analysis for all organic species, in addition to the heavy metals, was performed on the Process Building sample. No concentrations from this sample exceeded the federal values for TCLP.

GPS. Initially, GPS georeferencing was performed on four discernable features at the site. A REAC Field Technician obtained GPS measurements at waste/soil borings and other sample locations. These locations, shown in Figures 4 and 5, have an accuracy of plus or minus 10 feet. The amount of error in the positions of the boring and sample locations is due to the close clustering of the georeferencing points along the southern portion of the site. There were no other reference positions that could be discerned on the 1958 and 2000 aerial photos in the central and northern portions of the site. The amount of positional error can be seen by the GPS outline of the South Lagoon versus the actual image from the aerial photograph in Figures 4 and 5.

CONCLUSIONS

The acidic surface water in the North and South Lagoons and the Trough are due to the formation of sulfuric acid from the very high concentrations of sulfur throughout much of the site. This excessively low pH surface water, containing criteria concentrations of TAL metals and sulfate, is draining off site into the surrounding environment via the Trough, the Drainage Ditch and the East Boundary Creek.

Throughout much of the site, the primary criteria contaminants identified were the TAL metals

Samples taken within the Operations Area (Horizontal Tank, Process Building, and Lead Arsenate Area) exceeded the federal and state criteria for several different analytical parameters. From the variety of the contaminants, this area appears to have been used for multiple operations. However, the extent of the contamination in this portion of the Barker Site is not fully defined.

The high VOC concentrations identified in the Process Area most likely resulted from petroleum

distillate, an inexpensive solvent, being mixed with pure herbicides and an emulsifying agent. This mixture was then be diluted with water for farm application.

The Chip Area contains arsenic exceeding U.S. EPA RBC and NYSDEC TAGM 4046 criteria; other TAL metals exceed the NYSDEC TAGM 4046 criteria. The chips of the Chip Area (or Green Pieces area on the NYSDEC site map) were difficult to detect or see. Therefore, the chips may be located in a small geographical area and the physical boundaries of this area is not visually discernable.

RECOMMENDATIONS

For the Operations Area (Horizontal Tank, Process Building, and Lead Arsenate Area), removal of the visible contamination, followed by additional sampling is prudent.

The threat to human health and the environment is from the surface water both on and leaving the site. Therefore removal of the sediments from the North and South Lagoons and the Trough and the waste/soil materials in Layers 2 to 4 located in the Waste Pile/Filled Lagoon Area will remedy this surface water issue. The sediment andf materials in these areas can be placed into a capped and lined impoundment or removed off site

The physical boundaries of the Chip Area (Green Pieces area) need to be defined

The NYSDEC TAGM 4046, the U.S. EPA Health Based (in TAGM 4046), and the U.S. EPA Region III RBC Table criteria should be reviewed and evaluated as they apply to the Barker Chemical site. Sulfur, a dominant chemical of concern at the Barker Site, is not addressed by these criterea. Many of the waste/soil and sediment samples had contaminant concentrations only slightly above the criteria values.

Most NYSDEC TAGM 4046 criteria for heavy metals consider the site background concentrations. Therefore, site background samples should be taken at or near the Barker Chemical Site. Then site background concentrations should be evaluated with respect to the TAGM criteria for heavy metals.

Table ANALYTICAL PARAMETERS PER SAMPLE LOCATION

Analytical Parameters	Sample Type	Sample Location	Sample & Chain of Custody Numbers
TAL metals, sulfur, boron, Herbicides 8151A, TCLP (metals; 2,4-D; 2,4,5-TP) Ignitability, Reactivity, Corrosivity, Paint Filter	Sediment	Trough	22269 2817
TAL metals, sulfur, boron,	Sediment	Drainage Ditch	22270 2817
Herbicides 8151A, TCLP (metals; 2,4-D; 2,4,5-TP) Ignitability, Reactivity	Sediment	East Bound. Cr. upstream of Trough confluence	22271 2817
	Sediment	East Bound. Cr. downstream of Trough confluence	22264 2815
	Sediment	Railroad Cr. downstream of East Bound. Cr. confluence	22262 2815
TAL metals, sulfur, boron,	Waste/soil	Chip Area	22268 2816
TCLP (metals; 2,4-D; 2,4,5-TP)	Waste/soil	WP-13 Layer 3	22254 3585
Ignitability, Reactivity, Corrosivity	Waste/soil	WP-13 Layer 4	22255 3585
TAL metals, sulfur, boron Herbicides 8151A TCLP (metals: 2 4D: 2 4 5-TP)	Sediment	North Lagoon	22252 2812 & 2811
Ignitability, Reactivity, Corrosivity, BNAs, PCB/Pesticides, Paint Filter	Sediment	South Lagoon	22251 2812 & 2811
TAL metals, sulfur, boron Herbicides 8151A TCLP (metals; 2,4D; 2,4,5-TP)	Waste/soil	Lead Arsenate Area	22263 2815 & 2811
Ignitability, Reactivity Corrosivity, BNAs, PCB/Pesticides	Waste/soil	WP-1 Waste Pile	22261 2814 & 2811
TAL metals, sulfur, boron Herbicides 8151A, TCLP	Waste/soil	Horizontal (fuel) Tank	22267 2817 & 2811
Ignitability, Reactivity, Corrosivity, TPH	Waste/soil	WP-13 Layer 2	22253 2812
TAL metals, sulfur, boron Herbicides 8151A, TCLP (metals; 2,4D; 2,4,5-TP) Ignitability, Reactivity, BNAs	Waste/soil	WP-6 Layer 1	22256 2812

Table 1. (Cont.) ANALYTICAL PARAMETERS PER SAMPLE LOCATION

TAL metals, sulfur, boron, Herbicides 8151A, TCLP (all compounds), Ignitability, VOCs, Reactivity, Corrosivity, PCB/Pesticides	Waste/soil	Process Bldg, Process Area	22265	2816 & 2811
TAL metals, sulfur, boron,	Surface water	North Lagoon	22257	2818
Herbicides 8151A, Sulfate, Chloride, Nitrate, Ignitability, Corrosivity, Reactivity	Surface water	South Lagoon	22258	2809
	Surface water	Trough	22259	2810

Table 2. Barker Chemical Analytical Parameters and Individual Compounds

Volatile Organic Compounds (VOCs) Dichlorodifluoromethane Chloromethane Vinyl Chloride Bromomethane Chloroethane Trichlorofluoromethane Acetone 1.1-Dichloroethane Methylene Chloride Carbon Disulfide Methyl-t-butyl Ether trans-1.2-Dichloroethene 1.1-Dichloroethene 2-Butanone 2.2-Dichloropropane cis-1.2-Dichloroethene Chloroform 1,1-Dichloropropene 1.2-Dichloroethane 1,1,1-Trichloroethane Carbon Tetrachloride Renzene Trichloroethene 1,2-Dichloropropane Bromodichloromethane Dibromomethane cis-1,3-Dichloropropene trans-1.3-Dichloropropene 1.1.2-Trichloroethane 1.3-Dichloropropane Dibromochloromethane 1.2-Dibromoethane Bromoform 4-Methyl-2-Pentanone Toluene 2-Hexanone Tetrachloroethene Chlorobenzene 1,1,1,2-Tetrachloroethane Ethylbenzene m&p-Xylene o-Xylene Styrene Isopropylbenzene 1,1,2,2-Tetrachlorethane 1,2,3-Trichloropropane n-Propylbenzene Bromobenzene 1.3.5-Trimethylbenzene 2-Chlorotoluene 4-Chlorotoluene tert-Butylbenzene 1,2,4-Trimethylbenzene sec-Butylbenzene p-Isopropyltoluene 1,3-Dichlorobenzene 1.4-Dichlorobenzene n-Butylbenzene 1.2-Dichlorobenzene 1.2-Dibromo-3-chloropropane 1,2,4-Trichlorobenzene Hexachlorobutadiene Napthalene 1.2.3-Trichlorobenzene

Base Neutral Acid Extractables (BNAs) Phenol bis(-2-Chloroethyl)Ether 2-Chlorophenol 1,3-Dichlorobenzene 1.4-Dichlorobenzene Benzvi Alcohol 1,2-Dichlorobenzene 2-Methylphenol bis(2-Chloroisopropyl)ether 4-Methylphenol N-Nitroso-Di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1.2.4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2.4.5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate Acenaphthylene 2.6-Dinitrotoluene 3-Nitroaniline Acenaphthene 2.4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2.4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate Benzo(a)anthracene 3,3'-Dichlorobenzidine Chrysene Bis(2-Ethvlhexvl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(g,h,i)perylene

TCLP: metals Arsenic Barium Cadmium Chromium Lead Mercury Selenium Silver TCLP: Herbicides 2.4-D Silvex TCLP: VOCs Vinyl Chloride 1.1-Dichloroethene 2-Butanone Chloroform Carbon tetrachloride Benzene 1.2-Dichloroethane Trichloroethene Tetrachloroethene Chlorobenzene **TCLP: Semivolatiles** Pyridine 1.4-Dichlorobenzene 2-Methylphenol 3-Methylphenol 4-Methylphenol Hexachloroethane Nitrobenzene Hexachlorobutadiene 2.4.6-Trichlorophenol 2,4,5-Trichlorophenol 2.4-Dinitrotoluene Hexachlorobenzene Pentachlorophenol TCLP: Pesticides gamma-BHC (Lindane) Endrin Heptachlor Heptachlor Epoxide Methoxychlor Toxaphene **Technical** Chlordane

Total Petroleum Hydrocarbons (TPH)

Herbicides, selected (Method 8151A) 2,4-D Silvex 2,4.5-T

PCBs/Pesticide a-BHC g-BHC **b-BHC** Heptachlor d-BHC Aldrin Heptachlor Epoxide g-Chlordane a-Chlordane Endosulfan (I) p,p'-DDE Dieldrin Endrin p.p'-DDD Endosulfan (II) p.p'-DDT Endrin Aldehyde Endosulfan Sulfate Methoxychior Endrin Ketone Toxaphene Arochior 1016 Arochlor 1221 Arochlor 1232 Arochlor 1242 Arochior 1248 Arochlor 1254 Arochlor 1260 Arochlor 1268

TAL metals Aluminum Antimony Arsenic Barium Bervllium Cadmium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercurv Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc

This table contains all the individual compounds (individual analytes) for each analytical parameter. Therefore, this table contains the target compound list. Subsequent tables (Tables 3 to 6) only contain an individual compound if that compound was detected. If an individual compound is listed in Table 2, but not in one of the subsequent tables 3 to 6, the compound was not detected in the samples for the respective table.

Table 3. Sediment S	ample Locations
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				Table J	. Ocum	lent oamp	IC LOCAL	10113		-
				North	South	rough to Eas	Drainage	B Cr. Upstr	B Cr. Downstr	Railroad Cr.
				Lagoon	Lagoon	oundary (EB	Ditch	Confluence	Confluence	Downstream
						Creek		with Trough	with Trough	Confl. EB Cr.
Data Sheet #				22252	22251	22269	22270	22271	22264	22262
Chain of Custody #				2812	2812	2817	2817	2817	2815	2815
_	NYSDEC Soil	EPA Soil	EPA Health							
TAL Metals (mo/kg)	Objectives *	Objectives**	Based Obi.*							
Aluminum	SB	2 000 000	N/A	3.470	4.040	1,100	8,780	6,160	6.340	6.400
Ántimony	SB	820	N/A	ND	3	0.3	1	2	0.2	0.4
Amonio	7.5 or SP	20			J A	0.0	224		0.2	U.4
Aisenium	1.5 01 3B	3.0		121		200	521	20	444	60
Banum	1300 OF 56	140,000	NVA	121	9	200	57	09		00
Beryllium	0.16 or SB	41,000	N/A	0.1	U.2	0.05	U.3	0.5	0.3	0.5
Calcium	SB	N/A	N/A	23,900	203,000	42,100	2,000	2,760	11,300	1,760
Chromium	10 or SB	N/A	N/A	6	4	2		70		8
Cobalt	30 or SB	120,000	N/A	2	0.9	0.9	2	5	4	3
Copper	25 or SB	82,000	N/A	29	7	27	394	53	66	12
Iron	2000 or SB	610.000	N/A	5,010	3,870	1,580	26,900	15,300	14,900	8,030
Lead	SB	N/A	N/A	14	4	14	69	314	16	41
Magnesium	SB	N/A	N/A	772	9,200	244	916	2.690	2,780	1,430
Manganese	SB	41 000	N/A	126	180	22	84	309	326	89
Mercury	0.1	N/A	N/A		0.05	0.05	13.1	0.2	0.3	0.08
Nickel	13 0 80	41 000	N/A	-	0.00	0.00	7	10	10	
Deteccium	60	41,000		519	447	425	222	460	407	200
Potassium	30	NVA 10.000		510	ND	425	332	400	49/	309
Selenium	2 OF SB	10,000	IN/A	ND	ND	ND	2	0.5	0.2	0.5
Silver	SB	10,000	N/A	0.08	0.1	0.8	0.9	0.2	0.05	0.1
Sodium	SB	N/A	N/A	72	66	91	114	79	50	80
Thallium	SB	140	N/A	ND	ND	ND	ND	ND ND	0.2	ND
Vanadium	150 or SB	14,000	N/A	8	5	2	22	17	18	12
Zinc	20 or SB	610,000	N/A	12	16	5	83	84	55	34
Sulfur (mg/kg)	N/A	N/A	N/A	116,000	581,000	158,000	1,010	2,260	2,530	2.500
Boron (ma/ka)	N/A	180.000	N/A	14	26	10	53	25	31	20
(
Herbicides 8151A (uo	vika):									
24-D	1500	20 000 000	800	27	10	27		۵ ا		3
2 4 5 TP (Silver)	700	16,000,000	600	5		12		0.2		0.7
2,4,5-1F (SIIVEX)	1000	20,000,000	200					1 1 2	0.4	0.7
2,4,0-1	1:900	20,000,000	200	-		' °	0.0	1.2	1 1	0.7
										I
ICLP (µg/I):	ł	2000	1							
Arsenic		5000		21	30	14	25	50	61	8
Banum		100,000		29	74	- 94	170	637	1220	245
Cadmium	Į.	1000		2	1	2	0.3	2	1	0.3
Chromium		5000		7	54	17		2	1	0.4
Lead	<u>}</u>	5000		66	153	60	18	147	144	59
Mercury	1	200		0.1	0.2	0.2	0.1	0.2	0.3	0.1
Selenium	1	1000		7	10	8	8	12	11	7
Silver	1	5000		0.6	0.6	0.6	0.6	0.6	0.6	0.6
2,4-D	4	10,000		0.2	0.2	1		0.3	0.2	2 1
2.4.5-TP (Silvex)	1	1000		0.1	0.3	01	0.04	0.04	01	0.04
	1	1							1	
BNAs (mo/kg):	1		1	ND			1			
Sum of BNA TICe			NVA	2						
Sum of Diak Hos						1				
Corrosivity (-L)	1	2 312 5000						1		1
Corrosivity (pri)	1	<u> -2, 212.5***</u>		3.4	8.2	2.0				
DOD/De Hald i i	1				1	1	1			
PCB/Pesticides (mg/	kg)		1							
a-BHC	0.11	N/A	0.11	0.006	NC NC	Y NO	I ŲĽ ŁV	ALUATIO	N HAS BE	un perform
g-Chloridane	0.54	12,000	0.54	0.02	NC		DATA	ALIDITY	IC HINCH	CTANTIAT
p,p-DDE	2.1	17	2.1	0.06			UNIA	ALIVIII	12 0420	931ANTIA[EU
Dieldrin	0.044	36	0.044, 4	0.004J	ND		ANT ANT	THE DA	TA SHOIL	N RF IISEN
p,p'-DDD	2.9	24	2.9	0.2		2		1000	DIGGO	
p,p-DDT	2.1	17	2.1. 40	0.02		8		WITH	DISCRET	IVN I
				-						

Shaded compounds and concentrations exceeded NYSDEC or U.S.EPA criteria (1999) * TAGM 4046; ** EPA Region III RBC Table 4/13/2000, except TCLP in 40 CFR 261.24; *** for aqueous wastes (40 CFR 261.22)

SB = site background; N/A = not available; ND = none detected above J value

Analytical parameters and individual compounds listed in Tables 1 and 2 and not listed above were not found in above samples

	E State	North Lagoon	South Lagoon	Trough
Data Sheet #		22257	22258	22259
Chain of Custody #		2818	2809	2810
	NYSDEC Wate	r		
TAL Metals (µg/l):	Standards *			
Aluminum	100	51200	40,500	30,200
Arsenic	50	31	ND	204
Barium	1000	21	21	82
Beryllium	3 G	2	2	1
Cadmium	5	4	0.7	3
Calcium	N/A	296,000	278,000	470,000
Chromium	50	48	22	38
Cobalt	5	75	14	23
Copper	200	347	55	355
Iron	300	77,300	24,600	67,400
Lead	50	72	12	222
Magnesium	35,000	38,400	40,600	78,700
Manganese	300	5270	2660	2050
Mercury	0.7	ND	ND	0.1
Nickel	100	127	41	81
Potassium	N/A	3880	3040	8260
Selenium	10	2.6	<2	<2
Sodium	N/A	3900	2740	14,600
Thallium	8	11	5	7
Vanadium	14	57	5	49
Zinc	2000 G	735	581	1150
Sulfur (mg/l)	N/A	2460	1430	1950
Boron (mg/l)	10	0.2	2 ND	0.1
рН	6.5; > 8.5	2.7	3.1	2.1
Chloride (mg/l)	250	NE		8.2
Sulfate (mg/l)	250	1470	1480	2250

Table 4.	Surfacewater	Sample	Locations
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Shaded compounds and concentrations exceed NYSDEC or U.S.EPA criteria Note: * 6NYCRR Sec.703.5 Table 1, Water Quality Standards, Surface Waters and Groundwater

G = guidance value; N/A = not available; ND = none detected above J value Analytical parameters and individual compounds listed in Tables 1 and 2 and not listed above were not found in above samples

> NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Table 5. Waste/Soil Sample Locations in Waste Pile and Filled Lagoon

				WP-1	WP-6	WP-13	WP-13	WP-13
				Waste Pile	Layer 1	Layer 2	Layer 3	Layer 4
Data Sheet #				22261	22256	22253	22254	22255
Chain of Custody #				2814	2812	2812	3585	3585
	NYSDEC Soil	U.S.EPA Soil	EPA Health					
TAL Metals (mg/kg):	Objectives*	Objectives**	Based Obj.*					
Aluminum	SB	2,000,000	N/A	347	4240	8810	1960	4350
Antimony	SB	820	N/A	0.4	ND	0.3	0.2	0.4
Arsenic	7.5 or SB	3.8	N/A	5	3	1	3	
Barium	1300 or SB	140,000		21	75	106	5	4
Beryllium	0.16 or SB	41,000	IN/A	0.02	0.2	0.4	0.09	0.2
	58			198,000	41,100	76,700	248,000	206,000
Chromium	10 of SB	120.000		1	6	9	2	6
Copper	SU OF SB	120,000		ND	4	3	ND	0.3
licopper	2000 00	62,000		24	19	9	4770	3
Load		010,000		296	3030	8/60	1770	3 45 0
Magnesium	CD CD		N/A	100	5140	2210	4	1190
Mananese	SB	41 000	NA	100	610	3210	140	1100
Mercury	00 0 1	N/A	N/A	0.04	0.03	209	0.40	57 0.02
Nickel	13 or SB	41 000	N/A	0.7	0.03	8	0.03	0.03
Potassium	SB	N/A	N/A	4.7 4.8	742	779	64	47
Sodium	SB	NA	N/A	44 84	77	142	33	59
Vanadium	150 or SB	14.000	N/A	0	10	13	3	- 55 6
Zinc	20 or SB	610.000	N/A	NO	.0	31	5	7
								,
Sulfur (mg/kg)	N/A	NA	N/A	198.000	27.400	198.000	551.000	352.000
Boron (mg/kg)	N/A	180,000	N/A	26	18	26	15	10
			1					
Herbicides 8151A (µg/kg)]					
2,4-D	500	20,000,000	800	3	47	6	9	3
2,4,5-TP (Silvex)	700	16,000,000	600	6	10	7	1	2
2,4,5-T	1900	20,000,000	200	4	16	16	3	2
TCLP (μ g/l):								
Arsenic		5000		121	4	9	20	2
Barium		100,000		61	478	624	80	70
Cadmium		1000		0.2	0.2	0.4	0.2	0.2
Chromium		5000			0.4	39	32	2.2
		0000		29	12	36	47	14
		200		0.1	0.2	0.1	0.1	0.1
Silver		1000		9		8	10	
2 4-D	l.	10,000		0.6	0.6	0.6	0.9	0.6
2 4 5 TP (Silver)	ł	10,000		0.2	0.2	0.1	0.9	
2,7,0-17 (SIVEX)		1000		0.03	0.04	0.2	0.03	0./
PCB/Pesticides (mg/kg)								
p.p'-DDD	21	24	29	0.04				
p.p-DDT	Ž.1	17	2.1.40	0.04				
Endrin Ketone	NVA	N/A	N/A	0.01				
1								
Total Petroleum Hydro-								
carbons, TPH (mg/kg)	N/A	N/A	N/A	87		131		
BNAs (mg/kg):	1							1
Phenanthrene	50	N/A	N/A	ND	DN D	0.8		
Bis(2-Ethylhexyl)phthalate	50	410	50, 2000	ND	ND	3		
Total TICs	N/A	N/A	N/A	ND	ND	17		
1							9	
Corrosivity (pH)		<u>≤</u> 2, ≥12.5***		7.0	8.6	12.0	11.5	6.8
Charles a service and and a service					4			

* TAGM 4046; ** EPA Region III RBC Table 4/13/2000, except TCLP in 40 CFR 261.24; *** for aqueous wastes (40 CFR 261.22)

SB = site background; N/A = not available; ND = none detected above J value

Analytical parameters and individual compounds listed in Tables 1 and 2 and not listed above were not found in above samples

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED

Table 6	Waste/Soll Sample	Locations in	Operations	and Chip Areas
			Obelations	dito ottip ritogo

Data Sheet #	n Sample L			Horizontal (Fuel) Tank 22267	Process Bidg Process Area 22265	Chip Area	PbAsO4 (lead arsenate) area 22263 2915
Chain of Custody #			1	2817	2816	2816	2815
	NYSDEC Soll	U.S.EPA Soil	EPA Health	동안 동안 같이 많		20 관람이 가슴	
TAL Metals (mg/kg):	Objectives"	Objectives"	Based Obj.	907	253	10 400	555
Antimony	30 60	2,000,000	N/A	03	0.6	10,400	2
Amenic	7.5 or \$B	3.8	NA	3	11	286	15
Barium	300 or SB	140.000	N/A	128	30	94	93
Beryllium	0 16 or SB	41.000	N/A	0.07	0.02	0.5	0.1
Calcium	SB	N/A	N/A	205	131,000	3080	9950
Chromium, total	10 or SB	N/A	N/A	3	0.8	11	5
Cobalt	30 or SB	120,000	N/A	1	<0.08	3	3
Cooper	25 or SB	82.000	N/A	28	8	364	75
Iron	2000 or SB	610.000	N/A	2000	1980	11,700	14,300
Lead	SB	N/A	N/A	17	32	106	95
Magnesium	SB	N/A	N/A	99	103	1990	110
Manganese	SB	41,000	N/A	9	8	101	27
Mercury	0.1	N/A	N/A	0.06	0.2	0.1	0.3
Nickel	13 or SB	41,000	N/A	3	0.5	9	8
Potassium	SB	N/A	N/A	406	410	430	325
Selenium	2 or SB	10,000	N/A	0.6	<0.2	0.6	1
Silver	SB	10,000	N/A	0.08	<0.06	<0.8	0.5
Sodium	SB	N/A	N/A	81	99	97	85
Vanadium	150 or SB	14,000	N/A	3	1	17	8
Zinc	20 or SB	610,000	N/A	6	3	36	27
Sulfur (mg/kg)	N/A	N/A	N/A	17,700	251,000	2440	153,000
Boron (mg/kg)	N/A	180,000	N/A	13	10	26	35
Herbicides 8151A (µg/kg):						
2,4-D	500	20,000,000	800	13	7,000	2	7
2,4,5-TP (Silvex)	700	16,000,000	600	2	680	0.1	3
2.4.5-T	1900	20,000,000	200	3	3,500	1	10410-01
TCLP (µg/l)							
Arsenic		5000	a service Martin	118	48	246	5
Barium		100,000	1 2 2	417	68	336	90
Cadmium		1000		0.4	0.2	0.2	2
Chromium		5000		2	2	0.8	2
Lead		5000		38	126	56	106
Mercury		200		0.1	0.2	0.2	0.1
Selenium		1000		10	9	S	132
Silver		5000		0.6	0.6	0.6	0.6
2,4-D		10,000		0.2	0.7	0.2	0.3
2,4,5-TP (Silvex)		1000		0.02	0.2	0.03	0.04
Heptachlor		8			0.5		
Heptachlor Epoxide		8	a the second		0.4	말 가 있는 것이 같아?	
BNAs (mg/kg):					1		
Naphthalene	13	41,000	300	NC	ND		19
2-Methylnaphthalene	36.4	41,000	N/A	NC	ND		27
3-Nitroaniline	0.5 or MDL	N/A	N/A	NC	ND		49
2,4-Dinitrophenol	0.2 or MDL	4,100	200	NC	7		<5
Dibenzofuran	6.2	8,200	N/A	NC	ND		29
Fluorene	50	120,000	3,000	NC	ND		43
Pentachlorophenol	1 or MDL	48	2000	NC	ND		130
Phenanthrene	50	N/A	N/A	ND	ND	승규는 것이 같다.	13
Fluoranthene	50	82,000	3,000	NE	ND	[영상] 문화 이상	51
Pyrene	50	61,000	2,000	NC	ND	이 같은 것을 가지 않는 것이 없다.	35
Benzo(a)anthracene	0.224 or MDL	7.8	0.224	NC	ND		9
Chrysene	0.4	780	N/A	NC	ND		9
Butylbenzylphthalate	50	410,000	20,000		B ND		ND
Sum of BNA TICs	NA	N/A	N/A	44	1003		260
PCB/Pesticides (mg/kg)	:						
a-BHC	0.11	N/A	0.11	e persiente de	0.03		ND
g-BHC	NA	N/A	N/A		0.7		ND
Heptachlor	0.1	1.3	0.16, 40		0.2		ND
g-Chlordane	0.54	16	0.54, 50		0.2		ND
Endosulfan (I)	0.9	12,000	N/A		0.3		ND
p,p-DDE	2.1	17	2.1		0.2		0.1
Endrin	0.1	610	20		0.2		ND
p,p-DOD	2.9	24	2.9		0.2		ND
Endosulfan (11)	0.9	12,000	N/A		0.1	12.5	ND
p.p-DDT	2.1	17	2.1, 40		ND		0.9
VOCs (mg/kg):				And the set	1.1.1.1.1.1.1		
	1.2	4,100,000	200,000		79:22		
n-Propylbenzene	N/A	82,000	N/A		110		· [- 영양 () - 이상
1,3,5-Trimethylbenzene	NA	100,000	N/A	. La constante de la constante	710		
1,2,4-Trimethylbenzene	NVA	100,000	N/A	the same and the	2200		
n-Butylbenzene	N/A	82,000	N/A		21		
Total VOCs	10	N/A	N/A		3142		
Corrosivity (pH)	1	≤ 2, ≥12.5***		3.	0 3.9	5.	1 2.6
TPH (mg/kg)	N/A	N/A	N/A	87,80	o	1	

Shaded compounds and concentrations exceeded NYSDEC or U.S.EPA criteria fractional states and a state of the ND = none detected above J value; MDL = method detection limit; N/A = not available;

Analytical parameters and Individual compounds listed in Tables 1 and 2 and not listed above were not found in above samples

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED

Sample	Layer 4	Layer 3	Layer 2	Layer 1
Location				
WP-1	0 - 7.0 ft.	NP	7.0 - 7.5 ft.	7.5 - 8.0 ft.
WP-2	0 - 2.5 ft.	NP	2.5 - 4.0 ft.	DNR
WP-3	0 - 3.9 ft.	NP	3.9 - 4.0 ft.	DNR
WP-4	NP	NP	NP	0 - 4.0 ft.
WP-5	0 - 4.0 ft.	4.0 - 6.5 ft.	6.5 - 8.0 ft.	DNR
WP-6	0 - 4.0 ft.	4.0 - 4.2 ft.	4.2 - 5.7 ft.	5.7 - 8.0 ft.
WP-7	0 - 4.0 ft.	NP	4.0 - 7.0 ft.	7.0 - 8.0 ft.
WP-8	0 - 3.8 ft.	3.8 - 6.0 ft.	6.0 - 6.8 ft.	6.8 - 7.0 ft.
WP-9	0 - 3.2 ft.	3.2 - 3.8 ft.	3.8 - 4.1 ft.	4.1 - 8.0 ft.
WP-10	0 - 4.0 ft.	NP	4.0 - 7.0 ft.	7.0 - 8.0 ft.
WP-11	0 - 4.0 ft.	4.0 - 4.8 ft.	4.8 - 6.3 ft.	6.3 - 8.0 ft.
WP-12	0 - 1.6 ft.	1.6 - 3.2 ft.	3.2 - 6.0 ft.	6.0 - 8.0 ft.
WP-13	0 - 2.4 ft.	2.4 - 3.2 ft.	3.2 - 4.2+ ft.	DNR
WP-14	0 - 3.0 ft.	NP	NP	3.0 - 8.0 ft.
WP-15	0 - 2.0 ft.	2.0 - 3.0 ft.	3.0 - 6.9 ft.	6.9 - 8.0 ft.
WP-16	0 - 2.5 ft re	worked laye	er 1	
	2.5 - 2.8 ft	layer 2		
5	2.8 - 8.0 ft	native layer	1	
WP-17	0 - 2.3 ft la	yer 4		
	2.3 - 3.3 ft o	clayey sand	& clay (natura	l deposit)
	3.3 - 8.0 la	yer 1		
WP-18	0 - 2.5 ft re	worked laye	er 1	
	2.5 - 6.5 ft	layer 2		
	6.5 - 8.0 ft	native layer	1	
WP-19	0-4.0 ft re	worked laye	er 1	
	4.0 - 4.3 ft	layer 3		
	4.3 - 6.5 ft	layer 2		
	6.5 - 8.0 ft	layer 1		

 Table 7. Subsurface Stratigraphy - Waste Pile and Filled Lagoon

NP = not present DNR = did not reach Appendix A

SITE FIGURES

Appendix B

FIELD DATA SHEETS

REAC, EDISON, NJ (908) 321-4200 EPA CONTRACT 68-C4-0022

Samplers: <u>Busse //</u> Date: <u>6/2/00</u> Site Name: <u>Buryer</u> Time: <u>1000</u> Sample Location: <u>Pb As</u>	French cham.c.l. Area schette	C R E	hain of Custody No.: EAC Task Leader: <u>ES</u> PA WAM: <u>BSUM11</u> Vork Assignment No.: <u></u>	2813 6 0281 mgd 13to
SITE DESCRIPTION landfill old field upland palustrine industrial wooded lowland riverine commercial farmland lacustrine residential gully hedgerows floodplain	SOIL TYPE SURFA rock clay color gravel muck odor sand loarn flow silt peat direction color /multiple - Dufk	CE WATER	STREAM width depth velocity cm/s pools% riffles%	BOTTOM rock silt rubble clay gravel organic shell other sand
SAMPLE TYPE DEVICE surface water effluent kemmen groundwater sludge trowel potable water leachate bucket sediment waste auger soil other frill ekman	other <u>Geog</u> eria	SAMPLE In color odor temp DO cond_	IFORMATION pH_ ORP salinity sample depth tide stage	WEATHER PARAMETERS ambient temp <u>70°</u> barometric pressure <u>ince</u> relative humidity <u>ince</u> weather conditions <u>< (-a</u>
ANALYSES TO BE PERFORMED ORGANICS A. halogenated & aromatic volatiles B. volatiles C. trihalomethanes Pesticides/PCB E. PCB Dase neutral/acid extractables G. pesticides, drinking water H. herbicides, drinking water Other <u>becbicudes</u> 8151A INORGANICS A. metals, priority pollutant C. metals, conter <u>SIFA</u> INORGANICS A. metals, priority pollutant C. metals, other <u>SIFA</u> MCRACE SALES A. metals, priority pollutant C. metals, other <u>SIFA</u> MCRACE SALES A. metals, priority pollutant C. metals, other <u>SIFA</u> MCRACE SALES A. metals <u>A. metals</u> A. metals, other <u>SIFA</u> MCRACE SALES A. metals <u>A. metals</u> A.	OTHER ANALYS A. total cynanide B. total phenol C. petroleum hyd D. pH E. alkalinity F. hardness G. total dissolved H. total suspende I. sulfate J. TOC K. grain size L. percent moistu M. other	ES rocarbons solids id solids	CONTAINER (Jlass jar) plastic jar acetate core plastic bag plastic bucket other STORAGE Well ice dry ice ambient J 222263 J 22263	PRESERVATIVE HNO, Zn Acetate HCI Na,SO, other
COMMENTS: A 22263 B 2263 C 22263 FORM#1 D 22263 FORM#1 D 22263 E 22263 B 151 A he C 22263 T CLP: 1	, sulfan, bue noi ude s netals; 2,4-D	де оп ; 2,4;:	258-02jn 1, 4-02 jn 1, 4-02 jn 1, 4-02 j 5-TP 1, 4-	er 1, 32-02 ja re ne ne ne oz jare

-

22268

	R	ASe_		Chair	n of Custody No.:		Uall
and hal so	Samplers: ()	uney		REA(C Task Leader: <u>C</u> U	angel	asta
Time: 1305	Sample Location	chip A	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	EPA	Assignment No.:	21A D	0153
	_		0				
SITE DESCRIPTIC landfill old fi industrial woo commercial farm residential gully hedgerows flood	ON ield upland palu ded lowland rive land lacustrine dplain	SOI Istrine rock erine grav san silt colo	L TYPE (1) SL clay 1999 col rel muck od d loam flo peat dir r Macal	JRFACE WATER lor or w ection	STREAM width depth velocity cm/s pools% riffles%	BOTTO rock rubble gravei shell sand	M silt clay organic other
SAMPLE TYPE surface water groundwater potable water sediment	effluent sludge leachate waste other	DEVICE kemmerer trowel bucket auger ekman	ponar other	SAMPLE INFO color_ <u>Al-ul</u> odor_ <u>have</u> temp DO cond	RMATION _ pH ORP _ salinity _ sample deptho _ tide stage	WEATH ambient baromet relative weather	ER PARAMETERS temp_~75°F tric pressure humidity_m.9 conditions_Clear
ANALYSES TO B	E PERFORMED				SAMPLE PREPA	RATION	
ORGANICS A. halogenated & a B. volatiles C. trihalomethanes D. pesticides/PCB E. PCB F. base neutral/aci G. pesticides, drini H. herbicides, drini H. herbicides, drini Dother INORGANICS A. metals, priority metals, TAL C. metals scan (IC D) metals, other	aromatic volatiles s id extractables king water king water A herbi() pollutant	born	OTHER AN/ A. total cyna B. total phen C. petroleum D. pH E. alkalinity F. hardness G. total dissu H. total susp I. sulfate J. TOC K. grain size L. percent m M. other	ALYSES nide ol hydrocarbons bived solids ended solids	CONTAINER plastic jar acetate core plastic bag plastic bucket other STORAGE Wet ico dry ice ambient	NaOH	PRESERVATIVES HNO, Zn Acetate HCI Na,SO, other
RCRA	fols; 2,4-	0 ; 2, 4,	5-TP		Anchival F2220	Samp. 18	
COMMENTS: 4 2.2.268 3 2.2.268	IGNITA REACTIV	bility	the base				

22262

			zeidel	hák	Chain of Custody No	02815 6 02813
		Zaumia /	Tradition	and Pre	PEAC Task Leader	EVANDELISTA
1/20/00	Samplers:	The second	C Harda	TAL.	EDA WAM	ZOWNIA
Date:	_ Site Name:	Riber	- cuerti	him chatran of	More Assignment No	0-0153
Time:	_ Sample Locat	ion: KATIKOA	ONFLUENCE	OFEASTBOU	NDARY CREEK	
	DN Sold upland p		SOIL TYPE		R STREAM	BOTTOM rock silt
andtill old in	ded lowiand	riverine	gravel neck	odor	depth	rubb le clay
moustrai farm	land lacustrir	ne	sand loam	flow	velocity cm	vs gravel organic
residential gully	/		silt peat	direction	pools	% shell other
hedgerows floor	dplain		colophes dae	Lblain	riffles9	6 sand
SAMPLE TYPE		DEVICE		SAMPL	E INFORMATION	WEATHER PARAMETERS
surface water	effluent	kemmere	r ponar	color	pH_	_ ambient temp
groundwater	sludge	nowe!	other_	odor	ORP	barometric pressure
potable water	leachate	bucket		temp	sample depth	weather conditions
Sediment	waste	auger		cond	tide stage	
soil	other	ekinan				
ANALYSES TO B	E PERFORME	D			SAMPLE PRE	PARATION
000000			отн	FR ANALYSES	CONTAINER	PRESERVATIVES
A halogenated &	aromatic volatil	e s	A. tot	al cynanide	glass jar	HNO,
B volatiles			B. tot	al phenol	plastic jar	NaOH
C, trihalomethane	35		C. pe	troleum hydrocarbons	acetate core	Zn Acetate
D. pesticides/PCE	В		D. pH	4	plastic bag	
E. PCB			E. ali	kalinity	plastic bucket	Na ₂ SO,
F. base neutral/a	cid extractables		F. ha	rdness	other	other
G. pesticides, dri	nking water		G. to	tal dissolved solids		
H. herbicides, dri	nking water		H. 10	tal suspended solids	STORAGE	
O other	DICIDE	_	I. SUI		Gvetice	
			Kar	ain size	dry ice	
	v poliutant		L. pe	ercent moisture	ambient	
B metals, TAL	pondant		M. o	ther		
C. metals scan (I	icp sulfun	bacon			Archi	val samples
					6 1	262
	tals: Z.	U-D 1 2	, 4, 5 - TI			
	, , , , , , , , , , , , , , , , , , ,		•		H 24	- Ale a
C. corrosivity	pH				T 22	2262
@ reactivity					- 44	-
E. other						
A 2226	ZZI	SNITAB	LITY		2,8	- oz jme
132226	2)	The Tule T			9 0	- az jae
C 2226	2 K	CACI / V / 1	7		1,1	
FORM #1 D 2226	2 74	th Meta	Is dus si	the los	ion 1,4	- OE JAK
C 2721	2 01	SIA he	abicida	5	1, 4	1-0Z jan
5	1 D	- / A =	afela"	7 4-1) 1	7.4.5-70	1. U-nz ite
r Zaile	70	LI'S M	ermsj	-17- J	-11-11	

REAC, EDISON, NJ (908) 321-4200 EPA CONTRACT 68-C4-0022

	,		Chain	Of Custody No.	2813 E	02815
i (Orandami 1	Prinia /EVA	NGCUSTA	REAC	Task Leader	WIR EN	MBELIST
Sampiers:	BARKURA, Che	mical	EPA	WAM:	Wir	
Time: Sample Local	ion: Last Band	Hey Creek, D	unstel Motor	Assignment No.:	-0153	
	OF CONFLU	BULE WITH	TRIVEN_			
SITE DESCRIPTION	SOILT	YPE SURFA	CE WATER	STREAM	BOTTOM rock silt	
landfill old field upland (balustrine rock	ciay color		depth	rubble cla	у
industrial wooded lowiand	nverine gravei	loam flow		velocity cm/s	gravel org	anic
commercial farmland lacustri	silt	peat directio	n .	pools%	sheli otr	ner
hedgerows floodplain	color	edion redesh		riffles%	sand	
		PROUN		RMATION	WEATHER	PARAMETERS
SAMPLE TYPE	DEVICE) ar	color	pH	ambient terr	νρ
surface water effluent	Keminelei poi	iai Ver	odor	ORP	barometric p	oressure_
groundwater sludge	bucket		temp	salinity	relative hum	nidity
polable water reachate	auger		DO_	sample depth	_ weather con	ditions_
soil other	_ ekman		cond	_ tide stage		
ANALYSES TO BE PERFORME	D			SAMPLE PREPA	RATION	
			eeé	CONTAINER	P	RESERVATIVES
ORGANICS		OTHER ANALT	525	TIASE	н	NO,
A. halogenated & aromatic volati	les	A. total cynamios	5	plastic jar	NaOH	-
B. volatiles		C petroleum hv	drocarbons	acetate core	Z	n Acetate
C. trihalomethanes		D. pH		plastic bag	н	CI
		E. alkalinity		plastic bucket	N	a,SO,
E. FCD E. hase neutral/acid extractables	•	F. hardness		other	0	ther
G nesticides, drinking water	-	G. total dissolve	ed solids			
H, herbicides, drinking water	•	H. total suspend	ded solids			
Dother 8151A he	nbi cider	I. sulfate		STORAGE		
		J. TOC		weilde		
INORGANICS		K. grain size	A	ambient		
A metals, priority pollutant	-	L. percent mois	sture	ditionotic		
B metals, TAL		M. Other				
Dimetals, other	, boron					
				Archive	Smolt	ł
QTCLPO HOTHS; 2	Y-D; 2,4,	5-70		11-0-0140		
B. ignitability				E 2076	4	
C. corrosivityPH				1 0000	(
C. Jeactivity E. other						
COMMENTS:				1	20 . 7	iAn
A 22264	LENITABILI	7		1,	22-03	2476
B 22264	REACTIVITY			1,	8-03.	jt.
C 22264 ;	TAL Metals,	Sulfur,	boron		1	
DZ2264 8	151A herb	icides				
E 27264 7	CLP: MITA	15: 2.4-17	1746	-TP	Ţ	
- (/			1 4113		•	

22264

22270

7	1.		Chain of Custody No	2817 6 02813
It an Samplers Count	/EUNIGEUST	4	REAC Task Leader	ANGUIST
Date: 6/21/14 Site Name: DAnka	or Chemica	1	EPA WAM: 2	NN in
Time:	HOE Ditch		Work Assignment No.:	0-0153
SITE DESCRIPTION	SOIL TYPE	SURFACE WATER	STREAM	BOTTOM
landfill old field upland palustrine	rock clay	color	width	rock sitt
moustrial wooded lowland riverine	gravel muck	odor	depth	rubble clay
commercial farmland lacustrine	sand loam	flow	velocitycm/s	gravel organic
residential guily	sin pear		pools%	shell other
			nines%	Sano
SAMPLE TYPE DEVICE		SAMPLE	INFORMATION	WEATHER PARAMETERS
surface water effluent kemmen	er ponar	color	pH	_ ambient temp_
groundwater sludge	other_	odor	ORP	_ barometric pressure
potable water leachate bucket		temp	salinity	relative humidity
Soil otherekman		cond,	sample deptn tide stage	weather conditions
ANALYSES TO BE PERFORMED			SAMPLE PREPA	RATION
ORGANICS	OTHER	ANALYSES	CONTAINER	PRESERVATIVES
A. halogenated & aromatic volatiles	A. total c	cynanide	glass jar	HNO.
B. volatiles	B. total p	henol	plastic jar	NaOH
C. trihalomethanes	C. petroi	eum hydrocarbons	acetate core	Zn Acetate
D. pesticides/PCB	D. pH		plastic bag	HCI
E. PCB	E. aikelir	nity	plastic bucket	Na,SO,
F. base neutral/acid extractables	F. hardn		other	other
G. pesticides, drinking water	G. total c	dissolved solids		
Distar 8151 A Mabicides	ri. totalis i sulfata	suspencied solids	STORACE	
	J TOC	•	wetice	
INORGANICS	K. grain :	size	dry ice	
A_metals, priority pollutant	L. percei	nt moisture	ambient	
B. metals, TAL	M. other			
C. metals scan (ICP)				
Imetals, other <u>Sillfure</u> Blon				
	246-7	2	Anch	Val Sampla
Bignitability	6/1/3 - 11	r		2020
C. corrosivitypH			F	xx 210
D. plactivity			60	22270
E. other			•••	_
COMMENTS				
A 22270 IGNITA	bility			
B 22270 Reactiv	ity '			
C 22270 TAL Met	its, sult	ic, been	C	
D 22270 8157A	kent icide	9		
E 22270 TTIP	hardel.	24 2	2	
,	preme j	1917-0	6,7,5-TP	

22271

Date:	Samplers:	Whin /E	VANGE Chem	USTP	Chain of Custody No REAC Task Leader: EPA WAM:	92817 & 0 2813 Sumberistr WTA
Time:	Sample Location;	that ha	indary (PULLE AFTA	Work Assignment No.:	0-0153
SITE DESCR landfill inguishral commercial residential hedgerows	RIPTION old field upland palus wooded lowland rive farmland lacustrine gully floodplain	SOIL strine rock rine grave sand silt color	TYPE clay el muck loam peat	SURFACE WATER color odor flow direction	STREAM width depth velocity cm/s pools% riffles%	BOTTOM rock silt rubble clay gravel organic shell other sand
SAMPLE TY surface wate groundwater potable wate Sediment soil	PE er effluent sludge er leachate waste other	DEVICE kemmerer p trowe c bucket auger ekman	onar other_	SAMPLE color odor temp DO cond_	INFORMATION PH ORP salinity sample depth, tide stage	WEATHER PARAMETERS _ ambient temp barometric pressure relative humidity weather conditions
ANALYSES ORGANICS A. halogenat B. volatiles C. trihalomet D. pesticides E. PCB F. base neut G. pesticides H. herbicides H. herbicides I. bother INORGANIC A. metals, pi B. metals, T. C. metals sci	TO BE PERFORMED ted & aromatic volatiles thanes MPCB tral/acid extractables s, drinking water s, drinking water	idet	OTHER A. total (B. total (C. petro D. pH E. alkalii F. hardn G. total (H. total (I. sulfate J. TOC K. grain L. perce M. other	ANALYSES cynanide phenol leurn hydrocarbons nity less dissolved solids suspended solids suspended solids size nit moisture	SAMPLE PREP/ CONTAINER glass jar plastic jar acetate core plastic bag plastic bucket other STORAGE wet ice dry ice ambient	ARATION PRESERVATIVE HNO, NaOH Zn Acetate HCI Na,SO, other
RCRA A. TCLP bignitability corrosivity Deactivity E. other	ther <u>201 ful</u> ,	₩.e.o.	2,4,5	- T P	Acchiv. F 222 6 222	- 1 Struflez 71 71
COMMENT: 222 222 FORM #1 227 227 227	271 IGNITA 271 REACTION 271 REACTION 271 TAC M 271 8157A 71 TCLF	tility the s, s herbicu	ulfur, de s	to con	.5-78	

22269

82817 602813 Chain of Custody No. Samplers: Zownic / EVANGELISTA REAC Task Leader: Evange lista EPA WAM: OWNIK TROUGH TO EB CYCCK 0-0153 Sample Location: Work Assignment No.:... SOIL TYPE SURFACE WATER SITE DESCRIPTION BOTTOM STREAM iandfili old field upland palustrine rock clay width rock sitt color industrial wooded lowland riverine gravel and odor rubbie clay depth ioam commercia farmland sand flow lacustrine velocity___ cm/s gravel organic residential gully silt peat direction poois % shell other __ hedgerows floodplain color GranBreidn riffles % sand DEVICE SAMPLE INFORMATION WEATHER PARAMETERS SAMPLE TYPE pН ambient temp_ surface water effluent kemmerer ponar color ORP groundwater sludge troweD other odor_ barometric pressure bucket potable water leachate temp salinity_ relative humidity (sediment) waste auger DO sample depth. weather conditions ekman soil other cond tide stage_ ANALYSES TO BE PERFORMED SAMPLE PREPARATION OTHER ANALYSES CONTAINER ORGANICS PRESERVATIVES A. halogenated & aromatic volatiles A. total cynanide glass jar HNO, plastic jar NaOH B. volatiles B. total phenol C. trihalomethanes C. petroleum hydrocarbons acetate core Zn Acetate D. pesticides/PCB D. pH plastic bag HCI E. PCB E. alkalinity plastic bucket Na.SO. F. base neutral/acid extractables F hardness other other _ G. pesticides, drinking water G. total dissolved solids H. herbicides, drinking water H. total suspended solids 8151 A Dother hickille i. sulfate STORAGE J. TOC wet ice INORGANICS K. grain size dry ice A. metals, priority pollutant L. percent moisture ambient B)metals, TAL M. other metals scan (ICP) metals, other <u>SULFUR</u>, <u>boron</u> Apchival Dample F22269 DTCLP ; metals ; 2,4-D ; 2,4,5-TP Banitability C. corrosivity freactivity E. other COMMENTS A 22269 IGNITABILITY B 22269 REACTIVITY C 22269 TAL METALS, SULFUR, BORON 22269 8151 A herricides 22269 RLP & Metat; 2,4-D; 2,4,5-TP

22251

	REAC, EDISO (908) 321-4:	N, NJ 200			
	EPA CONTRACT 6	i8-C4-0022		82813	6
	12	Chain of (Custody No.:	02812 6	02811
Samplers: Who GEUST	a/ townin	REAC Tas	sk Leader:	vor coust	¥
Date: 610 100 Site Name: BARKER C	hemicol	EPA WAI	4: Zu	wnia	<u></u>
Time: AM_Sample Location: South La	Gen Hunny A	Work Ass	ignment No.:	-0453	
		-N	0705114	POTTON	
SITE DESCRIPTION SOIL	TYPE SURFACE	EWATER	Sireami width	rock silt	
landfill old field upland palustrine rock	el muck odor		depth_	rubble clay	
commercial farmland lacustrine sand	loam flow	,	velocity crivs	gravel organic	
residential gully	peat direction	•	pools%	shell other	
hedgerows floodplain / agoon color	Com-backel OR	FY	riffies%	sand	
SAMPLE TYPE DEVICE		SAMPLE INFORMA	TION	WEATHER PARAM	AETERS
surface water effluent kemmerer p	ionar acad b	color <u>GRE</u>	pH_	_ ambient temp_	
groundwater sludge trowel	other	odor tr /fer	ORP	Darometric pressui	e,
potable water leachate bucket	SPEEK		samnie deoth	weather conditions	-
sediment waste auger		cond	tide stage		<u> </u>
ANALYSES TO BE PERFORMED			SAMPLE PREPA	RATION	
	OTHER ANALYSE	¢	CONTAINER	PRESE	RVATIVES
ORGANICS	A. total cynanide	5	CHASS IN	HNO,	
A, halogenateu d'aronnatic volatiles B, volatiles	B. total phenoi		plastic jar	NaOH	
C_trihalomethanes	C. petroleum hydro	carbons	acetate core	Zn Acet	ate
Desticides/PCB	D. pH		plastic bag	HCI	
РСВ	E. alkalinity		plastic bucket	Na ₂ SO ₄	
De base neutral/acid extractables	F. hardness	olide	other		
G. pesticides, drinking water	G. total dissolved a	solids	T	Taskert Sal	. a cant
H. herdicides, drinking water	I. sulfate		STORAGE	Charles and	
	J. TOC		Viet ice)	miries	
INORGANICS	K. grain size		dry ice	SI Sedla	cy how
A. metals, priority pollutant	L. percent moisture	8	ambient		
B metals, TAL	M. other		2	L Sed Loc	-2.
C. metals scan (ICP)			2	Ampleis AC	composité
Or metals, other <u>Soffeed</u> A			1	of Above t	200'
RCRA ALTOLY, MUTALY; 2,4-0; 2,4,	5-TP		Archive	somples (3 8-03 jacs
B ignitability			H 227	251	
C. corrosivitypH			1 777	51	
(D) reactivity			T 7.7.7	51	
E. other			5 000	->/	
COMMENTS: 4227.51 :) 7	TLP put tots	- 2.Y=N	7 7 17 6	TO PL	_
B 22251 : (1	GNITADIL	ITX	(7 8-1	The Tree	C
		/	(-00	Janes	
FORM#1 C 22251 0 K	EACTIVITY	((1 4-03	JAR)	
D 222 51 : TA	I Metals p	IUS SULFUR	6 been	(14-1	inc)
E 222 51 : 81	51 A herbi	ades	11 you th	~) ·	5.5.9
F22261 : TO	LP Metals	i Z, 4-D,	2,4,5	- 77 (14	-on Jak

02810 Chain of Custody No.: EVANGELISTA Zownin/Evanberus REAC Task Leader: ZOWNIR EPA WAM 0-015 Samplers: Work Assignment No. Date 6/2/ 2010 Site Name: BOTTOM Sample Location: STREAM ait SURFACE WATER Time: 2 rock width SOIL TYPE colocter with 11 clay rubble SITE DESCRIPTION depth aliner cisy organic rock gravel upland pakustrine CTT/S 66 VALOCITY old field muck gravel other shell landfill % lowland riverine pools beboow loam 200510 sand direction sand lacustrine riffies farmland peat silt commercial s silfur WEATHER PARAMETERS gully colo residential SAMPLE INFORMATION floodplain ambient temp_ hedgerows barometric pressure pН DEVICE color ORP relative humidity SAMPLE TYPE kemmerer odor weather conditions salinity_ Eurface water effluent trowel temp sample depth sludge groundwater bucket DO tide stage leachate potable water cond auger SAMPLE PREPARATION waste sediment ekman other soil PRESERVATIVES ANALYSES TO BE PERFORMED CONTAINER MIND FOR OTHER ANALYSES grass jar NaOH A total cynanide mustic jar Žn Acetate ORGANICS A. halogenated & aromatic volatiles B. total phenol acetate core HCI C. petroleum hydrocarbons plastic bag Na,SO. B. volatiles plastic bucket D. pH C. trihalomethanes other E. alkalinity other D. pesticides/PCB F. hardness G. total dissolved solids E. PCB F. base neutral/acid extractables * for Hetm FISIA Dherbicides, drinking water 875/A Muthad H. total suspended solids STORAGE I. sulfate Tel ice) J. TOC UTV ICE i. other K. grain size ambient L. percent moisture INORGANICS metals, priority pollutant **C**other 8. metals, TAL (+1 Fur, boron C. metals scan (ICP) Ometals, other RCRA A. TCLP Bignitability C. corrosivity Contraver Sulfate, Neterts, Childreides 15 1-l Amber glass TAC metals, sulfur, boson 1, 1-l Amber glass Herbicide 8151A 1, 1-l Amber almos D reactivity 1 J I-l Amber glass E. other _ COMMENTS: Sample # A222 5 9 1, 1-l truber ghes 822255 C 22259 3 1-2 Ambenglass Ignitability, corrosivity Reactivity FORM #1 22259

22252

REAC, EDISON, NJ (908) 321-4200 EPA CONTRACT 68-C4-0022

028136

02812 \$ 02811 Chain of Custody No.: VANGELISTA REAC Task Leader EVANGEZISTA Samplers: L ZOWAN K EPA WAM Site Name 0-0153 Sample Location: Mach Lagoon-Work Assignment No.:, actions SURFACE WATER BOTTOM STREAM SITE DESCRIPTION SOIL TYPE width rock landfill old field upland palustrine rock clav color sitt industrial wooded lowland riverine gravel muck odor . deoth rubble clav velocity gravel ham organic commercial farmland lacustrine sand flow cm/s WASTEWATER sitt peat direction pools % shell other residential gully color MEO JUN riffies % sand floodplain hedgerows 1 AGOON GRIA SAMPLE INFORMATION WEATHER PARAMETERS DEVICE SAMPLE TYPE - Her рH ambient temp effluent kemmerer surface water ponar other_METAL odow ORP barometric pressure (TUCge trowel oroundwater 'salinity relative humidity_ leachate bucket tem noo o X potable water s/corve DŐ sample depth weather conditions sediment waste auger other (AMPOSITEEkman cond tide stage soil SAMPLE PREPARATION ANALYSES TO BE PERFORMED OTHER ANALYSES CONTAINER PRESERVATIVES ORGANICS glass ac HNO, A. halogenated & aromatic volatiles A. total cynanide B. volatiles B. total ohenol plastic jar NaOH acetate core Zn Acetate C. trihalomethanes C. petroleum hydrocarbons Desticides/PCB plastic bac HCI D oH PCB E. alkalinity plastic bucket Na.SO. other 9. base neutral/acid extractables F. hardness other G. pesticides, drinking water G. total dissolved solids H-22252 H. herbicides, drinking water H. total suspended solids 22252 STORAGE Dother Marbicie i suifate J. TOC - tet ice 222 52 dry ice INORGANICS K. grain size K Z2252 ambient A. metals, priority pollutant L. percent moisture Bretals, TAL M. other _ Staple is A Compaste C. metals scan (ICP) 18 Samples taken at Rtactom 10 at trows from ATCLP: MotHs; 2,4-0; 2,4,5-TP Bignitability The Sediment of the C. corrosivity (D) reactivity Karth Lagoon E. other COMMENTS: AZZZ5Z 4 IONATAbility (2,8-02 jARS) B22252 C 2225 Reactivity (1, 4-02 JAR) D 22252 TAL Metals plus sulfur & boran (1, 4-03 JAR) FORM #1 8151A herbicides (1, 4-07 JAN) E 222 52 222 52 TCLP: METAls; 214-D; 2,4,5-TP (1,4+03 im BNAS And PCB/Pesticider 22252 (1, 8-02, ime)

22258

Samplers: <u>Barwnin</u> Date: 4/11/2000 Site Name: <u>Bank</u> Time: 519000 Sample Location: <u>Seul</u>	ENTNGERISTO En Chemicos	Chain of Custody No.: REAC Task Leader: EPA WAM: Work Assignment No.:	02809 Evanderus (* Zonu Nil 0-0150
SITE DESCRIPTION andfill old field upland palustrine industriar wooded lowland riverine commercial farmland lacustrine residential gully hedgerows floodplain	SOIL TYPE SURFACE WATER rock clay gravel muck odor	STREAM width depth velocity pools riffles	BOTTOM rock silt rubble clay cm/s gravel organic _% shell other % sand
SAMPLE TYPE DEVICE surface water effluent kemmer groundwater sludge trowel botable water leachate bucket sediment waste auger soil other ekman	er ponar color color odor temp DO cond	INFORMATION pH ORP salinity sample dep tide stage	weather parometric pressure
ANALYSES TO BE PERFORMED ORGANICS A. halogenated & aromatic volatiles 3. volatiles C. trihalomethanes D. pesticides/PCB E. PCB F. base neutral/acid extractables G. pesticides, drinking water P. herbicides, drinking water P. herbicides, drinking water MORGANICS A. metals, priority pollutant B. metals, TAL C. metals scan (ICP) D. metals, other	OTHER ANALYSES A. total cynanide B. total phenol C. petroleum hydrocarbons D. pH E. alkalinity F. hardness G. total dissolved solids H. total suspended solids I. sulfate J. TOC K. grain size L. percent moisture M. other	CONTAINED glass ja plastic jar acetate com plastic buck other STORAGE dry ice ambient	R PRESERVATIVES HNO, FOR FAC NaOH Masses Zn Acetate HCI Na,SO, other 8(57) A
RCRA A TCLP B. ignitability C. corrosivityPH. D. reactivity E. other COMMENTS: Sample H A 22258 Sulfan D 22258 TR d 22258 Hcr	Analyses to, Nitrato, Chlorid L'Metals, Sulfur, Chicide 8151A	los boreon	Containon 1, 1-l Amber 91 1, 1-l Amber 91 1, 1-l Amber 91 1, 1-l Amber 91
22257

Samplers: Date: <u>6/2//2000</u> Site Name: Time:Sample Location	BAREEN C	hemicst	Chain of Custody No.: REAC Task Leader: EPA WAM: Work Assignment No.:	028/8 Eurobólistr Bunnia 0-0153
SITE DESCRIPTION landfill old field upland palu hdustrial wooded lowland rive commercial farmland lacustrine residential gully hedgerows floodplain	SOIL TYPE istrine rock clay arine gravel muc sand loar silt peat color	SURFACE WATEL color	STREAM width depth velocity cm/ pools% riffles%	BOTTOM rock silt rubble clay /s gravel organic /s shell other sand
SAMPLE TYPE sofface water groundwater sludge potable water leachate sediment waste soil other	DEVICE kemmerer ponar trowel ther bucket auger ekman	SAMPLI color odor temp DO cond	E INFORMATION pH ORP salinity sample depth tide stage	WEATHER PARAMETERS ambient temp barometric pressure relative humidity weather conditions_///sfr
ANALYSES TO BE PERFORMED ORGANICS A. halogenated & aromatic volatiles B. volatiles C. trihalomethanes D. pesticides/PCB E. PCB F. base neutral/acid extractables G. pesticides, drinking water Therbicides, drinking water I. other I. other INORGANICS A. metals, priority pollutant B. metals, TAL C. metals scan (ICP) Therbicides, other	O A B C D E F G I A Method H I. J K L J K	THER ANALYSES total cynanide total phenol petroleum hydrocarbons pH alkalinity hardness total dissolved solids total suspended solids sulfate TOC grain size percent moisture	SAMPLE PREI CONTAINER plastic jar acetate core plastic bag plastic bucket other STORAGE wer re- ory ice ambient	PRESERVATIVES HND, FOLJAL NaOH NaOH All 2 S2 03 Zn Acetate HCI Na,SO, other
RCRA A. TCLP B. pnitability C. corrosivitypH Dreactivity E. other COMMENTS: Simple # A 22257 B 22257 C 22257 C 22257 C 22257 F 2257 F 2257	A Sulfate, Notente AL Metats, a LeRbicide s TGNITABILITY	uniyses chloecto chloecto sulfide sulf Rec. SISIA I Corresility,	Reachivity	artiles 1, 1-l Ander 9 1, 1-l Amber 9 1, 1-l Amber 9 3, 1-l Amber

22254

SITE DESCRIPTION landfill old field upland palus		SOIL TYP							
commercial farmland lacustrine residential gully hedgerows floodplain	trine ine	rock cla gravel m sand lo silt pe color <u>14</u> ,	E av ucto arm at com	SURFAC color odor flow direction	E WATER		STREAM width lepth velocity cm/s xools% iffles%	BOTTO rock rubble gravel shell sand	M sitt clay organic other
SAMPLE TYPE surface water effluent groundwater sludge potable water leachate sediment waste soil other <u>invector</u>	DEVICE kemmere trowel bucket auger ekman	r ponar other <u>f</u>	<u>esp</u> an	L	SAMPLE IN color odor_ temp_ DO, cond_	NFORMAT	FION DRP salinity sample depth ide stage	WEATH _ ambient _ baromet _ relative _ weather	ER PARAMETERS temp
ANALYSES TO BE PERFORMED ORGANICS A. halogenated & aromatic volatiles B. volatiles C. trihalomethanes D. pesticides/PCB E. PCB F. base neutral/acid extractables G. pesticides, drinking water H. herbicides, drinking water D. other	tides		OTHER A A. total c) B. total pl C. petrole D. pH E. alkalini F. hardne G. total di H. total si I. sulfate J. TOC K. grain s L. percen M. other	ANALYSE ynanide henol eum hydro ity iss issolved s uspended size t moisture	S carbons olids solids		SAMPLE PREPA CONTAINER plass jar Dastic jar acetate core plastic bag plastic bucket other STORAGE wet ica iny ice ambient	RATION NaOH	PRESERVATIVE HNO, Zn Acetate HCI Na,SO, other
RCRA A)TCLP : Metals ; 24 Pignitability C. corrosivitypH Deactivity E. other COMMENTS: A22254 JEGNITA	-D;	Z, Y,	5-7	~p 2,	8-02.	Ìm	Archiva G 222 H 222	Som 54 -54	

22255

Samplers: Dor- 1 Date: 6/2/200 Site Name: 6/2/200 Time: 1345 Sample Location:	busser / chris Fruch rker clow-cul wl-13 - Luyer 4	Chain of REAC T EPA W/ Work As	Custody No.: ask Leader:_ <u>EV (</u> M: 20 signment No.:_K	angel ur 11 00	5602F/3 157
SITE DESCRIPTION landfill old field upland palustrine industrial wooded lowland riverine commercial farmland lacustrine residential gully hedgerows floodplain	SOIL TYPE SURFACE rock clay color gravel muck odor sand loarm flow silt peat direction color		STREAM width depth velocity cm/s pools% riffles%	BOTTO rock rubble gravel shell sand	VI sitt clay organic other
SAMPLE TYPE DEV surface water effluent kem groundwater sludge trow potable water leachate buck waste auge soil ME other_FILL ekm	rICE merer ponar el othe <u>Ces posse</u> tet er an	SAMPLE INFORM color (1517 Color) odor temp DO cond	ATION pH ORP salinity sample depth tide stage	WEATH ambient baromet relative weather	ER PARAMETERS temp <u>MBS F</u> ric pressure humidity <u>Hr. 4</u> conditions
ANALYSES TO BE PERFORMED			SAMPLE PREPA	RATION	
ORGANICS A. halogenated & aromatic volatiles B. volatiles C. trihalomethanes D. pesticides/PCB E. PCB F. base neutral/acid extractables G. pesticides, drinking water H. herbicides, drinking water INORGANICS A. metals, priority pollutant Interals, TAL Softon, boron M. C. metals scan (ICP) I metals, other <u>SVI fun, Banon</u>	OTHER ANALYSES A. total cynanide B. total phenol C. petroleum hydrod D. pH E. alkalinity F. hardness G. total dissolved at H. total suspended I. sulfate J. TOC K. grain size L. percent moisture M. other	S carbons olids solids	CONTAINER glass jar plastic jar acetate core plastic bag plastic bucket other STORAGE wet ice dry ice ambient	NaOH	PRESERVATIVE HNO, Zn Acetate HCI Na,SO, other
RCRA A. TCLP & Metals; 2,4-D B. ignitability C-corrosivitypH O reactivity E. other	: 2,4,5-TP	An	Chival San G 2225 H 2225 E 2225	<i>mplus</i> 5 55 55	-
COMMENTS: A 22255 IGNITAL B 22255 IGNITAL C 22255 REACTION D 22255 TAL MEAN FORM #1 E 22255 HURBICIDE F 22255 TULP:	9/2/7y Wity HS 8(57 A metals; 2)4-2;	2,4,5-	-T P		

22261 FIELD DATA SHEET REAC, EDISON. NJ (908) 321-4200 **EPA CONTRACT 68-C4-0022** 02811 Chain of Custody No .: 02813 6 02814 Samplers: Dor Bussey (Chris French REAC Task Leader Evangeliste Date: 6/21/00 Site Name: Burker Chamica Zownir EPA WAM: Work Assignment No.: RIA 00153 Sample Location: wp-1 - waste BOTTOM SOIL TYPEFID STREAM SURFACE WATER silt width rock rock cia color upland palustrine rubble clav lowland riverine gravel muck odor depth gravel lacustrine sand loam flow velocity____ cm/s organic % peat direction pools shell other ___ silt color high Colors riffles % sand WEATHER PARAMETERS SAMPLE INFORMATION DEVICE ambient temp ~ 55°F color pН kemmerer ponar barometric pressure other (contac ORP odor trowel relative humidity_____ bucket temp salinity___ weather conditions sample depth DO auger other_Fil cond tide stage ekman ANALYSES TO BE PERFORMED SAMPLE PREPARATION CONTAINER OTHER ANALYSES PRESERVATIVES glass jar) HNO, A. total cynanide A. halogenated & aromatic volatiles B. total phenol plastic jar NaOH acetate core Zn Acetate C. petroleum hydrocarbons HCI D. pH plastic bag plastic bucket Na,SO, E. alkalinity other F hardness other F) base neutral/acid extractables G. pesticides, drinking water G. total dissolved solids H, herbicides, drinking water H. total suspended solids Dother herbicide 8151A STORAGE I. sulfate J. TOC wet ice dry ice K. grain size ambient L. percent moisture M. other ___ ARCHIVAL SAMPLES C. metals scan (ICP) metals, other <u>Julfur</u>, burn H 22261 T 22261 ATCLP : metals; 2,4-2; 2,4,5-TP A22261 & IGNITABILITY 2, 8-02 SARS

A 22261 1, 4-02 JAR 6 22261 REACTIVITY P 22261 TAC METALS PLUS SUIFUR & BORON 1, 4-02 jAR F 22261 8151 A herebindes 1, 4-02 JAR F 22261 TCLP & METALS; 2,4-D; 2,4,5-TP 1, 402 jAR FORM #1 22261 BNAS and PCB/PESticides

Time: 1645

landfill

(industrial

commercial

residential

hedgerows

SAMPLE TYPE

surface water

groundwater

potable water

ORGANICS

B. volatiles

INORGANICS

RCRA

B, gnitability C. corrosivity D) reactivity E. other

COMMENTS:

metals, TAL

metals, priority pollutant

E. PCB

trihalomethanes Desticides/PCB

sediment

soil

SITE DESCRIPTION

old field

wooded

farmland

floodplain

effluent

sludae

waete

leachate

gully

2226

() <u> (</u>	Samplers:	ussey				Chain of REAC Ta	Custody No. 02	?8/1, 1 ~~ zal	128/3, 6 028, -str
Date: 6/22/00	Site Name:	mer d	en al			EPA WA	M: <u>20</u>	mit.	
Time: <u>/235</u>	Sample Location:	Honzont	ul tun	K		Work Ass	signment No.:	2140	5153
		(Fyel	TAK						
SITE DESCRIPTIO landfill old fie industrial frood commercial farmla residential gully hedgerows flood	N upland palus do upland palus of lowland river and lacustrine plain	SO trine roci ine gra san silt cok	IL TYPE k clay wel muck d ioam peat proceet vi	SURFAC color door flow direction _			STREAM width depth velocity cm/s pools% riffles%	BOTTO rock rubble gravel shell sand	M silt clay organic other
SAMPLE TYPE surface water groundwater potable water sediment	effluent sludge leachate waste (other	DEVICE kemmerer trowel bucket auger ekman	ponar other_		SAMPLE color odortemp DO cond_	INFORMA 	ITION pH ORP salinity sample depth tide stage	WEATH ambient beromet relative weather	ER PARAMETERS temp ~ 75° F ric pressure humidity molen te conditions
ANALYSES TO BE	PERFORMED						SAMPLE PREPAR	ATION	
ORGANICS A. halogenated & ar B. volatiles C. trihalomethanes D. pesticides/PCB E. PCB F. base neutral/acid G. pesticides, drinki H. herbicides, drinki H. herbicides, drinki I. other <u>815/</u> J & Then Tob INORGANICS A. metals, priority	extractables ing water ing water <u>A herebic</u> <u>A herebic</u> <u>Collistant</u> ollutant <u>Sulfuce</u> <u>A</u> <u>Sulfuce</u> <u>A</u> <u>B</u> <u>B</u> <u>B</u> <u>B</u> <u>B</u> <u>B</u> <u>B</u> <u>B</u> <u>B</u> <u>B</u>	ilo-j 1-Hydroc Dem D j 2, 4,	OTHER A. total o B. total o D. pH E. alkalin F. hardn G. total o H. total s i. sulfate M. other	ANALYSES cynanide phenol leum hydrod inity tess dissolved ad suspended size size	S carbons olids solids	Ae	CONTAINER glass jar plastic jar acetate core plastic bag plastic bucket other STORAGE wet ice dry ice ambient	NaOH	PRESERVATIVES HNO, Zn Acetate HCI Na,SO, other
E. other COMMENTS: A 22267	TONIT	sbility				0.	1dhad B	110	Lucas Mhal
B 222(7 C 22267 PORM#1 D 22267 E 22267 F 22267	REAL TAL A 8151 TCL Total	tivity Actals, A her P:Met Petrolec	sulta, bicides als; 2, Myda	4-D	; Z,Y.	,5-7 ГТОХ	P ()	V T AX	soryous 1110/0

22256

8 25/2 6 82813 Chain of Custody No.: Sampiers: Dor Busser / ching French REAC Task Leader France liste Date: 6/21 00 Site Name: cher chames EPA WAM: Zownir Time: 1515 Sample Location: 4-6 Luger Work Assignment No.:_ RIA DOISS SITE DESCRIPTION SOIL TYPE TILL) SURFACE WATER STREAM BOTTOM landfill old field upland palustrine color_ rock rock clay width sitt industrial wooded) lowland riverine gravel muck odor depth rubbie clay commercial farmland lacustrine loam flow organic sand velocity cm/s gravel residential direction aulty sitt peat % shell other _ pools hedgerows floodplain color DK. Kel riffes % sand SAMPLE TYPE DEVICE SAMPLE INFORMATION WEATHER PARAMETERS surface water effluent kemmerer ponar color pН ambient temp ~ 95° F other Geopohe groundwater sludge trowel odor ORP barometric pressure potable water leachate bucket salinity temp relative humidity Hrsh sediment waste auger DO sample depth weather conditions other TTL soil ekman cond_ tide stage ANALYSES TO BE PERFORMED SAMPLE PREPARATION ORGANICS OTHER ANALYSES CONTAINER PRESERVATIVES A. halogenated & aromatic volatiles A. total cynanide glass jar) HNO, B. volatiles plastic jar B. total phenol NaOH C. trihalomethanes C. petroleum hydrocarbons acetate core Zn Acetate D. pesticides/PCB plastic bag D. pH HCI E. PCB E. alkalinity plastic bucket Na.SO, F. base neutral/acid extractables F. hardness other other G. pesticides, drinking water G. total dissolved solids H. herbicides, drinking water H. total suspended solids () other Municides STORAGE I. sulfate J. TOC wet ice INORGÁNICS K. grain size dry ice A. metals, priority pollutant L. percent moisture ambient () metais, TAL M. other _ metals scan (ICP) (D. metals, other Sulfue boson Archival somples 622255 ATCLP : Metals ; 2,4-D ; 2,4,5-TP # 22256 e ignitability I 22256 C. corrosivity (). reactivity E. other COMMENTS Strap / CONTAINERS MAYSES 22256 2, 8-02 jac A IGNHALLE 22256 B 1, 4-oz sar REACTIVITY C 22256 1, 4-02 jac TAL METHS plus sultan & becom 8151A Acabia des FORM #1 D 22256 1, 4-02 JAR 222 56 E 1, 4-DE JAL TCLI; metals; 2,8-D; 2,4,5-TP 22256 NAL A RILA ITPH -/ 1/1/m

22253

Chain of Custody No .: 02112 6 0213 Samplers: Dow Bussey / chars French REAC Task Leader: Evancelista Date: 6/21/00 Site Name: Barker EPA WAM: ZOWNIZ Time: 1345_ Sample Location: 6 1-13 - Layer 2 Work Assignment No .: 1214-00/53 SITE DESCRIPTION SOIL TYPE TH SURFACE WATER STREAM BOTTOM landfill old field upland palustrine clay rock color width rock silt (ndustrial) (wooded) lowland riverine gravel muck odor_ depth rubble clay commercial farmland lacustrine sand loam flow velocity cm/s gravel organic residential aully sift peat direction DOOIS % shell other hedgerows floodplain color Black riffies ٩. sand SAMPLE TYPE DEVICE SAMPLE INFORMATION WEATHER PARAMETERS surface water effluent kemmerer ponar color oH ambient temp ~ 45 groundwater sludge trowel other Gespole odor_ ORP. barometric pressure potable water leachate bucket salinity_ temo relative humidity_ sediment waste auger DO sample depth weather conditions soil other 116 ekman cond tide stage ANALYSES TO BE PERFORMED SAMPLE PREPARATION C ORGANICS OTHER ANALYSES CONTAINER PRESERVATIVES A. halogenated & aromatic volatiles A. total cynanide glass jar) HNO, B. volatiles B. total phenol plastic jar NaOH C. trihalomethanes C. petroleum hydrocarbons acetate core Zn Acetate D. pesticides/PCB D. pH plastic bag HCI E. PCB E. alkalinity plastic bucket Na,SO, F. base neutral/acid extractables F. hardness other other G. pesticides, drinking water G. total dissolved solids H. herbicides, drinking water H. total suspended solids. 1) other herbicide 8151 A I. sulfate STORAGE J. TOC wet io INORGANICS K. grain size dry ice A. metals, priority pollutant L. percent moisture ambient ARCHIVAL SMPLES (B) metals, TAL M. other metals scan (ICP Selfer, been Ometais, other ___ 6 22253 22253 QTCLP: metals; 2, V-D; 2, 4, 5-TP T 222 53) ignitability C. corrosivity D reactivity E. other COMMENTS: Sample-ANALYSES Containens A22253 2 B22253 5 Ichitability 2, 8-02 jac FAL REACTIVITY Sulfue & bacon Rec 622253 1, 4-02. jac FORM \$ 22253 TAL METTIG Plus sulfue & becon 1, 8-03 142 E 22253 Fell Herbicides 2,4-2; 2,4,5-TP 1. 4003 JAC Ac F 22253 1, Y-UZJAR TCLP: Metals; 2,4-2; 2,4,5- TP 1, 4-02 jac F 22253 Added TRAJAS LATPH 7/12/01

REAC, EDISON, NJ (908) 321-4200 EPA CONTRACT 68-C4-0022

Date: <u>6/72/1000</u> Samplers: <u>Don</u> Buss Site Name: <u>PAAKO</u> Time: <u>A.M.</u> Sample Location: <u>PROCE</u>	lig DAN E	Eidlick REJ EPJ CAMÉN WO	ain of Custody No AC Task Leader: A WAM: rk Assignment No.:	2816, 2811 WANGE COLUDIO 0-0	& 02813 Witz- V 53
SITE DESCRIPTION landfill old field upland palustrine wooded lowland riverine commercial farmland lacustrine residential gully hedgerows floodplain	SOIL TYPE S rock clay c gravel muck o sand loam fit sitt peat d color //9// YET	SURFACE WATER bolor dor low birection wish greag	STREAM width_ depth velocity cm/s pools% riffles %	BOTTOM rock rubble gravel sheli sand	silt clay organic other
SAMPLE TYPE DEVIC surface water effluent kernme groundwater sludge trowe potable water leachate bucket sediment waste auger other ekman	E erer ponar other_	SAMPLE INF color odor temp DO cond_	ORMATION pH ORP salinity sample depth tide stage	WEATHE ambient (barometri relative h weather (R PARAMETERS
ANALYSES TO BE PERFORMED ORGANICS A. halogenated & aromatic volatiles P volatiles C. trihalomethanes D pesticides/PCB E. PCB D base neutral/acid extractables G. pesticides, drinking water H. herbicides, drink	OTHER A A. total cyr B. total ph C. petroler D. pH E. alkalinif F. hardner G. total di H. total su I. sulfate J. TOC K. grain s L. percen M. other	NALYSES nanide lenol um hydrocarbons ty ss ssolved solids uspended solids ize t moisture	SAMPLE PREPA CONTAINER plastic jar acetate core plastic bag plastic bucket other STORAGE wet ice dry ice ambient	NaOH	PRESERVATIVE HNO, Zn Acetate HCI Na,SO, other
BCRA B TCLP Metrols, Degraics B ignitability C corrosivitypH D reactivity E. other COMMENTS: A 27245 To with bull	- Note : f	fill acganics	for VCLV; At I	echivn 222	<u> Lample</u> 265
B22265 REACTIVITY C22265 TAL METRY 22265 8151 A her = 22265 BNAS MAS	T s sulfue, l bicides etmls; All o L PCB/Pestro	1,4 brean 1,4 1,4 organics ider 2,	-02 jAR -02 JAR -02 JAR 1, 4-02 jA 402 jAR	e	

4 22265 Volatile Organics

22265

Appendix C

PRELIMINARY ANALYTICAL DATA

LOCKHEED

DATE: 7/11/2000

TO: R.Singhvi, ERTC/EPA

FROM: Deborah Killeen, Data Validation and Report Writing Group Leader Mah

SUBJECT: Preliminary Results of Project Barker Chemical WA# 0153

Attached please find the preliminary results of the above referenced project for the following samples.

Chain of Custody No.

Analyses

03366

1 soil sample for TPH.

cc: Archives Subcontracting Deborah Killeen WAM: A. Zownir Task Leader: R. Evangelista

TOTAL PETROLEUM HYDROCARBONS IN SOIL ANALYSIS

SUMMARY REPORT

ITEM	SAMPLE	COMPUCHEM	RESULT	REPORTING LIMIT
NO.	IDENTIFIER	NUMBER	(mg/Kg)	(mg/Kg)
1.	F22267	T1398- 1	87800	1076

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

BRL = BELOW REPORTING LIMIT

Reviewed by/ID#: <u>former Mult</u> 12439 Date: 7/7/00

REAC #	Sample No. 22267	Sal Sampling Hor (2-4	mpie id Location Tark	entifica Matrix 3	Date Collected	# of Bo	ottles	Container/Pres	ervative						T	
REAC # 207 #	Sample No. 222.67	Sampling Herri2at	Location Tank	Matinx	6/22/11	/								A CONTRACTOR OF A CONTRACTOR O		
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is- ∪rum L- Drum	m Liquids 💦	swi- Sur	fape Water	0 -	Dil			·	nºn	ļ						
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Items/Reaso	on Reling	uished By	Date	Kec							\neg					
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Lockheed Martin Technology Services Group Environmental Services REAC 2890 Woodbridge Avenue, Building 209 Annex Edison, NJ 08837-3679 Telephone 732-321-4200 Facsimile 732-494-4021

LOCKHEED

- -

DATE:	7/19/ 2000

TO: R.Singhvi, ERTC/EPA

FROM: Deborah Killeen, Data Validation and Report Writing Group Leader

Preliminary Results of Project Barker Chemical WA# 0153 SUBJECT:

Attached please find the preliminary results of the above referenced project for the following samples.

Chain of Custody No.	Analyses
02812	1 soil sample for TPH.
02814	1 soil sample for TPH.

cc: Archives Subcontracting Deborah Killeen WAM: A. Zownir Task Leader: R. Evangelista

TOTAL PETROLEUM HYDROCARBONS ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	RESULT (mg/kg)	REPORTING LIMIT (mg/kg)
1.	22253	V1398-1	131	2.5
2.	22261	V1398-2	86.5	2.5

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

BRL = BELOW REPORTING LIMIT

12405 Date: 7/18/00 eera Reviewed by/ID#:_

TOTAL PETROLEUM HYDROCARBONS ANALYSIS QUALITY CONTROL REPORT

CASE: Q1398 MATRIX: SOIL		Analyst Date An	:2441 nalyzed:07/17/00
BLANK SPIKE COMPUCHEM #	TRUE VALUE (mg/kg)	OBSERVED RESULT (mg/kg)	BS % RECOVERY
WG4133-2	3213.37	3607.97	112

ORIG. SAMP MATRIX SPI MATRIX SPI	LE COMPUC KE (MS) COM KE DUP. (MS	HEM #: V13 IPUCHEM # D) COMPU	98-1 4: WG4133-3 CHEM #: WG413	33-4		
SPIKE ADDED	SAMPLE CONC.	MS CONC. (mg/kg)	MS % RECOVERY	MSD CONC. (mg/kg)	MSD % RECOVERY	RPD
3213.4	131.0	3117.6	97.0	3271.9	101.8	4.8

COMPUCHEM #	QC TYPE	AMOUNT DETECTED (mg/kg)	
WG4133-1	METHOD BLANK	BRL	

RPD = RELATIVE PERCENT DIFFERENCE BRL = BELOW REPORTING LIMIT

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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REAC, Edison, NJ (908) 321-4200 EPA Contract 68-C4-0022

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Project Name: Dealer Chemin Project Number:_ 0-06 1 Phone: 732 321 4248 RFW Contact: The Tole case

02812 No:

SHEET NO. LOF 2

Analyses Requested

	Sample Identification						Allalyses itequeense			
DEACH	Sample No.	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	T. 1. A. 1 ()	1%		
REAC	122221	Citte / Agrent	Sed	6720 2000	2	8-02 jan 400	LENTIOI			
	1222.51	LOUIN MAN	1	,	1	4-00 jac 1	RCACTIVI	TY OLD		
	K.22251		┟╌┟──	F	1		TAL Met	s surve	BOLOM	
	D 222 5/	l	┼╌┼──		1		8151 A h	echicides		
	E22251		┼╌╁╌╌╴	<u>↓ </u>	+-;	V	TCLP: MG	Tals: 2.4-D	2,4,5-	TP
	F27251	•		11- 1-		8-02 inc. 1106	Tourtabi	(ty		
	4 333 93	North Gracon	De -	0/30/1000	<u> </u>	Verside 1	Reactivit	गुर		
	622252		┼╌┼╌	<u>↓</u> /	+-{	1-04 1000	The work	In sulfue	BORON	
	022252			↓ <i>↓</i>	+	+	BUAL	appinider		
	87.2252				ļ/	+- <u>/</u>	TCIDE	atel 2 K-D	: 2.4.5	TP
	6 222.52			<u>v</u>	1/		TCLP M	Cliff of Lyr		1
	A 332 EL	UIP-6 LAYAR	15	6/21/2000	2	Joy Mi Earl	LOVIANI			
ļ			TT		1	408 jac	Reactivit	T EulCan	2 4 4 4	
 	<u>G 66620</u>		++				TALMOT	6 Juinae	Deron	
	P LLL		┼╍╂╼╍		1		8151A h	expicites		
	5 222 ST		+	1	1	VV	TCLP:	inetals; 2	<u>Y-P</u>	2,4,5-71
	F 22256	<u> </u>	1-2-	1/12/2010	+	Leating 4ºC	IGN ITAL	ILITY		
	1223	WP-13 LAYER	<u>ia o</u>	6/2//1000	1-5	9-18-160 1	REACTIV			
	C 27253		┥┥	_ 			TAI MET	1 Pettere	Bolon	
	D 22253					╶╂╌╌╂╌╍╌╌┼╴	\$151A A	expicides		
	E 27753						-C. 0	Acholas 204	-1 : 2.4	S-TP
	F 2275		V		alal Instructions:					
Matrix:			.	Soil			F			
SD -	Sediment	GW - Potable Water	w-	Water			FOR	SUBCONTR	ACTING L	ISE ONLY
DS - DL -	Drum Liquids	SW - Surface Wate	r 0-	Oil						
x -	Other	SL - Sludge	Jed	Sedimen	4		FRO	M CHAIN OF		

r	m. II	Date	Received By	Date	Time	Items/Reason	Relinquished By	Date	Received By	Date	Time
items/Reason	Relinquisned by		VIA VYOAA	Linn	4.20				•		
All / HNAMSE	Column light	~/=~/e	1 JULIAN TO DEFINE	000							
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L											

FORM #4

,	CHAIN OF CUSTODY RECORD		0
REAC, Edison, NJ (908) 321-4200	Project Name: <u>Photos Chemical</u>	No:	02814
EPA Contract 68-C4-0022	RFW Contact: John Jehnson Phone: 732-321-4248	SHEET	NOZOFZ

Analyses Requested

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		Sample id				Analy					
		Guittpie	Madely	Date Collected	# of Bottles	Container/Preservative					
REAC #	Sample No.	Sampling Location	S.	1/21/2000	2	8-02 4.6	IGN.	ITA BIL	1TY		<u> </u>
	122261	WP1-WARENIS		MIHIMU -	17	4-02 4	Re	ACTIVI	N		↓
	622261		┟╌┠──┥	├	1		TAL	MOTA	Surfue	DOEDN	↓ <u> </u>
	P22261		┠╌┠───	}	+		8/5	iA h	abicides_		
	E 2224				+ 1	VV	TZI	LPSA	otals: 2,5	<u>t-D; Z</u>	4.5-TP
	F 22261	V								<u> </u>	
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Matrix:				Spe	cial Instructions:			r			
SD -	Sediment	PW - Potable Water	r 5- W-	Son Water			,	FOR	SUBCONT	RACTING	JSE ONLY
DS -	Drum Solids Drum Liquids	SW - Surface Wate	r 0-	Oil		CARE	Goler				
X -	Other	SL - Sludge	A -	Air		July 1	1.1	FRO	M CHAIN O	۲	
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	Data	Received By	Date	Time	Items/Reason	Relinquished By	Date	Received By	Date	Time
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Lockheed Martin Technology Services Group Environmental Services REAC 2890 Woodbridge Avenue, Building 209 Annex Edison, NJ 08837-3679 Telephone 732-321-4200 Facsimile 732-494-4021

LOCKHEED

DATE: 7<u>/19/2000</u>

TO: R.Singhvi, ERTC/EPA

FROM: Deborah Killeen, Data Validation and Report Writing Group Leader

SUBJECT: Preliminary Results of Project Barker Chemical WA# 0153

Attached please find the preliminary results of the above referenced project for the following samples.

Chain of Custody No.

Analyses

02816

1 soil sample for TCLP VOA, TCLP Pesticides, and TCLP Semivolatiles.

. .

cc: Archives Subcontracting Deborah Killeen WAM: A. Zownir Task Leader: R. Evangelista

CLIENT SAMPLE NO.

FORM 1 VOLATILE ORGANICS ANALYSIS DATA SHEET

PROCESS BLDG

Lab Name COMPLICHEM	(Contract:			İ
	No :	SAS No.:	SDG No.: U	1398	
Lab Code: LIBRIT Case		Lab Sa	mple ID: U1398	-1	
Matrix: (soil/water) WAT	ER	2000 000		1750	
Sample wt/vol: 5	(g/ml) ML	Lab Fi	le ID: 01398	- IASS	
Level. (low/med) LOW		Date R	eceived: 07/07	/00	
Level. (10%) med,		Date A	nalyzed: 07/15	5/00	
* Moisture: not dec		D:1.1+i	on Factor: 5.0)	
GC Column: EQUITY624 ID:	0.53 (mm)	DITULI	On Factor, or		(
Soil Extract Volume:	(uL)	Soil A	liquot Volume:		(u.
CAS NO.	COMPOUND	CONCENTRATIC (ug/L or ug/	N UNITS: 'Kg) UG/L	Q	
75 - 01 - 4	/inyl Chloride .1-Dichloroet 2-butanone Chloroform Carbon Tetrach 3enzene 1,2-Dichloroet Frichloroether Fetrachloroet Chlorobenzene	hene	50 50 50 50 50 50 50 50 50	U U U U U U U U U U U	

INC GC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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FORM I VOA

CLIENT SAMPLE NO.

VOLATILE	ORGANICS	ANALYSIS	DATA	SHEET

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VBLKSY

.b Name: COMPUCHEM	(Contract:			1
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG NO.: U	17390	
Matrix: (soil/water)	WATER	Lab San	mple ID: WG405	52-2	
Sample wt/vol:	5 (g/ml) ML	Lab Fil	le ID: WG405	52-2B59	
Level: (low/med)	LOW	Date Re	eceived:		
Moisture: not dec.		Date A	nalyzed: 07/14	4/00	
a Morseure. Not deer	 TD: 0.53 (mm)	Dilutio	on Factor: 1.	0	
GC COLUMN: EQUIIO24	(uL)	Soil A	liquot Volume	:	(uL
CAS NO. 75-01-4 75-35-4 78-93-3 67-66-3 56-23-5 71-43-2 107-06-2 79-01-6 127-18-4	COMPOUND Vinyl Chloride 1,1-Dichloroet 2-butanone Chloroform Carbon Tetrach Benzene 1,2-Dichloroet Trichloroether Trichloroether	CONCENTRATIO (ug/L or ug/	N UNITS: Kg) UG/L 10 10 10 10 10 10 10 10 10 10 10 10		
108-90-/				_	

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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CLIENT	SAMPLE	NO	•
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FORM 1							
VOLATILE	ORGANICS	ANALYSIS	DATA	SHEET			

ZHEBLK

Lab Name: COMPUCHEM	Contract:				
Lab Code: LIBRTY Case No	SAS No.:	SDG	No.: U.	1398	
Matrix: (soil/water) WATER	La	ab Sample ID:	WG4020	5-1	
Sample wt/vol: 5	(g/ml) ML La	ab File ID:	WG402	6-1A59	
Level: (low/med) LOW	D	ate Received:			
* Moisture: not dec.	D	ate Analyzed:	07/15	/00	
GC Column: EQUITY624 ID: 0.	 .53 (mm) D	ilution Facto	or: 5.0		
Soil Extract Volume:	_(uL) S	oil Aliquot V	/olume:		(uI
CAS NO. COME	CONCENT COUND (ug/L o	RATION UNITS or ug/Kg) UG/1	: [j	Q1	
75-01-4Viny 75-35-4Viny 78-93-32-bu 67-66-3Chlo 56-23-5Carl 71-43-2Bens 107-06-21,2 79-01-6Tric 127-18-4Tets 108-90-7Chlo	/l Chloride -Dichloroethene itanone proform pon Tetrachloride zene -Dichloroethane chloroethene rachloroethene orobenzene		50 50 50 50 50 50 50 50	U U U U U U U U U U U U	

CO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Contract: b Name: COMPUCHEM SAS No.: Lab Code: LIBRTY Case No.:

SDG No.: U1398

Matrix Spike - Sample No.: PROCESS BLDG

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC # ======	QC. LIMITS REC. ======
<pre>vinyl Chloride 1,1-Dichloroethene 2-butanone Chloroform Carbon Tetrachloride Benzene 1,2-Dichloroethane Trichloroethene Tetrachloroethene Chlorobenzene</pre>	500.0 500.0 500.0 500.0 500.0 500.0 500.0 500.0 500.0 500.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	229.3 456.9 531.2 527.4 532.7 552.6 524.9 550.5 537.4 514.6	46 91 106 105 106 110 105 110 107 103	1-251 1-234 1-200 51-138 70-140 37-151 49-155 71-157 64-148 37-160

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD # ======	QC L RPD ======	MITS REC.
Vinyl Chloride 1,1-Dichloroethene 2-butanone Chloroform Carbon Tetrachloride Benzene 1,2-Dichloroethane Trichloroethene Tetrachloroethene Chlorobenzene	500.0 500.0 500.0 500.0 500.0 500.0 500.0 500.0 500.0 500.0 500.0	213.4 425.5 464.6 497.8 494.0 520.0 481.1 514.5 514.2 493.6	43 85 93 100 99 104 96 103 103 99	7 7 13 6 8 6 9 7 4 4 4	20 20 20 20 20 20 20 20 20 20 20	1-251 1-234 1-200 51-138 70-140 37-151 49-155 71-157 64-148 37-160

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 10 outside limits Spike Recovery: 0 out of 20 outside limits

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED

COMMENTS:

----- AND THE DATA SHOULD BE USED

WITH DISCRETION

FORM III VOA

20

CLIENT SAMPLE NO.

530

550

520 550

540

510

VOLATILE ORGANICS ANALYSIS DATA SHEET PROCESS BLDGMS Contract: Lab Name: COMPUCHEM SDG No.: U1398 SAS No.: Case No.: Lab Code: LIBRTY Lab Sample ID: WG4052-6 Matrix: (soil/water) WATER Lab File ID: WG4052-6A59 (q/ml) ML 5 Sample wt/vol: Date Received: 07/07/00 Level: (low/med) LOW Date Analyzed: 07/15/00 % Moisture: not dec. Dilution Factor: 5.0 GC Column: EQUITY624 ID: 0.53 (mm)Soil Aliquot Volume: _____(uI Soil Extract Volume:_____(uL) CONCENTRATION UNITS: Q (ug/L or ug/Kg) UG/L COMPOUND CAS NO. 230 75-01-4-----Vinyl Chloride 460 75-35-4-----1,1-Dichloroethene 530 78-93-3-----2-butanone 530

FORM 1

67-66-3-----Chloroform

71-43-2----Benzene

56-23-5-----Carbon Tetrachloride

107-06-2-----1,2-Dichloroethane

127-18-4-----Tetrachloroethene

79-01-6-----Trichloroethene

108-90-7-----Chlorobenzene

NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM 1 VOLATILE ORGANICS ANALYSI	S DATA SHEET	
D Name: COMPUCHEM	Contract:	
Lab Code: LIBRTY Case No.:	SAS No.: SDG NO.: 01398	
Mater) WATER	Lab Sample ID: WG4052-7	
Matrix: (SOII) water, (α/m) ML	Lab File ID: WG4052-7A59	
Sample wt/vol: 5 (g/mg/ 12	Date Received: 07/07/00	
Level: (low/med) LOW	Date needs 07/15/00	
<pre>% Moisture: not dec</pre>	Date Analyzed: 07/15/00	
CC Column: EOUITY624 ID: 0.53 (mm)	Dilution Factor: 5.0	
Soil Extract Volume:(uL)	Soil Aliquot Volume:(u	ıĿ
CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q	
75-01-4Vinyl Chloride 75-35-41,1-Dichloroe 78-93-32-butanone 67-66-3Chloroform 56-23-5Carbon Tetrac 71-43-2Benzene 107-06-21,2-Dichloroe 79-01-6Trichloroethe 127-18-4Tetrachloroet 108-90-7Chlorobenzene	e 210 thene 430 460	

RO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I VOA

14 .

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WATER VOLATILE LAB CONTROL SAMPLE

VSYLCS

Contract: Lab Name: COMPUCHEM SAS No.: Lab Code: LIBRTY Case No.:

SDG No.: U1398

COMPOUND ====================================	SPIKE ADDED (ug/L) ====== 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00	LCS CONCENTRATION (ug/L) ====================================	LCS % REC # ===== 74 89 117 102 103 105 101 105 140 101	QC. LIMITS REC. ===== 1-251 1-234 1-200 51-138 70-140 37-151 49-155 71-157 64-148 37-160
--	--	--	--	---

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM III VOA-1

CLIENT SAMPLE NO. FORM 1 VOLATILE ORGANICS ANALYSIS DATA SHEET VSYLCS Contract: ib Name: COMPUCHEM SDG No.: U1398 SAS No.: Case No.: Lab Code: LIBRTY Lab Sample ID: WG4052-4 Matrix: (soil/water) WATER Lab File ID: WG4052-4B59ZHE 5 (g/ml) ML Sample wt/vol: Date Received: Level: (low/med) LOW Date Analyzed: 07/14/00 % Moisture: not dec. _____ Dilution Factor: 1.0 GC Column: EQUITY624 ID: 0.53 (mm) Soil Aliquot Volume: _____(uL Soil Extract Volume:_____(uL) CONCENTRATION UNITS: 0 (ug/L or ug/Kg) UG/L COMPOUND CAS NO. 37 75-01-4-----Vinyl Chloride 45 75-35-4-----1,1-Dichloroethene_ 59 78-93-3----**2-butanone** 51 67-66-3-----Chloroform 51 56-23-5-----Carbon Tetrachloride_ 53 71-43-2-----Benzene 51 107-06-2-----1,2-Dichloroethane_ 52 79-01-6-----Trichloroethene 70

127-18-4-----Tetrachloroethene

108-90-7-----Chlorobenzene

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I VOA

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51

CLIENT SAMPLE NO

FORM 4 VOLATILE METHOD BLANK SUMMARY

VBLKSY

-1

Lab Name: COMPUCHEM

Lab Code: LIBRTY Case No.:

Lab File ID: WG4052-2B59

Date Analyzed: 07/14/00

GC Column: EQUITY624 ID: 0.53 (mm)

Instrument ID: 5972HP59

Contract:

SAS No.:

SDG No.: U1398

Lab Sample ID: WG4052-2

Time Analyzed: 2301

Heated Purge: (Y/N) N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

				TAP	TIME	
		LAB	T D		ANALYZED	
	SAMPLE NO.	SAMPLE	TD		================	
	=================			WC4052 - 4B59Z	2346	
01	VSYLCS	WG4052-4		111398-1259	0059	
02	PROCESS BLDG	U1398-1		WG4052 - 6A59	0131	
03	PROCESS BLDG	WG4052-0		WG4052 - 7A59	0203	
04	PROCESS BLDG	WG4052-7		WG4026-1A59	0235	
05	ZHEBLK	WG4020-1				
06						
07		<u></u>				
08						
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18					-	
19					-	
20		·	<u> </u>		-	
21				-	-	
22				-		
23		-				
27		-				
26						
20						
28					_	
29					_	
30						
		EV I	D QC EV	ALUATION HAS BEE	N PERFURMED.	
COMMENTS:			DATA	VALIDITY IS UNSUB	STANTIATED	
			6.81	THE DATA SHOULD	BE USED	
			11186	WITH DICODETIN	ON	
With Disoletion						

page 1 of 1

FORM IV VOA

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

87-68-3-----Hexachlorobutadiene 88-06-2-----2,4,6-Trichlorophenol_ 95-95-4-----2,4,5-Trichlorophenol_

121-14-2-----2,4-Dinitrotoluene_

118-74-1-----Hexachlorobenzene

87-86-5-----Pentachlorophenol

CLIENT SAMPLE NO.

50 U

50 U

50 U 50 U

50 U

100

U

8

1

		PROCESS BLDG
Lab Name: COMPUCHEM	Contract	:
Lab Code: LIBRTY	Case No.: SAS No.	: SDG No.: U1398
Matrix: (soil/water)	WATER	Lab Sample ID: U1398-1
Sample wt/vol:	100 (g/mL) ML	Lab File ID: U1398-1A68
Level: (low/med)	LOW	Date Received: 07/07/00
% Moisture:	decanted: (Y/N)	Date Extracted:07/10/00
Concentrated Extract	Volume: 500(uL)	Date Analyzed: 07/11/00
Injection Volume:	1.0(uL)	Dilution Factor: 1.0
GPC Cleanup: (Y/N)	N pH:	
CAS NO.	CONCE COMPOUND (ug/L	NTRATION UNITS: or ug/Kg) UG/L Q
110 - 86 - 1	Pyridine 1,4-Dichlorobenzene 2-Methylphenol 3-Methylphenol 4-Methylphenol Hexachloroethane Nitrobenzene	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I SV

CLIENT SAMPLE NO.

10 U

10 U

10 U

10 U

10 U

20 U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

87-68-3-----Hexachlorobutadiene

121-14-2----2,4-Dinitrotoluene

118-74-1-----Hexachlorobenzene

87-86-5-----Pentachlorophenol

88-06-2-----2,4,6-Trichlorophenol

95-95-4-----2,4,5-Trichlorophenol

SBLKJV Contract: Lab Name: COMPUCHEM SDG No.: U1398 SAS No.: Case No.: Lab Code: LIBRTY Lab Sample ID: WG3938-1 Matrix: (soil/water) WATER WG3938-1A68 Lab File ID: 500 (q/mL) ML Sample wt/vol: Date Received: (low/med) LOW Level: Date Extracted:07/10/00 decanted: (Y/N) % Moisture: Date Analyzed: 07/11/00 500(uL) Concentrated Extract Volume: Dilution Factor: 1.0 1.0(uL) Injection Volume: GPC Cleanup: (Y/N) N pH: CONCENTRATION UNITS: 0 (uq/L or ug/Kg) UG/LCAS NO. COMPOUND 10 U 110-86-1----Pyridine 10 U 106-46-7-----1, 4-Dichlorobenzene 10 U 95-48-7----2-Methylphenol 10 U 108-39-4-----3-Methylphenol 10|U 106-44-5----4-Methylphenol 10 U 67-72-1-----Hexachloroethane 98-95-3-----Nitrobenzene 10 U

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I SV

CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLKKP Contract: Lab Name: COMPUCHEM SDG No.: U1398 Lab Code: LIBRTY Case No.: SAS No.: Lab Sample ID: WG3985-1 Matrix: (soil/water) WATER Lab File ID: WG3985-1A68 Sample wt/vol: 500 (g/mL) ML Date Received: Level: (low/med) LOW Date Extracted:07/11/00 % Moisture: decanted: (Y/N) Date Analyzed: 07/12/00 Concentrated Extract Volume: 500(uL) Dilution Factor: 1.0 Injection Volume: 1.0(uL) GPC Cleanup: (Y/N) N pH: CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q COMPOUND CAS NO. - 1

110-86-1Pyridine 106-46-71,4-Dichlorobenzene 95-48-72-Methylphenol 108-39-43-Methylphenol 106-44-54-Methylphenol 67-72-1Hexachloroethane 98-95-3Nitrobenzene 87-68-3Hexachlorobutadiene 98-95-4	10 10 10 10 10 10 10 10 10 10 10 20	ם מממממ מממ מ מ מ מ מ מ מ מ מ מ מ מ מ מ

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I SV

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CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TCLPBLKIV Contract: Lab Name: COMPUCHEM SDG No.: U1398 Lab Code: LIBRTY Case No.: SAS No.: Lab Sample ID: WG3866-1 Matrix: (soil/water) WATER Lab File ID: WG3866-1RA68 Sample wt/vol: 250 (g/mL) ML Date Received: Level: (low/med) LOW Date Extracted:07/11/00 % Moisture: decanted: (Y/N) Date Analyzed: 07/12/00 Concentrated Extract Volume: 500(uL) Dilution Factor: 1.0 Injection Volume: 1.0(uL) GPC Cleanup: (Y/N) N pH: ____ CONCENTRATION UNITS: Q (ug/L or ug/Kg) UG/L COMPOUND CAS NO.

110-86-1Pvridine	20	U
106-46-71.4-Dichlorobenzene	20	U
95-48-7+2-Methylphenol	20	U
108-39-43-Methylphenol	20	U
106-44-54-Methylphenol	20	U
67-72-1Hexachloroethane	20	U
98-95-3Nitrobenzene	20	U
87-68-3Hexachlorobutadiene	20	U
88-06-22.4.6-Trichlorophenol	20	ប
95-95-42.4.5-Trichlorophenol	20	U
121-14-22.4-Dinitrotoluene	20	U
118-74-1Hexachlorobenzene	20	U
87-86-5Pentachlorophenol	40	U

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I SV

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM

Contract:

Lab Code: LIBRTY Case No.: SAS No.:

SDG No.: U1398

Matrix Spike - Sample No.: PROCESS BLDG

COMPOUND	SPIKE	SAMPLE	MS	MS	QC.
	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	(ug/L)	(ug/L)	(ug/L)	REC #	REC.
<pre>Pyridine 1,4-Dichlorobenzene 2-Methylphenol 3-Methylphenol Hexachloroethane Nitrobenzene Hexachlorobutadiene 2,4,6-Trichlorophenol 2,4-Dinitrotoluene Hexachlorobenzene Pentachlorophenol</pre>	250 250 250 500 250 250 250 250 250 250	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	180 170 230 460 460 170 160 170 210 220 200 200 230	72 68 92 92 68 64 68 84 88 80 80 92	$ \begin{array}{r} 1-200\\ 20-124\\ 1-200\\ 1-200\\ 40-113\\ 35-180\\ 24-116\\ 37-144\\ 37-144\\ 39-139\\ 1-152\\ 14-176\\ \end{array} $

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LI RPD	MITS REC.
Pyridine 1,4-Dichlorobenzene 2-Methylphenol 3-Methylphenol 4-Methylphenol Hexachloroethane Nitrobenzene Hexachlorobutadiene 2,4,6-Trichlorophenol 2,4-Dinitrotoluene Hexachlorobenzene Pentachlorophenol	250 250 250 500 250 250 250 250 250 250	210 170 240 460 180 180 200 220 230 210 200 230	84 68 96 92 92 72 72 72 80 88 92 84 80 92	15 0 4 0 6 12 16 5 4 5 0 0	$ \begin{array}{c} 40 \\ 40 \\ 40 \\ 40 \\ 40 \\ 40 \\ 40 \\ 40 \\$	$\begin{array}{c} 1-200\\ 20-124\\ 1-200\\ 1-200\\ 1-200\\ 40-113\\ 35-180\\ 24-116\\ 37-144\\ 37-144\\ 39-139\\ 1-152\\ 14-176\\ \end{array}$

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

COMMENTS:

FORM III SV

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	FORM 1	7070 DATA	CI	LIENT SAMPLE NO.
SEMIVOLATIL	E ORGANICS ANAL	SIS DAIA	SALLI	PROCESS BLDGMS
Lab Name: COMPUCHEM		Contract	:	
Lab Code: LIBRTY (Case No.:	SAS No.	: SDG	No.: U1398
Matrix: (soil/water)	WATER		Lab Sample ID	: WG3985-5
Sample wt/vol:	100 (g/mL) ML		Lab File ID:	WG3985-5RA68
Level: (low/med)	LOW		Date Received	: 07/07/00
% Moisture:	decanted: (Y/N)		Date Extracte	d:07/11/00
Concentrated Extract	Volume: 500	(uL)	Date Analyzed	1: 07/12/00
Injection Volume:	1.0(uL)		Dilution Fact	or: 1.0
GPC Cleanup: (Y/N)	N pH:	-		
CAS NO.	COMPOUND	CONCE (ug/L	NTRATION UNITS or ug/Kg) UG/	З: /L Q
110-86-1 106-46-7 95-48-7 108-39-4 106-44-5 67-72-1	Pyridine 1,4-Dichlorob 2-Methylpheno 3-Methylpheno 4-Methylpheno Hexachloroeth	enzene 1 1 b1 ane		180 170 230 460 460 170

98-95-3-----Nitrobenzene

87-68-3-----Hexachlorobutadiene

121-14-2-----2,4-Dinitrotoluene_

118-74-1-----Hexachlorobenzene 87-86-5-----Pentachlorophenol

88-06-2-----2,4,6-Trichlorophenol 95-95-4-----2,4,5-Trichlorophenol

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I SV

9

160

170

210

220 200

200

230

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

108-39-4-----3-Methylphenol

106-44-5-----4-Methylphenol

98-95-3-----Nitrobenzene

67-72-1-----Hexachloroethane

87-68-3-----Hexachlorobutadiene

121-14-2----2, 4-Dinitrotoluene

118-74-1-----Hexachlorobenzene

87-86-5-----Pentachlorophenol

88-06-2-----2,4,6-Trichlorophenol

95-95-4-----2,4,5-Trichlorophenol

CLIENT SAMPLE NO.

460

180

180

200

220

230

210

200

230

			PROCESS BLDGMSL
Lab Name: COMPUCHEM		Contract:	
Lab Code: LIBRTY	Case No.:	SAS No.: SI	DG No.: U1398
Matrix: (soil/water)	WATER	Lab Sample	ID: WG3985-6
Sample wt/vol:	100 (g/mL) ML	Lab File ID	: WG3985-6RA68
Level: (low/med)	LOW	Date Receiv	ed: 07/07/00
% Moisture:	decanted: (Y/N)_	Date Extrac	ted:07/11/00
Concentrated Extract	Volume: 500(uL) Date Analyz	ed: 07/12/00
Injection Volume:	1.0(uL)	Dilution Fa	ctor: 1.0
GPC Cleanup: (Y/N)	N pH:	-	
CAS NO.	COMPOUND	CONCENTRATION UNI (ug/L or ug/Kg) U	TS: IG/L Q
110-86-1 106-46-7 95-48-7	Pyridine 1,4-Dichlorobe 2-Methylphenol	enzene	210 170 240

NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I SV

10
3C

WATER SEMIVOLATILE LAB CONTROL SAMPLE

SJVLCS

Lab Name: COMPUCHEM

Lab Code: LIBRTY

Contract:

SAS No.:

SDG No.: U1398

LCS QC. LCS SPIKE LIMITS 8 CONCENTRATION ADDED REC # REC. (ug/L) (uq/L)COMPOUND ====== ===== _____ ====== ______ 38 1-200 19 50 Pyridine 20-124 48 24 50 1,4-Dichlorobenzene 64 1-200 32 50 2-Methylphenol 1-200 65 65 100 3-Methylphenol 65 1-200 65 100 4-Methylphenol 50 40-113 25 Hexachloroethane 50 56 35-180 28 Nitrobenzene 50 52 24-116 26 50 Hexachlorobutadiene 37-144 52 26 2,4,6-Trichlorophenol 50 60 37-144 30 50 2,4,5-Trichlorophenol 39-139 31 62 50 2,4-Dinitrotoluene 1-152 32 64 50 Hexachlorobenzene 14-176 38 19 Pentachlorophenol 50

Case No.:

DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

COMMENTS:

FORM III SV-1

17.

FORM 1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

95-95-4-----2,4,5-Trichlorophenol

121-14-2----2,4-Dinitrotoluene

118-74-1-----Hexachlorobenzene

87-86-5-----Pentachlorophenol

CLIENT SAMPLE NO.

26 30

31

32

โป 19

			SJVLCS
Lab Name: COMPUCHEM		Contract:	
Lab Code: LIBRTY	Case No.:	SAS No.: SD	G No.: U1398
Matrix: (soil/water)	WATER	Lab Sample I	D: WG3938-2
Sample wt/vol:	500 (g/mL) ML	Lab File ID:	WG3938-2A68
Level: (low/med)	LOW	Date Receive	ed :
% Moisture:	decanted: (Y/N)	Date Extract	ed:07/10/00
Concentrated Extract	Volume: 500	(uL) Date Analyze	ed: 07/11/00
Injection Volume:	1.0(uL)	Dilution Fac	ctor: 1.0
GPC Cleanup: (Y/N)	N pH:	_	
CAS NO.	COMPOUND	CONCENTRATION UNIT (ug/L or ug/Kg) UC	rs: G/L Q
110 - 86 - 1	Pyridine 1,4-Dichlorob 2-Methylpheno 3-Methylpheno 4-Methylpheno Hexachloroeth Nitrobenzene Hexachlorobut 2,4,6-Trichlo	enzene 1 1 ane adiene ropheno	19 24 32 65 65 25 28 26 26 26

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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FORM I SV

11

3C

WATER SEMIVOLATILE LAB CONTROL SAMPLE

SKPLCS

Lab Name: COMPUCHEM

Contract:

SDG No.: U1398

Lab Code: LIBRTY Case No.:

SAS No.:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Pyridine 1,4-Dichlorobenzene 2-Methylphenol 3-Methylphenol 4-Methylphenol Hexachloroethane Nitrobenzene Hexachlorobutadiene 2,4,6-Trichlorophenol 2,4-Dinitrotoluene Hexachlorobenzene Pentachlorophenol	50 50 100 100 50 50 50 50 50 50 50	30 31 37 75 75 32 29 30 35 37 30 34 33	60 62 74 75 75 64 58 60 70 74 60 68 66	$\begin{array}{c} 1-200\\ 20-124\\ 1-200\\ 1-200\\ 40-113\\ 35-180\\ 24-116\\ 37-144\\ 37-144\\ 39-139\\ 1-152\\ 14-176\end{array}$
			I	I

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

FORM III SV-1

18

FORM 1 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

98-95-3-----Nitrobenzene

87-68-3-----Hexachlorobutadiene

118-74-1-----Hexachlorobenzene

87-86-5-----Pentachlorophenol

88-06-2-----2,4,6-Trichlorophenol_ 95-95-4-----2,4,5-Trichlorophenol_ 121-14-2----2,4-Dinitrotoluene____ CLIENT SAMPLE NO.

29

30

33

17

	SKPLCS
Lab Name: COMPUCHEM Cor	ntract:
Lab Code: LIBRTY Case No.: SA	AS NO.: SDG NO.: U1398
Matrix: (soil/water) WATER	Lab Sample ID: WG3985-2
Sample wt/vol: 500 (g/mL) ML	Lab File ID: WG3985-2A68
Level: (low/med) LOW	Date Received:
<pre>% Moisture: decanted: (Y/N)</pre>	Date Extracted:07/11/00
Concentrated Extract Volume: 500(uL)) Date Analyzed: 07/12/00
Injection Volume: 1.0(uL)	Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH:	
CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q
110-86-1Pyridine 106-46-71,4-Dichlorobenzo 95-48-72-Methylphenol 108-39-43-Methylphenol 106-44-54-Methylphenol 67-72-1Herachloroethane	ene 30 31 37 75 75 75 32

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I SV

FORM 4 SEMIVOLATILE METHOD BLANK SUMMARY

SBLKJV

SDG No.: U1398

Lab Name: COMPUCHEM Contract: SAS No.: Lab Code: LIBRTY Case No.: Lab Sample ID: WG3938-1 Lab File ID: WG3938-1A68 Date Extracted: 07/10/00 Instrument ID: 5972HP68 Date Analyzed: 07/11/00 Matrix: (soil/water) WATER Time Analyzed: 0849 Level: (low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

1			T.AB		LAR		DATE
	SAMPLE	NO.	SAMPLE	ID	FILE	ID	ANALYZED
01	SJVLCS		WG3938-2		WG3938-22	A68	07/11/00
02	PROCESS	BLDG	01398-1				
04 05					· · · · · · · · · · · · · · · · · · ·		
06							
08							
10					· · · · · · · · · · · · · · · · · · ·		·····
11 12							
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17							
18 19							
20 21							
22				C TVAL			
23 24				C EVALU	ALLUN HAS	CHECTAL	REORMED.
25 26				AND TH	E DATA SHO	SUBSTAN	
27					WITH DISCR	ETION-	
29							
30	1						1

COMMENTS:

page 1 of 1

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

	PROCESS BLDG
Lab Name: COMPUCHEM Conti	ract:
Lab Code: LIBRTY Case No.: SAS	No.: SDG No.: U1398
Matrix: (soil/water) WATER	Lab Sample ID: U1398-1
Sample wt/vol: 100.0 (g/mL) ML	Lab File ID:
<pre>% Moisture: decanted: (Y/N)</pre>	Date Received: 07/07/00
Extraction: (SepF/Cont/Sonc) SEPF	Date Extracted:07/10/00
Concentrated Extract Volume: 5000(uL)	Date Analyzed: 07/11/00
, Injection Volume: 2.0(uL)	Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH:	Sulfur Cleanup: (Y/N) N
CAS NO. COMPOUND (ONCENTRATION UNITS: ug/L or ug/Kg) UG/L Q
58-89-9gamma-BHC (Lindane 72-20-8Endrin 76-44-8Heptachlor 1024-57-3Heptachlor Epoxide 72-43-5Methoxychlor 8001-35-2Toxaphene 12789-03-6Technical Chlordar	1.6 JPB 0.14 JP 0.45 PB 0.42 P 1.2 JPB 25 U 25 U

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

1D

EPA SAMPLE NO.

	_		PBLKJW
Lab Name: COMPUCHEM	Cor	itract:	
Lab Code: LIBRTY	Case No.: SF	AS NO.:	DG No.: U1398
Matrix: (soil/water)	WATER	Lab Sample	ID: WG3939-1
Sample wt/vol:	100.0 (g/mL) ML	Lab File II):
<pre>% Moisture:</pre>	decanted: (Y/N)	Date Recei	ved:
Extraction: (SepF/C	ont/Sonc) SEPF	Date Extra	cted:07/10/00
Concentrated Extract	Volume: 5000 (uL)) Date Analy	zed: 07/11/00
Injection Volume:	2.0 (uL)	Dilution F	actor: 1.0
GPC Cleanup: (Y/N)	N pH:	Sulfur Cle	anup: (Y/N) N
CAS NO.	COMPOUND	CONCENTRATION UN (ug/L or ug/Kg)	ITS: UG/L Q
58-89-9 72-20-8 76-44-8 1024-57-3 72-43-5 8001-35-2 12789-03-6	gamma-BHC (Linda Endrin Heptachlor Heptachlor Epoxi Methoxychlor Toxaphene Technical Chlord	ne) de ane	0.00070 JP 1.0 U 0.0054 JP 0.25 U 0.0028 JP 25 U 25 U

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

EPA SAMPLE NO.

0.036 JPB

25 U

25 U

1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

72-43-5-----Methoxychlor

12789-03-6----Technical Chlordane

8001-35-2----Toxaphene

TCLPBLKIV Contract: Lab Name: COMPUCHEM _ab Code: LIBRTY Case No.: SAS No.: SDG No.: U1398 Lab Sample ID: WG3866-1 Matrix: (soil/water) WATER Lab File ID: Sample wt/vol: 100.0 (g/mL) ML Date Received: decanted: (Y/N)____ % Moisture: Date Extracted:07/10/00 Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/11/00 Concentrated Extract Volume: 5000(uL) Dilution Factor: 1.0 Injection Volume: 2.0(uL) Sulfur Cleanup: (Y/N) N GPC Cleanup: (Y/N) N pH:____ CONCENTRATION UNITS: Q (ug/L or ug/Kg) UG/L COMPOUND CAS NO. 0.018 JB 58-89-9-----gamma-BHC (Lindane)_____ 1.0 U 72-20-8-----Ēndrin 76-44-8-----Heptachlor 1024-57-3-----Heptachlor Epoxide 0.023 JPB 0.25 U

> NO OC EVALUATION HAS BEEN PERFORMED DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab	Name:	COMPUCHEM		Contract:	
Lab	Code:	LIBRTY	Case No.:	SAS No.:	SDG No.: U1398
Mat:	rix Sp:	ike - EPA	Sample No.:	PROCESS BLDG	s to the second

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC # ======	QC. LIMITS REC.
gamma-BHC (Lindane)	0.30	1.6	0.84	-253*	32-127
Heptachlor	1.5	0.45	2.0	103	34-111
Heptachlor Epoxide	0.30	0.42	0.73	103	37-142
Toxaphene	2.5	0.0	2.8	112	41-126

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L) ============	MSD % REC # ======	% RPD # ======	QC LI RPD ======	REC.
gamma-BHC (Lindane)	0.30	0.71	-297*	17	20	32-127
Heptachlor	0.30	0.45	0*	126*	20	34-111
Heptachlor Epoxide	0.30	0.65	77	12	20	37-142
Toxaphene	2.5	3.0	120	7	20	41-126

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 4 outside limits Spike Recovery: 3 out of 8 outside limits

COMMENTS:

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM III PEST-1

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1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

				PROCESS	5 BLDGMS
Lab Name: COMPUCHEM		Contract	•	l	
Jab Code: LIBRTY C	ase No.:	SAS No.	: SDG	No.: U	1398
Matrix: (soil/water)	WATER		Lab Sample ID	: WG393	9-3
Sample wt/vol:	500.0 (g/mL) ML		Lab File ID:		
* Moisture:	decanted: (Y/N)		Date Received	.: 07/07	/00
Extraction: (SepF/Co	ont/Sonc) SEPF		Date Extracte	d:07/10	/00
Concentrated Extract	Volume: 5000	(uL)	Date Analyzed	l: 07/11	/00
Injection Volume:	2.0(uL)		Dilution Fact	or: 1.0	
GPC Cleanup: (Y/N)	N pH:	_	Sulfur Cleanu	up: (Y/N	() N
CAS NO.	COMPOUND	CONCE (ug/L	NTRATION UNITS or ug/Kg) UG/	3: /L	Q
58-89-9 72-20-8 76-44-8 1024-57-3 72-43-5 8001-35-2 12789-03-6	gamma-BHC (Li Endrin Heptachlor Heptachlor Ep Methoxychlor Toxaphene Technical Chl	ndane) oxide ordane		0.84 0.17 2.0 0.73 0.25 2.8 5.0	PB JP PB EP JPB JP U

NO GC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

EPA SAMPLE NO.

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1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

				PROCES	S BLDGMSD
Lab Name: COMPUCHEM		Contract:	1	l	
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG	No.: U	1398
Matrix: (soil/water)	WATER		Lab Sample ID	: WG393	9-4
Sample wt/vol:	500.0 (g/mL) ML		Lab File ID:		
<pre>% Moisture:</pre>	decanted: (Y/N)		Date Received	: 07/07	/00
Extraction: (SepF/C	ont/Sonc) SEPF		Date Extracte	d:07/10	/00
Concentrated Extract	Volume: 5000	(uL)	Date Analyzed	: 07/11	/00
Injection Volume:	2.0(uL)		Dilution Fact	or: 1.0)
GPC Cleanup: (Y/N)	N pH:	_	Sulfur Cleanu	p: (Y/N	1) N
CAS NO.	COMPOUND	CONCE (ug/L	NTRATION UNITS or ug/Kg) UG/	: L	Q
58-89-9 72-20-8 76-44-8 1024-57-3 72-43-5 8001-35-2 12789-03-6	gamma-BHC (Li: Endrin Heptachlor Heptachlor Ep Methoxychlor_ Toxaphene_ Technical Chl	ndane) oxide ordane		$\begin{array}{c} 0.71 \\ 0.12 \\ 0.45 \\ 0.65 \\ 0.34 \\ 3.0 \\ 5.0 \end{array}$	PB JP PB EP JPB JP U

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

3E WATER PESTICIDE LAB CONTROL SAMPLE

Lab	Name:	COMPUCHEM			Contract:			
Ĺаb	Code:	LIBRTY	Case N	o.:	SAS No.:	SDG	No.:	U1398

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COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC # =====	QC. LIMITS REC. ======
gamma-BHC (Lindane)	0.30	0.21	70	32-127
Heptachlor	0.30	0.18	60	34-111
Heptachlor Epoxide	0.30	0.18	60	37-142
Toxaphene	2.5	1.6	64	41-126

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS:

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM III PEST-1

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EPA SAMPLE NO.

PESTICIDE ORGANICS ANALISIS DAIR SIND	PESTICIDE	ORGANICS	ANALYSIS	DATA	SHEE
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PJWLCS Contract: SDG No.: U1398 Lab Code: LIBRTY Case No.: SAS No.: Lab Sample ID: WG3939-2

Matrix:	(soil/water)	WATER		
Sample w	rt/vol:	500.0	(g/mL)	ML

Injection Volume: 2.0(uL)

Extraction: (SepF/Cont/Sonc) SEPF

Lab Name: COMPUCHEM

% Moisture: _____ decanted: (Y/N) ___ Date Received: _____

Date Extracted:07/10/00

Concentrated Extract Volume: 5000(uL) Date Analyzed: 07/11/00

Dilution Factor: 1.0

Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND

GPC Cleanup: (Y/N) N pH: ____

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

Q

58-89-9gamma-BHC (Lindane) 72-20-8Endrin 76-44-8Heptachlor 1024-57-3Heptachlor Epoxide 72-43-5Methoxychlor 8001-35-2Toxaphene 12789-03-6Technical Chlordane	0.21 0.20 0.18 0.18 0.50 1.6 5.0	JB U B U J U U
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NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

REAC, Edison, NJ	CHAIN OF CUSTODY RECORD		0
(908) 321-4200	Project Name: Chemical	No [,]	0287.6
EPA Contract 68-C4-0022	Project Number: $0 - 0.153$ Phone: $7.72 - 3.21 - 42.48$	110.	
	RFW Contact: <u>Vonn Jonnien</u> Hone. <u></u>	SHEET	NOZOFX

Sample Identification

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Analyses Requested

		Cumpie ie			······································	· · · · · · · · · · · · · · · · · · ·	I				
REAC	# Sample No.	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Pres	servative				
	411265	Paroscella Marin	5	6/22/2000	1	32-02	Y.C.	IgNitabili	ky		
 	822210	VIGLEN VIGY MISA		1	1	4-02	1 .	Reactivity	-		
ļ	7 2 2000	+		<u>}</u> /		6-22	0.00	TALMENTS	GIFUL	topol-	
L	C 2226)		<u> </u>	├ ─ <i>│</i> ─────	┼╱────	¥ .3	1	8151 A h	- hiridas		
	722265		⊢ ∦−		·····	1-07		TUP	untela A	11 acarul	<u>ک</u>
_	E 22265			V	ļ (y-0 =	1116	1CCC 1			
	A 12268	Chie ARCA	5	6/22/200	1/	32-02	4.6.	LONITO	111Y		
	A 22268		1		1	4-02	· ·	REACTIVE	1 aug		
	(222/1				1	4-02	. 2 4	TALMETA	5 Solter	DORON	
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Matrix:	O a diana at		S .	Spec							
SD -	Seament Drum Solids	GW - Groundwater	w.	Water	lease Note	, SAMP/6	r E 222	65 FOR :	SUBCONTR	RACTING L	JSE ONLY
DL -	Drum Liquids	SW - Surface Water	0-	Oil	e Trip	Le alla	atak a	and			
X -	Other	SL - Sludge	A -	Air	IS ICLY	TOR MIN	nermu /	FROM	A CHAIN OF	Ξ	

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CUSTODY #

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Lockheed Martin Technology Services Group Environmental Services REAC 2890 Woodbridge Avenue, Building 209 Annex Edison, NJ 08837-3679 Telephone 732-321-4200 Facsimile 732-494-4921

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LOCKHEED MARTIN

Date:	DY August 00
To:	Work Assignment Manager A. Zolonic
From:	Vinod Kansal, Organic Group Leader Inter Key use
Subject:	Preliminary Results of Project Barker Chemical WA# 0-0153

Attached please find the preliminary results of the above referenced project for the following samples:

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cc: Central File Task Leader <u>B. L. Vansi List G</u> Analyst <u>V Ree A</u> QC EVALUATION HAS BEEN PERFORMED DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION REAC ORGANIC CROOPS Preliminary Analytical Report Summary Barker Chemical Site WA# 0-0153 04 August 2000 BNA results: COC # 02813

This report contains the result of the sample that was and received on 07/12/2000 for BNA analysis by GC/MS. Three soil samples were received for analysis. The chain of custody does not indicate the analysis request. The results and MDLs are reported in units of $\mu g/kg$ based on dry weight for soil samples. The sample was extracted outside the REAC holding time, as per the task leader request.

The soil blank contained bis(2-ethylhexyl)phthalate.

The soil samples target compounds consisted of phenols and PAHs. The non-target compounds contained hydrocarbons, PAHs, sulfur compounds, and unknowns.

The surrogate recoveries and the internal standards were within the QA/QC limits, except for 2-fluorophenol (samples H-22256 and H-22256 MS), phenol-d5 (sample H22256 MS), 2,4,6-tribromophenol (samples H-22253 and G-22267), and terphenyl-d14 (sample G-22267). All matrix spike recoveries were within QA/QC limits, except for phenol, 2-chlorophenol, 1,4-dichlorobenzene, n-nitroso-di-n-propylamine, and 1,2,4-trichlorobenzene.

The initial calibration, daily calibration checks, and DFTPP all met QC criteria.

Due to the Y2K bug the date for the quant time stamp for all injections is 19100 rather than year 2000.

V. Reed

<u>.</u>

Note: Result Files could be found I:\organic\0153bark\bna\ 080400*.*

NO OC EVALUATION HAS BEEN PERFORMET DATA VALIDITY IS UNSUBSTANTIA AND THE DATA SHOULD BE US WITH DISCRETION. REAC ORGANIC GROUP

Table 1.x Results of the Analysis for BNA in Soil WA # 0-0153 Barker Chemical Site (Results are Based on Dry Weight)

Sample No. Sample Location GC/MS File Name Matrix Dilution Factor	SBLK07: Lab Bia BAR0: Soil	2600 ank 22	H-222 WP-13 Li BAR0 Soii 1	253 ayer 2 23	H-222 WP-6 La BAR0; Soil 1	56 iyər 1 24	G-222 Horiz (Fue BAR0 Soil 5	87 1) Tank 25	
	100		02		90		66		
Compound Name	Conc. µg/kg	MDL µg/kg	Conc. µg/kg	MDL. µg/kg	Conc. µg/kg	MDL µg/kg	Conc. µg/kg	MDL µg/kg	
Phenoi	U	330	U	540	U	370	U	2500	
bis(-2-Chloroethyl)Ether	U	330	U	540	Ū	370	Ū	2500	
2-Chlorophenol 1.3-Dichlombenzene	U	330	0	540 640	U	370	U	2500	
1,4-Dichlorobenzene	ŭ	330	ŭ	540	U U	370	0	2500	
Benzyi alcohol	Ū	330	Ū	540	Ŭ	370	Ŭ	2500	
1,2-Dichlorobenzene	U	330	U	540	U	370	U	2500	
2-Methylphenol bis/2-Chlomisonrow/)ether	0	330	0	540 540	U	370	U	2500	
4-Methylphenol	ŭ	330	ŭ	540	Ŭ	370	- U	2500	
N-Nitroso-Di-n-propylamine	U	330	U	540	Ú	370	ŭ	2500	
Hexachioroethane	U	330	U	540	U	370	U	2500	
Isonhorona	U	330	0	540	U	370	U	2500	
2-Nitrophenol	Ŭ	330	ŭ	540	Ŭ	370	U 11	2500	Z
2,4-Dimethylphenol	Ŭ	330	Ū	540	ŭ	370	ŭ	2500	
bis(2-Chloroethoxy)methane	U	330	U	540	U	370	Ŭ	2500	
2,4-Dichlorophenol	U	330	U.	540	U	370	U	2500	25m
1,2,4-1 Inchiorobenzene	U _	330	170 1	540	U.	370	U	2500	
4-Chloroaniline	ŭ	330	U 170 3	540	ŭ	370	400 J	2500	#2 2
Hexachlorobutadiene	ũ	330	Ū	540	ŭ	370	ŭ	2500	: ≤fia>
4-Chloro-3-methylphenol	U	330	U	540	Ű	370	ū	2500	
2-Methylnaphthalene	U	330	120 J	540	U	370	740 J	2500	EHZ ≺9
2.4.6-Trichiomohanoi	0	330	0	540	U	370	Ŭ	2500	Seyst
2,4,5-Trichlorophenol	ŭ	330	ŭ	540	ŭ	370	0	2500	÷2850
2-Chloronaphthalene	Ŭ	330	Ŭ	540	ŭ	370	ŭ	2500	
2-Nitroaniline	U	330	U	540	U	370	Ŭ	2500	
Dimethylphthalate	U	330	U	540	U	370	U	2500	
2.6-Dinitrotoluene	U U	330	U U	540	ŭ	370	U	2500	ÖŽB SZ
3-Nitroaniline	Ŭ	330	ŭ	540	·ŭ	370	ŭ	2500	ם <u>י</u> ש≱ק
Acenaphthene	U	330	180 J	540	Ū	370	Ū	2500	
2,4-Dinitrophenol	U	330	U	540	U	370	U	2500	Č
4-Nitrophenol Dibenzofi ren	U	330	+20 1	540	U	370	U	2500	PC
2.4-Dinitrotoluene	ŭ	330	120 3	540	U 11	370	280 3	2500	
Diethylphthalate	ũ	330	ū	540	ŭ	370	ŭ	2500	
4-Chlorophenyl-phenylether	U	330	U	540	U	370	Ŭ	2500	
Fluorene	U	330	200 J	540	U	370	U	2500	
4-nitroaniine 4.6-Dinitro-2-methylobenoi	U	330	U	540	U II	370	U U	2500	
N-Nitrosodiphenylamine	Ŭ	330	Ŭ	540	ŭ	370	600.1	2500	
4-Bromophenyl-phenylether	U	330	Ū	540	Ū	370	U N	4 2500	
Hexachlorobenzene	U	330	U	540	U	370	U	2500	
Phenanthrana	0	330	800	540	U II	370	U area (2500	
Anthracene	ŭ	330	190 J	540	ŭ	370	2300 J Ll	2500	
Carbazole	Ū	330	150 J	540	Ū	370	ŭ	2500	
Di-n-butylphthalate	U	330	U	540	U	370	U	2500	
Fluoranthene	U	330	330 J	540	U	370	U	2500	
Pyrene Butvibenzviohthalate	ŭ	330	390 J	540	0	370	2600	2500	
Benzo(a)anthracene	ŭ	330	140 J	540	ŭ	370	2000	2500	
3,3'-Dichlorobenzidine	U	330	U	540	Ū	370	Ū	2500	
Chrysene Bio(2) Ethydhaud abhalata	U	330	150 J	540	U.	370	2100 J	2500	
ois(∠-cinyinexy:)0nmalate Di-o-octviohthalate	672 J	330	3100	540	78 J	370	990 J	2500	
Benzo(b)fluoranthene	ŭ	330	Ŭ	540	ŭ	370 370	340 1	2500	
Benzo(k)fluoranthene	Ũ	330	62 J	540	ū	370	300 1	2500	
Benzo(a)pyrene	U	330	93 J	540	U	370	U	2500	
ngeno(1,2,3-cd)pyrene	U	330	U.	540	U	370	U	2500	
Benzo(a,h.i)cerviene	U 11	330 330		540		370	U 190 i	2500	
	•				5	510	230 J	2000	

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Sample # SBLK072600 LabFile# **BAR022** Con. Factor 33 Conc.* CAS# Compound 0 RT µg/kg No TICs were detected. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 ۰. 17 18 19 20

* Estimated Concentration (Response Factor = 1)

NO QC EVALUATION HAS BEEN PERFORM DATA VALIDITY IS UNSUBSTANT AND THE DATA SHOULD BE USED WITH DISCRETION.

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Sample #		H-22253			
LabFile#		BAR023	Con. 1	54	
	CAS#	Compound	Q	RT	μg/kg
1		Sulfur compound		6.37	1800
2		Sulfur compound		7.28	440
3		Sulfur compound		7.45	240
4		Sulfur compound		8.41	1100
5		Sulfur compound		8.58	530
6		Unknown		9.14	2400
7		Sulfur compound		10.33	7900
8		Sulfur compound		10.90	1700
9		PAH isomer + alkane		11.73	450
10		Alcohol		14.17	550
11					
12					
13					
14					
15	·				
16					
17					
18					
19					
20					

* Estimated Concentration (Response Factor = 1)

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NO QC EVALUATION HAS BEEN PERFORMED DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION. REAC ORGANIC GROUP

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Sample # LabFile#

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i H-22256

BAR024

Con. Factor

110#	BARU24	Con.	Factor	37		
· · · · · · · · · · · · · · · · · · ·				Conc.*		
CAS#	Compound	Q	RT	μg/kg		
	No TICs were detected.					
				+		
				+		
			1	+		
			1	<u>+</u>		
				1		
			1			
			1			
		Ite# BAR024 CAS# Compound No TICs were detected.	Item BAR024 Compound Q No TICs were detected.	Item BAR024 Compound Q RT CAS# Compound Q RT No TICs were detected. Image: Compound Image: Compound Image: Compound Image: Compound Image: Compound Image: Compound Image: Compound		

* Estimated Concentration (Response Factor = 1)

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NO QC EVALUATION HAS BEEN PERFORMED DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION. ... REAC ORGANIC GROUP

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Sample #		G-22267			
LabFile#		BAR025	Con. I	Factor	252
					Conc.*
	AS#	Compound	Q	RT	µg/kg
1		Aikane + unknown		8.73	4600
2		PAH isomer + diene\cycloalkene		8.79	3500
3		Alkane		8.96	7400
4		Alkane		9.58	22000
5		Alkene\cycloalkane		9.77	5300
6		Alkane		9.87	43000
7		Alkane + unknown		9.93	5600
8		Alkane		10.17	24000
9		Alkane		10.20	46000
10		Carbonic acid/cycloalkane		10.28	4300
11	<u> </u>	Carbonic acid/cycloalkane		10.38	7000
12		Alkane		10.42	14000
13		Alkane		10.58	8000
14		Alkene\cycloaikane		10.62	7300
15		Alkane		10.73	28000
16		Alkane		10.80	98000
17		Alkane		10.92	11000
18		Alkane +cycloalkane		10.95	18000
19		Alkane		11.23 .	46000
20		Alkane		11.27	43000

* Estimated Concentration (Response Factor = 1)

NO QC EVALUATION HAS BEEN PERFORMED DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION. REAC ORGANIC GROUP

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				RFW C	ontact:	RIEVA	NELISTA	Phone:	772-	321 -	4233	NO:	Uζi	ΩŢ
		6	1.1	41					732-7	13 - 2	1007	SHEE	TNO.	DF
		Sample	Identifi	cation					Ar	alyse	s Reques	ted		
REAC #	Sample No.	Sampling Locati	on Matrix	Date Colle	cted	# of Bottles	Container/Pres	ervative						
· 708	H, I, J 2725	1 Swith LAR	ion ed	6/20/20	0	7	8-02 140	44	An		7			
·7•9	F. J. K222	2 North Las	non Sed	6/20/20	7 2	E.3 4	8-12 540	UN.			4	<u> </u>	<u> </u>	
.710	6, H, [1215.	B WP-13 Lave	20 5	6/2/12	00	.3	8-02 in	ur	_ Au	~////	<u>, </u>			
1711	GH, T2225	5 WT-6 LAVE	215	6/21/	000	.3	Part in	1.	- 12	HIL				
·712	4 22261	WP-1 White	Pile S	6/21/20	•0	1	Poz ika	(DC		CHIM	/			
•7/5	6, H, T2222	RR Greek to	En Set	6/22/	2001	.7	Sect Lan	4.		CHINA			<u> </u>	_
·71+	5 J 22263	Por As ling hear	inter 5	4/22/	2010	3	4-07 in	L WC		CHI	<u>n</u>		<u> </u>	
• <u>7</u> (5	F 2726 Y	EB (reck, Do	W Sed	6/214	love	1	Y-07 12	yuc			7			
·ZIG	[22265	Process Dilo	2	6/22/20	~	1	4mz in	e Kir						
717	F22261	Chip Acca	- 5	6/22/2	200	1	4-02 14	. 01	<u></u>	. /	æ			,
· 718	622267	10Riz (541) 54	we s	6/27/20	00	1	V-112 12	1 41	<u> </u>	<u>u</u> AV	·/			_
· 719	F 22269	TROUGH	Sed	6/2/20	200	7	4-02 in	. U.	<u></u>	Ch VA	7			
.720	EG 22270	PRAINARY PIT	the Sed	6/1/20	100	2	4-02 IAO	4.1	_ay		/+			
•721	EG 22271	ED Greek, (b)	Deary Sect	6/2/12	000	2	Y-12 12		A	alve	7			
- 722	GH 22354	WP-13 Lance	35	6/2/1	2000)	2	8-02 10	L LUC		<u>cam</u>	F			
225	F. H. E 222 5	- WP-13-4	vere y S	6/21/2	00	3	8-02 100		<u>///</u>	-/ I/A	¥			
	/ /						- Jane	- 7-2-			۲			
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maurix: SD - Sec	jiment F	W - Potable W	ter S-	Soil	Special	Instructions:								
DS - Dru	m Solids (3W - Groundwat	er W-	Water		47AC #	110,711,718	Allivere				 ,		
DL - Dru X - Oth	im Liquids S	SW - Surface Wa	ater O -	Oll	. te	i centrol) lab on 7/1	2/00 fr	FC	OR SUE	3CONTR/	ACTING) USE (DN
		ir - Sindila	Ŝei	. Coder	neat	CNA cr	traction. of	120000	E					
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items/Kea	son Renna	usned By Da		ceived By	Date	Time	Items/Reason	Relinqui	shed By	Date	Receive	ed By	Date	T
<i> //tt</i> /	My II /	mplot 12	<u>790</u>		<u> </u>		377/BNA	1, Jass	<u>1</u>	7/12/00	M's with		7120	3
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Luckheed Martin Technology Services Group 2890 Wondbridge Avenue. Building 209 Annes Edison, NJ 08837-3679 Telephone 732-321-4200 Facsimile 732-494-4021 Environmental Services REAC

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Date:	07 July 00
To:	Work Assignment Manager A. Zownic
From:	Vinod Kansal, Organic Group Leader
Subject:	Preliminary Results of Project Barker Chemical WA# 0-0153

Attached please find the preliminary results of the above referenced project for the following samples:

Chain(s) of Custody	No.: 02811		
Analyses:	BnA		<u> </u>
No. of Samples:	5		
Matrix:	50,		
Comments on the r	sults:		
cc: Central File Task Leade Analyst R Si ny	NO QCI DAT A F <u>R. E2esta</u> Reed hvi	EMILIAUTION HAS BE A VALIDITY IS UNSUI ND THE DATA SHOUL WITH DISCRET REAC ORGA	EN PERFOPMED. SSTANTIATED D BE USED ION. NIC GPOPUL

Preliminary Analytical Report Summary Barker Chemical Site WA# 0-0153 07 July 2000 BNA results: COC # 02811

This report contains the result of the sample received on 06/23/2000 for BNA analysis by GC/MS. Five soil samples were received for analysis. The results and MDLs are reported in units of $\mu g/kg$ based on dry weight for soil samples. All samples were extracted within the REAC holding time. The samples were left at a final volume of 10 mL because the samples began to crystalize between a 10 mL and 5 mL.

The soil samples target compounds consisted of phenols and PAHs. The non-target compounds contained pesticides, alkanes, PAHs, phenols, alkyl benzenes, and unknowns.

The surrogate recoveries and the internal standards were within the QA/QC limits, except for terphenyl-d14 in sample F,G22265. All matrix spike recoveries were within QA/QC limits, except for PCP.

The initial calibration, daily calibration checks, and DFTPP all met QC criteria.

Due to the Y2K bug the date for the quant time stamp for all injections is 19100 rather than year 2000.

V. Reed

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Note: Result Files could be found I:\organic\0153bark\bna\ 070700*.*

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION. REAC ORGAND

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Table 1.x Results of the Analysis for BNA in Soil WA # 0-0153 Barker Chemical Site (Results are Based on Dry Weight)

Sample No. Sample Location GC/MS File Name Matrix Dilution Factor % Solid	SBLK062 Lab Bla BAR00 Soil 1 100	1600 nk 12	G2225 South Lay BAR00 Soil 10 38	51 goon)3	G22252 G22261 on North Lagoon WP! Waste Pile BAR004 BAR007 Soil Soil 10 10 69 68		G22261 WP! Waste Pile BAR007 Soil 10 68		31 GH22263 te Pile PbAs Area 07 BAR008 Soil 10 65	
Compound Name	Conc. µg/kg	MDL µg/kg	Conc. µg/kg	MDL µg/kg	Conc. µg/kg	MDL. <u>µg/kg</u>	Conc. µg/kg	MDL µg/kg	Conc. µg/kg	MDL µg/kg
Dhanal		330	п	8900	u	4900	U	4900	U	5100
bis(-2-Chloroethyl)Ether	- U	330	Ŭ	8900	Ū.	4900	Ū	4900	Ū	5100
2-Chlorophenol	U	330	U	8900	U	4900	U	4900	U	5100
1,3-Dichlorobenzene	U ·	330	U	8900	0	4900	U 11	4900	U	5100
1,4-Dichlorobenzene Benzul alcobol	U	330	Ŭ	8900	Ŭ	4900	ŭ	4900	ŭ	5100
1,2-Dichlorobenzene	ŭ	330	Ū	8900	Ū	4900	U	4900	U	5100
2-Methylphenol	U	330	U	8900	U	4900	U	4900	U	5100
bis(2-Chloroisopropyl)ether	U	330	U	8900	U	4900	U 11	4900	U	5100
4-Methylphenol	U U	330	U	8900	ŭ	4900	ŭ	-4900	ŭ	5100
Hexachioroethane	Ŭ	330	Ŭ	8900	Ŭ	4900	Ŭ	4900	Ŭ	510 0
Nitrobenzene	Ū	330	U	890 0	U	4900	U	4900	U	5100
Isophorone	U	330	U	8900	U	4900	U	4900	U	5100
2-Nitrophenol	U	330	U	8900	U 11	4900	U 11	4900	U U	5100
2,4-Dimethylphenol bis(2-Chloroethow)methane	U	330	U	8900	Ŭ	4900	Ŭ	4900	ŭ	5100
2.4-Dichlorophenol	Ŭ	330	Ū	8900	Ũ	4900	Ū	4900	Ū	5100
1,2,4-Trichlorobenzene	Ū	330	U	8900	U	4900	U	4900	U	5100
Naphthalene	U	330	U	8900	U	4900	U	4900	19000	5100
4-Chloroaniline	U	330	0	8900	0	4900	U U	4900	U U	5100
Hexachiorobutadiene	U U	330	ŭ	8900	ŭ	4900	ŭ	4900	ŭ	5100
2-Methylnaphthalene	Ŭ	330	Ũ	8900	Ŭ	4900	Ŭ	4900	27000	5100
Hexachlorocyclopentadiene	Ū	330	U	8900	υ	4900	U	4900	U	510 0
2,4,6-Trichlorophenol	U	330	U	8900	U	4900	U	4900	U	5100
2.4,5-Trichlorophenol	U	330	U	8900	U	4900	U	4900	U	5100
2-Chloronaphthalene	U	330	U	8900	U 11	4900	U U	4900	Ŭ	5100
2-Nitroaniine Dimethylohthalate	ŭ	330	ŭ	8900	ŭ	4900	ŭ	4900	ū	5100
Acenaphthylene	Ū	330	Ũ	8900	Ū	4900	U	4900	U	5100
2,6-Dinitrotoluene	U	330	U	8900	U	4900	U	4900	U	5100
3-Nitroaniline	U	330	Ü	8900	U U	4900	U	4900	40000	5100
Acenaphthene	U	330	U	8900	U U	4900	ŭ	4900	49000 U	5100
2,4-Dinitrophenol	U U	330	ŭ	8900	ŭ	4900	ū	4900	ū	5100
Dibenzofuran	ŭ	330	Ũ	8900	U	4900	U	490 0	29000	5100
2,4-Dinitrotoluene	U	330	U	8900	U	4900	U	4900	U	5100
Diethylphthalate	U	330	U	8900	U	4900	U.	4900	U	5100
4-Chlorophenyi-phenylether	U	330	U	8900	U H	4900	ŭ	4900	43000	5100
- Nitmaniline	U U	330	Ŭ	8900	ŭ	4900	ŭ	4900	U	5100
4.6-Dinitro-2-methylphenol	ŭ	330	ŭ	8900	ŭ	4900	Ŭ	4900	Ū	5100
N-Nitrosodiphenylamine	U	330	U	8900	U	4900	U	4900	U	5100
4-Bromophenyl-phenylether	U	330	U	8900	U	4900	U	4900	U	5100
Hexachlorobenzene	0	330	0	8900	0	4900	U U	4900	U U	5100
Pentachiorophenoi	ŭ	330	ŭ	8900	ŭ	4900	ŭ	4900	130000	5100
Anthracene	Ŭ	330	Ū	8900	U	4900	υ	4900	13000	5100
Carbazole	U	330	U	8900	U	4900	U	4900	1600 J	5100
Di-n-butylphthalate	U	. 330	U	8900	U 11	4900	0	4900	51000	5100
Prese	0	330	ŭ	8900	ŭ	4900	Ŭ	4900	35000	5100
Butylbenzylobthalate	ŭ	330	ŭ	8900	ŭ	4900	Ŭ	4900	U	5100
Benzo(a)anthracene	Ŭ	330	U	8900	U	4900	U	4900	9100	5100
3,3'-Dichlorobenzidine	U	330	U	8900	U	4900	U	4900	U	5100
Chrysene	U	330	U	8900	U	4900	U ===== '	4900	8500	5100
Bis(2-Ethylhexyl)phthalate	U 	330	U	8900	U	4900	500 J	4900 4000	U	5100
ui-n-octyiphtnalate Benzo/httiuoranthene	U 11	330	ŭ	8900	Ŭ	4900	ŭ	4900	2900 J	5100
Benzo(k)fluoranthene	ŭ	330	ũ	8900	ũ	4900	Ū	4900	3300 J	5100
Benzo(a)pyrene	Ū	330	U	8900	U	4900	U	4900	3000 J	5100
Indeno(1,2,3-cd)pyrene	U	330	U	8900	U	4900	U.	4900	1100 J	5100
Dibenzo(a,h)anthracene	U ,.	330	U	8900	U	4900	U	4900	1100 1	5100
benzo(g,n,i)peryiene	U	33 U	U	0900	U	4900	0	4900	1100 J	5100

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION.

Table 1.x Results of the Analysis for BNA in Soil WA # 0-0153 Barker Chemical Site (Results are Based on Dry Weight)

Sample No.	_F,G22265		
Sample Location	Process An	5 a	
GC/MS File Name	BAK009		
Mathx Bilution Fostor	300 10		
Uniudon Pactor % Solid	70		
	Conc.	MDL	
Compound Name	µg/kg	µg/kg	
Phanel		4800	
his/-2-Chloroethyl)Ether	Ŭ	4800	
2-Chlorophenol	Ū	4800	
1,3-Dichlorobenzene	U	4800	
1,4-Dichlorobenzene	U	4800	
Benzyl alcohol	U	4800	
1,2-Dichlorobenzene	U	4800	
2-Methylphenol	1	4800	
A-Methylabenol	ŭ	4800	•
N-Nitroso-Di-n-propylamine	Ŭ	4800	
Hexachloroethane	Ū	4800	
Nitrobenzene	U	4800	
Isophorone	U	4800	
2-Nitrophenol	U	4800	
2,4-Dimethylphenol	U	4000	
Dis(2-Unioroethoxy)methane	11	4800	
2,7-Dialio optieroi 1 2 4-Trichlombenzene	บั	4800	
Naphthalene	1400 J	4800	
4-Chloroaniline	Ú	4800	
Hexachlorobutadiene	U	480 0	
4-Chioro-3-methylphenol	U	4800	
2-Methylnaphthalene	2600 J	4800	
Hexachlorocyclopentadiene	U	4800	
2,4,6-Trichlorophenol	U	4800	
2,4,5-1 ncnioropnenoi	0	4800	
2-Unioronaphinaiene	ŭ	4800	
Dimethylohthalate	Ŭ	4800	
Acenaphthylene	Ũ	4800	
2,6-Dinitrotoluene	U	4800	
3-Nitroaniline	U	4800	
Acenaphthene	U	4800	
2,4-Dinitrophenol	6900	4800	
	U U	4800	
2 A-Dipitrotoluene	ŭ	4800	
Diethylohthalate	ŭ	4800	
4-Chlorophenvl-phenvlether	Ū	4800	
Fluorene	U	4800	
4-Nitroaniline	U	4800	
4,6-Dinitro-2-methylphenol	U	4800	
N-Nitrosodiphenylamine	U 11	4000	
4-promophenyi-phenyiemer	U	4800	
Pentachiorophenoi	ŭ	4800	
Phenanthrene	Ŭ	4800	
Anthracene	U	4800	
Carbazole	U	4800	
Di-n-butylphthalate	U	4800	
Fluoranthene	5/U J	4000	
ryrene Butdhenzdahthalate	11	4800	
Benzo(a)anthracene	ŭ	4800	
3.3'-Dichlorobenzidine	Ŭ	4800	
Chrysene	Ū	4800	
Bis(2-Ethylhexyl)phthalate	1000 J	4800	NO OC EVALUATION HAS BEEN PERFORMED.
Di-n-octylphthalate	U	4800	DATA VALIDITY IC LINCLIDCTANITIATED
Benzo(b)fluoranthene	U	4800	UAIA VALIVIIT IS UNSUDSTAINTALLO
Benzo(k)fluoranthene	U	4000	AND THE DATA SHOULD BE USED
Denzo(a)pyrene	U U	4800	WITH DISCOFTION
Nibenzo(a h)anthracene	Ц	4800	
Benzo(a,h.i)oerviene	ŭ	4800	PFAC OPTA

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Sample #		SBLK062600						
LabFile#		BAR002		Con. F	actor	33		
					r		Conc.*	
	CAS#		Compound		Q	RT	µg/kg	
1		Unknown			 	3.61	340	
2								
3								
4			····		<u> </u>			
5								
6					<u> </u>			
7								
8								
9								
10					<u> </u>			
11								
12			·····	·····				
13								
14								
15								
16			<u> </u>					
17			<u></u>		<u> </u>			
18						<u> </u>		
19								
20								

* Esimated Concerntration (Response Factor = 1)

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION REAC ORGANIC

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Sample #		G22251					
LabF	file#	BAR003	Con. F	actor	889		
					Conc.*		
	CAS#	Compound	Q	RT	µg/kg		
1	000072-55-9	p,p'-DDE	99	12.87	8100		
2	000050-29-3	Chlorophenothane	91	13.76	4000		
3							
4							
5							
6							
7							
8							
9							
10							
11					1		
12							
13							
14							
15							
16							
17							
18							
19							
20							

* Esimated Concerntration (Response Factor = 1)

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NO QC EVALUATION HAS BEEN PERFORMED DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION. REAC ORGANIC COM

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Sample #		G22252						
LabFile#		BAR004		Con. F	actor	486		
				 		Conc.*		
	CAS#		Compound	 Q	RT	µg/kg		
1		Alkane		 =	17.12	2800		
2				 				
3				 				
4				 				
5				 				
6				 				
7								
8								
9				 - <u></u>				
10	····			 				
11				 				
12				 				
13				 				
14				 		1		
15		-		 				
16				 				
17				 				
18				 				
19				 				
20								

* Esimated Concerntration (Response Factor = 1)

NO QC EVALUATION HAS BEEN PERFORMET DATA VALIDITY IS UNSUBSTANTIATE AND THE DATA SHOULD BE US WITH DISCRETION REAC ORGANIC COM

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Sample #		G22261						
LabFile#	ł	BAR007	C	Con. Factor				
						Conc.*		
	CAS#	Compound		Q	RT	μg/kg		
1		No TICs were detected						
2					<u> </u>			
3								
4								
5								
6								
7					-			
8								
9								
10								
11	<u> </u>							
12								
13								
14								
15								
16								
17								
18								
19								
20								

* Esimated Concerntration (Response Factor = 1)

NO QC EVALUATION HAS BEEN PERFORMED DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USU WITH DISCRETION REAC ORCIDENT OF

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Samp	ole #	G,H22263					
LabF	ile#	BAR008	Con. H	actor	514		
			r ī		Conc.*		
	CAS#	Compound	Q	RT	µg/kg		
1		Alkane		6.00	9800		
2		Alkane		6.78	12000		
3		Alkane		7.52	8100		
4		Naphthalene, -methyl- isomer		7. 9 3	18000		
5		Naphthalene, -dimethyl- isomer		8.55	11000		
6		Naphthalene, -dimethyl- isomer		8.67	16000		
7		Naphthalene, -dimethyl- isomer		8.69	8100		
8		Benzene, -(cyclopentadien-ylidene)ethyl isomer + PAH isomer		9.89	8600		
9		Dibenzofuran, -methyl- isomer		9.98	9600		
10		Dibenzofuran, -methyl- isomer		10.07	25000		
11		Alkane		10.61	12000		
12		Phenol, -(-phenylethenyl)- isomer + alkane		10.66	9300		
13	000132-65-0	Dibenzothiophene	95	10.85	10000		
14		Hexadecanoic acid + PAH isomer		11.48	16000		
15		Anthracene, -methyl- isomer		11.59	15000		
16		Anthracene, -methyl- isomer		11.63	24000		
17	· · · · · · · · · · · · · · · · · · ·	Cyclopenta[def]phenanthrene isomer		11.77	15000		
18	000238-84-6	11H-Benzo[a]fluorene	93	13.23	12000		
19	000234-17-4	11H-Benzo[b]fluorene	94	13.31	11000		
20		Cholesta-dien-one isomer + alkyl benzene		23.04	9200		

* Esimated Concerntration (Response Factor = 1)

NO QC EVALUATION HAS BEEN PERFORMED DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION REAC ORGANIZED

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Sample #		F,G22265			
LabF	file#	BAR009	Con. F	actor	476
					Conc.*
	CAS#	Compound	Q	RT	µg/kg
1	000103-65-1	Benzene, propyl-	94	4.91	5900
2		Benzene, -ethyl-methyl- isomer		4.98	42000
3		Benzene, -ethyl-methyl- isomer		5.15	17000
4		Benzene, -ethyl-methyl- isomer		5.29	82000
5		Benzene, -ethyl-methyl- isomer		5.55	19000
6		Benzene, -methyl-propyl- isomer		5.73	5900
7		Benzene, -ethyl-dimethyl- isomer		5.78	6300
8		Phenol, -(-methylpropyl)-dinitro- + unknown		10.90	16000
9		Phenol, -(-methylpropyl)-dinitro- + unknown		11.23	790000
10	000786-19-6	Carbofenotion	97	13.61	19000
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

* Esimated Concerntration (Response Factor = 1)

NO QC EVALUATION HAS BEEN PERFORMED DATA VALIDITY IS UNSUBSTANTIAT AND THE DATA SHOULD BE UP WITH DISCRETION REAC OPCOMPOSITION

REAC, Ec (908) 321 EPA Con	dison, NJ -4200 tract 68-C4-	0022		Project Name Project Numb RFW Contact	CHAIN Er: Fabent	DF CUSTODY REC - Clor Chemin - 0153 EVANG ELITAPhone	ORD 21 1 1 1 1 1 1 1 1 1 1 1 1 1	<u>4233</u> 200'7	No: SHEET N	02811 0. <u>/</u> of/	
G 2300- Sample Identific:				ation		Ana	Analyses Requested				
REAC #	Sample No.	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative					
1701	422251	South hagern	Sed	6/20/2000	1	Prozin 4ºC	ISNAS	PLBS	Pesticide	1	
.702	622252	NORTH LAGORAL	Sed	1.120/2000	1	8-12 JAN Y'C	BNA.	PEBI	Pesticide	<u>المسالم المسالم مسالم المسالم مسالم /u>	
. 703	627261	WP-1 WASFEPIE	5	6/2/1/2000	1	8-02 IAN 4°C	BNAC_	PCB_	Pes ticide	r	
.7040	110 2226 3	PhAs LLEND ACCENT	5	6/22/2000	à	4-02 JAR 4C	BNAS	PCBr	Pesticio	1. Junior	24-
170 SF	622265	PROLESS AREA	2	6/22/2000	2	4-02 JAL 4ºL	BNAS	7CBs	Resticides_	C2parter	-a
.706	H 22265	PROCESS AREA	2	6/22/auxo	_/	14-02 ML 4C	Velatile a	comis_			
.707	F 82267	there is (Fuel) Time		6/22/2000		4-02 jon vi	total Por	talave hyo	Ke Carbon	CIPH)	
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			1	Spec	al Instructions		1	1		1	1
Matrix:SD -SedimentPW -Potable WaterS -DS -Drum SolidsGW -GroundwaterW -DL -Drum LiquidsSW -Surface WaterO -X -OtherSL -SludgeA -Sed			Soil Water Oil			FOR	FOR SUBCONTRACTING USE ONLY				
			A- Sed	Sediment		FRO	FROM CHAIN OF CUSTODY #				
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14-2-1	ACD K # 0	626°	Worlan	612619	9 12.11		/		V	<u> </u>	
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FORM #4		<u></u>			<u>*</u>	+ 706 -	in ly				8/94

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Locklieed Martin Technology Services Group Environmental Services REAC 2890 Woostnridge Avenue, Building 209 Annes - Falison, NJ 03537-3679 Telephone 322-321-4200 - Facsimile 322-494-4021

LOCKHEED MARTIN

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Date:	July 5, 2000
To:	Work Assignment Manager <u>ANDRE ZOWNIR</u> . EPA/ERTC
From:	Vinod Kansal. Organic Group Leader. Analytical Section, REAC Unod Lausa
Subject:	Preliminary Results of Project <u>BARKER CHEMICAL SITE</u> WA# 0-153

Attached please find the preliminary results of the above referenced project for the following samples:

Chain(s) of Custody No .:	02811	
Analyses:	PESTICIDE/PCBs	
No. of Samples:	FIVE	
Matrix	SOIL	
Comments:		

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Raj Singhvi, V.Kansal Central File D. Angwenyi Task Leader: <u>ROBERT EVANGELISTA</u> Analyst: <u>GIRMA ADMASSU</u>
Table 1.x Results of the Analysis for Pesticide/PCBs in Soil WA# 0-153 Barker Chemical Site Based on Dry Weight

Client ID) SBLK062600 G22251				G2	52	G2	226	51	GH22263			
Location	-		South I	agoon	North	La	goon	WP-1 V	Vas	te Pile	PbAs Area		
Percent Solid	10	0	37	'.5 ⁻	68 .6			6	7.7		64	.8	
•••••	Conc.	MDL	Conc.	MDL	Conc.		MDL	Conc.		MDL	Conc.	MDL	
Analyte	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg		µg⁄kg	µg/kg		µg⁄kg	µg/kg	µg/kg	
a-BHC	U	3.3	U	8.9	5.5	J	9.7	2.4	J	4.9	U	5.1	
g-BHC	U	3.3	U	8.9	U		9.7	2.0	J	4.9	U	5.1	
b-BHC	U	3.3	U	8.9	U		9.7	U		4.9	U	5.1	
Heptachlor	U	3.3	U	8.9	U		9.7	U		4.9	U	5.1	
d-BHC	U	3.3	U	8.9	U		9.7	U		4.9	U	5.1	
Aldrin	U	3.3	U	8.9	U		9.7	U		4.9	U	5.1	
Heptachlor Epoxide	U	3.3	U	8.9	U		9.7	U		4.9	U	5.1	
g-Chlordane	U	3.3	U	8.9	17		9.7	U		4.9	U	5.1	
a-Chlordane	U	3.3	U	8.9	4.6	J	9.7	U		4.9	U	5.1	
Endosulfan (I)	U	3.3	U	8.9	U		9.7	U		4.9	U	5.1	
p,p'-D D E	U	3.3	7100	8.9	56		9.7	3.0	J	4.9	110	5.1	
Dieldrin	U	3.3	U	8.9	4	J	9.7	U		4.9	U	5.1	
Endrin	U	3.3	U	8.9	U		9.7	U		4.9	U	5.1	
p,p'-D D D	U	3.3	1 60 0	8.9	210		9.7	36		4.9	U	5.1	
Endosulfan (II)	U	3.3	U	8.9	U		9.7	U		4.9	U	5.1	
p,p'-D D T	U	3.3	5500	8.9	19		9.7	50		4.9	900	5.1	
Endrin Aldehyde	U	3.3	U	8.9	U		9.7	U		4.9	U	5.1	
Endosulfan Sulfate	U	3.3	U	8.9	U		9.7	U		4.9	U	5.1	
Methoxychlor	U	3.3	U	8.9	U		9.7	U		4.9	U	5.1	
Endrin Ketone	U	3.3	U	8.9	U		9.7	10		4.9	U	5.1	
Toxaphene	U	83	U	220	U		240	U		120	U	130	
Aroclor 1016	U	42	U	110	U		120	U		62	U	64	
Aroclor 1221	U	83	U	220	U		240	ប		120	U	130	
Aroclor 1232	U	42	U	110	U		120	U		62	U	64	
Aroclor 1242	U	42	U	110	U		120	U		62	U	64	
Aroclor 1248	U	42	U	110	U		120	U		62	U	64	
Aroclor 1254	U	42	Ū	110	U		120	U		62	U	64	
Arocior 1260	U	42	U	110	U		120	U		62	U	64	
Arocior 1268	U	42	U	110	U		120	U		62	U	64	

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NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION. (REAC ORGANIC GROUP)

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Table 2.x Results of the Surrogate Recoveries for Pesticide/PCBs in Soil WA# 0-153 Barker Chemical Site

	Percent Recovery						
Sample ID	TCMX	DCBP					
SBLK062600	85	129					
G22251	53 *	56 *					
G22252	64	54 *					
G22252ms	80	79					
G22252msd	85	89					
G22261	102	129					
GH22263	63	54 *					
GH22265	172 *	80					

	ADVISORY
	QC
	Limits
Tetrachloro-m-xylene (TCMX)	60-150
Decachlorobiphenyl (DCBP)	60-150

NO QC EVALUATION HAS BEEN PERFORMATION DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION. /REAC ORGANIC GROUP

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REAC, Ed	lison, NJ									
0001221					CHAIN	OF CUSTODY REC	OBD			
300/ 321-	-4200			Project Name	$\sim D$	aline Chan				
-PA Cont	ract 68-C4-	-0022		Desight Marine	s	Mar Crumi	C#1			
		OOLL				- 0733			No:	197314
~				KEW Contac	Labort	EVANG ERIJAPhone	e: <u>732 74 4</u>	1233		
, 2300-	•	Sample I	1				752 7132	00.7	SHEET N	
					·	1	Analy	ses Reque	sted	
REAC #	Sample No.	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative				1
<u>, 101</u>	4 2225/	Sur Mi hazer) ded	6/20/2000	/	Provine 4ºC	ISNAS	FIAC	Parkind	
· 702 k	222.52	NULTH LAGAGA	1 Sed	1/20/2000	/	Preston 4ºC	RNA	PIR	2004]
· 705	227261	WP-1 WASFEPILE	<u> </u>	4/2/ iver	7	S-02 ing Vil	PALA	PCP	P	· · · · · · · · · · · · · · · · · · ·
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120SE	522265	Tholesi AREA	3	6/22/200	.7	Venz Las Ver	TINKS	TCDI DOR	filicia	Valer
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atrix: D - Sedin	nent D	M Deteble Mister	C	Specia	al Instructions:			J	.l. <u></u>	l
S - Drum	Solids G	W - Groundwaler	S- W-	Soll Water			[
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Luckheed Martin Technology Services Group Environmental Services REAC 2890 Woodbridge Avenue, Building 209 Annex Edison, NJ 08837-3679 Telephone 732-321-4200 Facsimile 732-494-4021

LOCKHEED MARTI

Date:	06/24/00
To:	Work Assignment Manager <u>Andy Zownic</u>
From:	Yi-Hua Lin, Special Project Group Leader
Subject:	Preliminary Results of Project <u>Barker Chemical</u> . WA# <u>0153</u>

Attached please find the preliminary results of the above referenced project for the following samples:

Chain(s) of Custody No.	:02188	
Analyses:	VOC	
No. of Samples:		
Matrix:	Sediment	

Comments on the results:

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This sample contains high Conc. of Demenes in non-target campound

R. SINGHVI Central File cc: Task Leader <u>Robert Guengilist</u> Analyst <u><u>Mittug</u> R</u> Analyst ______ SAMPLE REELVING D. MILLER D. KILLEEN E. MATOS

TABLE 1 VOLATILE ORGANIC COMPOUND ANALYSIS

	Project # Sample # Location : Collected : Analyzed : Injected : File : Dil. Fact. Unit : % Solid :	Barker Chem, methanol bik0 06/24 2:06 pm AV1931.D 1.0 ug/kg 100	0-153 524		H22265 Proc Area 06/22 06/24 2:43 pm AV1932.D 10000 ug/kg 61	
Compound		Conc.		MDL	Conc.	<u>MDL</u>
Chlorodifluoromethane		U L		1.0	U	16000
Vinyl Chloride		Ŭ		1.0	Ū	16000
Bromomethane		U		2.0	υ	33000
Chloroethane		U		1.0	U	16000
Trichlorofluoromethane		U 14		1.0	0	130000
1 1-Dichlometheos		U	J	1.0	υ	16000
Methylene Chloride		Ŭ		1.0	U	16000
Carbon Disulfide		U		1.0	U	16000
Methyl-t-butyl Ether		U		1.0	U	16000
trans-1,2-Dichloroethene		U 11		1.0	ບ ບ	16000
1,1-Dichlordestane 2-Butanone		U		4.0	Ŭ	65000
2,2-Dichloropropane		Ŭ		1.0	U	16000
cis-1,2-Dichloroethene		U		1.0	U	16000
Chioroform		U		1.0	U	16000
1,1-Dichloropropene 1,2-Dichloroethane		U U		1.0	U	16000
1.1.1-Trichloroethane		Ŭ		1.0	ŭ	16000
Carbon Tetrachionde		U		1.0	U	16000
Benzene		U		1.0	U	16000
Trichloroethene		U		1.0	U	16000
1,2-Dichloropropane Bromodichloromethane		U U		1.0	U U	16000
Dibromomethane		U		1.0	υ	16000
cis-1,3-Dichloropropene		U		1.0	U	1 600 0
trans-1.3-Dichloropropene		υ		1.0	U	16000
1,1,2-Trichloroethane		U		1.0	U	16000
1,3-Dichloropropane		U 11		1.0	U U	16000
1,2-Dibromoethane		Ŭ		1.0	Ū	16000
Bromolorm		U		1.0	U	16000
4-Methyl-2-Pentanone		U		2.0	U	33000
Toluene		U		1.0	U 11	33000
Z-Hexanone Tetrachiomethene		U U		2.0 1.0	U	16000
Chlorobenzene		U		1.0	U	16000
1,1,1,2-Tetrachloroethane		υ		1.0	U	16000
Ethylbenzene		U		1.0	U	16000
p&m-Xylene		U U		1.0	79000 22100	16000
Styrene		Ŭ		1.0	U	16000
isopropyibenzene		U		1.0	U	16000
1.1.2.2-Tetrachioroethane		U		1.0	U	16000
1,2,3-Trichloropropane		U		1.0	110000	16000
Bromobenzene		ŭ		1.0	U	16000
1,3,5-Trimethylbenzene		U		1.0	710000	16000
2-Chiorololuene		U		1.0	U	16000
4-Chlorotoluene		U 11		1.0	U 11	16000
1,2,4-Trimethylbenzene		υ		1.0	2200000	16000
sec-Butylbenzene		U		1.0	U	16000
p-isopropytioluene		U		1.0	U	16000
1,3-Dichlorobenzene		U		1.0	U	16000
1,4-LICHIOROBERZERE		U		1.0	21000	16000
1,2-Dichlorobenzene		Ŭ		1.0	U	16000
1.2-Dibromo-3-chloropropan	e	U		1.0	U	16000
1,2,4-Trichlorobenzene		U	·	1.0	U	16000
Nexachiorobutaciene		U 11		1.0 4.0	U	65000
1,2,3-Trichiorobenzene		Ŭ		1.0	Ū	16000

RED OC EVALUATION HAS BEEN PERFORMED. Data validity is unsubstantiated and the data should be used with discretion.

B Indicates results are present in Blank

J Indicates below Method Detection Limit

REAC, E 908) 321-	-4200	0022	-	Project Name:	CHI DA	LF CUSTODY RECO Lan Chemic - 0153	QRD		م محمد من الم	
		Sample I	ientifica	RFW Contact:	Pabent	SVANG ELMAPhone	: <u>732</u> 30 752 71 Ar	24 ¥233 3 2007 nalyses Reque	SHEET NO). <u>/</u> OF <u>/</u>
REAC #	Sample No. 6 2225/ 6 22252	Sampling Location South Lagery North Lagery	Matrix Sed	Date Collected	# of Bottles	Container/Preservative -03 jAre 4°C 8-03 IAR 4°C	SNA BNA	PCBs PCBs	Pesticide Pesticide	7
· 705 ·7040	627261 110 22263 6022265	WP-1 WASE All Pb As Clean Green Tholosi Acen		6/24/2000 6/22/2000 6/22/2000	2	8-02 JAR 4°C 4-02 JAR 4°C 4-03 JAR 4°C 4-03 JAR 4°C	BNAC BNAS BNAS	PCB: PCB: PCB:	Pesticide Pesticio Tertteises	
·706 ·707	H 22365 F 22267	ADRIZ (TUEI) TAM	E J	6/22/2000 6/22/2000		4-12 jan 40	tobal ;	tisticilar hy	des Carlor	СТРН)
Matrix: SD - S DS - D DL - D X - C	iediment Drum Solids Drum Liquids Other	PW - Potable Wa GW - Groundwate SW - Surface Wa SL - Sludge	ter S- or W- ter O- A- Sec	Soll Water Oli Air L Sediment	cial Instructions	:		FOR SUBCON FROM CHAIN CUSTODY #	TRACTING	USE ON
X - C	Dther	SL - Sludge	Sed	l Sediment	•			FROM CHAIN CUSTODY #	OF	

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CompuChem

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DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

U. This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Linux (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J: This flag indicates an estimated value. The flag is used as detailed below:

i. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1.0 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the CRQL but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide/Aroclor or other GC or HPLC identification criteria, and the result is less than the CRQL but greater than zero. For example, if the sample quantitation limit is $10 \mu g/L$, but a concentration of $3 \mu g/L$ is calculated, it is reported as 3J.

- N: This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search. For generic characterization of a TIC such as 'chlorinated hydrocarbon', the N flag is not used.
- P: This flag is used for a pesticide/Aroclor target analyte, and other GC or HPLC analytes, when there is greater than 25% difference for detected concentrations between the two GC or HPLC columns. The lower of the two values is reported on Form I and flagged with a P.
- C: This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

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DATA REPORTING QUALIFIERS (continued)

- B: This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.
- E: This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a response greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a response greater than the upper level of the calibration range will have the concentration flagged with an E on Form I for the original analysis.
- D: If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on Form I for the more diluted sample, and **all** reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.
- NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL and the U flag.
- NOTE 2: Separate Form Is are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXDL) i.e. the results from both analyses are not combined on a single Form I.
- A: This flag indicates that a TIC is a suspected aldol-condensation product.
- X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y and Z.

Lockheed Martin Technology Services Group Environmental Services REAC 2890 Woodbridge Avenue, Building 209 Annex Edison, NJ 08837-3679 Telephone 732-321-4200 Facsimile 732-494-4021

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DATE:	7 <u>/06/ 2000</u>	
TO:	R.Singhvi, ERTC/EPA	Λ Ι
FROM:	Deborah Killeen, Data Va	lidation and Report Writing Group Leader
SUBJECT:	Preliminary Results of Pro	ject <u>Barker Chemical</u> WA# <u>0153</u>
Attached please find the p	reliminary results of the ab	ove referenced project for the following samples.
Chain of Custody No.		Analyses
02809		l water sample for sulfate, nitrate, chloride, TAL Metals, sulfur, boron, herbicides, ignitability, reactivity, and corrosivity
02810		1 water sample for sulfate, nitrate, chloride, TAL Metals, sulfur, boron, herbicides, ignitability, reactivity, and corrosivity
02812		4 soil samples for TAL Metals, sulfur, boron, herbicides, ignitability, reactivity, TCLP metals, and TCLP herbicides
02812		lsoil samples for TAL Metals, sulfur, boron, herbicides, ignitability, reactivity, TCLP metals, and TCLP herbicides
02815		3 soil samples for TAL Metals, sulfur, boron, herbicides, ignitability, reactivity, TCLP metals, and TCLP herbicides
02816		2 soil samples for TAL Metals, sulfur, boron, herbicides, ignitability, reactivity, TCLP metals, and TCLP herbicides
02817		4 soil samples for TAL Metals, sulfur, boron, herbicides, ignitability, reactivity, TCLP metals, and TCLP herbicides
02818		l water sample for sulfate, nitrate, chloride, TAL Metals, sulfur, boron, herbicides, ignitability, reactivity, and corrosivity
03585		1 soil samples for TAL Metals, sulfur, boron, herbicides, ignitability, reactivity, TCLP metals, and TCLP herbicides

The TCLP VOA, Pesticides, and Semivolatiles will follow later for sample E22265, COC 02816.

cc: Archives Subcontracting Deborah Killeen WAM: A. Zownir Task Leader: R. Evangelista PESTICIDE ORGANICS ANALYSIS DATA SHEET

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EPA SAMPLE NO.

- 1

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PBL	KOW

ab Name: COMPUCHEM		Contract:	
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No.: Q1398
Matrix: (soil/water)	SOIL		Lab Sample ID: WG3616-1
Sample wt/vol:	30.0 (g/mL) G		Lab File ID:
<pre>% Moisture: 0</pre>	decanted: (Y/N)	N	Date Received:
Extraction: (SepF/C	Cont/Sonc) SONC		Date Extracted:06/26/00
Concentrated Extract	Volume: 5000	(ul)	Date Analyzed: 06/29/00
Injection Volume:	2.0(uL)		Dilution Factor: 1.0
GPC Cleanup: (Y/N)	N pH:		Sulfur Cleanup: (Y/N) N
CAS NO.	COMPOUND	CONCEN (ug/L	NTRATION UNITS: or ug/Kg) UG/KG Q

94-75-72,4-D	2.8	J
93-72-1silvex	0.13	JP
93-76-52,4,5-T	0.89	JP
		1

NG CO EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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			SULFUR BLAN
ab Name: COMPUCHEM		Contract:	I
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No.: Q1398
Matrix: (soil/water) SOIL	Lab	Sample ID: SCHIBLK041
Sample wt/vol:	30.0 (g/mL) G	Lab	File ID:
<pre>% Moisture: 0</pre>	decanted: (Y/N) N Date	e Received:
Extraction: (SepF/	Cont/Sonc) SONC	Date	e Extracted:06/26/00
Concentrated Extrac	t Volume: 500	0(ul) Date	e Analyzed: 06/29/00
Injection Volume:	2.0(uL)	Dilu	tion Factor: 1.0
GPC Cleanup: (Y/N) N pH:_	Sulf	Eur Cleanup: (Y/N) Y
CAS NO.	COMPOUND	CONCENTRAT	TION UNITS: 1g/Kg) UG/KG Q

94-75-72,4-D	5.0	U
93-72-1silvex	0.072	JBP
93-76-52,4,5-T	0.16	JBP
		Í

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I PEST

EPA SAMPLE NO.

1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

SOUTHLAGOON

ab Name: COMPUCHEM		Contract:	I
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No.: Q1398
Matrix: (soil/water)	SOIL	Lab S	ample ID: Q1398-1
Sample wt/vol:	30.0 (g/mL) G	Lab F	ile ID:
% Moisture: 58	decanted: (Y/N)	N Date 2	Received: 06/23/00
Extraction: (SepF/	Cont/Sonc) SONC	Date	Extracted:06/26/00
Concentrated Extrac	Volume: 5000	(ul) Date 2	Analyzed: 06/29/00
Injection Volume:	2.0(uL)	Dilut	ion Factor: 1.0
GPC Cleanup: (Y/N) N pH:	Sulfu	r Cleanup: (Y/N) N
CAS NO.	COMPOUND	CONCENTRATI (ug/L or ug	ON UNITS: /Kg) UG/KG Q
94-75-7 93-72-1 93-76-5	2,4-D silvex		10 JBP 1.4 JBP 5.2 JBP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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ab Name: COMPUCHEM		Contract:	NORTHLAGOON
Lab Code: LIBRTY	Case No.:	SAS No.: SDG	No.: Q1398
Matrix: (soil/water)	SOIL	Lab Sample II): Q1398-2
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	
% Moisture: 26	decanted: (Y/N)	N Date Received	1: 06/23/00
Extraction: (SepF/C	ont/Sonc) SONC	Date Extracte	ed:06/26/00
Concentrated Extract	Volume: 5000 ((ul) Date Analyzed	l: 06/30/00
Injection Volume:	2.0(uL)	Dilution Fact	or: 1.0
GPC Cleanup: (Y/N)	N pH:	Sulfur Cleanu	ъ: (Y/N) Y
CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/	S: YKG Q

94-75-72,4-D	27	BP
93-72-1silvex	4.6	BP
93-76-52,4,5-T	3.5	BP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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					WP-6	LAYER
ab Na	me: COMPUCHEM		Contract	:	··	
Lab Co	de: LIBRTY	Case No.:	SAS No.	: SDG	No.: Q	1398
Matrix	: (soil/water)	SOIL		Lab Sample ID	Q1398	-3
Sample	wt/vol:	30.0 (g/mL) G		Lab File ID:		
% Mois	ture: 9	decanted: (Y/N)	N	Date Received	: 06/23	/00
Extrac	tion: (SepF/C	ont/Sonc) SONC	-	Date Extracted	1:06/26	/00
Concen	trated Extract	Volume: 5000	(ul)	Date Analyzed	: 06/30	/00
Inject	ion Volume:	2.0(uL)		Dilution Facto	or: 1.0	
GPC Cl	eanup: (Y/N)	N pH:	-	Sulfur Cleanu	p: (Y/N	I) Y
	CAS NO.	COMPOUND	CONCEI (ug/L	NTRATION UNITS or ug/Kg) UG/1	: KG	Q
	94-75-7 93-72-1 93-76-5	2,4-D silvex 2,4,5-T			47 10 16	BP BP BP

NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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	1D	?)	EPA SAMPLE NO.
PESTICIDE	ORGA	AYERCI		WP-13 LAYER
ab Name: COMPUCHEM			ł	
Lab Code: LIBRTY	Case No		SDG	No.: Q1398
Matrix: (soil/water)	SOIL	La	ab Sample ID:	Q1398-4
Sample wt/vol:	30.0 (g/mL) G	La La	ab File ID:	
% Moisture: 38	decanted: (Y/N) N Da	ate Received:	06/23/00
Extraction: (SepF/C	ont/Sonc) SONC	Da	ate Extracted	1:06/26/00
Concentrated Extract	Volume: 500	0(ul) Da	ate Analyzed:	06/30/00
Injection Volume:	2.0(uL)	D	ilution Facto	or: 1.0
GPC Cleanup: (Y/N)	N pH:_	Sı	ulfur Cleanup	b: (Y/N) Y
CAS NO.	COMPOUND	CONCENTI (ug/L or	RATION UNITS: r ug/Kg) UG/H	G Q
94-75-7	2.4-D			6.4 JBP

94-75-72,4-D	6.4	JBP
93-72-1silvex	6.8	B
93-78-32,4,5-1	10	2.

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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				WP1-WA	STE PILE
ab Name: COMPUCHEM		Contract:	l	. <u></u>	
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG	No.: Q	1398
Matrix: (soil/water)	SOIL		Lab Sample ID:	Q1398	-5
Sample wt/vol:	30.0 (g/mL) G		Lab File ID:		<u></u>
% Moisture: 30	decanted: (Y/N)	N	Date Received:	: 06/23	/00
Extraction: (SepF/C	ont/Sonc) SONC		Date Extracted	1:06/26	/00
Concentrated Extract	Volume: 5000	(ul)	Date Analyzed:	: 06/30	/00
Injection Volume:	2.0(uL)		Dilution Facto	or: 1.0	
GPC Cleanup: (Y/N)	N pH:	-	Sulfur Cleanur	p: (Y/N) N
CAS NO.	COMPOUND	CONCEN (ug/L	TRATION UNITS or ug/Kg) UG/H	: KG	Q
94-75-7 93-72-1 93-76-5	2,4-D silvex 2,4,5-T			2.7 6.3 3.9	JP P P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I PEST

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

	TO COMPLICHEM		Contract		RR (CREEK
ab Na	me: COMPOCHEM		CONCLUCE	-	· ····································	
Lab Co	de: LIBRTY	Case No.:	SAS No.	: SDG	No.: Q	1398
Matrix	: (soil/water)	SOIL		Lab Sample ID:	: Q1398	- 6
Sample	wt/vol:	30.0 (g/mL) G		Lab File ID:	<u></u>	
% Mois	ture: 33	decanted: (Y/N)	N	Date Received	: 06/23	/00
Extrac	tion: (SepF/C	ont/Sonc) SONC		Date Extracted	1:06/26	/00
Concen	trated Extract	Volume: 5000	(ul)	Date Analyzed	: 06/29	/00
Inject	ion Volume:	2.0(uL)		Dilution Facto	or: 1.0	
GPC Cl	eanup: (Y/N)	N pH:		Sulfur Cleanu	p: (Y/N) N
	CAS NO.	COMPOUND	CONCE (ug/L	NTRATION UNITS or ug/Kg) UG/1	: KG	Q
	94-75-7 93-72-1 93-76-5	2,4-D silvex 2,4,5-T			2.5 0.71 0.73	JB JB JBP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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		Contract	-	PB AS
1D Name: COMPUCHEM		CONCLACE:	l	· · · · · · · · · · · · · · · · · · ·
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No	.: Q1398
Matrix: (soil/water)	SOIL	Lab	Sample ID: Q	1398-7
Sample wt/vol:	30.0 (g/mL) G	Lab	File ID: _	
% Moisture: 29	decanted: (Y/N)	N Date	e Received: 0	6/23/00
Extraction: (SepF/C	ont/Sonc) SONC	Date	e Extracted:0	6/26/00
Concentrated Extract	Volume: 5000	(ul) Date	e Analyzed: 0	6/29/00
Injection Volume:	2.0(uL)	Dil	ution Factor:	1.0
GPC Cleanup: (Y/N)	N pH:	Sul	fur Cleanup:	(Y/N) N
CAS NO.	COMPOUND	CONCENTRA (ug/L or	TION UNITS: ug/Kg) UG/KG	Q
04 75 7	245			7 0 11

94-75-7 - 2,4-D	7.0	U
93-72-1silvex	2.8	U
93-76-52,4,5-T	0.80	JP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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1D PESTICIDE ORGANICS ANALYSIS I Drugon Fisence

EPA SAMPLE NO.

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b Name: COMPUCHEM		Contr	act:		EASI CREEK
Lab Code: LIBRTY	Case No.:	SAS	No.:	SDG No	o.: Q1398
Matrix: (soil/water)	SOIL		Lab Sa	mple ID: (21398-8
Sample wt/vol:	30.0 (g/m	止) G	Lab Fi	le ID: _	
% Moisture: 19	decanted:	(Y/N) N	Date F	Received: (06/23/00
Extraction: (SepF/G	Cont/Sonc) S	SONC	Date H	xtracted:(06/26/00
Concentrated Extract	: Volume:	5000(ul)	Date A	malyzed: (06/29/00
Injection Volume:	2.0(uL)		Diluti	on Factor:	1.0
GPC Cleanup: (Y/N)	N P	H:	Sulfur	Cleanup:	(Y/N) N
CAS NO.	COMPOUNE	CC) (1	NCENTRATIC	N UNITS: 'Kg) UG/KG	Q

94-75-7 2,4- D	2.5	JBP
93-72-1silvex	0.39	JBP
93-76-52,4,5-T	0.95	JBP
		1

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

		Countries at	PROCE	SS BLDG
ab Name: COMPUCHEM		Contract:	I	·
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No.: (21398
Matrix: (soil/water)	SOIL	Lab S	ample ID: Q139	8-9
Sample wt/vol:	30.0 (g/mL) G	Lab F	Tile ID:	
% Moisture: 29	decanted: (Y/N)	N Date	Received: 06/2	3/00
Extraction: (SepF/C	ont/Sonc) SONC	Date	Extracted:06/20	5/00
Concentrated Extract	Volume: 5000((ul) Date	Analyzed: 06/3	0/00
Injection Volume:	2.0(uL)	Dilut	ion Factor: 10	00.0
GPC Cleanup: (Y/N)	N pH:	Sulfu	ir Cleanup: (Y/	N) Y
CAS NO.	COMPOUND	CONCENTRATI (ug/L or ug	ION UNITS: g/Kg) UG/KG	Q
94-75-7 93-72-1 93-76-5	2,4-D silvex 2,4,5-T		- 7000 680 3500	U JBP U

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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ab Name, COMDUCHEM		Contract.		CHIP AREA
ab Name: COMPOCHEM		concrace.	1	
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG	No.: Q1398
Matrix: (soil/water)	SOIL	Lab	Sample ID:	Q1398-10
Sample wt/vol:	30.0 (g/mL) G	Lab	File ID:	
% Moisture: 39	decanted: (Y/N)	N Date	e Received:	06/23/00
Extraction: (SepF/C	ont/Sonc) SONC	Date	e Extracted	1:06/26/00
Concentrated Extract	Volume: 5000	(ul) Date	e Analyzed:	06/29/00
Injection Volume:	2.0(uL)	Dilı	ution Facto	or: 1.0
GPC Cleanup: (Y/N)	N pH:	Sul:	Eur Cleanup): (Y/N) N
CAS NO.	COMPOUND	CONCENTRA (ug/L or)	TION UNITS: ug/Kg) UG/K	α Q
94 - 75 - 7				2 3 JBP

94-75-72,4-D	2.3	JBP
93-72-1silvex	0.12	JBP
93-76-52,4,5-T	0.98	JBP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UBSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETICN

FORM I PEST

EPA SAMPLE NO.

1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

FUEL TANK

ab Name: COMPUCHEM	Contract:	
Lab Code: LIBRTY Cas	se No.: SAS No.:	SDG No.: Q1398
Matrix: (soil/water) SC	OIL	Lab Sample ID: Q1398-11
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:
% Moisture: 26 de	ecanted: (Y/N) N	Date Received: 06/23/00
Extraction: (SepF/Cont	t/Sonc) SONC	Date Extracted:06/26/00
Concentrated Extract Vo	olume: 5000(ul)	Date Analyzed: 06/30/00
Injection Volume:	2.0(uL)	Dilution Factor: 1.0
GPC Cleanup: (Y/N) N	pH:	Sulfur Cleanup: (Y/N) Y
CAS NO.	CONCEN COMPOUND (ug/L	TRATION UNITS: or ug/Kg) UG/KG Q
94 - 75 - 7	-2,4-D -silvex -2,4,5-T	13 B 1.9 JBP 2.9 JBP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1

ab Name: COMPUCHEM		Contract:	TROUGH
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No.: Q1398
Matrix: (soil/water)	SOIL	Lab Sa	ample ID: Q1398-12
Sample wt/vol:	30.0 (g/mL) G	Lab F:	lle ID:
<pre>% Moisture: 21</pre>	decanted: (Y/N)	N Date I	Received: 06/23/00
Extraction: (SepF/C	ont/Sonc) SONC	Date H	Extracted:06/26/00
Concentrated Extract	Volume: 5000(ul) Date A	analyzed: 06/30/00
Injection Volume:	2.0(uL)	Dilut	on Factor: 1.0
GPC Cleanup: (Y/N)	N pH:	Sulfu	Cleanup: (Y/N) Y
CAS NO.	COMPOUND	CONCENTRATIO	ON UNITS: /Kg) UG/KG Q
94-75-7 93-72-1 93-76-5	2,4-D silvex 2,4,5-T		27 BP 12 BP 6.4 BP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE CATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1

				DRAINA	GE DITCH
ab Name: COMPUCHEM		Contract	:		
Lab Code: LIBRTY	Case No.:	SAS No.	: SDG	No.: Q	1398
Matrix: (soil/water)	SOIL		Lab Sample ID:	Q1398	-13
Sample wt/vol:	30.0 (g/mL) G		Lab File ID:		
% Moisture: 56	decanted: (Y/N)	N	Date Received:	: 06/23	/00
Extraction: (SepF/C	ont/Sonc) SONC		Date Extracted	1:06/26	/00
Concentrated Extract	Volume: 5000	(ul)	Date Analyzed	: 06/30	/00
Injection Volume:	2.0(uL)		Dilution Facto	or: 1.0)
GPC Cleanup: (Y/N)	N pH:		Sulfur Cleanu	p: (Y/N	I) Y
CAS NO.	COMPOUND	CONCE (ug/L	NTRATION UNITS or ug/Kg) UG/1	: KG	Q
94-75-7 93-72-1 93-76-5	2,4-D silvex 2,4,5-T			6.1 0.56 0.79	JBP JBP JBP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I PEST

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EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS

1D

Upstream? ?
ntract:

EB CREEK

Co ab Name: COMPUCHEM SDG No.: Q1398 SAS No.: Lab Code: LIBRTY Case No.: Lab Sample ID: Q1398-14 Matrix: (soil/water) SOIL 30.0 (g/mL) G Lab File ID: Sample wt/vol: Date Received: 06/23/00 decanted: (Y/N) N % Moisture: 21 Date Extracted:06/26/00 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/29/00 Concentrated Extract Volume: 5000(ul) Dilution Factor: 1.0 Injection Volume: 2.0(uL) Sulfur Cleanup: (Y/N) N GPC Cleanup: (Y/N) N pH:____ CONCENTRATION UNITS:

CAS NO.

COMPOUND

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

Q

94-75-72,4-D	8.7	B
93-76-5silvex	1.2	JBP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

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EPA SAMPLE NO.

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		WP-13 LAYER 3
ab Name: COMPUCHEM	Contract:	· · · · · · · · · · · · · · · · · · ·
Lab Code: LIBRTY Case No.:	SAS No.:	SDG No.: Q1398
Matrix: (soil/water) SOIL	Lab Sampl	e ID: Q1398-15
Sample wt/vol: 30.0 (g/mL)	G Lab File	ID:
<pre>% Moisture: 45 decanted: (Y</pre>	/N) N Date Rece	eived: 06/23/00
Extraction: (SepF/Cont/Sonc) SON	C Date Extr	acted:06/26/00
Concentrated Extract Volume: 5	000(ul) Date Anal	yzed: 06/29/00
Injection Volume: 2.0(uL)	Dilution	Factor: 1.0
GPC Cleanup: (Y/N) N pH:	Sulfur Cl	eanup: (Y/N) N
CAS NO. COMPOUND	CONCENTRATION U (ug/L or ug/Kg)	INITS: UG/KG Q
94-75-72,4-D 93-72-1silvex 93-76-52,4,5-T		9.0 JB 1.1 JBP 3.1 JBP

NC QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

WP-13 LAYER 4

ab Name: COMPUCHEM		Contract:	
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No.: Q1398
Matrix: (soil/water)	SOIL	L	ab Sample ID: Q1398-16
Sample wt/vol:	30.0 (g/mL) G	L	ab File ID:
% Moisture: 34	decanted: (Y/N)	N D	ate Received: 06/23/00
Extraction: (SepF/C	ont/Sonc) SONC	D	ate Extracted:06/26/00
Concentrated Extract	Volume: 5000(ul) D	ate Analyzed: 06/29/00
Injection Volume:	2.0(uL)	D	ilution Factor: 1.0
GPC Cleanup: (Y/N)	N pH:	S	ulfur Cleanup: (Y/N) N
CAS NO.	COMPOUND	CONCENT (ug/L o	RATION UNITS: or ug/Kg) UG/KG Q

94-75-72,4-D 3.4 JBP 93-72-1silvex 1.8 JBP 93-76-52,4,5-T 2.0 JBP	94-75-72,4-D	3.4	JBP
	93-72-1silvex	1.8	JBP
	93-76-52,4,5-T	2.0	JBP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1

			PROCES	S BLDGMS
ab Name: COMPUCHEM		Contract:		
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No.: Q	1398
Matrix: (soil/water)	SOIL	Lab Sa	ample ID: WG361	6-3
Sample wt/vol:	30.0 (g/mL) G	Lab F:	ile ID:	
% Moisture: 29	decanted: (Y/N)	N Date H	Received: 06/23	/00
Extraction: (SepF/C	Cont/Sonc) SONC	Date I	Extracted:06/26	/00
Concentrated Extract	Volume: 5000	(ul) Date A	Analyzed: 06/30	/00
Injection Volume:	2.0(uL)	Dilut:	ion Factor: 100	0.0
GPC Cleanup: (Y/N)	N pH:	_ Sulfu:	r Cleanup: (Y/N) Y
CAS NO.	COMPOUND	CONCENTRATIC (ug/L or ug	ON UNITS: /Kg) UG/KG	Q
94-75-7 93-72-1 93-76-5	2,4-D silvex 2,4,5-T		7000 240 3500	U JBP U

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1

ab Name, COMPUCHEM		Contract	PROCESS BLDGMSD
Lab Code: LIBRTY	Case No.:	SAS No.: SDG	No.: Q1398
Matrix: (soil/water)	SOIL	Lab Sample ID:	WG3616-4
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	<u></u>
% Moisture: 29	decanted: (Y/N)	N Date Received:	06/23/00
Extraction: (SepF/Co	ont/Sonc) SONC	Date Extracted	1:06/26/00
Concentrated Extract	Volume: 5000(ul) Date Analyzed:	06/30/00
Injection Volume:	2.0(uL)	Dilution Facto	or: 1000.0
GPC Cleanup: (Y/N)	N pH:	Sulfur Cleanup): (Y/N) Y
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/K	G Q

94-75-72,4-D	7000	υ
93-72-1silvex	23	JBP
93-76-52,4,5-T	320	JBP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

EPA SAMPLE NO.

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

PQWLCS

ab Name: COMPUCHEM		Contract:	
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No.: Q1398
Matrix: (soil/water)	SOIL		Lab Sample ID: WG3616-2
Sample wt/vol:	30.0 (g/mL) G		Lab File ID:
<pre>% Moisture: 0</pre>	decanted: (Y/N)	N	Date Received:
Extraction: (SepF/C	Cont/Sonc) SONC		Date Extracted:06/26/00
Concentrated Extract	Volume: 5000	(ul)	Date Analyzed: 06/29/00
Injection Volume:	2.0(uL)		Dilution Factor: 1.0
GPC Cleanup: (Y/N)	N pH:		Sulfur Cleanup: (Y/N) N
CAS NO.	COMPOUND	CONCEN (ug/L	UTRATION UNITS: or ug/Kg) UG/KG Q

94-75-72,4-D 93-72-1silvex 93-76-52,4,5-T	58 11 11	BB BB	
			l

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I PEST

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3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

ib Name: COMPUCHEMContract:Lab Code: LIBRTYCase No.:SAS No.:SDG No.: Q1398Matrix Spike - EPA Sample No.:PROCESS BLDG

COMPOUND	SPIKE	SAMPLE	MS	MS	QC.
	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	(ug/Kg	(ug/Kg)	(ug/Kg)	.REC #	REC.
2,4-D	94	0.0	0.0	0*	30-150
silvex	19	680	240	-2316*	30-150
2,4,5-T	19	0.0	0.0	0*	30-150

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

COMPOUND	SPIKE ADDED (ug/Kg	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LI RPD	MITS REC.
2,4-D silvex 2,4,5-T	94 19 19	0.0 23 320	-3458* 1684*	165*	40 40 40	30-150 30-150 30-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 3 outside limits Spike Recovery: 6 out of 6 outside limits

COMMENTS:

SOIL PESTICIDE LAB CONTROL SAMPLE

зþ	Name:	COMPUCHEM		Contract:		
Lab	Code:	LIBRTY	Case No.	: SAS No.: SD	G No.:	Q1398

COMPOUND	SPIKE ADDED (ug/Kg	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC. ======
2,4-D	67	58	86	30-150
silvex	13	11	85	30-150
2,4,5-T	13	11	85	30-150

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 3 outside limits

COMMENTS:

FORM III PEST-2

PESTICIDE ORGANICS ANALYSIS DATA SHEET

PBLKPX Contract: b Name: COMPUCHEM SDG No.: Q1391 Lab Code: LIBRTY Case No.: SAS No.: Lab Sample ID: WG3554-1 Matrix: (soil/water) WATER Lab File ID: Sample wt/vol: 500.0 (g/ml) ML Date Received: decanted: (Y/N)____ % Moisture: Date Extracted:06/23/00 Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/00 Concentrated Extract Volume: 2500(ul) Dilution Factor: 1.0 Injection Volume: 2.0(uL) Sulfur Cleanup: (Y/N) N GPC Cleanup: (Y/N) N pH: CONCENTRATION UNITS: Q (uq/L or uq/Kg) UG/LCAS NO. COMPOUND 0.032 JP 94-75-7----2,4-D 0.0028 JP 93-72-1----silvex 0.0045 JP 93-76-5----2,4,5-T

> NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

> > FORM I PEST

PESTICIDE ORGANIC	S ANALYSIS DATA SHEET	· · · · · · · · · · · · · · · · · · ·
b Name - COMPUCHEM	Contract:	SOUTH LAGOON
		SDC No • 01391
Lab Code: LIBRTY Case No.	: SAS NO.:	3DG NO Q1331
Matrix: (soil/water) WATER	Lab	Sample ID: Q1391-1
Sample wt/vol: 500.0 (g/ml) ML Lab	File ID:
<pre>% Moisture: decante</pre>	d: (Y/N) Dat	e Received: 06/22/00
Extraction: (SepF/Cont/Sonc) SEPF Dat	e Extracted:06/23/00
Concentrated Extract Volume:	2500(ul) Dat	e Analyzed: 06/23/00
Injection Volume: 2.0(uL) Dil	ution Factor: 1.0
GPC Cleanup: (Y/N) N	pH: Sul	fur Cleanup: (Y/N) N
CAS NO. COMPO	CONCENTRA UND (ug/L or	ATION UNITS: ug/Kg) UG/L Q
94-75-72,4-D 93-72-1silve 93-76-52,4,5	× -T	0.046 JBP 0.035 JBP 0.026 JBP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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EPA SAMPLE NO.

EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

ab Name: COMPUCHEM	Contract	NORTH LAGOON	
Lab Code: LIBRTY C	Case No.: SAS No.:	: SDG No.: Q1391	
Matrix: (soil/water)	WATER	Lab Sample ID: Q1391-2	
Sample wt/vol:	500.0 (g/ml) ML	Lab File ID:	
% Moistúre:	decanted: (Y/N)	Date Received: 06/22/00	
Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:06/23/00			
Concentrated Extract	Volume: 2500(ul)	Date Analyzed: 06/24/00	
Injection Volume:	2.0(uL)	Dilution Factor: 1.0	
GPC Cleanup: (Y/N)	N pH:	Sulfur Cleanup: (Y/N) N	
CONCEN CAS NO. COMPOUND (ug/L		NTRATION UNITS: or ug/Kg) UG/L Q	
94-75-7 93-72-1 93-76-5	2,4-D silvex 2,4,5-T	0.20 JBP 0.16 JBP 0.077 JBP	

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I PEST

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EPA SAMPLE NO.

0.015 JBP

PESTICIDE ORGANICS ANALYSIS DATA SHEET

93-76-5----2,4,5-T

TROUGH ib Name: COMPUCHEM Contract: SDG No.: Q1391 SAS No.: Lab Code: LIBRTY Case No.: Lab Sample ID: Q1391-3 Matrix: (soil/water) WATER Lab File ID: Sample wt/vol: 500.0 (g/ml) ML Date Received: 06/22/00 % Moisture: decanted: (Y/N) Date Extracted:06/23/00 Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/24/00 Concentrated Extract Volume: 2500(ul) Dilution Factor: 1.0 Injection Volume: 2.0(uL) Sulfur Cleanup: (Y/N) N GPC Cleanup: (Y/N) N pH: ____ CONCENTRATION UNITS: Q (ug/L or ug/Kg) UG/L CAS NO. COMPOUND 0.28 JBP 94-75-7----2,4-D 93-72-1----silvex 0.030 JB

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

PPXLCS 1b Name: COMPUCHEM Contract: SDG No.: Q1391 SAS No.: Lab Code: LIBRTY Case No.: Lab Sample ID: WG3554-2 Matrix: (soil/water) WATER Lab File ID: Sample wt/vol: 500.0 (g/ml) ML % Moisture: ____ decanted: (Y/N) ____ Date Received: _____ Date Extracted:06/23/00 Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/00 Concentrated Extract Volume: 2500(ul) Dilution Factor: 1.0 Injection Volume: 2.0(uL) Sulfur Cleanup: (Y/N) N GPC Cleanup: (Y/N) N pH: CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q CAS NO. COMPOUND 1.8 B 94-75-7----2,4-D 0.40 JB 93-72-1----silvex 0.36 JB 93-76-5----2,4,5-T

> NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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EPA SAMPLE NO.

14

PESTICIDE ORGANICS ANALYSIS DATA SHEET

TROUGHMS

b Name: COMPUCHEM	Contract	:
Lab Code: LIBRTY	Case No.: SAS No.	: SDG No.: Q1391
Matrix: (soil/water)	WATER	Lab Sample ID: WG3554-5
Sample wt/vol:	500.0 (g/ml) ML	Lab File ID:
<pre>% Moisture:</pre>	decanted: (Y/N)	Date Received: 06/22/00
Extraction: (SepF/C	ont/Sonc) SEPF	Date Extracted:06/23/00
Concentrated Extract	Volume: 2500(ul)	Date Analyzed: 06/24/00
Injection Volume:	2.0(uL)	Dilution Factor: 1.0
GPC Cleanup: (Y/N)	N pH:	Sulfur Cleanup: (Y/N) N
CAS NO.	CONCE COMPOUND (ug/L	NTRATION UNITS: or ug/Kg) UG/L Q
94-75-7 93-72-1 93-76-5	2,4-D	0.94 JBP 0.28 JBP 0.26 JB

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

TROUGHMSD

ib Name: COMPUCHEM	Contract	:
Lab Code: LIBRTY	Case No.: SAS No.	: SDG No.: Q1391
Matrix: (soil/water)	WATER	Lab Sample ID: WG3554-6
Sample wt/vol:	500.0 (g/ml) ML	Lab File ID:
% Moisture:	decanted: (Y/N)	Date Received: 06/22/00
Extraction: (SepF/C	ont/Sonc) SEPF	Date Extracted:06/23/00
Concentrated Extract	Volume: 2500(ul)	Date Analyzed: 06/24/00
Injection Volume:	2.0(uL)	Dilution Factor: 1.0
GPC Cleanup: (Y/N)	N pH:	Sulfur Cleanup: (Y/N) N
CAS NO.	CONCE COMPOUND (ug/L	NTRATION UNITS: or ug/Kg) UG/L Q
94-75-7 93-72-1 93-76-5	2,4-D silvex 2,4,5-T	0.81 JBP 0.27 JBP 0.20 JBP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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FORM I PEST

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3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

b Name: COMPUCHEMContract:Lab Code: LIBRTYCase No.:SAS No.:SDG No.: Q1391Matrix Spike - EPA Sample No.:TROUGH

COMPOUND	SPIKE	SAMPLE	MS	MS	QC.
	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	(ug/L)	(ug/L)	(ug/L)	REC #	REC.
2,4-D	2.0	0.28	0.94	33	30-150
silvex	0.40	0.030	0.28	62	30-150
2,4,5-T	0.40	0.015	0.26	61	30-150

NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LI RPD	MITS REC.
2,4-D	2.0	0.81	26*	15	40	30-150
silvex	0.40	0.27	60	4	40	30-150
2,4,5-T	0.40	0.20	46	26	40	30-150

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Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits Spike Recovery: 1 out of 6 outside limits

COMMENTS:

FORM III PEST-1

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3E WATER PESTICIDE LAB CONTROL SAMPLE

b Name:	COMPUCHEM			Contract:			
Lab Code:	LIBRTY	Case N	o.:	SAS No.:	SDG	No.:	Q1391

COMPOUND	SPIKE	LCS	LCS	QC.
	ADDED	CONCENTRATION	%	LIMITS
	(ug/L)	(ug/L)	REC #	REC.
2,4-D	2.0	1.8	90	30-150
silvex	0.40	0.40	100	30-150
2,4,5-T	0.40	0.36	90	30-150

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 3 outside limits

COMMENTS:

FORM III PEST-1

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1D PESTICIDE ORGANICS ANALYSIS DATA SHEET EPA SAMPLE NO.

1

						PB	LKQY
ab Nam	e: COMPUCHEM		Contr	act:	1	i	
Lab Cod	le: LIBRTY	Case No.:	SAS	No.:	SDG	No.: S	1398
Matrix:	(soil/water)	WATER		Lab Sa	mple ID:	WG361	8-1
Sample	wt/vol:	500.0 (g/ml)	ML	Lab Fi	le ID:	<u></u>	
% Moist	ure:	decanted: (Y/	/N)	Date R	eceived		
Extract	ion: (SepF/C	ont/Sonc) SEPH	र	Date E	xtracted	1:06/27	/00
Concent	rated Extract	Volume: 25	500(ul)	Date A	nalyzed	06/29	/00
Injecti	on Volume:	2.0(uL)		Diluti	on Facto	or: 1.0	
GPC Cle	eanup: (Y/N)	N pH:		Sulfur	Cleanur	p: (Y/N)	i) N
	CAS NO.	COMPOUND	C((1	DNCENTRATIC	N UNITS (Kg) UG/1	:	Q
	94-75-7 93-72-1	2,4-D				0.027 0.0079	JP JP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11

					TCLPBLKF1
.ab Name: COMPUCHEM		Conti	cact:	l	
Lab Code: LIBRTY	Case No.:	SAS	No.:	SDG No.	: S1398
Matrix: (soil/water)	WATER		Lab Sam	ple ID: WG	3612-1
Sample wt/vol:	100.0 (g/ml) ML	Lab Fil	e ID:	
% Moisture:	decanted: ((Y/N)	Date Re	ceived:	
Extraction: (SepF/C	Cont/Sonc) SE	EPF	Date Ex	tracted:06	/27/00
Concentrated Extract	Volume:	2500(ul)	Date An	alyzed: 06	/29/00
Injection Volume:	2.0(uL)		Dilutio	n Factor:	1.0
GPC Cleanup: (Y/N)	N pH	I:	Sulfur	Cleanup: (Y/N) N
CAS NO.	COMPOUND	CC (1	DNCENTRATION 1g/L or ug/K	UNITS: g) UG/L	Q
94-75-7	2,4-D		·	0. 0.0	22 BJP 944 BJP

NC QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED. WITH DISCRETION

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EPA SAMPLE NO.

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1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

		Contract	ICLPBLKF2
Jab Name: COMPUCHEM		Concract.	
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No.: S1398
Matrix: (soil/water)	WATER	Lab Sa	mple ID: WG3612-2
Sample wt/vol:	100.0 (g/ml) M	1L Lab Fi	le ID:
<pre>% Moisture:</pre>	decanted: (Y/N)	Date R	eceived:
Extraction: (SepF/C	Cont/Sonc) SEPF	Date E	xtracted:06/27/00
Concentrated Extract	Volume: 2500)(ul) Date A	nalyzed: 06/29/00
Injection Volume:	2.0(uL)	Diluti	on Factor: 1.0
GPC Cleanup: (Y/N)	N pH:		Cleanup: (Y/N) N
CAS NO.	COMPOUND	CONCENTRATIO (ug/L or ug/	N UNITS: Kg) UG/L Q
94 - 75 - 7	2,4-D		0.098 BJP 0.030 BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUESTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1

	<i>.</i>	C auchasa at	SOUTHLAGOON
.ab Name: COMPUCH	SM	Contract:	·
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No.: S1398
Matrix: (soil/wate	er) WATER	Lab Sa	mple ID: S1398-1
Sample wt/vol:	100.0 (g/ml)	ML Lab Fi	le ID:
% Moisture:	decanted: (Y/	N) Date R	leceived: 06/23/00
Extraction: (SepP	F/Cont/Sonc) SEPF	Date E	Extracted:06/27/00
Concentrated Extra	act Volume: 25	00(ul) Date A	nalyzed: 06/29/00
Injection Volume:	2.0(uL)	Diluti	on Factor: 1.0
GPC Cleanup: (Y,	N) N pH:	Sulfur	Cleanup: (Y/N) N
CAS NO.	COMPOUND	CONCENTRATIC (ug/L or ug/	NUNITS: (Kg) UG/L Q
94-75-7 93-72-1	2,4-D		0.20 BJP 0.26 BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

17

				NORTHLAGOON
.ab Name: COMPUCHEM		Contract:	I	
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No	.: S1398
Matrix: (soil/water)	WATER	Lab S	ample ID: S	1398-2
Sample wt/vol:	100.0 (g/ml) M	L Lab F	ile ID: _	
% Moisture:	decanted: (Y/N)	Date	Received: 0	6/23/00
Extraction: (SepF/C	ont/Sonc) SEPF	Date	Extracted:0	6/27/00
Concentrated Extract	Volume: 2500	(ul) Date	Analyzed: 0	6/29/00
Injection Volume:	2.0(uL)	Dilut	ion Factor:	1.0
GPC Cleanup: (Y/N)	N pH:	_ Sulfu	r Cleanup:	(Y/N) N
CAS NO.	COMPOUND	CONCENTRATI (ug/L or ug	ON UNITS: /Kg) UG/L	Q
94-75-7 93-72-1	2,4-D		0.	.21 BJP 059 BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

FORM I PEST

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EPA SAMPLE NO.

1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

						WP-6	LAYER
ab Name: COMPUCHEM		Cor	itract:		1		
Lab Code: LIBRTY	Case No.:	Sł	AS No.:		SDG	No.: S	1398
Matrix: (soil/water)	WATER			Lab Sa	mple ID:	S1398	-3
Sample wt/vol:	100.0 (g,	/ml) ML		Lab Fi	le ID:		
% Moisture:	decanted	: (Y/N)		Date R	eceived:	06/23	/00
Extraction: (SepF/C	Cont/Sonc)	SEPF		Date E	xtracted	1:06/27	/00
Concentrated Extract	Volume:	2500(ul)	Date A	nalyzed:	06/29	/00
Injection Volume:	2.0(uL)			Diluti	on Facto	or: 1.0	
GPC Cleanup: (Y/N)	N	pH:		Sulfur	Cleanu	p: (Y/N	[) N
CAS NO.	COMPOU	ND	CONCEN (ug/L	TRATIC or ug/	N UNITS (Kg) UG/1	: [.	Q
94-75-7	2,4-D					0.16 0.038	BJP BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1-

						WP-13 LAYER
.ab Na	me: COMPUCHEM		Cont	ract:		·
Lab Co	de: LIBRTY	Case No.:	SAS	No.:	SDG	No.: S1398
Matrix	: (soil/water)	WATER		Lab	Sample ID	: 51398-4
Sample	wt/vol:	100.0 (g/r	ml) ML	Lab	File ID:	
% Mois	sture:	decanted:	(Y/N)	Dat	e Received	: 06/23/00
Extrac	tion: (SepF/Co	ont/Sonc) s	SEPF	Dat	e Extracted	d:06/27/00
Concen	trated Extract	Volume:	2500(ul)	Dat	e Analyzed	: 06/29/00
Inject	ion Volume:	2.0(uL)		Dil	ution Facto	or: 1.0
GPC Cl	eanup: (Y/N)	N J	рН:	Sul	fur Cleanu	p: (Y/N) N
	CAS NO.	COMPOUN		ONCENTRA ug/L or	TION UNITS ug/Kg) UG/1	: L Q
	94-75-7 93-72-1	2,4-D				0.12 BJP 0.22 BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1-

ab Name: COMPUCHEM	C	Contract:	WP1-WASTE PILE
Lab Code: LIBRTY (Tage No ·	SAS No. :	SDG No.: S1398
Matrix, (goil/water)		Lab Samr	Je TD. 51398-5
Matrix: (Soli/water)	WAIER		
Sample wt/vol:	100.0 (g/ml) ML	Lab File	e 1D:
% Moisture:	decanted: (Y/N)	_ Date Rec	eived: 06/23/00
Extraction: (SepF/Co	ont/Sonc) SEPF	Date Ext	racted:06/27/00
Concentrated Extract	Volume: 2500(u	l) Date Ana	lyzed: 06/29/00
Injection Volume:	2.0(uL)	Dilution	Factor: 1.0
GPC Cleanup: (Y/N)	N pH:	Sulfur C	Cleanup: (Y/N) N
CAS NO.	COMPOUND	CONCENTRATION (ug/L or ug/Kg	UNITS: J) UG/L Q
94-75-7 93-72-1	2,4-D		0.20 BJP 0.033 BJP

NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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FORM I PEST

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1

		Contract		RRC	CREEK
Lab Name: COMPUCHEM		CONLIACE.			
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG	No.: SI	1398
Matrix: (soil/water)	WATER	La	b Sample ID	: S1398·	-6
Sample wt/vol:	100.0 (g/ml) M	L La	b File ID:		
% Moisture:	decanted: (Y/N)	Da	te Received	: 06/23,	/00
Extraction: (SepF/C	ont/Sonc) SEPF	Da	te Extracted	d:06/27,	/00
Concentrated Extract	Volume: 2500	(ul) Da	te Analyzed	: 06/29,	/00
Injection Volume:	2.0(uL)	Di	lution Facto	or: 1.0	
GPC Cleanup: (Y/N)	N pH:		lfur Cleanu	p: (Y/N)) N
CAS NO.	COMPOUND	CONCENTR (ug/L or	ATION UNITS ug/Kg) UG/	: L	Q
94-75-7 93-72-1	2,4-D			1.0 0.044	BJP BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1

.ab Name: COMPUCHEM	Co	ontract:		P	B AS
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG N	io.: S	1398
Matrix: (soil/water)	WATER	Lab Sa	ample ID:	S1398	-7
Sample wt/vol:	100.0 (g/ml) ML	Lab F:	ile ID:		<u> </u>
% Moisture:	decanted: (Y/N)	_ Date H	Received:	06/23	/00
Extraction: (SepF/C	ont/Sonc) SEPF	Date H	Extracted:	06/27	/00
Concentrated Extract	Volume: 2500(u)	l) Date A	Analyzed:	06/29	/00
Injection Volume:	2.0(uL)	Dilut	ion Factor	: 1.0	
GPC Cleanup: (Y/N)	N pH:	Sulfu	r Cleanup:	(Y/N) N
CAS NO.	COMPOUND	CONCENTRATIO	ON UNITS: /Kg) UG/L		Q
94-75-7 93-72-1	2,4-D		0	0.27	BJP BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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1D PESTICIDE ORGANICS ANALYSIS DATA SHEET EPA SAMPLE NO.

17

		•		EAST	CREEK
.ab Name: COMPUCHEM	Ĺ	contract:	l	<u> </u>	
Lab Code: LIBRTY (Case No.:	SAS No.:	SDG	No.: S	1398
Matrix: (soil/water)	WATER	Lab Sa	mple ID:	S1398	- 8
Sample wt/vol:	100.0 (g/ml) ML	Lab Fi	le ID:		
% Moisture:	decanted: (Y/\dot{N})	Date R	eceived:	06/23	/00
Extraction: (SepF/Co	ont/Sonc) SEPF	Date E	xtracted	1:06/27	/00
Concentrated Extract	Volume: 2500(1	l) Date A	nalyzed:	06/29	/00
Injection Volume:	2.0(uL)	Diluti	on Facto	or: 1.0	
GPC Cleanup: (Y/N)	N pH:	Sulfur	Cleanur	p: (Y/N)	I) N
CAS NO.	COMPOUND	CONCENTRATIC (ug/L or ug/	N UNITS Kg) UG/1	: 	Q
94-75-7 93-72-1	2,4-D			0.18 0.083	BJP BJP

NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Т

				PROCESS BLDG
ab Name: COMPUCHEM		Contract:	l	
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG	No.: 51398
Matrix: (soil/water)	WATER	I	Lab Sample ID:	: 51398-9
Sample wt/vol:	100.0 (g/ml)	ML I	Lab File ID:	
% Moisture:	decanted: (Y/N	ľ) I	Date Received:	: 06/23/00
Extraction: (SepF/C	Cont/Sonc) SEPF	I	Date Extracted	1:06/27/00
Concentrated Extract	Volume: 250	00(ul) I	Date Analyzed:	: 06/29/00
Injection Volume:	2.0(uL)	I	Dilution Facto	or: 1.0
GPC Cleanup: (Y/N)	N pH:_		Sulfur Cleanur	p: (Y/N) N
CAS NO.	COMPOUND	CONCENT (ug/L d	IRATION UNITS: or ug/Kg) UG/I	L Q
94-75-7 93-72-1	2,4-D			0.72 BJP 0.16 BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

EPA SAMPLE NO.

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

					CHI	P AREA
Jab Name: COMPUCHEM		Cont	ract:			
Lab Code: LIBRTY	Case No.:	SAS	No.:	SDG	No.: S	1398
Matrix: (soil/water)	WATER		Lab Sa	mple ID:	S1398	-10
Sample wt/vol:	100.0 (g	/ml > ML	Lab Fi	le ID:		
% Moisture:	decanted	: (Y/N)	Date R	eceived:	06/23	/00
Extraction: (SepF/C	Cont/Sonc)	SEPF	Date E	xtracted	:06/27	/00
Concentrated Extract	Volume:	2500(ul)	Date A	nalyzed:	06/29	/00
Injection Volume:	2.0(uL)		Diluti	on Facto	r: 1.0	
GPC Cleanup: (Y/N)	N	pH:	Sulfur	Cleanup): (Y/N	I) N
CAS NO.	COMPOU	ND (ONCENTRATIC ug/L or ug/	N UNITS: 'Kg) UG/I	1	Q
94-75-7 93-72-1	2,4-D_ silvex				0.19 0.031	BJP BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

sh Nam	COMPLICIEM		Co	nt r	act ·			FUE	L TANK
aD Nam	e: COMPOCHEM				acc.		i		
Lab Cod	e: LIBRTY	Case No.:	S	SAS	No.:		SDG	No.: S	1398
Matrix:	(soil/water)	WATER			I	ab	Sample ID:	: S1398	-11
Sample	wt/vol:	100.0 (g/m	ml) ML		I	ab	File ID:		
% Moist	ure:	decanted:	(Y/N)	-	E	ate	Received	: 06/23	/00
Extract	ion: (SepF/Co	ont/Sonc) S	SEPF		Ľ	ate	Extracted	d:06/27	/00
Concent	rated Extract	Volume:	2500(ul	L)	Ľ	ate	Analyzed	: 06/29	/00
Injecti	on Volume:	2.0(uL)			I)ilu	tion Facto	or: 1.0)
GPC Cle	anup: (Y/N)	N]	рН:		S	Sulf	ur Cleanu	p: (Y/N	I) N
	CAS NO.	COMPOUN	D	CC (1	NCENI 1g/L c	rai or u	ION UNITS g/Kg) UG/1	: L	Q
_	94-75-7 93-72-1	2,4-D				·····	_	0.24 0.022	BJP BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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1D PESTICIDE ORGANICS ANALYSIS DATA SHEET EPA SAMPLE NO.

1-

		TROUGH
.ab Name: COMPUCHEM	Contract:	1
Lab Code: LIBRTY Case	No.: SAS No.:	SDG No.: S1398
Matrix: (soil/water) WAT	ER L	ab Sample ID: S1398-12
Sample wt/vol: 100	.0 (g/ml) ML L	ab File ID:
% Moisture: dec.	anted: (Y/N) D	ate Received: 06/23/00
Extraction: (SepF/Cont/	Sonc) SEPF D	ate Extracted:06/27/00
Concentrated Extract Vol	ume: 2500(ul) D	ate Analyzed: 06/29/00
Injection Volume: 2.	0(uL) D	ilution Factor: 1.0
GPC Cleanup: (Y/N) N	pH: S	ulfur Cleanup: (Y/N) N
CAS NO. C	CONCENT COMPOUND (ug/L c	RATION UNITS: rug/Kg) UG/L Q
94-75-72 93-72-1s	,4-D	0.97 BJP 0.091 BJ

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11

The Name COMPLICHEM	c	ontract.	DRAINAGE DITCH
ab Name: COMPOCHEM		concrace.	I
Lab Code: LIBRTY C	Case No.:	SAS No.: SD	G No.: S1398
Matrix: (soil/water)	WATER	Lab Sample I	D: S1398-13
Sample wt/vol:	100.0 (g/ml) ML	Lab File ID:	
% Moisture:	decanted: (Y/N)	Date Receive	d: 06/23/00
Extraction: (SepF/Co	ont/Sonc) SEPF	Date Extract	ed:06/27/00
Concentrated Extract	Volume: 2500(u	1) Date Analyze	d: 06/29/00
Injection Volume:	2.0(uL)	Dilution Fac	tor: 1.0
GPC Cleanup: (Y/N)	N pH:	Sulfur Clean	up: (Y/N) N
CAS NO.	COMPOUND	CONCENTRATION UNIT (ug/L or ug/Kg) UG	S: /L Q
94-75-7 93-72-1	2,4-D		0.91 BJP 0.043 BJ

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1-

ab Name CO	MDIICHEM		C	'ont i	ract.			EB	CREEK
ab Name. Co	MI OCHEM			.01101	Luce.		1		
Lab Code: LI	BRTY	Case No.:		SAS	No.:		SDG	No.: 5	1398
Matrix: (soi	l/water)	WATER				Lab Sa	ample ID:	S1398	8-14
Sample wt/vo	1:	100.0 (g/	ml) ML			Lab F	ile ID:	a 112	
% Moisture:		decanted:	(Y/N)			Date 1	Received:	06/23	/00
Extraction:	(SepF/C	ont/Sonc)	SEPF			Date 1	Extracted	1:06/27	/00
Concentrated	Extract	Volume:	2500 (u	l)		Date Å	Analyzed:	06/29	/00
Injection Vo	lume:	2.0(uL)				Dilut	ion Facto	or: 1.0)
GPC Cleanup:	(Y/N)	N	pH:			Sulfu	r Cleanup	b: (Y/N	1) N
CAS N	0.	COMPOUN	ID	CC (1	DNCEN 1g/L	TRATION OF US	ON UNITS: /Kg) UG/I		Q
94-75 93-72	-7	2,4-D						0.27 0.044	BJ BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1

ab Name: COMPUCHEM	c	Contract:	WP-13 LAYER 3
Lab Code: LIBRTY	Case No.:	SAS No.: SDG	No.: S1398
Matrix: (soil/water)	WATER	Lab Sample ID	: S1398-15
Sample wt/vol:	100.0 (g/ml) ML	Lab File ID:	
% Moisture:	decanted: (Y/N)	Date Received	: 06/23/00
Extraction: (SepF/Co	ont/Sonc) SEPF	Date Extracte	d:06/27/00
Concentrated Extract	Volume: 2500(1	1) Date Analyzed	: 06/29/00
Injection Volume:	2.0(uL)	Dilution Fact	or: 1.0
GPC Cleanup: (Y/N)	N pH:	Sulfur Cleanu	p: (Y/N) N
CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/	: L Q
94-75-7 93-72-1	2,4-D silvex		0.94 BJP 0.033 BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

4

1-

ab Name: COMPUCHEM	Contract:	WP-13 LAYER
Lab Code: LIBRTY Case	No.: SAS No.:	SDG No.: S1398
Matrix: (soil/water) WATE	ER L	ab Sample ID: S1398-16
Sample wt/vol: 100.	0 (g/ml) ML L	ab File ID:
% Moisture: deca	nted: (Y/N) D	ate Received: 06/23/00
Extraction: (SepF/Cont/S	Sonc) SEPF D	ate Extracted:06/27/00
Concentrated Extract Volu	nme: 2500(ul) D	ate Analyzed: 06/29/00
Injection Volume: 2.0)(uL) D	ilution Factor: 1.0
GPC Cleanup: (Y/N) N	pH: S	ulfur Cleanup: (Y/N) N
CAS NO. CO	MPOUND CONCENT	RATION UNITS: r ug/Kg) UG/L Q
94-75-72, 93-72-1si	4-D	1.0 BJP 0.074 BJP

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ab Name: COMPUCHEM	Co	ntract:	I
Lab Code: LIBRTY	Case No.: S	AS No.:	SDG No.: S1398
Matrix: (soil/water)	WATER	Lab	Sample ID: WG3618-3
Sample wt/vol:	100.0 (g/ml) ML	Lab	File ID:
% Moisture:	decanted: (Y/N)	. Dat	e Received: 06/23/00
Extraction: (SepF/C	ont/Sonc) SEPF	Dat	e Extracted:06/27/00
Concentrated Extract	Volume: 2500(ul) Dat	e Analyzed: 06/29/00
Injection Volume:	2.0(uL)	Dil	ution Factor: 1.0
GPC Cleanup: (Y/N)	N pH:	Sul	fur Cleanup: (Y/N) N
CAS NO.	COMPOUND	CONCENTRA (ug/L or	TION UNITS: ug/Kg) UG/L Q
94-75-7 93-72-1	2,4-D		5.8 BJ 2.0 BJ

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

1D PESTICIDE ORGANICS ANALYSIS DATA SHEET EPA SAMPLE NO.

1-

Jab Name: COMPUCHEM	(Contract:	NORTHLAGOONMSD
Lab Code: LIBRTY	Case No.:	SAS No.: SDG	G No.: S1398
Matrix: (soil/water)	WATER	Lab Sample II): WG3618-4
Sample wt/vol:	100.0 (g/ml) ML	Lab File ID:	
% Moisture:	decanted: (Y/N)_	Date Received	d: 06/23/00
Extraction: (SepF/C	ont/Sonc) SEPF	Date Extracte	ed:06/27/00
Concentrated Extract	Volume: 2500(1	ul) Date Analyzed	l: 06/29/00
Injection Volume:	2.0(uL)	Dilution Fact	cor: 1.0
GPC Cleanup: (Y/N)	N pH:	Sulfur Cleanu	ıp: (Y/N) N
CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/	S: ′L Q
94-75-7 93-72-1	2,4-D		6.3 BJ 2.3 BJ

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

17

			PQYLCS
ab Name: COMPUCHEM		Contract:	·
Lab Code: LIBRTY	Case No.:	SAS No.:	SDG No.: S1398
Matrix: (soil/water)	WATER	Lab Sa	mple ID: WG3618-2
Sample wt/vol:	500.0 (g/ml) ML	Lab Fi	le ID:
% Moisture:	decanted: (Y/N)	Date R	eceived:
Extraction: (SepF/C	Cont/Sonc) SEPF	Date E	xtracted:06/27/00
Concentrated Extract	Volume: 2500(ul) Date A	nalyzed: 06/29/00
Injection Volume:	2.0(uL)	Diluti	on Factor: 1.0
GPC Cleanup: (Y/N)	N pH:	Sulfur	Cleanup: (Y/N) N
CAS NO.	COMPOUND	CONCENTRATIC (ug/L or ug/	NUNITS: Kg)UG/L Q
94-75-7 93-72-1	2,4-D		1.6 B 0.44 BJ

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

.ab Name: COMPUCHEMContract:Lab Code: LIBRTYCase No.:SAS No.:SDG No.: S1398Matrix Spike - EPA Sample No.: NORTHLAGOON

COMPOUND	SPIKE	SAMPLE	MS	MS	QC.
	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	(ug/L)	(ug/L)	(ug/L)	REC #	REC.
2,4-D	10	0.21	5.8	56	30-150
silvex	2.0	0.059	2.0	97	30-150

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	¥ RPD #	QC LI RPD	MITS REC.
2,4-D	10	6.3	61	8	40	30-150
silvex	2.0	2.3	112	14	40	30-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits Spike Recovery: 0 out of 4 outside limits

COMMENTS:

FORM III PEST-1

3E WATER PESTICIDE LAB CONTROL SAMPLE

.ab	Name:	COMPUCHEM			Contra	.ct:			
Lab	Code:	LIBRTY	Case	No.:	SAS N	io.:	SDG	No.:	S1398

COMPOUND	SPIKE	LCS	LCS	QC.
	ADDED	CONCENTRATION	%	LIMITS
	(ug/L)	(ug/L)	REC #	REC.
2,4-D	2.0	1.6	80	30-150
silvex	0.40	0.44	110	30-150

NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III PEST-1

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3

BLANKS

 Lab Name:
 COMPUCHEM
 Contract:

 Lab Code:
 LIBRTY
 Case No.:
 SAS No.:

 Preparation Blank Matrix (soil/water):
 WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	~	1	c	Continuing C Blank (u	al: g/1	ibration L) 3	C	Prepa- ration Blank	c			м
	(ug/2/	<u> </u>	· ·		2	<u> </u>	-					<u></u>	<u> </u>
Arsenic	2.3	υ	2.	3 0	2.3	U	2.3	U	-4.27	<u> </u>	·	1	<u> </u>
Barium	0.1	υ	o.:	B	1.6	В	0.5	B	1.05	I B		l	P
Cadmium	2	в	0.:	2 0	2	B	0.2	U	60	7 B		Ŀ	P
Chromium	7	в	0.	4 U	4	В	0.4	U	0.40	ט ט	<u>'</u>	_l'	P
Lead	1.3	U	1.:	3 0	1.3	ש	1.3	U	1.30	0 U		Ŀ	P
Mercury	0.1	в	0.1	וש	0.1	U	0.1	ט	0.10	2 E		Ľ	cv
Selenium	2.2	U	-2.	5 B	2.2	U	-6.0	В	-2.47	8 E	3	1	P
Silver	0.6	υ	0.	5 U	0.6	ש	0.6	U	0.60	0 U	J	Ŀ	P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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INORGANIC ANALYSIS DATA SHEET

				EPA SAMPLE NO.
				LEACH BLK1
ab Name:	COMPUCHEM		Contract:	
Lab Code:	LIBRTY	Case No.:	SAS No.:	SDG No.: <u>\$1398</u>
atrix (so	il/water):	WATER	Lab Sample ID:	WG3612-1
Level (low	(med): LOW	l	Date Received:	06/26/00
Solids:	0.0			

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

CAS No.	Analyte	Concentration	С	Q	M
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	0.63	В	E	P
7440-43-9	Cadmium	0.20	ט	1	P
7440-47-3	Chromium	0.40	ע	E	P
7439-92-1	Lead	3.0	B		P
7439-97-6	Mercury	0.12	B		CV
7782-49-2	Selenium	10.5	B		P
7440-22-4	Silver	0.60	ע		P

PO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	<u></u>
Color After :	COLORLESS	Clarity After:	CLEAR	Artifacts:	
comments:				·	
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INORGANIC ANALYSIS DATA SHEET

		EPA SAMPLE NO.
· ·		LEACH BLK2
Lab Name: COMPUCHEM	Contract:	
Lab Code: LIBRTY Case No.:	SAS No.: SDG	No.: <u>\$1398</u>
Matrix (soil/water): WATER	Lab Sample ID: WG3612-2	
Level (low/med): LOW	Date Received: 06/26/00	
e solide: 00		

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

CAS No.	Analyte	Concentration	С	Q	м
7440-38-2	Arsenic	2.3	U	1	P
7440-39-3	Barium	0.77	B	E	P
7440-43-9	Cadmium	0.20	U		P
7440-47-3	Chromium	0.40	ע	E	P
7439-92-1	Lead	1.8	B		P
7439-97-6	Mercury	0.20	В		cv
7782-49-2	Selenium	12.6	В		P
7440-22-4	Silver	0.60	U		P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After :	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					<u>. </u>
					15

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INORGANIC ANALYSIS DATA SHEET

	mondani			EPA SAMPLE NO.
				SOUTH LAGOON
ab Name: COMPUCHEM	····	Contract:		
Lab Code: LIBRTY C.	ase No.:	SAS No.:	- SDG	No.: <u>\$1398</u>
fatrix (soil/water): WATE	ER	Lab Sample ID:	<u>s1398-1</u>	
Level (low/med): LOW		• Date Received:	06/23/00	

Solids: 0.0

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

CAS No.	Analyte	Concentration	c	Q	м
7440-38-2	Arsenic	30.3	В		P
7440-39-3	Barium	74.1	B	E	P
7440-43-9	Cadmium	1.2	В		P
7440-47-3	Chromium	54.2	B	E	P
7439-92-1	Lead	153	B	1	P
7439-97-6	Mercury	0.22	B		cv
7782-49-2	Selenium	10.3	В		P
7440-22-4	Silver	0.60	U		P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Color Before:	BROWN	Clarity Before:	CLEAR	Texture:	
Color After:	YELLOW	Clarity After:	CLEAR	Artifacts:	
Comments:				<u> </u>	
- <u></u>				· · · · · · · · · · · · · · · · · · ·	-20

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

 Lab Name:
 COMPUCHEM
 Contract:
 NORTH LAGOON

 Lab Code:
 LIBRTY
 Case No.:
 SDG No.:
 SDG No.:
 S1398

 Matrix (soil/water):
 WATER
 Lab Sample ID:
 S1398-2

 Level (low/med):
 LOW
 Date Received:
 06/23/00

 % Solids:
 0.0

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

CAS No.	Analyte	Concentration	С	Q	м
7440-38-2	Arsenic	21.2	В		P
7440-39-3	Barium	29.1	B	E	P
7440-43-9	Cadmium	1.9	В		P
7440-47-3	Chromium	7.0	В	E	P
7439-92-1	Lead	65.6	B		P
7439-97-6	Mercury	0.14	B		cv
7782-49-2	Selenium	7.3	B		P
7440-22-4	Silver	0.60	U		P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:		
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:		
comments:	····-				· · · · · · · · · · · · · · · · · · ·	
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

 Lab Name:
 COMPUCHEM
 Contract:
 WP-6 LAYER1

 Lab Code:
 LIBRTY
 Case No.:
 SDG No.:
 SDG No.:
 S1398

 Matrix (soil/water):
 WATER
 Lab Sample ID:
 S1398-3

 Level (low/med):
 LOW
 Date Received:
 06/23/00

 & Solids:
 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L____

CAS No.	Analyte	Concentration	c	Q	M
7440-38-2	Arsenic	4.0	B	1	P
7440-39-3	Barium	478	B	E	P
7440-43-9	Cadmium	0.20	U (P
7440-47-3	Chromium	0.40	ט	E	P
7439-92-1	Lead	11.8	B		P
7439-97-6	Mercury	0.21	B		cv
7782-49-2	Selenium	10.5	B	1	P
7440-22-4	Silver	0.60	ט	1	P

NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	PINK	Clarity After:	CLEAR	Artifacts:	
Comments:	<u></u>	·	<u></u>		
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

 Lab Name:
 COMPUCHEM
 Contract:
 WP-13 LAYER2

 Lab Code:
 LIBRTY
 Case No.:
 SDG No.:
 SDG No.:
 S1398

 Matrix (soil/water):
 WATER
 Lab Sample ID:
 S1398-4

 Level (low/med):
 LOW
 Date Received:
 06/23/00

 % Solids:
 0.0

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

CAS No.	Analyte Concentration		С	Q	M
7440-38-2	Arsenic	8.6	B		₽
7440-39-3	Barium	624	В	E	P
7440-43-9	Cadmium	0.43	В	1	P
7440-47-3	Chromium	38.8	В	E	P
7439-92-1	Lead	35.9	В		P
7439-97-6	Mercury	0.14	В	1	CV
7782-49-2	Selenium	8.1	В		P
7440-22-4	Silver	0.60	ט		P

Color Before:	YELLOW	Clarity Before:	CLEAR	Texture:	<u></u>	
Color After:	YELLOW	Clarity After:	CLEAR	Artifacts:		
Comments:	· ·.					
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INORGANIC ANALYSIS DATA SHEET

INORGAN	EPA SAMPLE NO.	. <u> </u>
	WP1-WASTE PIL	E
ab Name: COMPUCHEM	Contract:	
Lab Code: LIBRTY Case No.:	SAS No.: SDG No.: <u>\$1398</u>	<u> </u>
fatrix (soil/water): WATER	Lab Sample ID: 51398-5	
Level (low/med): LOW	Date Received: 06/23/00	
Solids: 0.0		

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

CAS No.	Analyte	Concentration	С	Q	M
7440-38-2	Arsenic	121	В	Ī	P
7440-39-3	Barium	60.6	В	E	P
7440-43-9	Cadmium	0.22	В		P
7440-47-3	Chromium	1.4	В	E	P
7439-92-1	Lead	28.6	B		P
7439-97-6	Mercury	0.14	В		CV
7782-49-2	Selenium	9.4	B	1	P
7440-22-4	Silver	0.60	ע		P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Color Before:	YELLOW	Clarity Before:	CLEAR	Texture:	
Color After :	YELLOW	Clarity After:	CLEAR	Artifacts:	
Comments:		··			
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INORGANIC ANALYSIS DATA SHEET

INOROAN		EPA SAMPLE NO.
х.		RR CREEK
Lab Name: COMPUCHEM	Contract:	
Lab Code: LIBRTY Case No.:	SAS No.: SDG	No.: <u>51398</u>
Matrix (soil/water): WATER	Lab Sample ID: S1398-6	
Level (low/med): LOW	Date Received: 06/23/00	
<pre>% Solids: 0.0</pre>		

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

CAS No.	Analyte	Concentration		2	M
7440-38-2	Arsenic	7.7	в		P
7440-39-3	Barium	245	В	E	P
7440-43-9	Cadmium	0.33	B	1	P
7440-47-3	Chromium	0.40	ט	E	P
7439-92-1	Lead	58.9	B	1	P
7439-97-6	Mercury	0.11	B		cv
7782-49-2	Selenium	7.3	B	1	P
7440-22-4	Silver	0.60	ט		P

Color Before:	BROWN	Clarity Before: Clarity After:	CLEAR	Texture: Artifacts:	
comments:					
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

		PB AS
Lab Name: COMPUCHEM	Contract:	
Lab Code: LIBRTY Case No.:	SAS No.: SDG	No.: <u>51398</u>
Matrix (soil/water): WATER	Lab Sample ID: 51398-7	······
Level (low/med): LOW	Date Received: 06/23/00	

& Solids: 0.0

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

CAS No.	Analyte	Concentration		Q	M
7440-38-2	Arsenic	5.2	в		P
7440-39-3	Barium	89.5	В	E	P
7440-43-9	Cadmium	1.9	B		P
7440-47-3	Chromium	2.4	B	E	P
7439-92-1	Lead	106	В		P
7439-97-6	Mercury	0.11	B		cv
7782-49-2	Selenium	12.8	B		P
7440-22-4	Silver	0.60	U		P

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:		
olor After:	COLORLESS	Clarity After:	CLEAR	Artifacts:		
comments:					·	
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INORGANIC ANALYSIS DATA SHEET

 Lab Name:
 COMPUCHEM
 Contract:
 EAST CREEK

 Lab Code:
 LIBRTY
 Case No.:
 SDG No.:
 SDG No.:
 S1398

 Matrix (soil/water):
 WATER
 Lab Sample ID:
 S1398-8

 Level (low/med):
 LOW
 Date Received:
 06/23/00

 % Solids:
 0.0

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

CAS No.	Analyte	Concentration	С	Q	м
7440-38-2	Arsenic	61.4	B		P
7440-39-3	Barium	1220	В	E	P
7440-43-9	Cadmium	1.3	B		P
7440-47-3	Chromium	1.1	В	E	P
7439-92-1	Lead	144	B	1	P
7439-97-6	Mercury	0.25	B		cv
7782-49-2	Selenium	10.6	В	1	P
7440-22-4	Silver	0.60	U	1	P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Color Before:	COLORLESS	Clarity Before	CLEAR	Texture:		
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	<u> </u>	
Comments:						
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EPA SAMPLE NO.

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

	PROCESS BLDG	
ab Name: COMPUCHEM	Contract:	لــــ
Lab Code: LIBRTY Case No.:	SAS No.: SDG No.: <u>S1398</u>	-
<pre>fatrix (soil/water): WATER</pre>	Lab Sample ID: S1398-9	
Level (low/med): LOW	Date Received: 06/23/00	
Solids: 0.0		

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

CAS No.	Analyte	Concentration	С	Q	м
7440-38-2	Arsenic	47.6	В		P
7440-39-3	Barium	67.6	B	E	P
7440-43-9	Cadmium	0.20	ט		P_
7440-47-3	Chromium	2.1	В	E	P
7439-92-1	Lead	126	В		P
7439-97-6	Mercury	0.17	B	1	CV
7782-49-2	Selenium	8.5	В	1	P
7440-22-4	Silver	0.60	ט	1	₽

Color Before:	YELLOW	Clarity Before Clarity After:	: <u>CLEAR</u>	Texture: Artifacts:	
comments:					
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

· · ·		CHIP AREA
Lab Name: COMPUCHEM	Contract:	
Lab Code: LIBRTY Case No.:	SAS No.: SDG	No.: <u>\$1398</u>
Matrix (soil/water): WATER	Lab Sample ID: S1398-10	
Level (low/med): LOW	Date Received: 06/23/00	

% Solids: 0.0

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

CAS No.	Analyte	Concentration	С	Q	м
7440-38-2	Arsenic	246	в	1	P
7440-39-3	Barium	336	B	E	P
7440-43-9	Cadmium	0.20	U	1	P
7440-47-3	Chromium	0.84	B	E	P
7439-92-1	Lead	55.6	B		P
7439-97-6	Mercury	0.15	В		cv
7782-49-2	Selenium	9.4	B		P
7440-22-4	Silver	0.60	U	1	P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Color Before: Color After:	COLORLESS	_ Clarity Before: Clarity After:	CLEAR	Texture: Artifacts:		
comments:					· · · · · · · · · · · · · · · · · · ·	
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INORGANIC ANALYSIS DATA SHEET

		monon		EPA SAMPLE NO.
				FUEL TANK
lab Name:	COMPUCHEM		Contract:	
Lab Code:	LIBRTY	Case No.:	SAS No.:	SDG No.: <u>S1398</u>
fatrix (so	il/water):	WATER	Lab Sample ID:	s1398-11
Level (low	/med): LOW		Date Received:	06/23/00
Solids:	0.0			
		Concentration Un	its (ug/L or mg/kg dry weig	ht): <u>UG/L</u>

CAS No.	Analyte	Concentration	С	Q	M
7440-38-2	Arsenic	118	В	 	P
7440-39-3	Barium	417	B	E	P
7440-43-9	Cadmium	0.36	В		P
7440-47-3	Chromium	2.2	B	E	P
7439-92-1	Lead	38.4	B		P
7439-97-6	Mercury	0.14	В		cv
7782-49-2	Selenium	9.9	B		P
7440-22-4	Silver	0.60	U		P

NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Color Before:	YELLOW	Clarity Before:	CLEAR	Texture:	
Color After:	YELLOW	Clarity After:	CLEAR	Artifacts:	
comments:					
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

		TROUGH
Lab Name: COMPUCHEM	Contract:	and the second second
Lab Code: LIBRTY Case No.:	SAS No.: SDG	No.: <u>51398</u>
Matrix (soil/water): WATER	Lab Sample ID: 51398-12	
Level (low/med): LOW	Date Received: 06/23/00	
<pre>% Solids: 0.0</pre>		

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

CAS No.	Analyte	Concentration	С	Q	м
7440-38-2	Arsenic	13.9	В		P
7440-39-3	Barium	93.6	В	E	P
7440-43-9	Cadmium	1.5	B	l	P
7440-47-3	Chromium	16.9	В	E	P
7439-92-1	Lead	60.0	В		P
7439-97-6	Mercury	0.17	В		cv
7782-49-2	Selenium	8.4	B		P
7440-22-4	Silver	0.60	ט		P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	YELLOW	Clarity After:	CLEAR	Artifacts:	
comments:		<u></u>			. <u></u>
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

 Lab Name: COMPUCHEM
 Contract:
 DRAINAGE DITCH

 Lab Code: LIBRTY
 Case No.:
 SAS No.:
 SDG No.:
 S1398

 /atrix (soil/water):
 WATER
 Lab Sample ID:
 S1398-13

 Level (low/med):
 LOW
 Date Received:
 06/23/00

 5 Solids:
 0.0

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

CAS No.	Analyte	Concentration	С	Q	M
7440-38-2	Arsenic	28.6	В	İ	P
7440-39-3	Barium	170	В	E	P
7440-43-9	Cadmium	0.34	B		P
7440-47-3	Chromium	2.0	B	E	P
7439-92-1	Lead	18.0	B	1	P
7439-97-6	Mercury	0.11	В		cv
7782-49-2	Selenium	7.9	B	1	P
7440-22-4	Silver	0.60	U		P

Color Before: Color After:	COLORLESS	_ Clarity Before: _ Clarity After:	CLEAR	Texture: Artifacts:	
Comments:					<u></u>
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

			EB CREEK
Lab Name: CO	MPUCHEM Con	ntract:	
Lab Code: LII	BRTY Case No.:	SAS No.:SD	G No.: <u>\$1398</u>
Matrix (soil/	/water): WATER	Lab Sample ID: S1398-1	.4
Level (low/me	ed): LOW	Date Received: 06/23/0	0
<pre>% Solids: 0.</pre>	0		

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

CAS No.	Analyte	Concentration	c	Q	M
7440-38-2	Arsenic	50.2	в		P
7440-39-3	Barium	637	В	E	P
7440-43-9	Cadmium	2.0	В		P
7440-47-3	Chromium	1.8	B	E	P
7439-92-1	Lead	147	B		P
7439-97-6	Mercury	0.18	В	I	cv
7782-49-2	Selenium	12.0	B	1	P
7440-22-4	Silver	0.60	ט	1	P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:			<u></u>	<u></u>	

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INORGANIC ANALYSIS DATA SHEET

	EPA SAMPLE NO.
	WP-13 LAYER 3
Lab Name: COMPUCHEM	_ Contract:
Lab Code: LIBRTY Case No.:	SAS No.: SDG No.: <u>S1398</u>
Matrix (soil/water): WATER	Lab Sample ID: S1398-15
Level (low/med): LOW	Date Received: 06/23/00
<pre>% Solids: 0.0</pre>	

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

CAS No.	Analyte	Concentration	С	Q	м
7440-38-2	Arsenic	19.7	В		P
7440-39-3	Barium	79.5	B	E	P
7440-43-9	Cadmium	0.24	B		P
7440-47-3	Chromium	31.6	B	E	P
7439-92-1	Lead	46.8	B	1	P
7439-97-6	Mercury	0.13	В		cv
7782-49-2	Selenium	10.0	B		P
7440-22-4	Silver	0.87	B		P

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After :	COLORLESS	Clarity After:	CLEAR	Artifacts:	
comments:				·	<u></u>
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INORGANIC ANALYSIS DATA SHEET

INORGANI	IC ANAL 1515 DATA SILLET	EPA SAMPLE NO.
		WP-13 LAYER 4
Lab Name: COMPUCHEM	Contract:	⁻ - • •
Lab Code: LIBRTY Case No.:	SAS No.: SD0	3 No.: <u>\$1398</u>
Matrix (soil/water): WATER	Lab Sample ID: S1398-1	6
Level (low/med): LOW	Date Received: 06/23/00)
<pre>% Solids: 0.0</pre>		

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

CAS No.	Analyte	Concentration	С	Q	м
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	69.5	В	E	P
7440-43-9	Cadmium	0.20	U		P
7440-47-3	Chromium	2.2	В	E	P
7439-92-1	Lead	14.2	B		P
7439-97-6	Mercury	0.10	U		cv
7782-49-2	Selenium	7.2	В		P
7440-22-4	Silver	0.60	ט		P

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:		
Color After:	YELLOW	Clarity After:	CLEAR	Artifacts:		
comments:	<u> </u>					
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SW846 METALS 5A SPIKE SAMPLE RECOVERY

					EP	A SAMPLE NO.
<i>1</i> 4					so	UTH LAGOONM
ab Name:	COMPUCHEM		_Contract: _			
Lab Code:	LIBRTY	Case No.:	SAS No.:		SDG NO.	: <u>\$1398</u>
latrix (so	oil/water):W	ATER		Level	(low/med):	LOW
e Solids f	for Sample:	0.0				

		· · ·		-			_	
Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR)	с	Spike Added (SA)	ŧR	Q	м
Arsenic	75 - 125	5227.1812	30.3012	в	5000.00	103.9		P
Barium	75 - 125	5066.7612 B	74.1364	в	100000.00	5.0		P
Cadmium	75 - 125	931.8485	1.1918	в	1000.00	93.1		P
Chromium	75 - 125	4922.6660	54.1596	B	5000.00	97.4		P
Lead	75 - 125	2492.9900 B	152.9550	B	5000.00	46.8		P
Mercury	75 - 125	201.7500	0.2208	в	200.00	100.8		cv
Selenium	75 - 125	1015.5440	10.3396	B	1000.00	100.5		P
Silver	75 - 125	946.1808	0.6000	U	1000.00	94.6		P

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

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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SW846 METALS 5A SPIKE SAMPLE RECOVERY

EPA SAMPLE NO. SOUTH LAGOONS Lab Name: COMPUCHEM Contract: SAS No.: _____ SDG NO.: <u>S1398</u> Case No.:_____ Lab Code: LIBRTY Level (low/med): LOW Matrix (soil/water):WATER % Solids for Sample: 0.0

	Conc	centration Units (ug/	'L or mg/kg dry wei	ght): UG/L	•		
Analyte	Control Limit %R	Spiked Sample Result (SSR)	с	Sample Result (SR) C	Spike Added (SA)	ŧR	Q	м
Arsenic	75 - 125	5367.4390		30.3012 B	5000.00	106.7		P
Barium	75 - 125	4708.8979	в	74.1364 B	100000.00	4.6		P
Cadmium	75 - 125	951.7543		1.1918 B	1000.00	95.0		P
Chromium	75 - 125	5065.1709		54.1596 B	5000.00	100.2		P
Lead	75 - 125	2481.7571	в	152.9550 B	5000.00	46.6		P
Mercury	75 - 125	194.4750		0.2208 B	200.00	97.1		CV
Selenium	75 - 125	1021.7010		10.3396 B	1000.00	101.1		P
Silver	75 - 125	963.2346		0.6000 U	1000.00	96.3		P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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BLANKS

Name: CompuChem

Lab Code: LIBRTY Case No.: 01398

SAS No.:

Contract:

SDG NO.: Q1398

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

	Initial Calib. Blank		- C	ontinuing Ca Blank (uq	ali g/I	bration		Prepa- ration			-
Analyte	(ug/L)	С	1 C	2	С	3	с	Blank	с		м
Aluminum	26.7	U	26.7 U	26.7	υ	26.7	υ	5.340	υ	Ц	P
Antimony	1.5	บ	1.7 B	1.5	υ	1.5	ט	0.368	В	Ц	P
Arsenic	2.1	ש	2.1 0	2.1	U	2.1	ט	0.420	ש	Ш	P
Barium	0.2	U	0.2 B	0.2	в	0.3	В	0.106	В	\square	Р
Beryllium	0.1	ប	0.3 B	0.4	B	0.4	В	0.017	В	Ш	P
Cadmium	0.3	ש	0.3 U	0.3	υ	0.3	υ	058	В	\square	P
Calcium	25.0	υ	25.0 U	43.0	B	25.0	υ	13.839	В		Р
Chromium	2.1	ប	2.1 0	2.1	U	2.1	υ	0.420	U		P
Cobalt	0.7	U	0.7 U	0.7	υ	0.7	ט	0.140	υ	\square	P
Copper	1.3	U	1.3 0	1.3	U	1.3	U	0.228	В	\Box	Ρ
Iron	14.1	υ	14.1 U	14.1	υ	14.1	υ	1.696	B		P
Lead	1.1	U	1.1 U	1.1	U	1.6	B	0.213	В		P
Magnesium	6.8	ប	36.4 B	17.8	B	22.4	B	2.167	В		Р
Manganese	0.4	U	0.4 U	0.4	U	0.4	υ	0.051	В		Р
Mercury	0.1	B	0.1 U	0.1	U	0.1	ប	0.025	В		CV
Nickel	3.2	U	3.2 0	3.2	U	3.2	U	0.640	ט		P
Potassium	36.9	U	36.9 U	36,9	υ	36.9	U	7.380	U	\bot	P
Selenium	1.7	U	1.7 0	1.7	U	1.7	U	0.340	υ		P
Silver	0.5	U	0.5 0	0.5	U	0.5	U	0.100	ש	\bot	P
Sodium	158.6	U	158.6 U	158.6	U	158.6	U	48.624	В		P
Thallium	2.5	в	2.2 0	2.2	U	2.2	U	482	B	1	P
Vanadium	6	в	4B	0.4	U	0.4	υ	0.080	U		P
Zinc	3.6	U	3.6 U	3.6	ש	3.6	ט	1.054	B		P

NG QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

	South Lagoon
Lab Name: CompuChem	Contract:
Lab Code: LIBRTY Case No.: 01398	SAS No.: SDG No.: Q1398
Matrix (soil/water): <u>SOIL</u>	Lab Sample ID: 01398-1
Level (low/med): LOW	Date Received: 06/23/00

% Solids: 42.4

Color After:

omments:

YELLOW

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

CAS No.	Analyte	Concentration	с	Q	M
7429-90-5	Aluminum	4040			P
7440-36-0	Antimony	0.32	υ	N	P
7440-38-2	Arsenic	3.7		N	P
7440-39-3	Barium	8.5		N	P
7440-41-7	Beryllium	0.22	B		P
7440-43-9	Cadmium	0.063	ט		P
7440-70-2	Calcium	203000		E	P
7440-47-3	Chromium	4.3			P
7440-48-4	Cobalt	0.92	B		P
7440-50-8	Copper	7.4		N	P
7439-89-6	Iron	3870		[P
7439-92-1	Lead	3.7		N	P
7439-95-4	Magnesium	9200			P
7439-96-5	Manganese	180		N	P
7439-97-6	Mercury	0.048	B	N	cv
7440-02-0	Nickel	3.9		ł	P
7440-09-7	Potassium	117	В	1	P
7782-49-2	Selenium	0.36	ט	1	P
7440-22-4	Silver	0.12	B		P
7440-23-5	Sodium	66.0	B	1	P
7440-28-0	Thallium	0.46	U	N	P
7440-62-2	Vanadium	4.5		1	P
7440-66-6	Zinc	15.6	1		P

1-0 QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUSSTANTIATED AND THE DATA SHOULD BE USED Color Before: GRAY Clarity Before: WITH DISCREEMONTE: FINE Clarity After: Artifacts:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

 Lab Name:
 CompuChem
 Contract:
 NORTH LAGOON

 Lab Code:
 LIBRTY
 Case No.:
 Q1398
 SAS No.:
 SDG No.:
 Q1398

 Matrix (soil/water):
 SOIL
 Lab Sample ID:
 Q1398-2

 Level (low/med):
 LOW
 Date Received:
 06/23/00

8 Solids: 74.4

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

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum	3470			P
7440-36-0	Antimony	0.18	ט	N	P
7440-38-2	Arsenic	6.1		N	P
7440-39-3	Barium	121		N	P
7440-41-7	Beryllium	0.093	B		P
7440-43-9	Cadmium	0.035	U		P
7440-70-2	Calcium	23900		E	P
7440-47-3	Chromium	6.0	1	1	P
7440-48-4	Cobalt	2.3	I	1	P
7440-50-8	Copper	29.2	1	N	P
7439-89-6	Iron	5010		1	P
7439-92-1	Lead	14.0		N	P
7439-95-4	Magnesium	772	1		P
7439-96-5	Manganese	126	!	N	P
7439-97-6	Mercury	0.17	1	N	CV
7440-02-0	Nickel	4.8	1	1	P
7440-09-7	Potassium	518	I	1	P
7782-49-2	Selenium	0.20	ט	1	P
7440-22-4	Silver	0.079	B	1	P
7440-23-5	Sodium	71.9	В	1	P
7440-28-0	Thallium	0.26	ט	N	P
7440-62-2	Vanadium	7.6	1		P
7440-66-6	Zinc	12.1	1		P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED -

Color Before:	BROWN	Clarity Before:	WITH DISCRETION	FINE
Color After:	YELLOW	Clarity After:	Artifacts:	
omments:				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CompuChem	Contract:
Lab Code: LIBRTY Case No.: 01398	SAS No.: SDG No.: 01398
Matrix (soil/water): <u>SOIL</u>	Lab Sample ID: 21398-3
Level (low/med): LOW	Date Received: 06/23/00

% Solids: 91.2

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

			CAS No.		Analyte	Concentration	С	Q	м	
			7429-90	-5	Aluminum	4240			P	
			7440-36	-0	Antimony	0.16	υ	N	P	
			7440-38	-2	Arsenic	2.6		N	P	
			7440-39	-3	Barium	75.1		Ň	P	
			7440-41	-7	Beryllium	0.19	B		P	
			7440-43	-9	Cadmium	0.031	U		₽	
			7440-70	-2	Calcium	41100		E	P	
			7440-47	-3	Chromium	6.4			P	
			7440-48	-4	Cobalt	4.0			P	
			7440-50	-8	Copper	19.1		N	P	
			7439-89	-6	Iron	9690			P	
			7439-92	-1	Lead	2.9		N	P	
			7439-95	-4	Magnesium	5140			₽	
			7439-96	-5	Manganese	610		N	P	
			7439-97	-6	Mercury	0.032	B	N	cv	
			7440-02	-0	Nickel	8.4		ļ	₽	
			7440-09	-7	Potassium	742	<u> </u>		P	1
			7782-49	-2	Selenium	0.18	U		P	1
			7440-22	-4	Silver	0.052	ע		P	1
			7440-23	-5	Sodium	77.0	B	1	P	!
			7440-28	-0	Thallium	0.23	ט	N	P	1
			7440-62	-2	Vanadium	10.3			P	1
			7440-66	-6	Zinc	21.6			P	
					NO 00	EVALUATION HA	IS B	SEEN P	2 M F &	JKMED.
					DA	TA VALIDITY IS U	INS	UBSIA	NIIA	
					ļ.	AND THE DATA S	HOL	ILD BF	USE	.U
						WITH DIS	CRE	ETION		•
Color	Before:	BROWN	<u>`</u>	Clari	ty Before:		T	exture	:	MEDIUM
Color	After:	YELLO	<u>w</u>	Clari	ty After:		A	rtifac	ts:	
.omme	nts:									
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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

		WP-13 LAYER2
Lab Name: CompuChem	Contract:	
Lab Code: LIBRTY Case No.: 01398	SAS No.: SDG	No.: <u>Q1398</u>
Matrix (soil/water): SOIL	Lab Sample ID: 21398-4	
Level (low/med): LOW	Date Received: 06/23/00	
<pre>% Solids: 62.2</pre>		

CAS No.	Analyte	Concentration	с	Q	м
7429-90-5	Aluminum	8810			P
7440-36-0	Antimony	0.26	B	N	P
7440-38-2	Arsenic	1.2	В	N	P
7440-39-3	Barium	106		N	P
7440-41-7	Beryllium	0.40	В		P
7440-43-9	Cadmium	0.044	U		P
7440-70-2	Calcium	76700		E	P
7440-47-3	Chromium	9.2	1		P
7440-48-4	Cobalt	3.4			P
7440-50-8	Copper	8.9		N	P
7439-89-6	Iron	8780		ĺ	P
7439-92-1	Lead	3.5		N	P
7439-95-4	Magnesium	3210	1		P
7439-96-5	Manganese	269	1	N	P
7439-97-6	Mercury	0.018	U	N	cv
7440-02-0	Nickel	8.0	1		P
7440-09-7	Potassium	779			P
7782-49-2	Selenium	0.25	U	1	P
7440-22-4	Silver	0.073	U	1	P
7440-23-5	Sodium	142	В		P
7440-28-0	Thallium	0.32	ט	N	P
7440-62-2	Vanadium	13.3	1	1	P
7440-66-6	Zinc	30.8	1	1	P

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

		NO	QC EVALUATION HAS BEEN PI	ERFORMED.	
		1	DATA VALIDITY IS UNSUBSTA	NTIATED	
			AND THE DATA SHOULD BE	USED	
Color Before:	BLACK	Clarity Before:	WITH DISERETION	COARSE	
Color After:	YELLOW	Clarity After:	Artifacts:		
mments:					
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

						WP1-WASTE PILE
Lab Name: CompuChem		Contr	act:			
Lab Code: LIBRTY	Case No.: _	21398	SAS No.:		SDG	No.: <u>91398</u>
Matrix (soil/water):	SOIL	_	Lab Sample 1	D: Q139	8-5	
Level (low/med): LOW	4		Date Receive	d: 06/2	3/00	
<u></u>				<u></u>		
<pre># Solids: 69.8</pre>						
	Concentration	units (ug/I	or mg/kg dry w	eight):	MG/	<u>'KG</u>
	CAS No.	Analyte	Concentration	c Q	м]
	7429-90-5	Aluminum	347		P	-
	7440-36-0	Antimony	0.36	BN	P	-
	7440-38-2	Arsenic	5.0	N	P	
	7440-39-3	Barium	20.7	N	P	
	7440-41-7	Beryllium	0.022	в	P	
	7440-43-9	Cadmium	0.04	ט	P	
	7440-70-2	Calcium	198000	E	P	1
	7440-47-3	Chromium	1.3		P]
	7440-48-4	Cobalt	0.095	ט	P	1
	7440-50-8	Copper	23.8	N N	P	
	7439-89-6	Iron	296		P	
	7439-92-1	Lead	6.5	N	P	_
	7439-95-4	Magnesium	180		P	
	7439-96-5	Manganese	6.3	N	P	<u> </u>
	7439-97-6	Mercury	0.036	BN	cv	
	7440-02-0	Nickel	0.65	B	P	
	7440-09-7	Potassium	47.9	в	P	
	7782-49-2	Selenium	0.23	ע	P	
	7440-22-4	Silver	0.068	ע	P	<u> </u>
	7440-23-5	Sodium	47.7	в	P	_
	7440-28-0	Thallium	0.30	UN	P	
	7440-62-2	Vanadium	0.81	B	P	
	7440-66-6	Zinc	0.49.	Junk Dr	r pi 🖻	ERFORMED.
		•••	DATA VALIDITY I AND THE DATI WITH I	IS UNSU A SHOUI DISCRET	BSTA LD BE ION	NTIATED USED
Color Before: GRAY	Clar:	ity Before:		Textu	re:	FINE
Color After: YELL(OW Clar	ity After:		Artif	acts:	<u> </u>
omments:						

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

		RR CREEK	
Lab Name:	CompuChem	Contract:	-
Lab Code:	LIBRTY Case No.: 01398	SAS No.: SDG No.: <u>Q1398</u>	-
Matrix (so:	il/water): SOIL	Lab Sample ID: 21398-6	
Level (low,	(med): LOW	Date Received: 06/23/00	

% Solids: 67.3

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

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	6400			P
7440-36-0	Antimony	0.36	В	N	P
7440-38-2	Arsenic	4.2		N	P
7440-39-3	Barium	60.4		N	P
7440-41-7	Beryllium	0.27	B		P
7440-43-9	Cadmium	0.042	ט		P
7440-70-2	Calcium	1760		E	P
7440-47-3	Chromium	7.5			P
7440-48-4	Cobalt	2.7			P
7440-50-8	Copper	12.4		N	P
7439-89-6	Iron	8030			P
7439-92-1	Lead	40.9		N	P_
7439-95-4	Magnesium	1430			P
7439-96-5	Manganese	89.0	Ī	N	P
7439-97-6	Mercury	0.082		N	CV
7440-02-0	Nickel	7.2			P
7440-09-7	Potassium	309	1	l	P
7782-49-2	Selenium	0.53	B		P
7440-22-4	Silver	0.14	В		P
7440-23-5	Sodium	80.1	B		P
7440-28-0	Thallium	0.30	0	N	P
7440-62-2	Vanadium	12.4			P
7440-66-6	Zinc	34.3	1	1	P

		NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED									
Color Before:	BROWN	Clarity Before: WITH DISCRETION COARSE									
Color After:	YELLOW	Clarity After: Artifacts:	•								
omments:											
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

 Lab Name: CompuChem
 Contract:
 PB AS

 Lab Code: LIBRTY
 Case No.: Q1398
 SAS No.: SDG No.: Q1398

 Matrix (soil/water): SOIL
 Lab Sample ID: Q1398-7

 Level (low/med):
 LOW

 Date Received: 06/23/00

% Solids: 71.4

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

CAS No.	Analyte	Concentration		Q	M
7429-90-5	Aluminum	555			P
7440-36-0	Antimony	1.7		N	P
7440-38-2	Arsenic	14.6		N	P
7440-39-3	Barium	93.1		N	P
7440-41-7	Beryllium	0.10	B		P
7440-43-9	Cadmium	0.04	ש		P
7440-70-2	Calcium	9950		E	P
7440-47-3	Chromium	5.0			P
7440-48-4	Cobalt	3.4		l	P
7440-50-8	Copper	74.8		N	P
7439-89-6	Iron	14300			P
7439-92-1	Lead	94.8		N	P
7439-95-4	Magnesium	110	B		P
7439-96-5	Manganese	27.1		N	P
7439-97-6	Mercury	0.33		N	cv
7440-02-0	Nickel	8.4	1		P
7440-09-7	Potassium	325			P
7782-49-2	Selenium	1.4		1	P
7440-22-4	Silver	0.48	В		P
7440-23-5	Sodium	85.4	B	1	P
7440-28-0	Thallium	0.29	U	N	P
7440-62-2	Vanadium	7.7			P
7440-66-6	Zinc	26.8			P

		NO CC DA	EVALUATION HAS BEEN PERI TA VALIDITY IS UNSUBSTANT	FORMED. IATED
		1	AND THE DATA SHOULD BE US	SED
Color Before:	BLACK	Clarity Before:	WITH DISCRETION .	COARSE
Color After:	YELLOW	Clarity After:	Artifacts:	
omments:		· ·		·····
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

							EAST	CREEK
Lab	Name:	CompuChe	m	Cont:	act:		L	
Lab	Code:	LIBRTY	Case No	o.: <u>0</u> 1398	SAS No.:	SDG	No.:	01398
Matr	ix (so:	il/water)	: SOIL		Lab Sar	mple ID: <u>01398-8</u>		
Leve	1 (low,	/med):	LOW		Date Re	eceived: 06/23/00	<u> </u>	

% Solids: 81.3

7440-50-8

7439-89-6

7439-92-1

7439-95-4

7439-96-5

7439-97-6

7439-97-6

7440-02-0

7440-09-7

7782-49-2

7440-22-4

7440-23-5

7440-28-0

7440-62-2

Copper

Magnesium

Manganese

Mercury

Mercury

Potassium

Selenium

Silver

Sodium

Thallium

Vanadium

Nickel

Iron

Lead

М С Analyte Concentration CAS No. Q 7429-90-5 6340 P Aluminum 7440-36-0 Antimony 0.21 B N ₽ ₽ 7440-38-2 Arsenic 23.5 N 7440-39-3 Barium 111 N P ₽ 0.25 B 7440-41-7 Beryllium P Cadmium 0.032 U 7440-43-9 7440-70-2 Calcium 11300 E ₽ ₽ Chromium 11.2 7440-47-3 7440-48-4 Cobalt 3.9 P

65.8

15.5

2780

326

0.27

0.059

10.1

497

0.22 B

0.053 U

49.7 B

0.24 U

17.7

14900

N

N

N

N

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P

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CV

CV

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P

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

	74	40-66-6 Zi		VALUATION PASS BEEN PERFORMED	
			DATA	VALIDITY IS UNSUBSTANTIATED	
			AN	D THE DATA SHOULD BE USED	
Color Before:	BROWN	Clarity	Before:	WITH DISCRETION Texture: MED	IUM
Color After:	YELLOW	Clarity	After:	Artifacts:	
omments:					
<u> </u>					

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

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						PROC	ESS BLDG	1
Lab Name:	CompuChem		_ Contract:			L		J
Lab Code:	LIBRTY	Case No.: 01398	SAS No	.:	- SDG	No.:	<u>01398</u>	
Matrix (so	<pre>>il/water):</pre>	SOIL	Lab	Sample ID:	Q1398-9			
Level (lo	w/med): LO	W	, Dat	e Received:	06/23/00			

% Solids: 71.3

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

CAS No.	Analyte	Concentration	с	Q	м
7429-90-5	Aluminum	253			P
7440-36-0	Antimony	0.57	в	N	P
7440-38-2	Arsenic	11.4		N	P
7440-39-3	Barium	29.6		N	P
7440-41-7	Beryllium	0.017	в		P
7440-43-9	Cadmium	0.035	ע		P
7440-70-2	Calcium	131000		E	P
7440-47-3	Chromium	0.77			P
7440-48-4	Cobalt	0.082	ט		P
7440-50-8	Copper	8.1		N	P
7439-89-6	Iron	1980			P
7439-92-1	Lead	31.9		N	P
7439-95-4	Magnesium	103	B		P
7439-96-5	Manganese	7.9		N	P
7439-97-6	Mercury	0.25		N	cv
7439-97-6	Mercury	0.18		N	cv
7440-02-0	Nickel	0.53	B	1	P
7440-09-7	Potassium	410	1		P
7782-49-2	Selenium	0.20	U	1	P
7440-22-4	Silver	0.058	ט	1	P
7440-23-5	Sodium	99.2	B	1	P
7440-28-0	Thallium	0.26	ט	N	P
7440-62-2	Vanadium	0.99	В	1	P
7440-66-6	Zinc	3.3	1	1	P

			NO QC EV DATA V	ALUATION HAS VALIDITY IS UN	BEEN PERFOR	MED. ED
Color Before:	BROWN	Clarity	Before	<u>THE DATA SHO</u> WITH DISCI	DU L<u>D,RE,L</u>LS ED Retion	MEDIUM
Color After:	YELLOW	Clarity	After:		Artifacts:	
omments:						
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CompuChem	Chip AREA
Lab Code: LIBRTY Case No.: 0139	8 SAS No.: SDG No.: Q1398
Matrix (soil/water): SOIL	Lab Sample ID: Q1398-10
Level (low/med): LOW	Date Received: 06/23/00

% Solids: 61.0

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

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum	10400			P
7440-36-0	Antimony	1.0	1	N	P
7440-38-2	Arsenic	286		N	P
7440-39-3	Barium	93.6		N	P
7440-41-7	Beryllium	0.47	в		P
7440-43-9	Cadmium	0.049	ט		P
7440-70-2	Calcium	3080		E	P
7440-47-3	Chromium	10.8			P
7440-48-4	Cobalt	3.0	1		P
7440-50-8	Copper	364		N	P
7439-89-6	Iron	11700		ĺ	P
7439-92-1	Lead	106		N	P
1439-95-4	Magnesium	1990			P
7439-96-5	Manganese	101	1	N	P
7439-97-6	Mercury	0.10		N	cv
7440-02-0	Nickel	8.8			P
7440-09-7	Potassium	430			P
7782-49-2	Selenium	0.61	B		P
7440-22-4	Silver	0.081	ט		P
7440-23-5	Sodium	97.2	В		P
7440-28-0	Thallium	0.36	ט	N	P
7440-62-2	Vanadium	16.9	1	1	P
7440-66-6	Zinc	36.3	1		P

omments:				
Color After:	YELLOW	Clarity After:	Artifacts	:
Color Before:	BROWN	Clarity Before:	WITH DISCRETION Texture:	FINE
		DA DA	TA VALIDITY IS UNSUBSTAM AND THE DATA SHOULD BE U	TIATED ISED

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

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1			FUEL TANK
Lab Name:	CompuChem	Contract:	
Lab Code:	LIBRTY Case No.: 01398	SAS No.: SDG	No.: <u>Q1398</u>
Matrix (so	il/water): SOIL	Lab Sample ID: 21398-11	
Level (low	/med): LOW	Date Received: 06/23/00	

% Solids: 74.0

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

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	897			P
7440-36-0	Antimony	0.33	в	N	P
7440-38-2	Arsenic	3.3		N	P
7440-39-3	Barium	128		N	P
7440-41-7	Beryllium	0.073	В		P
7440-43-9	Cadmium	0.034	ט		P
7440-70-2	Calcium	205		E	P
7440-47-3	Chromium	3.4			P
7440-48-4	Cobalt	1.1			P
7440-50-8	Copper	28.1		N	P
7439-89-6	Iron	2000		Í	P
7439-92-1	Lead	16.9		N	P
7439-95-4	Magnesium	99.3	B		P
7439-96-5	Manganese	9.0		N	P
7439-97-6	Mercury	0.056		N	CV
7440-02-0	Nickel	2.7		1	P
7440-09-7	Potassium	406			P
7782-49-2	Selenium	0.59		1	P
7440-22-4	Silver	0.075	В	1	P
7440-23-5	Sodium	80.5	B	<u> </u>	P
7440-28-0	Thallium	0.25	ט	N	P
7440-62-2	Vanadium	3.4	1	1	P
7440-66-6	Zinc	6.3			P

		NO	QC EVALUATION HAS BEEN PE DATA VALIDITY IS UNSUBSTAN	RFORMED. TIATED
			AND THE DATA SHOULD BE I	JSED
Color Before:	BLACK	Clarity Before:	WITH DISCRELLON	COARSE
Color After:	YELLOW	Clarity After:	Artifacts:	
omments:				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

		TROUGH
Lab Name: CompuChem Co	ontract:	······································
Lab Code: LIBRTY Case No.: 01398	SAS No.: SDG 1	No.: <u>Q1398</u>
Matrix (soil/water): <u>SOIL</u>	Lab Sample ID: Q1398-12	
Level (low/med): LOW	. Date Received: 06/23/00	

% Solids: 79.0

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

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum	1100			P
7440-36-0	Antimony	0.32	в	N	P
7440-38-2	Arsenic	3.3		N	P
7440-39-3	Barium	208		N	P
7440-41-7	Beryllium	0.049	B		P
7440-43-9	Cadmium	0.034	ש		P
7440-70-2	Calcium	42100		E	P
7440-47-3	Chromium	2.4			P
7440-48-4	Cobalt	0.87	ł		P
7440-50-8	Copper	26.6		N	P
7439-89-6	Iron	1580	l		P
7439-92-1	Lead	13.9	1	N	P
7439-95-4	Magnesium	244			P
7439-96-5	Manganese	22.4		N	P
7439-97-6	Mercury	0.052		N	CV
7440-02-0	Nickel	1.8	l		P
7440-09-7	Potassium	425	1		P
7782-49-2	Selenium	0.20	ט	[P
7440-22-4	Silver	0.076	В	1	P
7440-23-5	Sodium	90.8	В	1	P
7440-28-0	Thallium	0.25	U	N	P
7440-62-2	Vanadium	2.4			P
7440-66-6	Zinc	5.4		1	P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED

Color Before:	GRAY	Clarity Before:	WITH DISCRELION	FINE
Color After:	YELLOW	Clarity After:	Artifacts:	<u></u>
omments:				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DDX	TNIN	CF.	DITICU
			DTTCH

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Lab Name: CompuChem Contr	ract:
Lab Code: LIBRTY Case No.: 01398	SAS No.: SDG No.: Q1398
Matrix (soil/water): SOIL	Lab Sample ID: <u>Q1398-13</u>
Level (low/med): LOW	Date Received: 06/23/00

% Solids: 44.0

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

CAS No.	Analyte	Concentration	С	Q	м	
7429-90-5	Aluminum	8780			P	
7440-36-0	Antimony	1.4		N	P	
7440-38-2	Arsenic	321		N	P	
7440-39-3	Barium	56.5		N	P	
7440-41-7	Beryllium	0.29	В	l	P	
7440-43-9	Cadmium	0.062	U		P	
7440-70-2	Calcium	2000	ł	E	P	
7440-47-3	Chromium	17.0	1		P	
7440-48-4	Cobalt	1.8			P	
7440-50-8	Copper	394		N	P	
7439-89-6	Iron	26900	I	Į	P	
7439-92-1	Lead	68.5		N	P	
7439-95-4	Magnesium	916	[1	P	
7439-96-5	Manganese	84.2	1	N	P	
7439-97-6	Mercury	0.13	1	N	CV	
7440-02-0	Nickel	6.6			P	l
7440-09-7	Potassium	332	Ī	1	P	ł
7782-49-2	Selenium	1.7	1		P	1
7440-22-4	Silver	0.94	B	1	P	1
7440-23-5	Sodium	114	B	I	P	1
7440-28-0	Thallium	0.45	ע	N	P	
7440-62-2	Vanadium	22.2		1	P	1
7440-66-6	Zinc	82.7	1	1	P.	<u> </u>
	NO (D	C EVALUATION H ATA VALIDITY IS	IAS Un	BEEN ISUBST	PERI	FORME IATED
		AND THE DATA	SH	DULD E	BEUS	SED
			~ ~ `			

Color Before:	BLACK	Clarity Before:	WITH DISCRETION Texture:	MEDIUM
Color After:	YELLOW	Clarity After:	Artifacts:	
omments:		·····	·	

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INORGANIC ANALYSIS DATA SHEET

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			EPA SAMPLE NO.
			EB CREEK
Lab Name:	CompuChem	Contract:	
Lab Code: I	LIBRTY Case No.: 01398	SAS No.:	SDG No.: 01398
Matrix (soi	l/water): <u>SOIL</u>	Lab Sample ID: Q1398	3-14
Level (low/	med): LOW	Date Received: 06/23	/00

% Solids: 78.5

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

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	6160			P
7440-36-0	Antimony	2.1		N	P
7440-38-2	Arsenic	22.1		N	P
7440-39-3	Barium	88.8		ท	P
7440-41-7	Beryllium	0.33	В		P
7440-43-9	Cadmium	0.034	U		P
7440-70-2	Calcium	2760		E	P
7440-47-3	Chromium	69.6		l	P
7440-48-4	Cobalt	4.5			P
7440-50-8	Copper	53.4	1	N	P
7439-89-6	Iron	15300		l	P
7439-92-1	Lead	314	l	N	P
7439-95-4	Magnesium	2690			P
7439-96-5	Manganese	309	1	N	P
7439-97-6	Mercury	0.19		N	CV
7440-02-0	Nickel	10.4		l	P
7440-09-7	Potassium	468			P
7782-49-2	Selenium	0.48	в	ļ	P
7440-22-4	Silver	0.17	B	1	P
7440-23-5	Sodium	79.3	B	1	P
7440-28-0	Thallium	0.24	U	N	P
7440-62-2	Vanadium	17.2		1	P
7440-66-6	Zinc	83.9			P

		NO OC EVALUATION HAS BEEN PERFORMED. Data validity is unsubstantiated			
		A	ID THE DATA SHOULD BE USE	D	
Color Before:	BROWN	Clarity Before:	WITH DISCREE-ONre:	MEDIUM	
Color After:	YELLOW	Clarity After:	Artifacts:		
omments:					
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

			WP-13 LAYER 3
Lab Name:	CompuChem	Contract:	
Lab Code:	LIBRTY Case No.: <u>Q1398</u>	SAS No.: SDG	No.: <u>Q1398</u>
Matrix (so:	il/water): SOIL	Lab Sample ID: Q1398-15	j
Level (low,	/med): LOW	Date Received: 06/23/00	
<pre>% Solids:</pre>	55.2	•	

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	1960			P
7440-36-0	Antimony	0.23	в	N	P
7440-38-2	Arsenic	3.3		N	P
7440-39-3	Barium	5.2		N	P
7440-41-7	Beryllium	0.089	В		P
7440-43-9	Cadmium	0.045	ע		P
7440-70-2	Calcium	248000		E	P
7440-47-3	Chromium	2.4	1		P
7440-48-4	Cobalt	0.10	υ	1	P
7440-50-8	Copper	2.8		N	P
7439-89-6	Iron	1770		[P
7439-92-1	Lead	3.7	1	N	P
7439-95-4	Magnesium	10100	1		P
7439-96-5	Manganese	146		N	P
7439-97-6	Mercury	0.031	B	N	cv
7440-02-0	Nickel	1.9			P
7440-09-7	Potassium	63.9	B		P
7782-49-2	Selenium	0.25	U		P
7440-22-4	Silver	0.075	U		P
7440-23-5	Sodium	32.6	B	1	P
7440-28-0	Thallium	0.33	ע	N	P
7440-62-2	Vanadium	3.3	1	1	P
7440-66-6	Zinc	7.0	1	1	P

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

NO Q(DA	C EVALUATION HAS BEEN TA VALIDITY IS UNSUB	N PERFORMED. STANTIATED
	AND THE DATA SHOULD	BE USED
Clarity Before:	WITH DISCRETIO	N . FINE
Clarity After:	Artif	acts:

omments:

Color After:

Color Before: GREEN

YELLOW

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CompuChem	Contract:	WP-13 LAYER 4
Lab Code: LIBRTY Case No.: 01	1398 SAS No.: SDG	No.: Q1398
Matrix (soil/water): <u>SOIL</u>	Lab Sample ID: Q1398-16	
Level (low/med): LOW	Date Received: 06/23/00	

% Solids: 65.5

Color Before:

Color After:

mments:

CAS No. Analyte Concentration С Q М 7429-90-5 Aluminum 4350 ₽ ٠ 7440-36-0 Antimony 0.40 B ₽ N 7440-38-2 Arsenic N P 3.7 7440-39-3 Barium P 4.4 N 7440-41-7 Beryllium 0.15 B P 7440-43-9 Cadmium P 0.042 U 7440-70-2 Calcium 206000 ₽ Е 7440-47-3 Chromium 5.8 ₽ 7440-48-4 Cobalt 0.30 B P 7440-50-8 Copper 3.4 N ₽ 7439-89-6 Iron 3450 P 7439-92-1 Lead 5.7 N ₽ 7439-95-4 Magnesium 1180 ₽ 7439-96-5 Manganese 56.6 N P 7439-97-6 Mercury 0.032 В CV N 7440-02-0 Nickel 2.2 P 7440-09-7 Potassium 47.4 B P 7782-49-2 Selenium 0.24 U ₽ 7440-22-4 Silver 0.069 U P 7440-23-5 Sodium 58.9 B ₽ 7440-28-0 Thallium 0.30 U Ρ N 7440-62-2 Vanadium 5.8 ₽ 7440-66-6 Zinc 7.4 P

	KO QO 27 DATA 1	ALUATION HAS BEEN PERF VALIDITY IS UNSUBSTANTI	ORMED. Ated
BROWN	ANI Clarity Before:	THE DATA SHOULD BE US WITH DISCRETION	MEDIUM
YELLOW	Clarity After:	Artifacts:	

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

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SW-846 METALS **5**A SPIKE SAMPLE RECOVERY

			EPA SAMPLE NO.
			SOUTH LAGOONMS
Name:	CompuChem	Contract:	
Lab Code:	LIBRTY Case No.: 01398	SAS No.:	SDG NO.: 01398
Matrix (so	oil/water):SOIL	Level	(low/med): <u>LOW</u>
% Solids f	for Sample: <u>42.4</u>		

	Con	centration Units (ug	J/L or mg/kg dry we	eight): MG/KG			
Analyte	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	C Added (SA)	8 R	2	м
Aluminum		0.0004	3836.6621	453.60	165.1		P
Antimony	75 - 125	90.2520	0.3000 0	J 113.40	79.6	_	P
Arsenic	75 - 125	10.8353	3.5431	4.50	162.0	N	P
Barium	75 - 125	415.7232	8.0642	453.60	89.9		P
Beryllium	75 - 125	9.4049	0.2086	B 11.30	81.4		P
Cadmium	75 - 125	8.5189	0.0600	ט 11.30	75.4	\square	₽
Chromium	75 - 125	40.9547	4.0626	45.40	81.2		P
Cobalt	75 - 125	88.6916	0.8760	B 113.40	77.4		P
Copper	75 - 125	65.7773	7.3784	117.90	49.5	N	P
Iron		4110.8467	3677.5205	226.80	191.1		₽
Lead	75 - 125	7.0124	3.5215	4.50	77.6		P
Manganese	75 - 125	266.9229	170.7753	- 113.40	84.8		P
Mercury	75 - 125	0.2862	0.0484	B 0.31	76.7		CV
Nickel	75 - 125	92.2984	3.7173	113.40	78.1		P
Selenium	75 - 125	2.0088	0.3400	טן 2.30	87.3		P
Silver	75 - 125	9.3172	0.1117	B 11.30	81.5		P
Thallium	75 - 125	6.7000	0.4400	U 11.30	59.3	N	P
Vanadium	75 - 125	98.6277	4.2377	113.40	83.2		P
Zinc	75 - 125	102.4679	14.8353	113.40	77.3		P

NO OC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Comments:

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SW-846 METALS 5A SPIKE SAMPLE RECOVERY

			EPA SAMPLE NO.
			SOUTH LAGOONMSD
Name: عيد	CompuChem	Contract:	
ab Code:	LIBRTY Case No.: 01398	SAS No.:SD	g no.: <u>Q1398</u>
Matrix (so	pil/water): SOIL	Level (low/ma	ed): <u>LOW</u>
Solids f	for Sample: <u>42.4</u>		

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	Con	centration Units (ug/	L or mg/kg dry w	e19	nt): MG/KG	, 		
Analyte	Control Limit %R	Spiked Sample Result (SSR)	с	Sample Result (SR)	с	Spike Added (SA)	€R	Q	м
Aluminum		4931.8140		3836.6621		421.20	260.0		P
Antimony	75 - 125	90.1185	1	0.3000	υ	16.80	536.4	N	P
Arsenic	75 - 125	11.3150		3.5431		4.20	185.0	N	P
Barium	75 - 125	419.5700		8.0642		421.20	97.7		P
Beryllium	75 - 125	9.4190		0.2086	B	10.50	87.7		P
Cadmium	75 - 125	8.4150		0.0600	U	10.50	80.1		P
Chromium	75 - 125	41.1010		4.0626		42.10	88.0		P
Cobalt	75 - 125	88.6439	l	0.8760	в	105.30	83.4		P
Copper	75 - 125	68.5289		7.3784	1	117.90	51.9	N	P
Iron		4110.6113	Ι	3677.5205	1	210.60	205.6		₽
Lead	75 - 125	7.0718	Î	3.5215		4.20	84.5		₽
Manganese	75 - 125	261.4619		170.7753		421.20	21.5	N	₽
Mercury	75 - 125	0.3163		0.0484	в	0.36	74.4	N	CV
Nickel	75 - 125	92.1043	1	3.7173		105.30	83.9	[P
Selenium	75 - 125	2.0423		0.3400	ט	2.10	97.2		P
Silver	75 - 125	9.4469		0.1117	В	10.50	88.9		P
Thallium	75 - 125	7.6188	1	0.4400	U	10.50	72.6	N	₽
Vanadium	75 - 125	98.8157		4.2377	Ī	105.30	89.8		P
Zinc	75 - 125	104.6613	1	14.8353	1	105.30	85.3	1	P

NO QC EVALUATION HAS BEEN PERFORMED. DATA VALIDITY IS UNSUBSTANTIATED AND THE DATA SHOULD BE USED WITH DISCRETION

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

	SOUTH	LAGOON
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Lab Name:	CompuChem	Contract:	
Lab Code:	LIBRTY Case No.: 01391	SAS No.: SI	DG No.: <u>Q1391</u>
Matrix (so	il/water): WATER	Lab Sample ID: 21391-	1
Level (low	/med): LOW	Date Received: 06/22/0	00
<pre>% Solids:</pre>	0.0		

CAS No. Analyte Concentration С Q M 7429-90-5 Aluminum 40500 P 7440-36-0 Antimony 2.1 0 P 7440-38-2 Arsenic 2.3 U P 7440-39-3 Barium ₽ 21.2 7440-41-7 Beryllium 1.7 B ₽ 7440-43-9 Cadmium 0.65 B P 7440-70-2 Calcium 278000 P 7440-47-3 Chromium 22.1 P 7440-48-4 Cobalt 14.4 P 7440-50-8 Copper 54.8 ₽ Е 7439-89-6 Iron 24600 P 7439-92-1 Lead 11.9 N P 7439-95-4 Magnesium 40600 P 7439-96-5 Manganese 2660 P 7439-97-6 Mercury 0.10 0 CV 7440-02-0 Nickel 41.0 ₽ 7440-09-7 Potassium 3040 Е P 7782-49-2 Selenium 2.2 U ₽ N 7440-22-4 Silver 0.60 0 ₽ N 7440-23-5 Sodium 2740 Ρ 7440-28-0 Thallium

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

		NO QC EVAL DATA VA	UATION HAS BEE	EN PERFORMEL	D.
Color Before:	COLORLESS	AND I Clarity Before:	HE DATA SHOULI WITH DISCRETI	D BE USED	
Color After:	YELLOW	Clarity After:	CLEAR	Artifacts:	
mments:					

Vanadium

Zinc

7440-62-2

7440-66-6

4.7 B

5.0 B

581

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