WATTS ENGINEERS

# PHASE II
# FIELD INVESTIGATION AND
# SITE ASSESSMENT REPORT
# OF THE DEEP SUBSURFACE SOILS

**AT**

## GALLAGHER BEACH
## PROPOSED LAKE ERIE STATE PARK
## BUFFALO, NEW YORK

**JANUARY 2005**

**PREPARED FOR:**

**WENDEL DUCHSCHERER**
**95 JOHN MUIR DRIVE**
**SUITE 100**
**BUFFALO, NEW YORK 14228-1163**

**FOR SUBMISSION TO:**

**NEW YORK STATE**
**OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION**
**WESTERN DISTRICT - NIAGARA FRONTIER REGION**
**PO BOX 1132**
**NIAGARA FALLS, NEW YORK 14303-0132**

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**JANUARY 2005**

**PREPARED BY:**

**WATTS ENGINEERING AND ARCHITECTURE, P.C.**
**3826 MAIN STREET**
**BUFFALO, NEW YORK 14226**

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## 1.0 PROJECT PURPOSE AND SCOPE

The Phase II Field Investigation of the deep subsurface soils representing historical dredge spoils was performed by Watts Engineering and Architecture, P.C., (Watts Engineers) at the request of Wendel-Duchscherer on behalf of the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP). This report is the third report performed by Watts Engineers for Gallagher Beach, the proposed Lake Erie State Park. This soil investigation was conducted to investigate and characterize deep sub-surface soils within the proposed park, specifically the dredge spoils. Earlier test pits concluded that dredge spoils were present across the site at a depth of approximately five to eight feet below ground surface. The area investigated for this report included the greenspace that will function as the main recreational area for the proposed park.

The proposed park is located in an area of historical fill activities and contains materials such as slag and cinder, brick and masonry, metal scrap, Buffalo River and Buffalo Harbor dredge spoils, and soil believed to have been excavated from across the City of Buffalo to facilitate construction/redevelopment at former industrial sites. This investigation was performed to determine if elevated compound concentrations were present in sub-surface soils that could be a potential environmental concern with the proposal to have this area serve as a playground and park for the public.

## 2.0 SOIL/FILL IDENTIFICATION, CHARACTERIZATION, AND SAMPLE COLLECTION

The field investigation was conducted on Monday, December 20, 2004. The investigation involved the collection of three (3) soil samples from two locations at the site. The sample locations were determined by NYSOPRHP personnel in consultation with Watts Engineers. One location was within the northwest quadrant of the greenspace. The second location was within the southeast quadrant.

Please refer to **Figure 2-1** which provides a sample location map that identifies each of the sampling locations superimposed on top of an aerial photograph of the project site. Samples locations were referenced in the field with the use of a personal global positioning system unit and should be accurate to within several yards.

The samples were recovered utilizing a track-mounted drilling rig. The boreholes were advanced to a depth of 24 to 30 feet below ground surface using 2 3/4-inch hollow stem augers with continuous 2-inch split spoon sampling. The returned soil profiles from each location were logged and examined for volatile vapors using a MiniRAE 2000™ photoionization detector (PID), olfactory and visual indications of contamination and presence of dredge spoils.

Two of the three soil samples were collected from the upper portion of the dredged soils from each boring. The first sample (SB-NW-1) was collected at a depth of 6 to 11.5 feet below existing ground surface. The second sample (SB-SE-2) was collected at a depth of 4 to 10 feet below existing ground surface. The third composite sample from the two boreholes (Deep Comp-3) was collected to represent deep dredge sediment sample conditions. This sample was collected from a depth of 14 to 20 feet. All samples were collected by Watts Engineers personnel using pre-cleaned hand tools such as stainless steel or teflon scoops.

### 2.1 Evaluation of Sub-surface Soils

The immediate surface soils (approximately the upper 4 to 6 feet) within the site are composed of brown to reddish-brown silts and silty clays. The surface soils have been re-worked and graded recently in preparation of the proposed plans to construct a park and recreation area. Fill composed primarily of brick, slag, small concrete, and stone with some wood is commonly intermixed with these soils. Sub-surface soils (approximately greater than 6 feet below ground surface) within the site are composed of dark grey to black silts, silty clays, and sands. Organic material (wood, stems, reeds, etc.) was commonly intermixed within the sub-surface soils. An organic odor and sheen was typically noted throughout the sub-surface strata.

## 2.2 Sample Collection Summary

Soil samples were collected directly from each location. Samples were designated based on a combination of their origin and depth (when more than one sample was collected from the same location). Pertinent information was recorded on a chain-of custody form. The samples were then packaged, placed on ice and hand-delivered Severn-Trent Laboratories (STL), Inc., located in Amherst, New York.


0m 50m 100m 150m 200m 250m

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Figure 2-1
Sample Location Map

Gallagher Beach
Proposed Erie State Park
Buffalo, New York

Scale in meters

January 2005

## 3.0 LABORATORY ANALYSIS AND RESULTS

This section presents a summary of the analytical data for the soil/fill samples collected during the field investigation. Three (3) samples were analyzed for the following parameters:

- Target Compound List (TCL) Volatile Organics via EPA SW-846 Method 8260
- Target Compound List (TCL) Semi-Volatile Organics via EPA SW-846 Method 8270
- Target Compound List (TCL) Pesticides/PCBs via EPA SW-846 Method 8081/8082
- Target Analyte List (TAL) Inorganics plus Cyanide via EPA SW-846 Method 8463/9012

A copy of the chain-of-custody form and analytical results received from Severn Trent Laboratories is found in **Appendix A.**

Watts Engineers has summarized the laboratory results in **Tables 3-1, 3-2, 3-3, 3-4, 3-5 and 3-6.** These tables also contain New York State Department of Environmental Conservation (NYSDEC) recommended soil cleanup objectives so a comparison of the results can be made to applicable regulatory guidance values.

**Table 3-1** summarizes the TCL volatile organic analytical results for the three samples. Acetone, benzene, chlorobenzene, 1,2-dichlorobenzene, 1,2,4-trichlorobenze, 1,3-dichlorobenzene, 1,4-dichlorobenzene, ethylbenzene, 2-hexanone, methycylohexane, methylene chloride, and xylenes were detected in the samples. Of these compounds, benzene, chlorobenzene, 1,2-dichlorobenzene, 1,2,4-trichlorobenze, 1,3-dichlorobenzene, 1,4-dichlorobenzene, ethylbenzene and xylenes were detected in concentrations above NYSDEC recommended cleanup objectives. All of these compounds were detected in the deep composite sample. Chlorobenzene and benzene were detected in sample SB-SE-2. None were detected above recommended cleanup levels in sample SB-NW-1.

**Table 3-2** summaries the TCL semi-volatile organic analytical results for the three samples. While semi-volatile compounds were detected including phenanthrene, fluoranthene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, 2-methylnapthalene and pyrene, none of the samples were detected at elevated concentrations exceeding NYSDEC recommended cleanup objectives. Furthermore, detections were restricted to the deep sediment sample.

**Table 3-3** summarizes the TCL pesticide results for the three soil samples collected for laboratory analysis. While pesticides including 4,4-DDT, 4,4-DDE, dieldrin, delta-BHC, endrin and endrin aldahyde were detected, none were identified in any of the samples at concentrations above the NYSDEC recommended soil cleanup objectives.

**Table 3-4** summarizes the TCL PCB results for the three soil samples collected for laboratory analysis. PCBs were detected in all three samples, however, none had concentrations above the NYSDEC recommended soil cleanup objective for subsurface soils.

**Table 3-5** summarizes the TAL inorganic (metal) results for the three samples. Several inorganic compounds were detected at concentrations either above normal soil background levels or NYSDEC recommended soil cleanup objectives. Inorganics detected at elevated levels included arsenic, beryllium, cadmium, chromium, copper, iron, magnesium, mercury, nickel, and zinc. The

concentration of both chromium and lead found in samples SB-SE-2 and Deep Comp-3 could mathematically exceed Resources Conservation and Recovery Act (RCRA) limits as defined under the Toxicity Characteristic Leaching Procedure (TCLP). Exceeding the TCLP regulatory level would classify soils removed from these locations as a RCRA hazardous waste and force appropriate material handling and disposal requirements. Additional testing would be required to confirm this possibility.

**Table 3-6** summarizes the total recoverable cyanide results for the three samples. Total cyanide was detected at a low concentration in one sample.

**TABLE 3-1**
**VOLATILE ORGANIC COMPOUNDS IN SOIL SAMPLES**
**GALLAGHER BEACH - ANALYTICAL DATA SUMMARY**
**ROUND III**

| | Soil Concentration (µg/kg - ppb) | | | |
|---|---|---|---|---|
| Compound | Sample Y213312-SB-NW-1 | Sample Y213312-SB-SE-2 | Sample Y213312-Deep Comp-3 | NYSDEC Recommended Soil Cleanup Objectives[1] (µg/kg - ppb) |
| Sample Date | 12/20/04 | 12/20/04 | 12/20/04 | |
| Sample Depths (in) | 6-11.5 | 4-10 | 14-20 | |
| Acetone | 66 | ND | ND | 200 |
| Benzene | ND | 400J | 1,400J | 60 |
| Bromodichloromethane | ND | ND | ND | N/A |
| Bromoform | ND | ND | ND | N/A |
| Bromomethane | ND | ND | ND | N/A |
| 2-Butanone | 17J | ND | ND | 300 |
| Carbon Disulfide | ND | ND | ND | 2,700 |
| Carbon Tetrachloride | ND | ND | ND | 600 |
| Chlorobenzene | 120 | 22,000 | 92,000 | 1,700 |
| Chloromethane | ND | ND | ND | N/A |
| Chloroethane | ND | ND | ND | 1,900 |
| Chloroform | ND | ND | ND | 300 |
| Cyclohexane | ND | ND | ND | N/A |
| Dibromochloromethane | ND | ND | ND | N/A |
| 1,1-Dichloroethane | ND | ND | ND | 200 |
| 1,1,2-Trichloro-1,2,2,-triflurorethane | ND | ND | ND | 6,000 |
| 1,2-Dibromo-3-chloropropane | ND | ND | ND | N/A |
| 1,2-Dibromethane | ND | ND | ND | N/A |
| 1,2-Dichlorobenzene | 2J | ND | 10,000 | 7,900 |
| 1,2-Dichloroethane | ND | ND | ND | 100 |
| 1,1-Dichloroethene | ND | ND | ND | 400 |
| 1,2-Dichloroethene (cis) | ND | ND | ND | 250 |
| 1,2-Dichloroethene (trans) | ND | ND | ND | 300 |
| 1,2-Dichloropropane | ND | ND | ND | 300 |
| 1,2,4-Trichlorobenzene | ND | 240J | 20,000 | 3,400 |
| 1,3-Dichlorobenzene | 3J | ND | 5,300 | 1,600 |
| 1,3-Dichloropropene (cis) | ND | ND | ND | 300 |
| 1,3-Dichloropropene (trans) | ND | ND | ND | 300 |

**TABLE 3-1**
**VOLATILE ORGANIC COMPOUNDS IN SOIL SAMPLES**
**GALLAGHER BEACH - ANALYTICAL DATA SUMMARY**
**ROUND III**

| | Soil Concentration (µg/kg - ppb) | | | |
|---|---|---|---|---|
| Compound | Sample Y213312-SB-NW-1 | Sample Y213312-SB-SE-2 | Sample Y213312-Deep Comp-3 | NYSDEC Recommended Soil Cleanup Objectives[1] (µg/kg - ppb) |
| 1,4-Dichlorobenzene | 13 | 1,500 | 42,000 | 8,500 |
| Dichlorodifluoromethane | ND | ND | ND | N/A |
| Ethylbenzene | ND | ND | 4,600 | 5,500 |
| 2-Hexanone | ND | ND | ND | N/A |
| Isopropylbenzene | ND | ND | ND | 5,000 |
| Methyl Acetate | ND | ND | ND | N/A |
| Methyl Tert Butyl Ether | ND | ND | ND | 120 |
| Methycyclohexane | 1J | 2,500 | 9,600 | N/A |
| Methylene Chloride | 9B | ND | ND | 100 |
| 4-Methyl-2-Pentanone | ND | ND | ND | 10 |
| Tetrachloroethene | ND | ND | ND | 1,400 |
| 1,1,1-Trichlorethane | ND | ND | ND | 800 |
| 1,1,2-Trichloroethane | ND | ND | ND | N/A |
| 1,1,2,2-Tetrachloroethane | ND | ND | ND | 600 |
| Styrene | ND | ND | ND | N/A |
| Toluene | ND | ND | ND | 1,500 |
| Trichloroethene | ND | ND | ND | 700 |
| Trichlorofluoromethane | ND | ND | ND | N/A |
| Vinyl Acetate | ND | ND | ND | N/A |
| Vinyl Chloride | ND | ND | ND | 200 |
| Xylenes | ND | ND | 5,200J | 1,200 |

**NOTES**:
ND = None Detected
N/A = Not Available
MDL = Method detection Limit
J = Estimated Value (below Laboratory Quantitation Limit)
B = Compound detected in associated blank as well as the sample.

[1] NYSDEC Technical and Administrative Guidance Memorandum HWR-94-4046, revised January 24, 1994. As per TAGM 4046; Total volatiles <10,000 ppb, total semi-volatiles <500,000 ppb, and individual semi-volatiles <50,000 ppb.

Exceeds NYSDEC recommended soil cleanup objective.

**TABLE 3-2**
**SEMI-VOLATILE ORGANIC COMPOUNDS**
**GALLAGHER BEACH - ANALYTICAL DATA SUMMARY**
**ROUND III**

| Compound | Soil Concentration (µg/kg - ppb) | | | NYSDEC Recommended Soil Cleanup Objectives[2] (µg/kg - ppb) |
|---|---|---|---|---|
| | Sample Y213312-SB-NW-1 | Sample Y213312-SB-SE-2 | Sample Y213312-Deep Comp-3 | |
| Sample Date | 12/20/04 | 12/20/04 | 12/20/04 | |
| Sample Depths (in) | 6-11.4 | 4-10 | 14-20 | |
| Phenol | ND | ND | ND | 30 or MDL |
| Bis(2-Chloroethyl) ether | ND | ND | ND | N/A |
| 2-Chlorophenol | ND | ND | ND | 800 |
| 1,3-Dichlorobenzene | ND | ND | ND | 1,600 |
| 1,4-Dichlorobenzene | ND | ND | 3,200J | 8,500 |
| 1,2-Dichlorobenzene | ND | ND | ND | 7,900 |
| 2-Methylphenol | ND | ND | ND | 100 or MDL |
| 2,2'-Oxybis (1-chloropropane) | ND | ND | ND | N/A |
| 4-Methylphenol | ND | ND | ND | 900 |
| n-Nitrosodi-n-propylamine | ND | ND | ND | N/A |
| Hexachloroethane | ND | ND | ND | N/A |
| Nitrobenzene | ND | ND | ND | 200 or MDL |
| Isophorone | ND | ND | ND | 4,400 |
| 2-Nitrophenol | ND | ND | ND | 330 or MDL |
| 2,4-Dimethylphenol | ND | ND | ND | N/A |
| bis (2-Chloroethoxy) methane | ND | ND | ND | N/A |
| 2,4-Dichlorophenol | ND | ND | ND | 400 |
| 1,2,4-Trichlorobenzene | ND | ND | 2,200J | 3,400 |
| Naphthalene | ND | ND | ND | 13,000 |
| 4-Chloroaniline | ND | ND | ND | 220 or MDL |
| Hexachlorobutadiene | ND | ND | ND | N/A |
| 4-Chloro-3-methylphenol | ND | ND | ND | 240 or MDL |
| 2-Methylnaphthalene | ND | ND | 1,300J | 36,400 |
| Hexachlorocyclopentadiene | ND | ND | ND | N/A |
| 2,4,6-Trichlorophenol | ND | ND | ND | N/A |
| 2,4,5-Trichlorophenol | ND | ND | ND | 100 |
| 2-Chloronaphthalene | ND | ND | ND | N/A |
| 2-Nitroaniline | ND | ND | ND | 430 or MDL |
| Dimethylphthalate | ND | ND | ND | 2,000 |

**TABLE 3-2**
**SEMI-VOLATILE ORGANIC COMPOUNDS**
**GALLAGHER BEACH - ANALYTICAL DATA SUMMARY**
**ROUND III**

| Compound | Soil Concentration (µg/kg - ppb) | | | |
|---|---|---|---|---|
| | Sample Y213312-SB-NW-1 | Sample Y213312-SB-SE-2 | Sample Y213312-Deep Comp-3 | NYSDEC Recommended Soil Cleanup Objectives[2] (µg/kg - ppb) |
| Acenaphthylene | ND | ND | ND | 41,000 |
| 2,6-Dinitrotoluene | ND | ND | ND | 1,000 |
| 3-Nitroaniline | ND | ND | ND | 500 or MDL |
| Acenaphthene | ND | ND | ND | 50,000 |
| 2,4-Dinitrophenol | ND | ND | ND | 200 or MDL |
| 4-Nitrophenol | ND | ND | ND | 100 or MDL |
| Dibenzofuran | ND | ND | ND | 6,200 |
| 2,4-Dinitrotoluene | ND | ND | ND | N/A |
| Diethylphthalate | ND | ND | ND | 7,100 |
| 4-Chlorophenylphenylether | ND | ND | ND | N/A |
| Fluorene | ND | ND | ND | 50,000 |
| 4-Nitroaniline | ND | ND | ND | N/A |
| 2-Methyl-4,6-dinitrophenol | ND | ND | ND | N/A |
| n-Nitrosodiphenylamine | ND | ND | ND | N/A |
| 4-Bromophenylphenylether | ND | ND | ND | N/A |
| Hexachlorobenzene | ND | ND | ND | 410 |
| Pentachlorophenol | ND | ND | ND | 1,000 or MDL |
| Phenanthrene | ND | ND | 2,900J | 50,000 |
| Anthracene | ND | ND | ND | 50,000 |
| Di-n-butyl phthalate | ND | ND | ND | 8,100 |
| Fluoranthene | ND | ND | 1,900J | 50,000 |
| Pyrene | ND | ND | 1,800J | 50,000 |
| Butylbenzylphthalate | ND | ND | ND | 50,000 |
| 3,3'-Dichlorobenzidine | ND | ND | ND | N/A |
| Benzo(a)Anthracene | ND | ND | ND | 224 or MDL |
| Chrysene | ND | ND | ND | 400 |
| bis (2-Ethylhexyl) phthalate | ND | ND | ND | 50,000 |
| Di-n-octyl phthalate | ND | ND | ND | 8,100 |
| Benzo(b) fluoranthene | ND | ND | ND | 1,100 |
| Benzo(k) fluoranthene | ND | ND | ND | 1,100 |
| Benzo(a) pyrene | ND | ND | ND | 61 or MDL |
| Benzoic acid | ND | ND | ND | 2,700 |

**TABLE 3-2**
**SEMI-VOLATILE ORGANIC COMPOUNDS**
**GALLAGHER BEACH - ANALYTICAL DATA SUMMARY**
**ROUND III**

| Compound | Soil Concentration (µg/kg - ppb) | | | |
|---|---|---|---|---|
| | Sample Y213312-SB-NW-1 | Sample Y213312-SB-SE-2 | Sample Y213312-Deep Comp-3 | NYSDEC Recommended Soil Cleanup Objectives[2] (µg/kg - ppb) |
| Benzyl alcohol | ND | ND | ND | N/A |
| Indeno(1,2,3-cd) pyrene | ND | ND | ND | 3,200 |
| Dibenzo(a,h) anthracene | ND | ND | ND | 14 or MDL |
| Benzo(ghi) perylene | ND | ND | ND | 50,000 |

**NOTES**
ND = None Detected
N/A = Not Available
MDL = Method Detection Limit
J = Estimated Value (below Laboratory Quantitation Limit)
na = Not Applicable
[1] NYSDEC Technical and Administrative Guidance Memorandum HWR-94-4046, revised January 24, 1994. As per TAGM 4046; total volatiles <10,000 ppb, total semi-volatiles <500,000 ppb, and individual semi-volatiles <50,000 ppb.

Exceeds NYSDEC recommended soil cleanup objective.

**TABLE 3-3**
**PESTICIDE COMPOUNDS IN SOIL SAMPLES**
**GALLAGHER BEACH - ANALYTICAL DATA SUMMARY**
**ROUND III**

| Compound | Soil Concentration (µg/kg - dry (ppb)) | | | NYSDEC Recommended Soil Cleanup Objectives[2] (µg/kg - ppb) |
|---|---|---|---|---|
| | Sample Y213312-SB-NW-1 | Sample Y213312-SB-SE-2 | Sample Y213312-Deep Comp-3 | |
| Sample Date | 12/20/04 | 12/20/04 | 12/20/04 | |
| Sample Depths (in) | 6-11.5 | 4-10 | 14-20 | |
| 4,4 - DDT | 23 | ND | ND | 2,100 |
| 4,4 - DDD | ND | ND | ND | 2,900 |
| 4,4 - DDE | ND | ND | 75J | 2,100 |
| Aldrin | ND | ND | ND | 41 |
| Chlordane | ND | ND | ND | 540 |
| Dieldrin | ND | 14J | ND | 44 |
| alpha-BHC | ND | ND | ND | 110 |
| beta-BHC | ND | ND | ND | 200 |
| delta-BHC | ND | ND | 230 | 300 |
| gamma-BHC (Lindane) | ND | ND | ND | 60 |
| Endrin | 5.7J | 8.4J | 77J | 100 |
| Endrin aldehyde | ND | ND | 150 | N/A |
| Endrin ketone | ND | ND | ND | N/A |
| Endosulfan Sulfate | ND | ND | ND | 1,000 |
| Endosulfan I | ND | ND | ND | 900 |
| Endosulfan II | ND | ND | ND | 900 |
| Heptachlor | ND | ND | ND | 100 |
| Heptachlor epoxide | ND | ND | ND | 20 |
| Methoxychlor | ND | ND | ND | N/A |
| Toxaphene | ND | ND | ND | N/A |

**NOTES:**
ND = None Detected
N/A = Not Available
MDL = Method Detection Limit
J = Estimated Value (below Laboratory Quantitation Limit)
na = Not Applicable
[1] NYSDEC Technical and Administrative Guidance Memorandum HWR-94-4046, revised April, 1995. As per TAGM 4046; total pesticides <10,000 ppb.

Exceeds NYSDEC recommended soil cleanup objective.

**TABLE 3-4**
**PCB COMPOUNDS IN SOIL SAMPLES**
**GALLAGHER BEACH - ANALYTICAL DATA SUMMARY**
**ROUND III**

| Compound | Soil Concentration (µg/kg - dry (ppb)) | | | NYSDEC Recommended Soil Cleanup Objectives[2] (µg/kg - ppb) |
|---|---|---|---|---|
| | Sample Y213312-SB-NW-1 | Sample Y213312-SB-SE-2 | Sample Y213312-Deep Comp-3 | |
| Sample Date | 12/20/04 | 12/20/04 | 12/20/04 | |
| Sample Depths (in) | 6-11.5 | 4-10 | 14-20 | |
| **PCBs** | | | | |
| Aroclor 1260 | 57 | 170 | 170J | 1000 (surface) 10,000 (subsurface) |
| Aroclor 1254 | 160 | 540 | 860 | 1000 (surface) 10,000 (subsurface) |
| Aroclor 1221 | ND | ND | ND | 1000 (surface) 10,000 (subsurface) |
| Aroclor 1232 | ND | ND | ND | 1000 (surface) 10,000 (subsurface) |
| Aroclor 1248 | 280 | 940 | 2,300 | 1000 (surface) 10,000 (subsurface) |
| Aroclor 1016 | ND | ND | ND | 1000 (surface) 10,000 (subsurface) |
| Aroclor 1242 | ND | ND | ND | 1000 (surface) 10,000 (subsurface) |

**NOTES:**
If a compound was not detected the space was left blank in the table.
ND = None Detected
N/A = Not Available
MDL = Method Detection Limit
J = Estimated Value (below Laboratory Quantitation Limit)
na = Not Applicable

[1] NYSDEC Technical and Administrative Guidance Memorandum HWR-94-4046, revised April, 1995. As per TAGM 4046.

Exceeds NYSDEC recommended soil cleanup objective.

## TABLE 3-5
## TARGET ANALYTE LIST INORGANICS (METALS) IN SOIL SAMPLES
## GALLAGHER BEACH - ANALYTICAL DATA SUMMARY
## ROUND III

| Parameter | Soil Concentration (mg/kg - dry [ppm]) | | | NYSDEC Guidance Values (ppm) | |
|---|---|---|---|---|---|
| | Sample Y213312-SB-NW-1 | Sample Y213312-SB-SE-2 | Sample Y213312-Deep Comp-3 | Eastern USA/NYS Background[1] | Recommended Soil Cleanup Objectives[1] (mg/kg - ppm) |
| Sample Date | 12/20/04 | 12/20/04 | 12/20/04 | | |
| Sample Depths | 6-11.5 | 4-10 | 14-20 | | |
| Aluminum | 4,500 | 13,600 | 5,880 | 33,000 | SB |
| Antimony | ND | ND | ND | N/A | SB |
| Arsenic | 7.6 | 36.3 | 51.1 | 3-12 | 7.5 or SB |
| Barium | 43.0 | 115 | 64.3 | 15-600 | 300 or SB |
| Beryllium | ND | 0.71 | 0.57 | 0-1.75 | 0.16 or SB |
| Cadmium | ND | 5.1 | 2.7 | 0.1-1 | 1 or SB |
| Calcium | 16,800 | 26,400 | 18,800 | 130-35,000 | SB |
| Chromium | 20.5 | 175 | 168 | 1.5-40 | 10 |
| Cobalt | 5.2 | 13.0 | 8.8 | 2.5-60 | 30 or SB |
| Copper | 37.3 | 180 | 158 | 1-50 | 25 or SB |
| Iron | 13,100 | 37,400 | 91,500 | 2000-550,000 | 2000 or SB |
| Lead | 66.5 | 306 | 310 | 200-500[2] | SB |
| Magnesium | 4,140 | 9,820 | 5,500 | 100-5000 | SB |
| Manganese | 252 | 648 | 1,300 | 50-5000 | SB |
| Mercury | 0.078 | 2.0 | 2.2 | 0.001-0.2 | 0.1 |
| Nickel | 17.1 | 42.8 | 61.5 | 0.5-25 | 13 or SB |
| Potassium | 758 | 1,540 | 732 | 8500-43000 | SB |
| Selenium | ND | ND | ND | 0.1-3.9 | 2 or SB |
| Silver | ND | 0.89 | 0.85 | N/A | SB |
| Sodium | ND | ND | ND | 6000-8000 | SB |
| Thallium | ND | ND | ND | N/A | SB |
| Vanadium | 9.1 | 24.6 | 19.7 | 1-300 | 150 or SB |
| Zinc | 94.2 | 620 | 1,080 | 9-50 | 20 or SB |

**NOTES**
N/A = Not Available
ND = None Detected
SB = Site Background
na = Not Applicable

[1] NYSDEC Technical and Administrative Guidance Memorandum HDW-94-4046, Revised April, 1995.
[2] Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm. Source is NYSDEC TAGM HWR 94-4046.

Exceeds NYSDEC recommended soil cleanup objective.

## TABLE 3-6
## WET CHEMISTRY ANALYSIS INCLUDING TOTAL RECOVERABLE CYANIDE IN SOIL SAMPLES GALLAGHER BEACH - ANALYTICAL DATA SUMMARY ROUND III

| | Soil Concentration (µg/kg - dry (ppb)) | | | |
|---|---|---|---|---|
| Compound | Sample Y213312-SB-NW-1 | Sample Y213312-SB-SE-2 | Sample Y213312-Deep Comp-3 | NYSDEC Recommended Soil Cleanup Objectives[2] (µg/kg - ppb) |
| Sample Date | 12/20/04 | 12/20/04 | 12/20/04 | |
| Sample Depths (in) | 6-11.5 | 4-10 | 14-20 | |
| Cyanide (total) | ND | ND | 2.5 | N/A |

**NOTES**

N/A = Not Available
ND = None Detected
SB = Site Background
na = Not Applicable

[1] NYSDEC Technical and Administrative Guidance Memorandum HDW-94-4046, Revised April, 1995.
[2] Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm. Source is NYSDEC TAGM HWR 94-4046.

Exceeds NYSDEC recommended soil cleanup objective.

## 4.0 ASSESSMENT OF ENVIRONMENTAL SITE CONDITIONS

Various contaminants were detected in the soil samples collected for laboratory analysis. The largest number of compounds detected and their greatest concentration, especially with regards to volatile, PCB and inorganic parameters are associated with the deepest sediments found at this parcel. Compounds detected above NYSDEC recommended cleanup objectives include several volatile organics and a variety of inorganics. All other compounds (e.g., pesticides, PCBs and semi-volatile organics) were detected at concentrations below NYSDEC recommended soil cleanup objectives.

These compounds are likely attributed to the mixed dredge spoils representing outfall conditions from historical industrial operations in the vicinity of the Buffalo River and Harbor area.

## 5.0 RECOMMENDATIONS

The contamination found at this site during all three rounds of investigations is consistent with soil intermixed with fill from former manufacturing sites that have had a long history of industrial use (i.e., brownfield sites). Deeper soils appear to represent dredge materials collected by the Army Corps of Engineers from the Buffalo Harbor and Buffalo River and deposited into this former diked containment area. Watts Engineers continues to recommend that the NYSDEC and NYSDOH be consulted to determine if the contaminant concentrations detected at this site are a potential concern for the intended use of the property as a park.

Recently, the NYSDEC has revised their position with regards to vapor intrusion that results from the release and migration of volatile organic compounds and their associated vapors. This investigation identified a large number and greater concentration of volatile organic compounds than the two previous investigations. This may be anticipated based on the depth from which the samples were collected. The NYSDEC may recommend that confirmatory vapor intrusion sampling be conducted for any building constructed on this parcel to confirm vapors are not migrating through the concrete slab and impacting the breathing zone within the proposed facility. This concern should be discussed and reviewed in a meeting with the NYSDEC.

Any workers involved with subsurface excavation, trenching, and future utility installation, should take precautions if their work involves handling these fill materials. Precautions would include wearing gloves to prevent direct dermal contact, keeping the fill moist or wet to minimize the generation of dust and particulates, and abstaining from any activities that would increase the likelihood of hand to mouth transfer (i.e., eating, drinking, smoking) while working within these fill materials.

Any excess materials should be staged for sampling and characterization with regards to disposal. Analysis is recommended to include both the total concentrations of TAL and TCL analytes examined in this investigation as well as TCLP testing to confirm that the materials are not considered hazardous waste under RCRA. The surficial fill materials should be able to be re-used on-site but not as clean soils in active recreational areas. Fill from depths greater than 6+/- feet and characterized by their dark gray-black color appear to represent more contaminated dredge spoils. If excavated, these materials will likely require disposal in an off-site landfill and may be considered hazardous if they fail regulatory toxicity levels under RCRA.

NYSOPRHP should be aware that purchase of this site will involve the transfer of property with identified soil contamination. While low level contamination would classify many of the soils as a solid waste, it is possible that certain locations (especially at depth) contain compounds of concern and pockets of contamination at a concentration that would characterize the material as a hazardous waste/hazardous substance under Resource Recreation and Recovery Act or Toxic Substance Control Act regulations. Purchase of this property should be made with the understanding that the sale will include a transfer of environmental liability associated with the site and therefore, we recommend that this process include review and approval by NYSOPRHP legal council.

# APPENDIX A
# LABORATORY ANALYTICAL REPORT


SEVERN TRENT STL

STL Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228

Tel: 716 691 2600 Fax: 716 691 7991
www.stl-inc.com

ANALYTICAL REPORT

Job#: A04-C674

STL Project#: NY2A893625
Site Name: Watts Engineers Gallagher Beach-Round Three
Task: Gallagher Beach Round Three

Andrew Klimek
Watts Engineers
3826 Main Street
Buffalo, NY 14226

STL Buffalo

Paul K. Morrow
Project Manager

01/06/2005

# STL Buffalo
# Current Certifications

| STATE | Program | Cert # / Lab ID |
|---|---|---|
| Arkansas | SDWA, CWA, RCRA, SOIL | 03-054-D/88-0686 |
| California | NELAP SDWA, CWA, RCRA | 01169CA |
| Connecticut | SDWA, CWA, RCRA, SOIL | PH-0568 |
| Florida | NELAP RCRA | E87672 |
| Georgia | SDWA | 956 |
| Illinois | NELAP SDWA, CWA, RCRA | 200003 |
| Iowa | SW/CS | 374 |
| Kansas | NELAP SDWA, CWA, RCRA | E-10187 |
| Kentucky | SDWA | 90029 |
| Kentucky UST | UST | 30 |
| Louisiana | NELAP CWA, RCRA | 2031 |
| Maine | SDWA, CWA | NY044 |
| Maryland | SDWA | 294 |
| Massachusetts | SDWA, CWA | M-NY044 |
| Michigan | SDWA | 9937 |
| Minnesota | CWA, RCRA | 036-999-337 |
| New Hampshire | NELAP SDWA, CWA | 233701 |
| New Jersey | SDWA, CWA, RCRA, CLP | NY455 |
| New York | NELAP, AIR, SDWA, CWA, RCRA | 10026 |
| North Carolina | CWA | 411 |
| North Dakota | SDWA, CWA, RCRA | R-176 |
| Oklahoma | CWA, RCRA | 9421 |
| Pennsylvania | Env. Lab Reg. | 68-281 |
| South Carolina | RCRA | 91013 |
| USDA | FOREIGN SOIL PERMIT | S-41579 |
| Virginia | SDWA | 278 |
| Washington | CWA | C254 |
| West Virginia | CWA | 252 |
| Wisconsin | CWA | 998310390 |
| | | |
| | | |
| | | |

SAMPLE SUMMARY

| LAB SAMPLE ID | CLIENT SAMPLE ID | SAMPLED DATE | SAMPLED TIME | RECEIVED DATE | RECEIVED TIME |
|---|---|---|---|---|---|
| A4C67403 | Y213312-DEEPCOMP-3 | 12/20/2004 | 15:15 | 12/20/2004 | 16:42 |
| A4C67401 | Y213312-SB-NW-1 | 12/20/2004 | 11:30 | 12/20/2004 | 16:42 |
| A4C67402 | Y213312-SB-SE-2 | 12/20/2004 | 14:50 | 12/20/2004 | 16:42 |

METHODS SUMMARY

Job#: A04-C674

STL Project#: NY2A893625
Site Name: Watts Engineers Gallagher Beach-Round Three

| PARAMETER | ANALYTICAL METHOD |
|---|---|
| METHOD 8260 - TCL VOLATILE ORGANICS | SW8463 8260 |
| METHOD 8270 - TCL SEMI-VOLATILE ORGANICS | SW8463 8270 |
| METHOD 8081 - TCL PESTICIDES | SW8463 8081 |
| METHOD 8082 - POLYCHLORINATED BIPHENYLS | SW8463 8082 |
| Aluminum - Total | SW8463 6010 |
| Antimony - Total | SW8463 6010 |
| Arsenic - Total | SW8463 6010 |
| Barium - Total | SW8463 6010 |
| Beryllium - Total | SW8463 6010 |
| Cadmium - Total | SW8463 6010 |
| Calcium - Total | SW8463 6010 |
| Chromium - Total | SW8463 6010 |
| Cobalt - Total | SW8463 6010 |
| Copper - Total | SW8463 6010 |
| Iron - Total | SW8463 6010 |
| Lead - Total | SW8463 6010 |
| Magnesium - Total | SW8463 6010 |
| Manganese - Total | SW8463 6010 |
| Mercury - Total | SW8463 7471 |
| Nickel - Total | SW8463 6010 |
| Potassium - Total | SW8463 6010 |
| Selenium - Total | SW8463 6010 |
| Silver - Total | SW8463 6010 |
| Sodium - Total | SW8463 6010 |
| Thallium - Total | SW8463 6010 |
| Vanadium - Total | SW8463 6010 |
| Zinc - Total | SW8463 6010 |
| Cyanide - Total | SW8463 9012A |

SW8463 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846), Third Edition, 9/86; Update I, 7/92; Update IIA, 8/93; Update II, 9/94; Update IIB, 1/95; Update III, 12/96.

NON-CONFORMANCE SUMMARY

Job#: A04-C674

STL Project#: NY2A893625
Site Name: Watts Engineers Gallagher Beach-Round Three

General Comments

The enclosed data have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A04-C674
Sample Cooler(s) were received at the following temperature(s); 2.0 °C
All samples were received in good condition.

GC/MS Volatile Data

The analyte Methylene Chloride was detected in the Method Blank A4B2163802 (VBLK15) at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

The analyte Bromomethane was detected in the Method Blank A4B2168104 (VBLK86) at a level below the project established reporting limit. No corrective action is necessary for any values in Method Blanks that are below the requested reporting limits.

Samples Y213312-SB-SE-2 and Y213312-DEEPCOMP-3 were analyzed using medium level techniques due to high concentrations of target analytes.

GC/MS Semivolatile Data

The spike recoveries for N-Nitroso-Di-n-propylamine were below the laboratory quality control limits in the Matrix Spike Y213312-DEEPCOMP-3 and Matrix Spike Duplicate Y213312-DEEPCOMP-3. Since the Matrix Spike Blank A4B2137701 recoveries were compliant, no corrective action was required.

The spike recoveries for 1,4-Dichlorobenzene were above the laboratory quality control limits in the Matrix Spike Y213312-DEEPCOMP-3 and Matrix Spike Duplicate Y213312-DEEPCOMP-3. Since the Matrix Spike Blank A4B2137701 recoveries were compliant, no corrective action was required.

The spike recovery for 1,2,4-Trichlorobenzene was above the laboratory quality control limits in the Matrix Spike Y213312-DEEPCOMP-3. Since the Matrix Spike Blank A4B2137701 recoveries were compliant, no corrective action was required.

The relative percent difference between the Matrix Spike Y213312-DEEPCOMP-3 and the Matrix Spike Duplicate Y213312-DEEPCOMP-3 exceed quality control criteria for 1,2,4-Trichlorobenzene.

GC Extractable Data

For method 8082, several samples required dilution prior to analysis due to the high concentration of target analytes. The surrogates are diluted out of all sample extracts with a dilution factor of 10X or greater.

For method 8082, the recoveries and the relative percent difference for sample Y213312-SB-SE-2 Matrix Spike and Matrix Spike Duplicate exceed quality control limits due to sample matrix and dilution. The Matrix Spike Blank recovery is compliant with quality control criteria; no corrective action is indicated.

For method 8081, many samples required dilution prior to analysis due to the heavy matrix present. The surrogates are diluted out of all sample extracts with a dilution factor of 10X or greater.

For method 8081, the recoveries and the relative percent difference for sample Y213312-SB-NW-1 Matrix Spike and the Matrix Spike duplicate exceeded quality control limits for several compounds, though the Matrix Spike Blank recoveries are compliant, no action necessary.

For method 8081, the recovery of both surrogate Tetrachloro-m-xylene and of surrogate Decachlorobiphenyl in sample Y213312-SB-NW-1, Matrix Spike and the Matrix Spike duplicate are outside of established quality control limits due to sample matrix interferences and dilution.

For method 8081, the recovery of surrogate Tetrachloro-m-xylene in sample A4B2137502 is outside of established quality control limits. The recovery of surrogate Decachlorobiphenyl is within quality control criteria; no corrective action is required.

Metals Data

The recovery of sample Y213312-SB-NW-1 Matrix Spike exhibited results above the quality control limits for Iron and Manganese. The recovery of Y213312-SB-NW-1 Matrix Spike Duplcate exhibited results above the quality control limits for Manganese, and below quality control limits for Iron and Calcium. The sample result is more than four times greater than the spike added. The LFB A4B2138701 is acceptable.

The recovery of sample Y213312-SB-NW-1 Matrix Spike exhibited results above the quality control limits for Chromium, Copper and Zinc, and below quality control limits for Antimony and Potassium. The recovery of sample Y213312-SB-NW-1 Matrix Spike Duplicate exhibited results below the quality control limits for Aluminum, Antimony, Barium, Lead, Magnesium, and Potassium. Sample matrix is suspect. The RPD between sample Y213312-SB-NW-1 Matrix Spike and Matrix Spike Duplicate exceeded quality control limits for Aluminum, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, and Zinc. However, the LFB A4B2138701 was acceptable.

The relative percent difference between Y213312-SB-NW-1 Matrix Spike and Matrix Spike Duplicate exceed quality control criteria for Vanadium, though all individual recoveries are compliant. No action required.

The LCS A4B2138701 (Lot D042540) recovery for Iron fell outside of the quality control limits, however, the LCS value was within the manufacturer's recommended acceptance limits. No corrective action was taken.

Wet Chemistry Data

No deviations from protocol were encountered during the analytical procedures.

********

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

| Client Sample ID | Lab Sample ID | Parameter (Inorganic)/Method (Organic) | Dilution | Code |
|---|---|---|---|---|
| Y213312-SB-NW-1 | A4C67401 | 8081 | 5.00 | 002 |
| Y213312-SB-NW-1 | A4C67401 | 8270 | 10.00 | 012 |
| Y213312-SB-NW-1 | A4C67401MS | 8081 | 5.00 | 002 |
| Y213312-SB-NW-1 | A4C67401SD | 8081 | 5.00 | 002 |
| Y213312-SB-SE-2 | A4C67402 | 8081 | 10.00 | 002 |
| Y213312-SB-SE-2 | A4C67402 | 8082 | 5.00 | 008 |
| Y213312-SB-SE-2 | A4C67402 | 8270 | 10.00 | 012 |
| Y213312-SB-SE-2 | A4C67402MS | 8082 | 5.00 | 008 |
| Y213312-SB-SE-2 | A4C67402SD | 8082 | 5.00 | 008 |
| Y213312-DEEPCOMP-3 | A4C67403 | 8081 | 50.00 | 002 |
| Y213312-DEEPCOMP-3 | A4C67403 | 8082 | 10.00 | 008 |
| Y213312-DEEPCOMP-3 | A4C67403 | 8260 | 4.00 | 008 |
| Y213312-DEEPCOMP-3 | A4C67403 | 8270 | 10.00 | 012 |
| Y213312-DEEPCOMP-3 | A4C67403 | Iron - Total | 5.00 | 008 |
| Y213312-DEEPCOMP-3 | A4C67403 | Potassium - Total | 5.00 | 002 |
| Y213312-DEEPCOMP-3 | A4C67403 | Sodium - Total | 5.00 | 008 |
| Y213312-DEEPCOMP-3 | A4C67403 | Zinc - Total | 5.00 | 008 |
| Y213312-DEEPCOMP-3 | A4C67403MS | 8270 | 10.00 | 012 |
| Y213312-DEEPCOMP-3 | A4C67403SD | 8270 | 10.00 | 012 |

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ilution Code Definition:

002 - sample matrix effects
003 - excessive foaming
004 - high levels of non-target compounds
005 - sample matrix resulted in method non-compliance for an Internal Standard
006 - sample matrix resulted in method non-compliance for Surrogate
007 - nature of the TCLP matrix
008 - high concentration of target analyte(s)
009 - sample turbidity
010 - sample color
011 - insufficient volume for lower dilution
012 - sample viscosity
013 - other

# DATA COMMENT PAGE

## ORGANIC DATA QUALIFIERS

| | |
|---|---|
| ND or U | Indicates compound was analyzed for, but not detected at or above the reporting limit. |
| J | Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. |
| C | This flag applies to pesticide results where the identification has been confirmed by GC/MS. |
| B | This flag is used when the analyte is found in the associated blank, as well as in the sample. |
| E | This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis. |
| D | This flag identifies all compounds identified in an analysis at the secondary dilution factor. |
| N | Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results. |
| P | This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the data page and flagged with a "P". |
| A | This flag indicates that a TIC is a suspected aldol-condensation product. |
| [1] | Indicates coelution. |
| * | Indicates analysis is not within the quality control limits. |

## INORGANIC DATA QUALIFIERS

| | |
|---|---|
| ND or U | Indicates element was analyzed for, but not detected at or above the reporting limit. |
| J or B | Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit. |
| N | Indicates spike sample recovery is not within the quality control limits. |
| K | Indicates the post digestion spike recovery is not within the quality control limits. |
| S | Indicates value determined by the Method of Standard Addition. |
| M | Indicates duplicate injection results exceeded quality control limits. |
| W | Post digestion spike for Furnace AA analysis is out of quality control limits (85-115%) while sample absorbance is less than 50% of spike absorbance. |
| E | Indicates a value estimated or not reported due to the presence of interferences. |
| H | Indicates analytical holding time exceedance. The value obtained should be considered an estimate. |
| * | Indicates analysis is not within the quality control limits. |
| + | Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995. |

# Sample Data Package

Sample ID: Y213312-DEEPCOMP-3
Lab Sample ID: A4C67403
Date Collected: 12/20/2004
Time Collected: 15:15

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analys |
|---|---|---|---|---|---|---|---|
| SOIL-SW8463 8260 - TCL VOLATILES | | | | | | | |
| 1,1,1-Trichloroethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,1,2,2-Tetrachloroethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,1,2-Trichloroethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,1-Dichloroethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,1-Dichloroethene | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,2,4-Trichlorobenzene | 20000 | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,2-Dibromo-3-chloropropane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,2-Dibromoethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,2-Dichlorobenzene | 10000 | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,2-Dichloroethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,2-Dichloropropane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,3-Dichlorobenzene | 5300 | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 1,4-Dichlorobenzene | 42000 | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 2-Butanone | ND | | 19000 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 2-Hexanone | ND | | 19000 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| 4-Methyl-2-pentanone | ND | | 19000 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Acetone | ND | | 19000 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Benzene | 1400 | J | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Bromodichloromethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Bromoform | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Bromomethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Carbon Disulfide | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Carbon Tetrachloride | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Chlorobenzene | 92000 | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Chloroethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Chloroform | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Chloromethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| cis-1,2-Dichloroethene | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| cis-1,3-Dichloropropene | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Cyclohexane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Dibromochloromethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Dichlorodifluoromethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Ethylbenzene | 4600 | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Isopropylbenzene | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Methyl acetate | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Methyl tert butyl ether | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Methylcyclohexane | 9600 | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Methylene chloride | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Styrene | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Tetrachloroethene | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Toluene | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Total Xylenes | 5200 | J | 12000 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| trans-1,2-Dichloroethene | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| trans-1,3-Dichloropropene | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Trichloroethene | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Trichlorofluoromethane | ND | | 3900 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Vinyl acetate | ND | | 19000 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |
| Vinyl chloride | ND | | 7700 | UG/KG | 8260 | 12/29/2004 17:29 | BJ |

Sample ID: Y213312-DEEPCOMP-3
Lab Sample ID: A4C67403
Date Collected: 12/20/2004
Time Collected: 15:15

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| SOIL-SW8463 8270 - TCL SVOA ORGANICS | | | | | | | |
| 1,2,4-Trichlorobenzene | 2200 | J | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 1,2-Dichlorobenzene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 1,3-Dichlorobenzene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 1,4-Dichlorobenzene | 3200 | J | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2,2'-Oxybis(1-Chloropropane) | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2,4,5-Trichlorophenol | ND | | 11000 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2,4,6-Trichlorophenol | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2,4-Dichlorophenol | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2,4-Dimethylphenol | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2,4-Dinitrophenol | ND | | 21000 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2,4-Dinitrotoluene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2,6-Dinitrotoluene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2-Chloronaphthalene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2-Chlorophenol | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2-Methylnaphthalene | 1300 | J | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2-Methylphenol | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2-Nitroaniline | ND | | 21000 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 2-Nitrophenol | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 3,3'-Dichlorobenzidine | ND | | 8800 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 3-Nitroaniline | ND | | 21000 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 4,6-Dinitro-2-methylphenol | ND | | 21000 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 4-Bromophenyl phenyl ether | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 4-Chloro-3-methylphenol | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 4-Chloroaniline | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 4-Chlorophenyl phenyl ether | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 4-Methylphenol | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 4-Nitroaniline | ND | | 21000 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| 4-Nitrophenol | ND | | 21000 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Acenaphthene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Acenaphthylene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Anthracene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Benzo(a)anthracene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Benzo(a)pyrene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Benzo(b)fluoranthene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Benzo(ghi)perylene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Benzo(k)fluoranthene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Benzoic acid | ND | | 64000 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Benzyl alcohol | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Bis(2-chloroethoxy) methane | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Bis(2-chloroethyl) ether | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Bis(2-ethylhexyl) phthalate | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Butyl benzyl phthalate | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Chrysene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Di-n-butyl phthalate | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Di-n-octyl phthalate | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Dibenzo(a,h)anthracene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Dibenzofuran | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Diethyl phthalate | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Dimethyl phthalate | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |

Sample ID: Y213312-DEEPCOMP-3
Lab Sample ID: A4C67403
Date Collected: 12/20/2004
Time Collected: 15:15

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analys |
|---|---|---|---|---|---|---|---|
| SOIL-SW8463 8270 - TCL SVOA ORGANICS | | | | | | | |
| Fluoranthene | 1900 | J | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Fluorene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Hexachlorobenzene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Hexachlorobutadiene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Hexachlorocyclopentadiene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Hexachloroethane | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Indeno(1,2,3-cd)pyrene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Isophorone | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| N-Nitroso-Di-n-propylamine | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| N-nitrosodiphenylamine | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Naphthalene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Nitrobenzene | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Pentachlorophenol | ND | | 21000 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Phenanthrene | 2900 | J | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Phenol | ND | | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| Pyrene | 1800 | J | 4400 | UG/KG | 8270 | 12/22/2004 19:23 | MRF |
| SOIL-SW8463 8081 - TCL PESTICIDES | | | | | | | |
| 4,4'-DDD | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| 4,4'-DDE | 75 | J | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| 4,4'-DDT | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Aldrin | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| alpha-BHC | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| beta-BHC | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Chlordane | ND | | 1100 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| delta-BHC | 230 | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Dieldrin | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Endosulfan I | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Endosulfan II | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Endosulfan Sulfate | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Endrin | 77 | J | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Endrin aldehyde | 150 | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Endrin ketone | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| gamma-BHC (Lindane) | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Heptachlor | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Heptachlor epoxide | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Methoxychlor | ND | | 110 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| Toxaphene | ND | | 2200 | UG/KG | 8081 | 12/30/2004 19:37 | TCH |
| SOIL-SW8463 8082 - PCBS | | | | | | | |
| Aroclor 1016 | ND | | 220 | UG/KG | 8082 | 12/22/2004 14:16 | GFD |
| Aroclor 1221 | ND | | 220 | UG/KG | 8082 | 12/22/2004 14:16 | GFD |
| Aroclor 1232 | ND | | 220 | UG/KG | 8082 | 12/22/2004 14:16 | GFD |
| Aroclor 1242 | ND | | 220 | UG/KG | 8082 | 12/22/2004 14:16 | GFD |
| Aroclor 1248 | 2300 | | 220 | UG/KG | 8082 | 12/22/2004 14:16 | GFD |
| Aroclor 1254 | 860 | | 220 | UG/KG | 8082 | 12/22/2004 14:16 | GFD |
| Aroclor 1260 | 170 | J | 220 | UG/KG | 8082 | 12/22/2004 14:16 | GFD |

Sample ID: Y213312-DEEPCOMP-3
Lab Sample ID: A4C67403
Date Collected: 12/20/2004
Time Collected: 15:15

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| **Metals Analysis** | | | | | | | |
| Aluminum - Total | 5880 | | 12.7 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Antimony - Total | ND | | 19.0 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Arsenic - Total | 51.1 | | 2.5 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Barium - Total | 64.3 | | 0.63 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Beryllium - Total | 0.57 | | 0.25 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Cadmium - Total | 2.7 | | 0.25 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Calcium - Total | 18800 | | 12.7 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Chromium - Total | 168 | | 0.63 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Cobalt - Total | 8.8 | | 0.63 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Copper - Total | 158 | | 1.3 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Iron - Total | 91500 | | 63.3 | MG/KG | 6010 | 12/27/2004 15:18 | TRB |
| Lead - Total | 310 | | 1.3 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Magnesium - Total | 5500 | | 25.3 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Manganese - Total | 1300 | | 0.25 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Mercury - Total | 2.2 | | 0.027 | MG/KG | 7471 | 12/21/2004 16:51 | AJY |
| Nickel - Total | 61.5 | | 0.63 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Potassium - Total | 732 | | 190 | MG/KG | 6010 | 12/27/2004 15:18 | TRB |
| Selenium - Total | ND | | 5.1 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Silver - Total | 0.85 | | 0.63 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Sodium - Total | ND | | 887 | MG/KG | 6010 | 12/27/2004 15:18 | TRB |
| Thallium - Total | ND | | 7.6 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Vanadium - Total | 19.7 | | 0.63 | MG/KG | 6010 | 12/22/2004 19:03 | BKL |
| Zinc - Total | 1080 | | 12.7 | MG/KG | 6010 | 12/27/2004 15:18 | TRB |
| **Wet Chemistry Analysis** | | | | | | | |
| Cyanide - Total | 2.5 | | 1.0 | UG/G | 9012A | 12/23/2004 11:32 | KW |

Sample ID: Y213312-SB-NW-1
Lab Sample ID: A4C67401
Date Collected: 12/20/2004
Time Collected: 11:30

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analys |
|---|---|---|---|---|---|---|---|
| SOIL-SW8463 8260 - TCL VOLATILES | | | | | | | |
| 1,1,1-Trichloroethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,1,2,2-Tetrachloroethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,1,2-Trichloroethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,1-Dichloroethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,1-Dichloroethene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,2,4-Trichlorobenzene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,2-Dibromo-3-chloropropane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,2-Dibromoethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,2-Dichlorobenzene | 2 | J | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,2-Dichloroethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,2-Dichloropropane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,3-Dichlorobenzene | 3 | J | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 1,4-Dichlorobenzene | 13 | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 2-Butanone | 17 | J | 28 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 2-Hexanone | ND | | 28 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| 4-Methyl-2-pentanone | ND | | 28 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Acetone | 66 | | 28 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Benzene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Bromodichloromethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Bromoform | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Bromomethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Carbon Disulfide | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Carbon Tetrachloride | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Chlorobenzene | 120 | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Chloroethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Chloroform | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Chloromethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| cis-1,2-Dichloroethene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| cis-1,3-Dichloropropene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Cyclohexane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Dibromochloromethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Dichlorodifluoromethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Ethylbenzene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Isopropylbenzene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Methyl acetate | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Methyl tert butyl ether | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Methylcyclohexane | 1 | J | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Methylene chloride | 9 | B | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Styrene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Tetrachloroethene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Toluene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Total Xylenes | ND | | 17 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| trans-1,2-Dichloroethene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| trans-1,3-Dichloropropene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Trichloroethene | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Trichlorofluoromethane | ND | | 6 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Vinyl acetate | ND | | 28 | UG/KG | 8260 | 12/28/2004 19:08 | LH |
| Vinyl chloride | ND | | 11 | UG/KG | 8260 | 12/28/2004 19:08 | LH |

Sample ID: Y213312-SB-NW-1
Lab Sample ID: A4C67401
Date Collected: 12/20/2004
Time Collected: 11:30

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| SOIL-SW8463 8270 - TCL SVOA ORGANICS | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 1,2-Dichlorobenzene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 1,3-Dichlorobenzene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 1,4-Dichlorobenzene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2,2'-Oxybis(1-Chloropropane) | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2,4,5-Trichlorophenol | ND | | 10000 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2,4,6-Trichlorophenol | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2,4-Dichlorophenol | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2,4-Dimethylphenol | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2,4-Dinitrophenol | ND | | 21000 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2,4-Dinitrotoluene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2,6-Dinitrotoluene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2-Chloronaphthalene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2-Chlorophenol | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2-Methylnaphthalene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2-Methylphenol | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2-Nitroaniline | ND | | 21000 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 2-Nitrophenol | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 3,3'-Dichlorobenzidine | ND | | 8500 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 3-Nitroaniline | ND | | 21000 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 4,6-Dinitro-2-methylphenol | ND | | 21000 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 4-Bromophenyl phenyl ether | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 4-Chloro-3-methylphenol | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 4-Chloroaniline | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 4-Chlorophenyl phenyl ether | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 4-Methylphenol | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 4-Nitroaniline | ND | | 21000 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| 4-Nitrophenol | ND | | 21000 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Acenaphthene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Acenaphthylene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Anthracene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Benzo(a)anthracene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Benzo(a)pyrene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Benzo(b)fluoranthene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Benzo(ghi)perylene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Benzo(k)fluoranthene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Benzoic acid | ND | | 62000 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Benzyl alcohol | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Bis(2-chloroethoxy) methane | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Bis(2-chloroethyl) ether | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Bis(2-ethylhexyl) phthalate | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Butyl benzyl phthalate | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Chrysene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Di-n-butyl phthalate | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Di-n-octyl phthalate | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Dibenzo(a,h)anthracene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Dibenzofuran | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Diethyl phthalate | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Dimethyl phthalate | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |

Sample ID: Y213312-SB-NW-1
Lab Sample ID: A4C67401
Date Collected: 12/20/2004
Time Collected: 11:30

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analys |
|---|---|---|---|---|---|---|---|
| SOIL-SW8463 8270 - TCL SVOA ORGANICS | | | | | | | |
| Fluoranthene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Fluorene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Hexachlorobenzene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Hexachlorobutadiene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Hexachlorocyclopentadiene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Hexachloroethane | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Indeno(1,2,3-cd)pyrene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Isophorone | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| N-Nitroso-Di-n-propylamine | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| N-nitrosodiphenylamine | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Naphthalene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Nitrobenzene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Pentachlorophenol | ND | | 21000 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Phenanthrene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Phenol | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| Pyrene | ND | | 4300 | UG/KG | 8270 | 12/22/2004 18:31 | MRF |
| SOIL-SW8463 8081 - TCL PESTICIDES | | | | | | | |
| 4,4'-DDD | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| 4,4'-DDE | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| 4,4'-DDT | 23 | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Aldrin | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| alpha-BHC | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| beta-BHC | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Chlordane | ND | | 110 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| delta-BHC | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Dieldrin | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Endosulfan I | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Endosulfan II | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Endosulfan Sulfate | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Endrin | 5.7 | J | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Endrin aldehyde | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Endrin ketone | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| gamma-BHC (Lindane) | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Heptachlor | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Heptachlor epoxide | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Methoxychlor | ND | | 11 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| Toxaphene | ND | | 210 | UG/KG | 8081 | 01/01/2005 23:40 | TCH |
| SOIL-SW8463 8082 - PCBS | | | | | | | |
| Aroclor 1016 | ND | | 22 | UG/KG | 8082 | 12/22/2004 13:26 | GFD |
| Aroclor 1221 | ND | | 22 | UG/KG | 8082 | 12/22/2004 13:26 | GFD |
| Aroclor 1232 | ND | | 22 | UG/KG | 8082 | 12/22/2004 13:26 | GFD |
| Aroclor 1242 | ND | | 22 | UG/KG | 8082 | 12/22/2004 13:26 | GFD |
| Aroclor 1248 | 280 | | 22 | UG/KG | 8082 | 12/22/2004 13:26 | GFD |
| Aroclor 1254 | 160 | | 22 | UG/KG | 8082 | 12/22/2004 13:26 | GFD |
| Aroclor 1260 | 57 | | 22 | UG/KG | 8082 | 12/22/2004 13:26 | GFD |

Sample ID: Y213312-SB-NW-1
Lab Sample ID: A4C67401
Date Collected: 12/20/2004
Time Collected: 11:30

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| Metals Analysis | | | | | | | |
| Aluminum - Total | 4500 | | 13.2 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Antimony - Total | ND | | 19.9 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Arsenic - Total | 7.6 | | 2.6 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Barium - Total | 43.0 | | 0.66 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Beryllium - Total | ND | | 0.26 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Cadmium - Total | ND | | 0.26 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Calcium - Total | 16800 | | 13.2 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Chromium - Total | 20.5 | | 0.66 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Cobalt - Total | 5.2 | | 0.66 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Copper - Total | 37.3 | | 1.3 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Iron - Total | 13100 | | 13.2 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Lead - Total | 66.5 | | 1.3 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Magnesium - Total | 4140 | | 26.5 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Manganese - Total | 252 | | 0.26 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Mercury - Total | 0.078 | | 0.023 | MG/KG | 7471 | 12/21/2004 16:48 | AJY |
| Nickel - Total | 17.1 | | 0.66 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Potassium - Total | 758 | - | 39.8 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Selenium - Total | ND | | 5.3 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Silver - Total | ND | | 0.66 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Sodium - Total | ND | | 186 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Thallium - Total | ND | | 8.0 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Vanadium - Total | 9.1 | | 0.66 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Zinc - Total | 94.2 | | 2.6 | MG/KG | 6010 | 12/22/2004 18:31 | BKL |
| Wet Chemistry Analysis | | | | | | | |
| Cyanide - Total | ND | | 1.0 | UG/G | 9012A | 12/23/2004 11:32 | KW |

Sample ID: Y213312-SB-SE-2
Lab Sample ID: A4C67402
Date Collected: 12/20/2004
Time Collected: 14:50

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analys |
|---|---|---|---|---|---|---|---|
| SOIL-SW8463 8260 - TCL VOLATILES | | | | | | | |
| 1,1,1-Trichloroethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,1,2,2-Tetrachloroethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,1,2-Trichloroethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,1-Dichloroethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,1-Dichloroethene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,2,4-Trichlorobenzene | 240 | J | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,2-Dibromo-3-chloropropane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,2-Dibromoethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,2-Dichlorobenzene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,2-Dichloroethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,2-Dichloropropane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,3-Dichlorobenzene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 1,4-Dichlorobenzene | 1500 | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 2-Butanone | ND | | 4900 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 2-Hexanone | ND | | 4900 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| 4-Methyl-2-pentanone | ND | | 4900 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Acetone | ND | | 4900 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Benzene | 400 | J | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Bromodichloromethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Bromoform | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Bromomethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Carbon Disulfide | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Carbon Tetrachloride | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Chlorobenzene | 22000 | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Chloroethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Chloroform | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Chloromethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| cis-1,2-Dichloroethene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| cis-1,3-Dichloropropene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Cyclohexane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Dibromochloromethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Dichlorodifluoromethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Ethylbenzene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Isopropylbenzene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Methyl acetate | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Methyl tert butyl ether | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Methylcyclohexane | 2500 | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Methylene chloride | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Styrene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Tetrachloroethene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Toluene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Total Xylenes | ND | | 2900 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| trans-1,2-Dichloroethene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| trans-1,3-Dichloropropene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Trichloroethene | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Trichlorofluoromethane | ND | | 970 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Vinyl acetate | ND | | 4900 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |
| Vinyl chloride | ND | | 1900 | UG/KG | 8260 | 12/29/2004 16:10 | BJ |

Sample ID: Y213312-SB-SE-2
Lab Sample ID: A4C67402
Date Collected: 12/20/2004
Time Collected: 14:50

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| SOIL-SW8463 8270 - TCL SVOA ORGANICS | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 1,2-Dichlorobenzene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 1,3-Dichlorobenzene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 1,4-Dichlorobenzene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2,2'-Oxybis(1-Chloropropane) | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2,4,5-Trichlorophenol | ND | | 12000 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2,4,6-Trichlorophenol | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2,4-Dichlorophenol | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2,4-Dimethylphenol | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2,4-Dinitrophenol | ND | | 25000 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2,4-Dinitrotoluene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2,6-Dinitrotoluene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2-Chloronaphthalene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2-Chlorophenol | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2-Methylnaphthalene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2-Methylphenol | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2-Nitroaniline | ND | | 25000 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 2-Nitrophenol | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 3,3'-Dichlorobenzidine | ND | | 10000 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 3-Nitroaniline | ND | | 25000 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 4,6-Dinitro-2-methylphenol | ND | | 25000 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 4-Bromophenyl phenyl ether | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 4-Chloro-3-methylphenol | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 4-Chloroaniline | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 4-Chlorophenyl phenyl ether | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 4-Methylphenol | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 4-Nitroaniline | ND | | 25000 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| 4-Nitrophenol | ND | | 25000 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Acenaphthene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Acenaphthylene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Anthracene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Benzo(a)anthracene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Benzo(a)pyrene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Benzo(b)fluoranthene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Benzo(ghi)perylene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Benzo(k)fluoranthene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Benzoic acid | ND | | 75000 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Benzyl alcohol | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Bis(2-chloroethoxy) methane | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Bis(2-chloroethyl) ether | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Bis(2-ethylhexyl) phthalate | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Butyl benzyl phthalate | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Chrysene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Di-n-butyl phthalate | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Di-n-octyl phthalate | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Dibenzo(a,h)anthracene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Dibenzofuran | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Diethyl phthalate | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Dimethyl phthalate | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |

Sample ID: Y213312-SB-SE-2
Lab Sample ID: A4C67402
Date Collected: 12/20/2004
Time Collected: 14:50

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analys |
|---|---|---|---|---|---|---|---|
| SOIL-SW8463 8270 - TCL SVOA ORGANICS | | | | | | | |
| Fluoranthene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Fluorene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Hexachlorobenzene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Hexachlorobutadiene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Hexachlorocyclopentadiene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Hexachloroethane | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Indeno(1,2,3-cd)pyrene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Isophorone | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| N-Nitroso-Di-n-propylamine | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| N-nitrosodiphenylamine | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Naphthalene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Nitrobenzene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Pentachlorophenol | ND | | 25000 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Phenanthrene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Phenol | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| Pyrene | ND | | 5100 | UG/KG | 8270 | 12/22/2004 18:57 | MRF |
| SOIL-SW8463 8081 - TCL PESTICIDES | | | | | | | |
| 4,4'-DDD | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| 4,4'-DDE | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| 4,4'-DDT | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Aldrin | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| alpha-BHC | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| beta-BHC | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Chlordane | ND | | 260 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| delta-BHC | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Dieldrin | 14 | J | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Endosulfan I | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Endosulfan II | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Endosulfan Sulfate | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Endrin | 8.4 | J | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Endrin aldehyde | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Endrin ketone | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| gamma-BHC (Lindane) | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Heptachlor | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Heptachlor epoxide | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Methoxychlor | ND | | 26 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| Toxaphene | ND | | 520 | UG/KG | 8081 | 12/30/2004 18:52 | TCH |
| SOIL-SW8463 8082 - PCBS | | | | | | | |
| Aroclor 1016 | ND | | 130 | UG/KG | 8082 | 12/22/2004 13:39 | GFD |
| Aroclor 1221 | ND | | 130 | UG/KG | 8082 | 12/22/2004 13:39 | GFD |
| Aroclor 1232 | ND | | 130 | UG/KG | 8082 | 12/22/2004 13:39 | GFD |
| Aroclor 1242 | ND | | 130 | UG/KG | 8082 | 12/22/2004 13:39 | GFD |
| Aroclor 1248 | 940 | | 130 | UG/KG | 8082 | 12/22/2004 13:39 | GFD |
| Aroclor 1254 | 540 | | 130 | UG/KG | 8082 | 12/22/2004 13:39 | GFD |
| Aroclor 1260 | 170 | | 130 | UG/KG | 8082 | 12/22/2004 13:39 | GFD |

Sample ID: Y213312-SB-SE-2
Lab Sample ID: A4C67402
Date Collected: 12/20/2004
Time Collected: 14:50

Date Received: 12/20/2004
Project No: NY2A893625
Client No: 508664
Site No:

| Parameter | Result | Flag | Detection Limit | Units | Method | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|
| Metals Analysis | | | | | | | |
| Aluminum - Total | 13600 | | 15.1 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Antimony - Total | ND | | 22.7 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Arsenic - Total | 36.3 | | 3.0 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Barium - Total | 115 | | 0.76 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Beryllium - Total | 0.71 | | 0.30 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Cadmium - Total | 5.1 | | 0.30 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Calcium - Total | 26400 | | 15.1 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Chromium - Total | 175 | | 0.76 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Cobalt - Total | 13.0 | | 0.76 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Copper - Total | 180 | | 1.5 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Iron - Total | 37400 | | 15.1 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Lead - Total | 306 | | 1.5 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Magnesium - Total | 9820 | | 30.3 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Manganese - Total | 648 | | 0.30 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Mercury - Total | 2.0 | | 0.027 | MG/KG | 7471 | 12/21/2004 16:49 | AJY |
| Nickel - Total | 42.8 | | 0.76 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Potassium - Total | 1540 | | 45.4 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Selenium - Total | ND | | 6.0 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Silver - Total | 0.89 | | 0.76 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Sodium - Total | ND | | 212 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Thallium - Total | ND | | 9.1 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Vanadium - Total | 24.6 | | 0.76 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Zinc - Total | 620 | | 3.0 | MG/KG | 6010 | 12/22/2004 18:58 | BKL |
| Wet Chemistry Analysis | | | | | | | |
| Cyanide - Total | ND | | 1.0 | UG/G | 9012A | 12/23/2004 11:32 | KW |

# Batch Quality Control Data

Lab Sample ID: A4C67403 A4C67403MS A4C67403SD

| Analyte | Units of Measure | Concentration | | | Spike Amount | | % Recovery | | | % | QC LIMITS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample | Matrix Spike | Spike Duplicate | MS | MSD | MS | MSD | Avg | RPD | RPD | REC. |
| METHOD 8270 - TCL SEMI-VOLATILE ORGANICS | | | | | | | | | | | | |
| Phenol | UG/KG | 0 | 3417 | 3301 | 4486 | 4499 | 76 | 73 | 75 | 4 | 25.0 | 35-120 |
| 2-Chlorophenol | UG/KG | 0 | 3566 | 3396 | 4486 | 4499 | 79 | 75 | 77 | 5 | 26.0 | 34-118 |
| 1,4-Dichlorobenzene | UG/KG | 3254 | 12376 | 10161 | 4486 | 4499 | 203 * | 153 * | 178 | 28 | 30.0 | 30-120 |
| N-Nitroso-Di-n-propylamine | UG/KG | 0 | 0 | 304 | 4486 | 4499 | 0 * | 7 * | 4 | 200 * | 20.0 | 42-131 |
| 1,2,4-Trichlorobenzene | UG/KG | 2203 | 8836 | 7044 | 4486 | 4499 | 148 * | 108 | 128 | 31 * | 24.0 | 32-120 |
| 4-Chloro-3-methylphenol | UG/KG | 0 | 4301 | 4201 | 4486 | 4499 | 96 | 93 | 95 | 3 | 20.0 | 45-135 |
| Acenaphthene | UG/KG | 675 | 5355 | 5035 | 4486 | 4499 | 104 | 97 | 101 | 7 | 16.0 | 49-131 |
| 4-Nitrophenol | UG/KG | 0 | 3140 | 3124 | 4486 | 4499 | 70 | 69 | 70 | 1 | 25.0 | 36-142 |
| 2,4-Dinitrotoluene | UG/KG | 0 | 4283 | 3650 | 4486 | 4499 | 95 | 81 | 88 | 16 | 19.0 | 45-138 |
| Pentachlorophenol | UG/KG | 0 | 1893 | 1892 | 4486 | 4499 | 42 | 42 | 42 | 0 | 27.0 | 28-135 |
| Pyrene | UG/KG | 1753 | 6040 | 6029 | 4486 | 4499 | 96 | 95 | 96 | 1 | 25.0 | 48-154 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Date: 01/06/2005 10:18:34
Batch No: A4B21376

MS/MSD Batch QC Results

Rept: AN1392

Lab Sample ID: A4C67402 A4C67402MS A4C67402SD

| Analyte | Units of Measure | Concentration | | | Spike Amount | | % Recovery | | | % | QC LIMITS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample | Matrix Spike | Spike Duplicate | MS | MSD | MS | MSD | Avg | RPD | RPD | REC. |
| METHOD 8082 - POLYCHLORINATED BIPHENYLS | | | | | | | | | | | | |
| Aroclor 1254 | UG/KG | 545 | 618 | 659 | 260 | 259 | 28 * | 44 * | 36 | 44 * | 30.0 | 52-153 |

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* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

STL Buffalo

Date: 01/06/2005 10:18:34
Batch No: A4B21387

MS/MSD Batch QC Results

Rept: AN1392

Lab Sample ID: A4C67401 A4C67401MS A4C67401SD

| Analyte | Units of Measure | Concentration | | | Spike Amount | | % Recovery | | | % | QC LIMITS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample | Matrix Spike | Spike Duplicate | MS | MSD | MS | MSD | Avg | RPD | RPD | REC. |
| TOTAL TCL METALS | | | | | | | | | | | | |
| TOTAL ALUMINUM | MG/KG | 4499 | 5992 | 5096 | 1263 | 1293 | 118 | 46 * | 82 | 88 * | 20.0 | 80-120 |
| TOTAL ANTIMONY | MG/KG | 1.27 | 15.99 | 15.51 | 25.27 | 25.87 | 58 * | 55 * | 57 | 5 | 20.0 | 80-120 |
| TOTAL ARSENIC | MG/KG | 7.56 | 30.79 | 30.90 | 25.27 | 25.87 | 92 | 90 | 91 | 2 | 20.0 | 80-120 |
| TOTAL BARIUM | MG/KG | 43.05 | 64.10 | 62.38 | 25.27 | 25.87 | 83 | 75 * | 79 | 10 | 20.0 | 80-120 |
| TOTAL BERYLLIUM | MG/KG | 0.251 | 22.79 | 22.08 | 25.27 | 25.87 | 89 | 84 | 87 | 6 | 20.0 | 80-120 |
| TOTAL CADMIUM | MG/KG | 0.225 | 22.45 | 21.80 | 25.27 | 25.87 | 88 | 83 | 86 | 6 | 20.0 | 80-120 |
| TOTAL CALCIUM | MG/KG | 16811 | 18281 | 15626 | 1263 | 1293 | 116 | -92 * | 12 | 1730 * | 20.0 | 80-120 |
| TOTAL CHROMIUM | MG/KG | 20.46 | 53.49 | 41.55 | 25.27 | 25.87 | 131 * | 82 | 107 | 46 * | 20.0 | 80-120 |
| TOTAL COBALT | MG/KG | 5.24 | 26.87 | 26.62 | 25.27 | 25.87 | 86 | 83 | 85 | 4 | 20.0 | 80-120 |
| TOTAL COPPER | MG/KG | 37.34 | 86.54 | 60.18 | 25.27 | 25.87 | 195 * | 88 | 142 | 76 * | 20.0 | 80-120 |
| TOTAL IRON | MG/KG | 13072 | 13271 | 12358 | 50.54 | 51.75 | 393 * | -999 * | -303 | 359 * | 20.0 | 80-120 |
| TOTAL LEAD | MG/KG | 66.47 | 87.24 | 75.51 | 25.27 | 25.87 | 82 | 35 * | 59 | 80 * | 20.0 | 80-120 |
| TOTAL MAGNESIUM | MG/KG | 4138 | 5547 | 4707 | 1263 | 1293 | 112 | 44 * | 78 | 87 * | 20.0 | 80-120 |
| TOTAL MANGANESE | MG/KG | 251.5 | 422.0 | 294.7 | 25.27 | 25.87 | 675 * | 167 * | 421 | 121 * | 20.0 | 80-120 |
| TOTAL NICKEL | MG/KG | 17.09 | 42.01 | 38.01 | 25.27 | 25.87 | 99 | 81 | 90 | 20 | 20.0 | 80-120 |
| TOTAL POTASSIUM | MG/KG | 757.9 | 1744 | 1712 | 1263 | 1293 | 78 * | 74 * | 76 | 5 | 20.0 | 80-120 |
| TOTAL SELENIUM | MG/KG | 0.0530 | 21.53 | 21.02 | 25.27 | 25.87 | 85 | 81 | 83 | 5 | 20.0 | 80-120 |
| TOTAL SILVER | MG/KG | 0.106 | 5.97 | 5.75 | 5.05 | 5.17 | 116 | 109 | 113 | 6 | 20.0 | 80-120 |
| TOTAL SODIUM | MG/KG | 68.00 | 1262 | 1165 | 1263 | 1293 | 94 | 85 | 90 | 10 | 20.0 | 80-120 |
| TOTAL THALLIUM | MG/KG | 0.318 | 23.37 | 22.40 | 25.27 | 25.87 | 91 | 85 | 88 | 7 | 20.0 | 80-120 |
| TOTAL VANADIUM | MG/KG | 9.14 | 35.68 | 30.55 | 25.27 | 25.87 | 105 | 83 | 94 | 23 * | 20.0 | 80-120 |
| TOTAL ZINC | MG/KG | 94.24 | 163.0 | 124.9 | 25.27 | 25.87 | 272 * | 119 | 196 | 78 * | 20.0 | 80-120 |

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* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

STL Buffalo

Date: 01/06/2005 10:18:34
Batch No: A4B21402

MS/MSD Batch QC Results

Rept: AN1392

Lab Sample ID: A4C63105 A4C63105MS A4C63105SD

| Analyte | Units of Measure | Concentration | | | Spike Amount | | % Recovery | | | % RPD | QC LIMITS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample | Matrix Spike | Spike Duplicate | MS | MSD | MS | MSD | Avg | | RPD | REC. |
| CYANIDE ANALYSIS<br>METHOD 9012 - TOTAL CYANIDE | MG/L | 0 | 0.0694 | 0.0769 | 0.100 | 0.100 | 69 * | 77 * | 73 | 11 | 15.0 | 85-115 |

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* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

# Chronology and QC Summary Package

Watts Engineers Gallagher Beach-Round Three
Gallagher Beach Round Three
METHOD 8260 - TCL VOLATILE ORGANICS



| Client ID | | METHANOL BLK 122904 | | VBLK15 | | VBLK86 | | | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A04-C674 | A4C67404 | A04-C674 | A4B2163802 | A04-C674 | A4B2168104 | | |
| Sample Date | | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Acetone | UG/KG | ND | 3000 | ND | 25 | ND | 3100 | NA | |
| Benzene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Bromodichloromethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Bromoform | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Bromomethane | UG/KG | ND | 600 | ND | 5 | 320 J | 620 | NA | |
| 2-Butanone | UG/KG | ND | 3000 | ND | 25 | ND | 3100 | NA | |
| Carbon Disulfide | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Carbon Tetrachloride | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Chlorobenzene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Chloroethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Chloroform | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Chloromethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Cyclohexane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,2-Dibromoethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Dibromochloromethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,2-Dibromo-3-chloropropane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,2-Dichlorobenzene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,3-Dichlorobenzene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,4-Dichlorobenzene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Dichlorodifluoromethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,1-Dichloroethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,2-Dichloroethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,1-Dichloroethene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| cis-1,2-Dichloroethene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| trans-1,2-Dichloroethene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,2-Dichloropropane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| cis-1,3-Dichloropropene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| trans-1,3-Dichloropropene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Ethylbenzene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 2-Hexanone | UG/KG | ND | 3000 | ND | 25 | ND | 3100 | NA | |
| Isopropylbenzene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Methyl acetate | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Methylcyclohexane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Methylene chloride | UG/KG | ND | 600 | 4 J | 5 | ND | 620 | NA | |
| 4-Methyl-2-pentanone | UG/KG | ND | 3000 | ND | 25 | ND | 3100 | NA | |
| Methyl tert butyl ether | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Styrene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,1,2,2-Tetrachloroethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Tetrachloroethene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Toluene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,2,4-Trichlorobenzene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,1,1-Trichloroethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| 1,1,2-Trichloroethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |



NA = Not Applicable ND = Not Detected

| Client ID<br>Job No Lab ID<br>Sample Date | | METHANOL BLK 122904<br>A04-C674 A4C67404 | | VBLK15<br>A04-C674 A4B2163802 | | VBLK86<br>A04-C674 A4B2168104 | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| 1,1,2-Trichloro-1,2,2-trifluor | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Trichlorofluoromethane | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Trichloroethene | UG/KG | ND | 600 | ND | 5 | ND | 620 | NA | |
| Vinyl acetate | UG/KG | ND | 3000 | ND | 25 | ND | 3100 | NA | |
| Vinyl chloride | UG/KG | ND | 1200 | ND | 10 | ND | 1200 | NA | |
| Total Xylenes | UG/KG | ND | 1800 | ND | 15 | ND | 1900 | NA | |
| ======IS/SURROGATE(S)====== | | | | | | | | | |
| Chlorobenzene-D5 | % | 99 | 50-200 | 108 | 50-200 | 97 | 50-200 | NA | |
| 1,4-Difluorobenzene | % | 98 | 50-200 | 111 | 50-200 | 99 | 50-200 | NA | |
| 1,4-Dichlorobenzene-D4 | % | 90 | 50-200 | 78 | 50-200 | 90 | 50-200 | NA | |
| Toluene-D8 | % | 91 | 71-125 | 98 | 71-125 | 92 | 71-125 | NA | |
| p-Bromofluorobenzene | % | 93 | 68-124 | 80 | 68-124 | 95 | 68-124 | NA | |
| 1,2-Dichloroethane-D4 | % | 90 | 61-136 | 92 | 61-136 | 95 | 61-136 | NA | |



NA = Not Applicable ND = Not Detected

Date: 01/06/2005
Time: 10:23:48

Watts Engineers Gallagher Beach-Round Three
Gallagher Beach Round Three
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Rept: AN1247

| Client ID | | SBLK | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A04-C674 | A4B2137702 | | | | | | |
| Sample Date | | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Acenaphthene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Acenaphthylene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Anthracene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Benzo(a)anthracene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Benzo(b)fluoranthene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Benzo(k)fluoranthene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Benzo(ghi)perylene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Benzo(a)pyrene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Benzoic acid | UG/KG | ND | 4800 | NA | | NA | | NA | |
| Benzyl alcohol | UG/KG | ND | 330 | NA | | NA | | NA | |
| Bis(2-chloroethoxy) methane | UG/KG | ND | 330 | NA | | NA | | NA | |
| Bis(2-chloroethyl) ether | UG/KG | ND | 330 | NA | | NA | | NA | |
| 2,2'-Oxybis(1-Chloropropane) | UG/KG | ND | 330 | NA | | NA | | NA | |
| Bis(2-ethylhexyl) phthalate | UG/KG | ND | 330 | NA | | NA | | NA | |
| 4-Bromophenyl phenyl ether | UG/KG | ND | 330 | NA | | NA | | NA | |
| Butyl benzyl phthalate | UG/KG | ND | 330 | NA | | NA | | NA | |
| 4-Chloroaniline | UG/KG | ND | 330 | NA | | NA | | NA | |
| 4-Chloro-3-methylphenol | UG/KG | ND | 330 | NA | | NA | | NA | |
| 2-Chloronaphthalene | UG/KG | ND | 330 | NA | | NA | | NA | |
| 2-Chlorophenol | UG/KG | ND | 330 | NA | | NA | | NA | |
| 4-Chlorophenyl phenyl ether | UG/KG | ND | 330 | NA | | NA | | NA | |
| Chrysene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Dibenzo(a,h)anthracene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Dibenzofuran | UG/KG | ND | 330 | NA | | NA | | NA | |
| Di-n-butyl phthalate | UG/KG | ND | 330 | NA | | NA | | NA | |
| 1,2-Dichlorobenzene | UG/KG | ND | 330 | NA | | NA | | NA | |
| 1,3-Dichlorobenzene | UG/KG | ND | 330 | NA | | NA | | NA | |
| 1,4-Dichlorobenzene | UG/KG | ND | 330 | NA | | NA | | NA | |
| 3,3'-Dichlorobenzidine | UG/KG | ND | 660 | NA | | NA | | NA | |
| 2,4-Dichlorophenol | UG/KG | ND | 330 | NA | | NA | | NA | |
| Diethyl phthalate | UG/KG | ND | 330 | NA | | NA | | NA | |
| 2,4-Dimethylphenol | UG/KG | ND | 330 | NA | | NA | | NA | |
| Dimethyl phthalate | UG/KG | ND | 330 | NA | | NA | | NA | |
| 4,6-Dinitro-2-methylphenol | UG/KG | ND | 1600 | NA | | NA | | NA | |
| 2,4-Dinitrophenol | UG/KG | ND | 1600 | NA | | NA | | NA | |
| 2,4-Dinitrotoluene | UG/KG | ND | 330 | NA | | NA | | NA | |
| 2,6-Dinitrotoluene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Di-n-octyl phthalate | UG/KG | ND | 330 | NA | | NA | | NA | |
| Fluoranthene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Fluorene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Hexachlorobenzene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Hexachlorobutadiene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Hexachlorocyclopentadiene | UG/KG | ND | 330 | NA | | NA | | NA | |

NA = Not Applicable ND = Not Detected

STL Buffalo

| Client ID | | SBLK | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A04-C674 | A4B2137702 | | | | | | |
| Sample Date | | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Hexachloroethane | UG/KG | ND | 330 | NA | | NA | | NA | |
| Indeno(1,2,3-cd)pyrene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Isophorone | UG/KG | ND | 330 | NA | | NA | | NA | |
| 2-Methylnaphthalene | UG/KG | ND | 330 | NA | | NA | | NA | |
| 2-Methylphenol | UG/KG | ND | 330 | NA | | NA | | NA | |
| 4-Methylphenol | UG/KG | ND | 330 | NA | | NA | | NA | |
| Naphthalene | UG/KG | ND | 330 | NA | | NA | | NA | |
| 2-Nitroaniline | UG/KG | ND | 1600 | NA | | NA | | NA | |
| 3-Nitroaniline | UG/KG | ND | 1600 | NA | | NA | | NA | |
| 4-Nitroaniline | UG/KG | ND | 1600 | NA | | NA | | NA | |
| Nitrobenzene | UG/KG | ND | 330 | NA | | NA | | NA | |
| 2-Nitrophenol | UG/KG | ND | 330 | NA | | NA | | NA | |
| 4-Nitrophenol | UG/KG | ND | 1600 | NA | | NA | | NA | |
| N-nitrosodiphenylamine | UG/KG | ND | 330 | NA | | NA | | NA | |
| N-Nitroso-Di-n-propylamine | UG/KG | ND | 330 | NA | | NA | | NA | |
| Pentachlorophenol | UG/KG | ND | 1600 | NA | | NA | | NA | |
| Phenanthrene | UG/KG | ND | 330 | NA | | NA | | NA | |
| Phenol | UG/KG | ND | 330 | NA | | NA | | NA | |
| Pyrene | UG/KG | ND | 330 | NA | | NA | | NA | |
| 1,2,4-Trichlorobenzene | UG/KG | ND | 330 | NA | | NA | | NA | |
| 2,4,5-Trichlorophenol | UG/KG | ND | 790 | NA | | NA | | NA | |
| 2,4,6-Trichlorophenol | UG/KG | ND | 330 | NA | | NA | | NA | |
| IS/SURROGATE(S) | | | | | | | | | |
| 1,4-Dichlorobenzene-D4 | % | 91 | 50-200 | NA | | NA | | NA | |
| Naphthalene-D8 | % | 89 | 50-200 | NA | | NA | | NA | |
| Acenaphthene-D10 | % | 89 | 50-200 | NA | | NA | | NA | |
| Phenanthrene-D10 | % | 92 | 50-200 | NA | | NA | | NA | |
| Chrysene-D12 | % | 84 | 50-200 | NA | | NA | | NA | |
| Perylene-D12 | % | 92 | 50-200 | NA | | NA | | NA | |
| Nitrobenzene-D5 | % | 99 | 30-127 | NA | | NA | | NA | |
| 2-Fluorobiphenyl | % | 98 | 36-138 | NA | | NA | | NA | |
| p-Terphenyl-d14 | % | 98 | 41-167 | NA | | NA | | NA | |
| Phenol-D5 | % | 94 | 34-120 | NA | | NA | | NA | |
| 2-Fluorophenol | % | 86 | 26-120 | NA | | NA | | NA | |
| 2,4,6-Tribromophenol | % | 84 | 42-140 | NA | | NA | | NA | |

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NA = Not Applicable ND = Not Detected

Date: 01/06/2005
Time: 10:23:53

Watts Engineers Gallagher Beach-Round Three
Gallagher Beach Round Three
METHOD 8081 - TCL PESTICIDES

Rept: AN1247

| Client ID<br>Job No<br>Sample Date | Lab ID | Method Blank<br>A04-C674 | A4B2137502 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Aldrin | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| alpha-BHC | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| beta-BHC | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| gamma-BHC (Lindane) | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| delta-BHC | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Chlordane | UG/KG | ND | 16 | NA | | NA | | NA | |
| 4,4'-DDD | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| 4,4'-DDE | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| 4,4'-DDT | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Dieldrin | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Endosulfan I | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Endosulfan II | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Endosulfan Sulfate | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Endrin | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Endrin ketone | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Endrin aldehyde | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Heptachlor | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Heptachlor epoxide | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Methoxychlor | UG/KG | ND | 1.6 | NA | | NA | | NA | |
| Toxaphene | UG/KG | ND | 33 | NA | | NA | | NA | |
| SURROGATE(S) | | | | | | | | | |
| Tetrachloro-m-xylene | % | 36 * | 38-132 | NA | | NA | | NA | |
| Decachlorobiphenyl | % | 76 | 46-151 | NA | | NA | | NA | |

33/60

NA = Not Applicable ND = Not Detected

STL Buffalo

| Client ID | | Method Blank | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Job No | Lab ID | A04-C674 | A4B2137602 | | | | | | |
| Sample Date | | | | | | | | | |
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Aroclor 1016 | UG/KG | ND | 16 | NA | | NA | | NA | |
| Aroclor 1221 | UG/KG | ND | 16 | NA | | NA | | NA | |
| Aroclor 1232 | UG/KG | ND | 16 | NA | | NA | | NA | |
| Aroclor 1242 | UG/KG | ND | 16 | NA | | NA | | NA | |
| Aroclor 1248 | UG/KG | ND | 16 | NA | | NA | | NA | |
| Aroclor 1254 | UG/KG | ND | 16 | NA | | NA | | NA | |
| Aroclor 1260 | UG/KG | ND | 16 | NA | | NA | | NA | |
| SURROGATE(S) | | | | | | | | | |
| Tetrachloro-m-xylene | % | 88 | 32-148 | NA | | NA | | NA | |
| Decachlorobiphenyl | % | 85 | 36-153 | NA | | NA | | NA | |



NA = Not Applicable ND = Not Detected

Date: 01/06/2005
Time: 10:23:58

Watts Engineers Gallagher Beach-Round Three
Gallagher Beach Round Three
TOTAL TCL METALS

Rept: AN1247

| Client ID<br>Job No<br>Sample Date | Lab ID | Method Blank<br>A04-C674 | A4B2136802 | Method Blank<br>A04-C674 | A4B2138702 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Mercury - Total | MG/KG | ND | 0.020 | NA | | NA | | NA | |
| Iron - Total | MG/KG | NA | | ND | 10 | NA | | NA | |
| Manganese - Total | MG/KG | NA | | ND | 0.20 | NA | | NA | |
| Sodium - Total | MG/KG | NA | | ND | 140 | NA | | NA | |
| Thallium - Total | MG/KG | NA | | ND | 6.0 | NA | | NA | |
| Silver - Total | MG/KG | NA | | ND | 0.50 | NA | | NA | |
| Selenium - Total | MG/KG | NA | | ND | 4.0 | NA | | NA | |
| Nickel - Total | MG/KG | NA | | ND | 0.50 | NA | | NA | |
| Lead - Total | MG/KG | NA | | ND | 1.0 | NA | | NA | |
| Copper - Total | MG/KG | NA | | ND | 1.0 | NA | | NA | |
| Cobalt - Total | MG/KG | NA | | ND | 0.50 | NA | | NA | |
| Calcium - Total | MG/KG | NA | | ND | 10 | NA | | NA | |
| Cadmium - Total | MG/KG | NA | | ND | 0.20 | NA | | NA | |
| Beryllium - Total | MG/KG | NA | | ND | 0.20 | NA | | NA | |
| Aluminum - Total | MG/KG | NA | | ND | 10 | NA | | NA | |
| Antimony - Total | MG/KG | NA | | ND | 15.0 | NA | | NA | |
| Arsenic - Total | MG/KG | NA | | ND | 2.0 | NA | | NA | |
| Barium - Total | MG/KG | NA | | ND | 0.50 | NA | | NA | |
| Chromium - Total | MG/KG | NA | | ND | 0.50 | NA | | NA | |
| Magnesium - Total | MG/KG | NA | | ND | 20.0 | NA | | NA | |
| Potassium - Total | MG/KG | NA | | ND | 30.0 | NA | | NA | |
| Vanadium - Total | MG/KG | NA | | ND | 0.50 | NA | | NA | |
| Zinc - Total | MG/KG | NA | | ND | 2.0 | NA | | NA | |

35/60

NA = Not Applicable ND = Not Detected

| Client ID<br>Job No Lab ID<br>Sample Date | | Method Blank<br>A04-C674 A4B2140204 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte | Units | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit | Sample Value | Reporting Limit |
| Cyanide - Total | UG/G | ND | 1.0 | NA | | NA | | NA | |



NA = Not Applicable ND = Not Detected

Client Sample ID: VBLK15 MSB15
Lab Sample ID: A4B2163802 A4B2163801

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| METHOD 8260 - TCL VOLATILE ORGANICS | | | | | |
| 1,1-Dichloroethene | UG/KG | 37.8 | 50.0 | 76 | 65-146 |
| Trichloroethene | UG/KG | 41.3 | 50.0 | 83 | 74-127 |
| Benzene | UG/KG | 42.3 | 50.0 | 85 | 74-128 |
| Toluene | UG/KG | 40.3 | 50.0 | 81 | 74-123 |
| Chlorobenzene | UG/KG | 44.3 | 50.0 | 89 | 76-124 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: VBLK86 MSB86
Lab Sample ID: A4B2168104 A4B2168103

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| METHOD 8260 - TCL VOLATILE ORGANICS | | | | | |
| 1,1-Dichloroethene | UG/KG | 5707 | 6250 | 91 | 65-146 |
| Trichloroethene | UG/KG | 5885 | 6250 | 94 | 74-127 |
| Benzene | UG/KG | 5965 | 6250 | 95 | 74-128 |
| Toluene | UG/KG | 5965 | 6250 | 95 | 74-123 |
| Chlorobenzene | UG/KG | 5979 | 6250 | 96 | 76-124 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SAMPLE DATE 12/20/2004

Client Sample ID: Y213312-DEEPCOMP-3 Y213312-DEEPCOMP-3 Y213312-DEEPCOMP-3
Lab Sample ID: A4C67403 A4C67403MS A4C67403SD

| Analyte | Units of Measure | Concentration | | | Spike Amount | | % Recovery | | | % | QC LIMITS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample | Matrix Spike | Spike Duplicate | MS | MSD | MS | MSD | Avg | RPD | RPD | REC. |
| METHOD 8270 - TCL SEMI-VOLATILE ORGANICS | | | | | | | | | | | | |
| Phenol | UG/KG | 0 | 3417 | 3301 | 4486 | 4499 | 76 | 73 | 75 | 4 | 25.0 | 35-120 |
| 2-Chlorophenol | UG/KG | 0 | 3566 | 3396 | 4486 | 4499 | 79 | 75 | 77 | 5 | 26.0 | 34-118 |
| 1,4-Dichlorobenzene | UG/KG | 3254 | 12376 | 10161 | 4486 | 4499 | 203 * | 153 * | 178 | 28 | 30.0 | 30-120 |
| N-Nitroso-Di-n-propylamine | UG/KG | 0 | 0 | 304 | 4486 | 4499 | 0 * | 7 * | 4 | 200 * | 20.0 | 42-131 |
| 1,2,4-Trichlorobenzene | UG/KG | 2203 | 8836 | 7044 | 4486 | 4499 | 148 * | 108 | 128 | 31 * | 24.0 | 32-120 |
| 4-Chloro-3-methylphenol | UG/KG | 0 | 4301 | 4201 | 4486 | 4499 | 96 | 93 | 95 | 3 | 20.0 | 45-135 |
| Acenaphthene | UG/KG | 675 | 5355 | 5035 | 4486 | 4499 | 104 | 97 | 101 | 7 | 16.0 | 49-131 |
| 4-Nitrophenol | UG/KG | 0 | 3140 | 3124 | 4486 | 4499 | 70 | 69 | 70 | 1 | 25.0 | 36-142 |
| 2,4-Dinitrotoluene | UG/KG | 0 | 4283 | 3650 | 4486 | 4499 | 95 | 81 | 88 | 16 | 19.0 | 45-138 |
| Pentachlorophenol | UG/KG | 0 | 1893 | 1892 | 4486 | 4499 | 42 | 42 | 42 | 0 | 27.0 | 28-135 |
| Pyrene | UG/KG | 1753 | 6040 | 6029 | 4486 | 4499 | 96 | 95 | 96 | 1 | 25.0 | 48-154 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: SBLK Matrix Spike Blank
Lab Sample ID: A4B2137702 A4B2137701

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| METHOD 8270 - TCL SEMI-VOLATILE ORGANICS | | | | | |
| Phenol | UG/KG | 2750 | 3325 | 83 | 35-120 |
| 2-Chlorophenol | UG/KG | 2902 | 3325 | 87 | 34-118 |
| 1,4-Dichlorobenzene | UG/KG | 2671 | 3325 | 80 | 30-120 |
| N-Nitroso-Di-n-propylamine | UG/KG | 3173 | 3325 | 95 | 42-131 |
| 1,2,4-Trichlorobenzene | UG/KG | 2690 | 3325 | 81 | 32-120 |
| 4-Chloro-3-methylphenol | UG/KG | 3262 | 3325 | 98 | 45-135 |
| Acenaphthene | UG/KG | 3259 | 3325 | 98 | 49-131 |
| 4-Nitrophenol | UG/KG | 3602 | 3325 | 108 | 36-142 |
| 2,4-Dinitrotoluene | UG/KG | 3305 | 3325 | 99 | 45-138 |
| Pentachlorophenol | UG/KG | 2887 | 3325 | 87 | 28-135 |
| Pyrene | UG/KG | 3458 | 3325 | 104 | 48-154 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Date : 01/06/2005 10:24:12

Rept: AN0364

SAMPLE DATE 12/20/2004

Client Sample ID: Y213312-SB-SE-2 Y213312-SB-SE-2 Y213312-SB-SE-2
Lab Sample ID: A4C67402 A4C67402MS A4C67402SD

| Analyte | Units of Measure | Concentration | | | Spike Amount | | % Recovery | | | % | QC LIMITS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample | Matrix Spike | Spike Duplicate | MS | MSD | MS | MSD | Avg | RPD | RPD | REC. |
| METHOD 8082 - POLYCHLORINATED BIPHENYLS<br>Aroclor 1254 | UG/KG | 545 | 618 | 659 | 260 | 259 | 28 * | 44 * | 36 | 44 * | 30.0 | 52-153 |

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* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

STL Buffalo

Client Sample ID: Method Blank
Lab Sample ID: A4B2137502

Matrix Spike Blank
A4B2137501

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| METHOD 8081 - TCL PESTICIDES | | | | | |
| Aldrin | UG/KG | 9.51 | 16.6 | 57 | 48-128 |
| alpha-BHC | UG/KG | 8.74 | 16.6 | 52 | 47-123 |
| beta-BHC | UG/KG | 11.0 | 16.6 | 66 | 56-129 |
| delta-BHC | UG/KG | 10.2 | 16.6 | 62 | 42-127 |
| gamma-BHC (Lindane) | UG/KG | 9.18 | 16.6 | 55 | 42-136 |
| 4,4'-DDD | UG/KG | 11.1 | 16.6 | 67 | 42-133 |
| 4,4'-DDE | UG/KG | 11.1 | 16.6 | 67 | 44-136 |
| 4,4'-DDT | UG/KG | 12.3 | 16.6 | 74 | 49-148 |
| Dieldrin | UG/KG | 10.8 | 16.6 | 65 | 51-132 |
| Endosulfan I | UG/KG | 11.0 | 16.6 | 66 | 42-132 |
| Endosulfan II | UG/KG | 11.5 | 16.6 | 70 | 44-135 |
| Endosulfan Sulfate | UG/KG | 10.8 | 16.6 | 65 | 42-136 |
| Endrin aldehyde | UG/KG | 10.9 | 16.6 | 66 | 37-123 |
| Endrin | UG/KG | 11.3 | 16.6 | 68 | 41-132 |
| Heptachlor | UG/KG | 9.94 | 16.6 | 60 | 43-127 |
| Heptachlor epoxide | UG/KG | 11.0 | 16.6 | 66 | 45-128 |
| Methoxychlor | UG/KG | 12.0 | 16.6 | 72 | 42-140 |
| Endrin ketone | UG/KG | 10.7 | 16.6 | 65 | 50-150 |

42/60

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: Method Blank
Lab Sample ID: A4B2137602

Matrix Spike Blank
A4B2137601

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| METHOD 8082 - POLYCHLORINATED BIPHENYLS<br>Aroclor 1254 | UG/KG | 168 | 165 | 102 | 52-153 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SAMPLE DATE 12/20/2004

Client Sample ID: Y213312-SB-NW-1 Y213312-SB-NW-1 Y213312-SB-NW-1
Lab Sample ID: A4C67401 A4C67401MS A4C67401SD

| Analyte | Units of Measure | Concentration Sample | Matrix Spike | Spike Duplicate | Spike Amount MS | MSD | % Recovery MS | MSD | Avg | % RPD | QC LIMITS RPD | REC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL TCL METALS | | | | | | | | | | | | |
| TOTAL ALUMINUM | MG/KG | 4499 | 5992 | 5096 | 1263 | 1293 | 118 | 46 * | 82 | 88 * | 20.0 | 80-120 |
| TOTAL ANTIMONY | MG/KG | 1.27 | 15.99 | 15.51 | 25.27 | 25.87 | 58 * | 55 * | 57 | 5 | 20.0 | 80-120 |
| TOTAL ARSENIC | MG/KG | 7.56 | 30.79 | 30.90 | 25.27 | 25.87 | 92 | 90 | 91 | 2 | 20.0 | 80-120 |
| TOTAL BARIUM | MG/KG | 43.05 | 64.10 | 62.38 | 25.27 | 25.87 | 83 | 75 * | 79 | 10 | 20.0 | 80-120 |
| TOTAL BERYLLIUM | MG/KG | 0.251 | 22.79 | 22.08 | 25.27 | 25.87 | 89 | 84 | 87 | 6 | 20.0 | 80-120 |
| TOTAL CADMIUM | MG/KG | 0.225 | 22.45 | 21.80 | 25.27 | 25.87 | 88 | 83 | 86 | 6 | 20.0 | 80-120 |
| TOTAL CALCIUM | MG/KG | 16811 | 18281 | 15626 | 1263 | 1293 | 116 | -92 * | 12 | 1730 * | 20.0 | 80-120 |
| TOTAL CHROMIUM | MG/KG | 20.46 | 53.49 | 41.55 | 25.27 | 25.87 | 131 * | 82 | 107 | 46 * | 20.0 | 80-120 |
| TOTAL COBALT | MG/KG | 5.24 | 26.87 | 26.62 | 25.27 | 25.87 | 86 | 83 | 85 | 4 | 20.0 | 80-120 |
| TOTAL COPPER | MG/KG | 37.34 | 86.54 | 60.18 | 25.27 | 25.87 | 195 * | 88 | 142 | 76 * | 20.0 | 80-120 |
| TOTAL IRON | MG/KG | 13072 | 13271 | 12358 | 50.54 | 51.75 | 393 * | -999 * | -303 | 359 * | 20.0 | 80-120 |
| TOTAL LEAD | MG/KG | 66.47 | 87.24 | 75.51 | 25.27 | 25.87 | 82 | 35 * | 59 | 80 * | 20.0 | 80-120 |
| TOTAL MAGNESIUM | MG/KG | 4138 | 5547 | 4707 | 1263 | 1293 | 112 | 44 * | 78 | 87 * | 20.0 | 80-120 |
| TOTAL MANGANESE | MG/KG | 251.5 | 422.0 | 294.7 | 25.27 | 25.87 | 675 * | 167 * | 421 | 121 * | 20.0 | 80-120 |
| TOTAL NICKEL | MG/KG | 17.09 | 42.01 | 38.01 | 25.27 | 25.87 | 99 | 81 | 90 | 20 | 20.0 | 80-120 |
| TOTAL POTASSIUM | MG/KG | 757.9 | 1744 | 1712 | 1263 | 1293 | 78 * | 74 * | 76 | 5 | 20.0 | 80-120 |
| TOTAL SELENIUM | MG/KG | 0.0530 | 21.53 | 21.02 | 25.27 | 25.87 | 85 | 81 | 83 | 5 | 20.0 | 80-120 |
| TOTAL SILVER | MG/KG | 0.106 | 5.97 | 5.75 | 5.05 | 5.17 | 116 | 109 | 113 | 6 | 20.0 | 80-120 |
| TOTAL SODIUM | MG/KG | 68.00 | 1262 | 1165 | 1263 | 1293 | 94 | 85 | 90 | 10 | 20.0 | 80-120 |
| TOTAL THALLIUM | MG/KG | 0.318 | 23.37 | 22.40 | 25.27 | 25.87 | 91 | 85 | 88 | 7 | 20.0 | 80-120 |
| TOTAL VANADIUM | MG/KG | 9.14 | 35.68 | 30.55 | 25.27 | 25.87 | 105 | 83 | 94 | 23 * | 20.0 | 80-120 |
| TOTAL ZINC | MG/KG | 94.24 | 163.0 | 124.9 | 25.27 | 25.87 | 272 * | 119 | 196 | 78 * | 20.0 | 80-120 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: Method Blank LCS
Lab Sample ID: A4B2136802 A4B2136801

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| TOTAL TCL METALS<br>TOTAL MERCURY | MG/KG | 2.05 | 1.80 | 114 | 80-120 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: Method Blank LCS CLP Soils
Lab Sample ID: A4B2138702 A4B2138701

| Analyte | Units of Measure | Concentration Blank Spike | Spike Amount | % Recovery Blank Spike | | QC LIMITS |
|---|---|---|---|---|---|---|
| TOTAL TCL METALS | | | | | | |
| TOTAL ALUMINUM | MG/KG | 5380 | 6480 | 83 | | 80-120 |
| TOTAL ANTIMONY | MG/KG | 61.49 | 60.10 | 102 | | 80-120 |
| TOTAL ARSENIC | MG/KG | 296.7 | 300.0 | 99 | | 80-120 |
| TOTAL BARIUM | MG/KG | 291.1 | 297.0 | 98 | | 80-120 |
| TOTAL BERYLLIUM | MG/KG | 90.60 | 95.70 | 95 | | 80-120 |
| TOTAL CADMIUM | MG/KG | 85.66 | 93.70 | 91 | | 80-120 |
| TOTAL CALCIUM | MG/KG | 2967 | 3220 | 92 | | 80-120 |
| TOTAL CHROMIUM | MG/KG | 97.45 | 105.0 | 93 | | 80-120 |
| TOTAL COBALT | MG/KG | 88.75 | 95.40 | 93 | | 80-120 |
| TOTAL COPPER | MG/KG | 109.9 | 107.0 | 103 | | 80-120 |
| TOTAL IRON | MG/KG | 8093 | 11600 | 70 | * | 80-120 |
| TOTAL LEAD | MG/KG | 101.8 | 105.0 | 97 | | 80-120 |
| TOTAL MAGNESIUM | MG/KG | 2051 | 2380 | 86 | | 80-120 |
| TOTAL MANGANESE | MG/KG | 217.7 | 242.0 | 90 | | 80-120 |
| TOTAL NICKEL | MG/KG | 93.46 | 97.90 | 95 | | 80-120 |
| TOTAL POTASSIUM | MG/KG | 1999 | 2200 | 91 | | 80-120 |
| TOTAL SELENIUM | MG/KG | 82.02 | 82.80 | 99 | | 80-120 |
| TOTAL SILVER | MG/KG | 97.91 | 93.20 | 105 | | 80-120 |
| TOTAL SODIUM | MG/KG | 527.4 | 588.0 | 86 | | 80-120 |
| TOTAL THALLIUM | MG/KG | 101.4 | 101.0 | 100 | | 80-120 |
| TOTAL VANADIUM | MG/KG | 107.8 | 117.0 | 92 | | 80-120 |
| TOTAL ZINC | MG/KG | 300.3 | 339.0 | 88 | | 80-120 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: Method Blank LCS
Lab Sample ID: A4B2140204 A4B2140203

| Analyte | Units of Measure | Concentration Blank Spike | Concentration Spike Amount | % Recovery Blank Spike | QC LIMITS |
|---|---|---|---|---|---|
| WET CHEMISTRY ANALYSIS<br>METHOD 9012 - TOTAL CYANIDE | UG/G | 0.387 | 0.400 | 97 | 60-118 |



* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

METHOD 8260 - TCL VOLATILE ORGANICS

| Client Sample ID<br>Job No & Lab Sample ID | Y213312-DEEPCOMP-3<br>A04-C674 A4C67403 | Y213312-SB-NW-1<br>A04-C674 A4C67401 | Y213312-SB-SE-2<br>A04-C674 A4C67402 | | |
|---|---|---|---|---|---|
| Sample Date | 12/20/2004 15:15 | 12/20/2004 11:30 | 12/20/2004 14:50 | | |
| Received Date | 12/20/2004 16:42 | 12/20/2004 16:42 | 12/20/2004 16:42 | | |
| Extraction Date | | | | | |
| Analysis Date | 12/29/2004 17:29 | 12/28/2004 19:08 | 12/29/2004 16:10 | | |
| Extraction HT Met? | - | - | - | | |
| Analytical HT Met? | YES | YES | YES | | |
| Sample Matrix | SOIL MED | SOIL LOW | SOIL MED | | |
| Dilution Factor | 4.0 | 1.0 | 1.0 | | |
| Sample wt/vol | 4.11 GRAMS | 5.07 GRAMS | 4.0 GRAMS | | |
| % Dry | 62.85 | 86.63 | 64.14 | | |

48/60

NA = Not Applicable

METHOD 8260 - TCL VOLATILE ORGANICS

| Client Sample ID<br>Job No & Lab Sample ID | METHANOL BLK 122904<br>A04-C674 A4C67404 | VBLK15<br>A04-C674 A4B2163802 | VBLK86<br>A04-C674 A4B2168104 | | |
|---|---|---|---|---|---|
| Sample Date | | | | | |
| Received Date | | | | | |
| Extraction Date | | | | | |
| Analysis Date | 12/29/2004 12:37 | 12/28/2004 12:38 | 12/29/2004 12:11 | | |
| Extraction HT Met? | - | - | - | | |
| Analytical HT Met? | - | - | - | | |
| Sample Matrix | SOIL MED | SOIL LOW | SOIL MED | | |
| Dilution Factor | 1.0 | 1.0 | 1.0 | | |
| Sample wt/vol | 4.19 GRAMS | 5.0 GRAMS | 4.0 GRAMS | | |
| % Dry | 100.00 | 100.00 | 100.00 | | |

49/60

NA = Not Applicable

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

| Client Sample ID<br>Job No & Lab Sample ID | Y213312-DEEPCOMP-3<br>A04-C674 A4C67403 | Y213312-SB-NW-1<br>A04-C674 A4C67401 | Y213312-SB-SE-2<br>A04-C674 A4C67402 | | |
|---|---|---|---|---|---|
| Sample Date | 12/20/2004 15:15 | 12/20/2004 11:30 | 12/20/2004 14:50 | | |
| Received Date | 12/20/2004 16:42 | 12/20/2004 16:42 | 12/20/2004 16:42 | | |
| Extraction Date | 12/21/2004 14:00 | 12/21/2004 14:00 | 12/21/2004 14:00 | | |
| Analysis Date | 12/22/2004 19:23 | 12/22/2004 18:31 | 12/22/2004 18:57 | | |
| Extraction HT Met? | YES | YES | YES | | |
| Analytical HT Met? | YES | YES | YES | | |
| Sample Matrix | SOIL LOW | SOIL LOW | SOIL LOW | | |
| Dilution Factor | 10.0 | 10.0 | 10.0 | | |
| Sample wt/vol | 30.67 GRAMS | 30.24 GRAMS | 30.39 GRAMS | | |
| % Dry | 73.22 | 76.68 | 63.30 | | |



NA = Not Applicable

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

| Client Sample ID<br>Job No & Lab Sample ID | SBLK<br>A04-C674 A4B2137702 | | | | |
|---|---|---|---|---|---|
| Sample Date | | | | | |
| Received Date | | | | | |
| Extraction Date | 12/21/2004 14:00 | | | | |
| Analysis Date | 12/22/2004 18:04 | | | | |
| Extraction HT Met? | - | | | | |
| Analytical HT Met? | - | | | | |
| Sample Matrix | SOIL LOW | | | | |
| Dilution Factor | 1.0 | | | | |
| Sample wt/vol | 30.22 GRAMS | | | | |
| % Dry | 100.00 | | | | |



NA = Not Applicable

METHOD 8081 - TCL PESTICIDES

| Client Sample ID<br>Job No & Lab Sample ID | Y213312-DEEPCOMP-3<br>A04-C674 A4C67403 | Y213312-SB-NW-1<br>A04-C674 A4C67401 | Y213312-SB-SE-2<br>A04-C674 A4C67402 | | |
|---|---|---|---|---|---|
| Sample Date | 12/20/2004 15:15 | 12/20/2004 11:30 | 12/20/2004 14:50 | | |
| Received Date | 12/20/2004 16:42 | 12/20/2004 16:42 | 12/20/2004 16:42 | | |
| Extraction Date | 12/21/2004 14:00 | 12/21/2004 14:00 | 12/21/2004 14:00 | | |
| Analysis Date | 12/30/2004 19:37 | 01/01/2005 23:40 | 12/30/2004 18:52 | | |
| Extraction HT Met? | YES | YES | YES | | |
| Analytical HT Met? | YES | YES | YES | | |
| Sample Matrix | SOIL LOW | SOIL LOW | SOIL LOW | | |
| Dilution Factor | 50.0 | 5.0 | 10.0 | | |
| Sample wt/vol | 30.9 GRAMS | 30.7 GRAMS | 30.24 GRAMS | | |
| % Dry | 73.22 | 76.68 | 63.30 | | |

METHOD 8082 - POLYCHLORINATED BIPHENYLS

| Client Sample ID<br>Job No & Lab Sample ID | Y213312-DEEPCOMP-3<br>A04-C674 A4C67403 | Y213312-SB-NW-1<br>A04-C674 A4C67401 | Y213312-SB-SE-2<br>A04-C674 A4C67402 | | |
|---|---|---|---|---|---|
| Sample Date | 12/20/2004 15:15 | 12/20/2004 11:30 | 12/20/2004 14:50 | | |
| Received Date | 12/20/2004 16:42 | 12/20/2004 16:42 | 12/20/2004 16:42 | | |
| Extraction Date | 12/21/2004 14:00 | 12/21/2004 14:00 | 12/21/2004 14:00 | | |
| Analysis Date | 12/22/2004 14:16 | 12/22/2004 13:26 | 12/22/2004 13:39 | | |
| Extraction HT Met? | YES | YES | YES | | |
| Analytical HT Met? | YES | YES | YES | | |
| Sample Matrix | SOIL LOW | SOIL LOW | SOIL LOW | | |
| Dilution Factor | 10.0 | 1.0 | 5.0 | | |
| Sample wt/vol | 30.29 GRAMS | 30.08 GRAMS | 30.13 GRAMS | | |
| % Dry | 73.22 | 76.68 | 63.30 | | |



NA = Not Applicable

METHOD 8081 - TCL PESTICIDES

| Client Sample ID<br>Job No & Lab Sample ID | Method Blank<br>A04-C674 A4B2137502 | Method Blank<br>A04-C674 A4B2137602 | | | |
|---|---|---|---|---|---|
| Sample Date | | | | | |
| Received Date | | | | | |
| Extraction Date | 12/21/2004 14:00 | | | | |
| Analysis Date | 12/30/2004 15:50 | | | | |
| Extraction HT Met? | - | NA | | | |
| Analytical HT Met? | - | | | | |
| Sample Matrix | SOIL LOW | | | | |
| Dilution Factor | 1.0 | | | | |
| Sample wt/vol | 30.19 GRAMS | | | | |
| % Dry | 100.00 | | | | |

METHOD 8082 - POLYCHLORINATED BIPHENYLS

| Client Sample ID<br>Job No & Lab Sample ID | Method Blank<br>A04-C674 A4B2137502 | Method Blank<br>A04-C674 A4B2137602 | | | |
|---|---|---|---|---|---|
| Sample Date | | | | | |
| Received Date | | | | | |
| Extraction Date | | 12/21/2004 14:00 | | | |
| Analysis Date | | 12/22/2004 13:14 | | | |
| Extraction HT Met? | NA | - | | | |
| Analytical HT Met? | | - | | | |
| Sample Matrix | | SOIL LOW | | | |
| Dilution Factor | | 1.0 | | | |
| Sample wt/vol | | 30.46 GRAMS | | | |
| % Dry | | 100.00 | | | |



NA = Not Applicable

| Lab ID | Sample ID | Lab | Analyte | Method | DF | % Dry | Sample wt/vol g/L | Sample Date | Receive Date | Analysis Date | ANL INI | A H | Matrix |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A4C67403 | Y213312-DEEPCOMP-3 | RECNY | Aluminum - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Antimony - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Arsenic - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Barium - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Beryllium - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Cadmium - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Calcium - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Chromium - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Cobalt - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Copper - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Iron - Total | 6010 | 5.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/27 | TRB | Y | SOIL |
| | | RECNY | Lead - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Magnesium - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Manganese - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Mercury - Total | 7471 | 1.0 | 73.22 | 0.5976 g | 12/20/2004 15:15 | 12/20 16:42 | 12/21 | AJY | Y | SOIL |
| | | RECNY | Nickel - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Potassium - Total | 6010 | 5.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/27 | TRB | Y | SOIL |
| | | RECNY | Selenium - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Silver - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Sodium - Total | 6010 | 5.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/27 | TRB | Y | SOIL |
| | | RECNY | Thallium - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Vanadium - Total | 6010 | 1.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Zinc - Total | 6010 | 5.0 | 73.22 | 0.539 g | 12/20/2004 15:15 | 12/20 16:42 | 12/27 | TRB | Y | SOIL |
| A4C67401 | Y213312-SB-NW-1 | RECNY | Aluminum - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Antimony - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Arsenic - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Barium - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Beryllium - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Cadmium - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Calcium - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Chromium - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Cobalt - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Copper - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Iron - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Lead - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Magnesium - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Manganese - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Mercury - Total | 7471 | 1.0 | 76.68 | 0.6847 g | 12/20/2004 11:30 | 12/20 16:42 | 12/21 | AJY | Y | SOIL |
| | | RECNY | Nickel - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Potassium - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Selenium - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Silver - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Sodium - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Thallium - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Vanadium - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Zinc - Total | 6010 | 1.0 | 76.68 | 0.492 g | 12/20/2004 11:30 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| A4C67402 | Y213312-SB-SE-2 | RECNY | Aluminum - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Antimony - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Arsenic - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |



AH = Analysis Holding Time Met
TH = TCLP Holding Time Met
NA = Not Applicable

ANL INI = Analyst Initials
DF = Dilution Factor

| Lab ID | Sample ID | Lab | Analyte | Method | DF | % Dry | Sample wt/vol g/L | Sample Date | Receive Date | Analysis Date | ANL INI | AH | Matrix |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A4C67402 | Y213312-SB-SE-2 | RECNY | Barium - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Beryllium - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Cadmium - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Calcium - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Chromium - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Cobalt - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Copper - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Iron - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Lead - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Magnesium - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Manganese - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Mercury - Total | 7471 | 1.0 | 63.30 | 0.7017 g | 12/20/2004 14:50 | 12/20 16:42 | 12/21 | AJY | Y | SOIL |
| | | RECNY | Nickel - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Potassium - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Selenium - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Silver - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Sodium - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Thallium - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Vanadium - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |
| | | RECNY | Zinc - Total | 6010 | 1.0 | 63.30 | 0.522 g | 12/20/2004 14:50 | 12/20 16:42 | 12/22 | BKL | Y | SOIL |



AH = Analysis Holding Time Met
TH = TCLP Holding Time Met
NA t Ap ble

ANL INI = Analyst Initials
DF = Dilution Factor

| Lab ID | Sample ID | Lab | Analyte | Method | DF | % Dry | Sample wt/vol | g/L | Sample Date | Receive Date | Analysis Date | ANL INI | A H | Matrix |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A4B2136802 | Method Blank | RECNY | Mercury - Total | 7471 | 1.0 | 100.00 | 0.6 | g | - | - | 12/21 | AJY | Y | SOIL |
| A4B2138702 | Method Blank | RECNY | Aluminum - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Antimony - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Arsenic - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Barium - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Beryllium - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Cadmium - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Calcium - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Chromium - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Cobalt - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Copper - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Iron - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Lead - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Magnesium - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Manganese - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Nickel - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Potassium - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Selenium - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Silver - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Sodium - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Thallium - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Vanadium - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |
| | | RECNY | Zinc - Total | 6010 | 1.0 | 100.00 | 0.5 | g | - | - | 12/22 | BKL | Y | SOIL |



AH = Analysis Holding Time Met
TH = TCLP Holding Time Met
NA = Not Applicable

ANL INI = Analyst Initials
DF = Dilution Factor

| Lab ID | Sample ID | Lab | Analyte | Method | DF | % Dry | Sample wt/vol g/L | Sample Date | Receive Date | Analysis Date | ANL INI | A H | Matrix |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A4C67403 | Y213312-DEEPCOMP-3 | RECNY | Cyanide - Total | 9012A | 1.0 | 73.22 | | 12/20/2004 15:15 | 12/20 16:42 | 12/23 | KW | Y | SOIL |
| A4C67401 | Y213312-SB-NW-1 | RECNY | Cyanide - Total | 9012A | 1.0 | 76.68 | | 12/20/2004 11:30 | 12/20 16:42 | 12/23 | KW | Y | SOIL |
| A4C67402 | Y213312-SB-SE-2 | RECNY | Cyanide - Total | 9012A | 1.0 | 63.30 | | 12/20/2004 14:50 | 12/20 16:42 | 12/23 | KW | Y | SOIL |

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AH = Analysis Holding Time Met
TH = TCLP Holding Time Met
NA = Not Applicable

ANL INI = Analyst Initials
DF = Dilution Factor

| Lab ID | Sample ID | Lab | Analyte | Method | DF | % Dry | Sample wt/vol g/L | Sample Date | Receive Date | Analysis Date | ANL INI | A H | Matrix |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A4B2140204 | Method Blank | RECNY | Cyanide - Total | 9012A | 1.0 | 100.00 | | - | - | 12/23 | KW | Y | SOIL |



AH = Analysis Holding Time Met
TH = TCLP Holding Time Met
NA = Not Applicable

ANL INI = Analyst Initials
DF = Dilution Factor

# Chain of Custody

# Chain of Custody Record

SEVERN TRENT STL

**Severn Trent Laboratories, Inc.**

STL-4124 (0901)

| Client | Project Manager | Date | Chain of Custody Number |
|---|---|---|---|
| Watts Engineers | Andrew Klimek | 12/20/04 | 192535 |
| **Address** | **Telephone Number (Area Code)/Fax Number** | **Lab Number** | **Page** 1 of 1 |
| 3826 Main St. | (716) 836-2320 | STL - Buff. | |
| **City** / **State** / **Zip Code** | **Site Contact** | **Lab Contact** | |
| Buffalo / NY / 14226 | Matt Holquist | Pat Filey | |
| **Project Name and Location (State)** | **Carrier/Waybill Number** | | |
| Gallagher Beach, Buffalo, NY | Hand deliver | | |
| **Contract/Purchase Order/Quote No.** Watts - Y213312 STL - NY2A893625 | | | |

| Sample I.D. No. and Description (Containers for each sample may be combined on one line) | Date | Time | Matrix: Air | Aqueous | Sed. | Soil | Containers & Preservatives: Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/ NaOH | Analysis: 2 ea GW - 8260 TCL VOC | 1 ea GW - 8270 TCL SVOC | TOT. TCL MET | 9012-TOT CYN | 8270-TCL SVOC | 8082 - PCBs | 8081 - TCL Pest | Special Instructions/ Conditions of Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Y213312-SB-NW-1 | 12/20/04 | 11:30 | | | | X | X | | | | | | 2 | 1 | | | | | | |
| Y213312-SB-SE-2 | 12/20/04 | 14:50 | | | | X | X | | | | | | 2 | 1 | | | | | | |
| Y213312-Deep Comp-3 | 12/20/04 | 15:15 | | | | X | X | | | | | | 2 | 1 | | | | | | |

**Possible Hazard Identification**

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

**Sample Disposal**

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

**Turn Around Time Required**

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

**QC Requirements (Specify)**

| | Date | Time | | Date | Time |
|---|---|---|---|---|---|
| 1. Relinquished By | 12/20/04 | 16:41 | 1. Received By | 12/20/04 | 16:42 |
| 2. Relinquished By | | | 2. Received By | | |
| 3. Relinquished By | | | 3. Received By | | |

Comments: 2.0°C

09/09

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy