TRANSPORTATION

P.I.N. 9650.02.301 NYSDOT REGION 9 EQUIPMENT MAINTENANCE YARD 112 BARLOW ROAD BROOME COUNTY NEW YORK

PHASE II HAZARDOUS WASTE ASSESSMENT

MAY 26, 1994



NEW YORK STATE DEPARTMENT OF TRANSPORTATION MARIO M. CUOMO, Governor JOHN C. EGAN, Commissioner



TABLE OF CONTENTS

| | | | | | | | | | | | | | | | | | | I | Pag |
|-----|--|---------------------------------|---|---|--------------------------------------|-----------------------------|----------|---------|-----------------|----------------|---------|---------|-------|---------------|-------|-------|-------|---|-------------------|
| 1.0 | INT | RODU | CTION | | • • • • • | | | • • • • | • • • • | | | | | • • • | • • • | ••• | • • • | | . 1 |
| | 1.1 1.2 | Site I | Backgroum of 1 | ind and Phase I | Histor Assess | ment | Resu | its . | • • • • | ••• | ••• | ••• | ••• | • • • | ••• | ••• | • • • | | . 1 |
| 2.0 | FIEI | D IN | ÆSTIGA | TION | • • • • • | • • • • | • • • • | • • • • | • • • • | • • • | • • • | • • • • | ••• | ••• | • • • | ••• | ••• | • • | . 3 |
| | 2.1 2.2 2.3 2.4 | Phase Phase | e II Soil e II Subs e II Mor e II Surf | urface S itoring | Soil Sai Well D | mplin evelo | g and | i Mo | nitori d San | ing V nplir | Well | Inst | alla | tion · · · | • • • | | • • • | • • | . 3 |
| 3.0 | EVA | LUATI | ON OF | NVEST | IGATI | VE R | ESUI | LTS | • • • • | ••• | ••• | • • • | • • • | • • • • | • • • | • • • | ••• | •• | . 6 |
| | 3.1 3.2 3.3 3.4 3.5 3.6 | Phase Comp Subst Phase | ogic and e II Soil parative urface So e II Surf e II Gro | Gas Sur Criteria oil Samp ace Soil | vey Re for So ling Re Sampl | esults oil and esults ing R | i Gro | undv | vater | ••• | • • • • | • • • • | | • • • • | • • • | • • • | • • • | • | . 7 . 8 . 8 |
| 4.0 | CON | CLUS | IONS A | ND REC | :OMM | ENDA | ATIO | NS, | • • • • | ••• | • • • • | ••• | • • • | • • • | • • • | • • • | ••• | •• | 11 |
| | 4.1 4.2 | | lusion . mmenda | | | | | | | | | | | | | | | | |
| 5.0 | LIM | ITATIO | ONS | • • • • • • | • • • • • · | • • • • | • • • • | • • • • | •••• | ••• | • • • | · • • • | ••• | • • • | • • • | ••• | ••• | •• | 14 |
| APP | ENDI | CES | | | | | | | | | | | | | | | | | |
| APP | ENDI ENDI | ХВ | BORIN PIT LC | | S, DE | VELO | - | | LOG | s, v | VEL | LD | RAV | WIN | īGS, | & | TE: | ST | |
| APP | ENDI: | X C | SOIL | as su | KVEY | RES | OLIS | • | | | | | | | | | | | |

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1.0 INTRODUCTION

This report presents the results of a Phase II Hazardous Waste Assessment for the New York State Department of Transportation (NYSDOT) Equipment Maintenance site, Barlow Road, Town of Kirkwood in Broome County, New York (Figure 1.1). The NYSDOT is engaged in a study to identify the nature and extent of site contamination which may affect the construction of a new building on this site and to develop the appropriate plans for possible site remediation.

A Phase I Hazardous Waste Assessment of the site, conducted in October and November 1993, consisted of a ground penetrating radar study, soil vapor survey, installation and sampling of three (3) groundwater monitoring wells (FH-X-3, FH-X-9, and FH-X-12) and subsurface soil sampling at nine (9) locations. The Phase I study indicated that trichloroethene contamination is present in groundwater at the Barlow Road site.

A Phase II Hazardous Waste Assessment was conducted in February 1994 with confirmatory sampling obtained in March 1994.

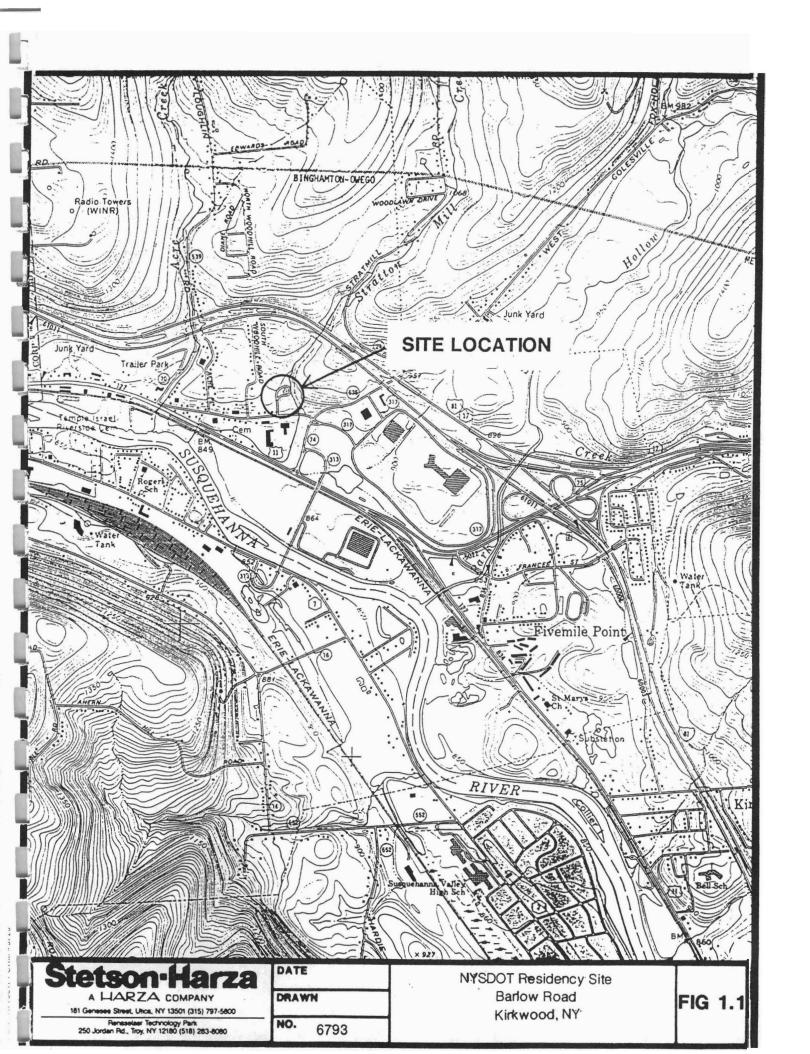
The objective of the Phase II Assessment was to characterize the site hydrogeology, to respond to health and safety questions from the New York State Department of Environmental Conservation (NYSDEC) and Health (NYSDOH), to define the contaminant plume and the source, and to generate data in support of subsequent site remediation. Additionally, the property located adjacent to the west boundary of the NYSDOT site was assessed prior to acquisition by NYSDOT for the potential of site contamination. The site is currently owned by the Gorick Construction Company and is used as a storage area for heavy equipment.

1.1 Site Background and History

Site background, physical setting, and history are based on review of existing data and supplemented by site reconnaissances. The study site in the Town of Kirkwood, Broome County, is approximately five (5) acres separated by Barlow Road from the remainder of the NYSDOT Equipment Maintenance Shop property at 112 Barlow Road. The parcels north and west of the site are owned by the Gorick Construction Co.

The subject site had been used by the Binghamton Psychiatric Facility prior to occupation by the NYSDOT. Reportedly, the site has been used by NYSDOT as a storage and disposal area for waste solvents used to remove paint, in conjunction with NYSDOT equipment maintenance activities. Most notably, a trench was reportedly used for disposal of spent toluene and thought to be located at the northwest corner of the site. There is no knowledge of trichloroethene disposal at this site by NYSDOT.

The site currently contains an approximately 16,000 square foot sand pile and a 6,750 square foot one-story wood frame building with two attached silos currently used as a sign shop. In addition to the sign shop building, the site currently contains an 8,700 square foot wood frame pole barn housing road salt, a waste paint/solvent drum storage area, several stock piles of signs, crushed drums, metal beams, cables, reinforcing rods, and miscellaneous NYSDOT debris.



A drum storage area is located approximately at the midpoint along the eastern property boundary; drums containing waste paints, solvents, and oils are currently stored there awaiting disposal. Due to exposure in an uncovered environment, several of the drums have deteriorated and soil surface staining was observed. Drums that were deteriorated have been overpacked by NYSDOT.

Stratton Mill Creek flows in a southerly direction along the eastern property boundary to the Susquehanna River, approximately 0.5 miles to the south. Groundwater has been encountered at the site in depths ranging from 17 feet to 27 feet. The site topography slopes downward from north to the south, at a 3% grade.

Aerial photographs (1"=2000') taken in 1937, 1955, 1958, 1965, and 1968 were reviewed to identify past land use activities which may have contributed contamination to the site. As of 1937 the site was undeveloped, showing more trees and vegetation, including a tree orchard at the northern portion of the property, than in later years. By 1955 the wood frame building and silos (now used as the sign shop) had been erected. Site conditions remained the same in the 1958 photo.

The 1965 and 1968 aerial photographs were consistent showing piles of sand or gravel and several structures which could be stockpiles of wood, steel, or temporary trailers. The 1968 further details the presence of trucks on the east and west side of the sign shop. There was no evidence of waste drums or mounding of the soil from trenching activity in the aerial photographs available for review from PERS at Cornell.

1.2 Summary of Phase I Assessment Results

The Phase I Hazardous Waste Assessment determined that a significant level of trichloroethene was present in the groundwater sample from monitoring well FH-X-12 at 1120 μ g/L. This concentration level exceeds New York State guidance value of 5 μ g/L for trichloroethene as well as the TCLP regulatory level of 500 μ g/L which indicates that the groundwater would need to be classified as a hazardous waste based on the toxicity characteristic. Samples from wells FH-X-3 and FH-X-9 had lower levels of trichloroethene (120 μ g/L and 20.3 μ g/L).

Soils samples taken during the Phase I Assessment did not exhibit significant organic contamination. Trichloroethene was detected at well locations FH-X-3 and FH-X-9 in soil samples at $8.0~\mu g/Kg$ and $3.6~\mu g/Kg$ respectively. These levels are well below the recommended clean-up standard of $700~\mu g/Kg$.

Additional information on Phase I results can be found in the <u>NYSDOT</u>, <u>Phase I Hazardous Waste Assessment Report</u> dated January 1994.

2.0 FIELD INVESTIGATION

A list of tasks conducted at the NYSDOT Barlow Road for the Phase II Assessment is listed below:

February 1994

- Soil Gas Survey of Proposed Building Footprint and Adjacent Gorick Property
- Completion of seven (7) soil borings
- Installation of seven (7) groundwater monitoring wells
- Collection of one (1) subsurface soil sample from mounded pile of soil on Gorick property
- Sampling and analysis of ten (10) groundwater monitoring wells.

March 1994

- Sampling and analysis of seven (7) groundwater monitoring wells.
- Collection of three (3) surface soil samples from the proposed building footprint.

2.1 Phase II Soil Gas Survey

Tracer Research Corporation conducted a soil gas survey in February 1994, collecting soil vapors from depths of 2 to 10 feet below ground surface. The samples were analyzed for 1,1,1-trichloroethane trichloroethene, tetrachloroethene, and total volatile hydrocarbons.

Samples were collected through gravel, asphalt, and snow cover. Soil gas sampling probes consisted of 7 to 14 foot lengths of 3/4 inch diameter hollow steel pipe. The probes were fitted with detachable drive tips and hydraulically pushed and/or pounded to final depths. A rock drill and compressor were used to drill through the gravel, asphalt, and concrete.

Sample probe vacuums ranged from 2 to 17 inches of mercury. The vacuum capacity of the pump was approximately 22 inches of mercury.

During the investigation, up to 10 milliliters (ml) of soil gas was collected for each sample and immediately analyzed in the Tracer Research analytical van using a Varian 3300 gas chromatograph equipped with a flame ionization detector (FID), an electronic capture detector (ECD), and two computing integrators.

Instrument calibrations were checked periodically during the day to monitor the response factors and retention times.

2.2 Phase II Subsurface Soil Sampling and Monitoring Well Installation

Seven (7) borings were drilled across the site. Three (3) borings were located on the Gorick property and four were on NYSDOT property. Each of the borings were converted to groundwater monitoring wells. The new wells were installed during February 1994 and are identified as MW-1 through MW-7. Three (3) wells MW-3, MW-4, and MW-7 were 4-inch, flush-mounted wells, while the remaining four (4) wells are 2 inch wells. MW-1 and MW-2 are stick-up while MW-5 and MW-6 are flush-mounted. The 4 inch water table wells were advanced using $6\frac{1}{2}$ inch ID

hollow stem augers. Ten foot screens were installed to straddle the water table. Monitoring and groundwater elevations are presented in Table 3.1. Subsurface soil samples were obtained using 24 inch long, 2 inch diameter split spoon samples driven by a 140 pound hammer free-falling 30 inches. Sampling was continuous to 20 feet and 5 feet intervals thereafter. Samples were classified in the field by Stetson-Harza. Geologic logs are presented in Appendix B.

Split spoon samples were screened with an HNU photoionization detector and OVA flame ionization detector. The sample representing the worst case contamination was submitted for laboratory analysis. Samples were analyzed for volatile organics, pesticides, PCBs, RCRA metals, and BTEX compounds using EPA Methods 8010, 8080, 200 Series and NYDOH 310-13 respectively.

The following table details the sample depth from each boring during the February 1994 sampling event.

| Boring No. | Boring Depth (ft.) | Sample Depth (ft.) |
|---------------|--------------------|-----------------------|
| MW-1 | 22 | 4-6 |
| MW-2 | 17 | 8-10 |
| MW-3 | 27 | 8-10 |
| MW-4 | 20 | 20-22 |
| MW-5 | 14 | 6-8 |
| MW-6 | 40 | 8-10 |
| MW-7 | 22 | 10-12 |

Seven (7) groundwater samples and eight (8) subsurface soil samples were submitted for laboratory analysis. The additional soil sample LS-1 was collected from the loam pile on the Gorick property.

Stetson-Harza personnel supervised the construction of monitoring wells by the drilling subcontractor, including finalizing screened intervals for each well based on site conditions and water table elevations. Well construction drawings are presented in Appendix B.

2.3 Phase II Monitoring Well Development and Sampling

Monitoring wells were developed not less than 24 hours after installation to ensure representative groundwater samples and elevation measurements by removing fine-grained materials from the sand pack. Phase II wells MW-1 through MW-7 were developed from February 16 to February 22, 1994. Development methods included bailing and pumping. Pumping was accomplished with an ISCO peristaltic pump and/or PVC or stainless steel bailers.

The Phase II Assessment included two rounds of sampling. The first round was performed in February 1994 and included wells FH-X-3, FH-X-9, and FH-X-12 installed during the Phase I Assessment and the seven new wells (MW-1 through MW-7). Monitoring wells were sampled less than 24 hours after development. Phase I wells were purged of three (3) well volumes prior to sampling. Wells MW-1 through MW-7 were purged and sampled again on March 14 and 15, 1994 to provide a second confirmatory data set.

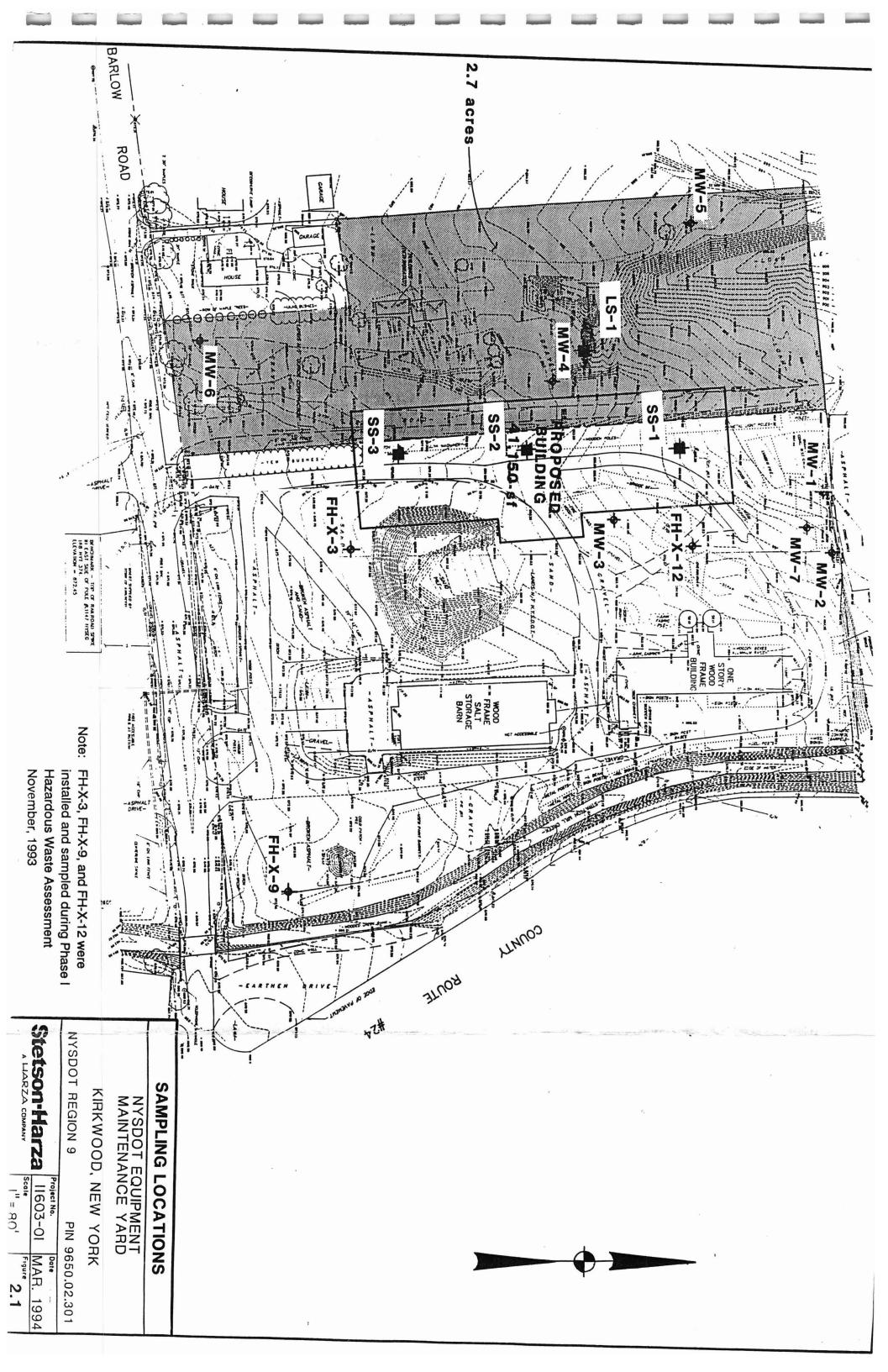
Samples collected in February 1994 were analyzed for BTEX, volatile organics, RCRA metals, and pesticides/PCBs. Samples collected in March 1994 were analyzed for volatile organics and cyanide only.

2.4 Phase II Surface Soil Sampling

Surface soil samples were collected within the footprint of the proposed building in an effort to determine if contamination was present where excavation and sitework will occur.

Three (3) soil samples, SS-1, SS-2, and SS-3, were collected March 14, 1994 at the locations shown on Figure 2.1. Soil samples were collected at a depth of 1 foot. A shovel was used to open a 1 foot deep hole and the soil sample was collected with a stainless steel scoop and placed directly into the sample jar. The shovel and scoop were decontaminated prior to each sample. Samples were analyzed for TCL volatiles, organics, semivolatiles, pesticides, PCBs, metals, and cyanide.

A soil sample was collected from a "loam" pile on the Gorick property on February 21, 1994. The sample was collected at the southern exposed face of the pile with a decontaminated stainless steel scoop. The soil sample was taken approximately 4 feet from the top of the pile and 1 foot horizontally into the pile. It was analyzed for volatile organics, pesticides/PCBs, metals, and cyanide.



3.0 EVALUATION OF INVESTIGATIVE RESULTS

This section presents the analytical results of the soil vapor survey, the ground penetrating radar study, the subsurface soil and groundwater sampling investigation at the NYSDOT Equipment Maintenance Yard and Gorick Property, Barlow Road, Kirkwood, New York.

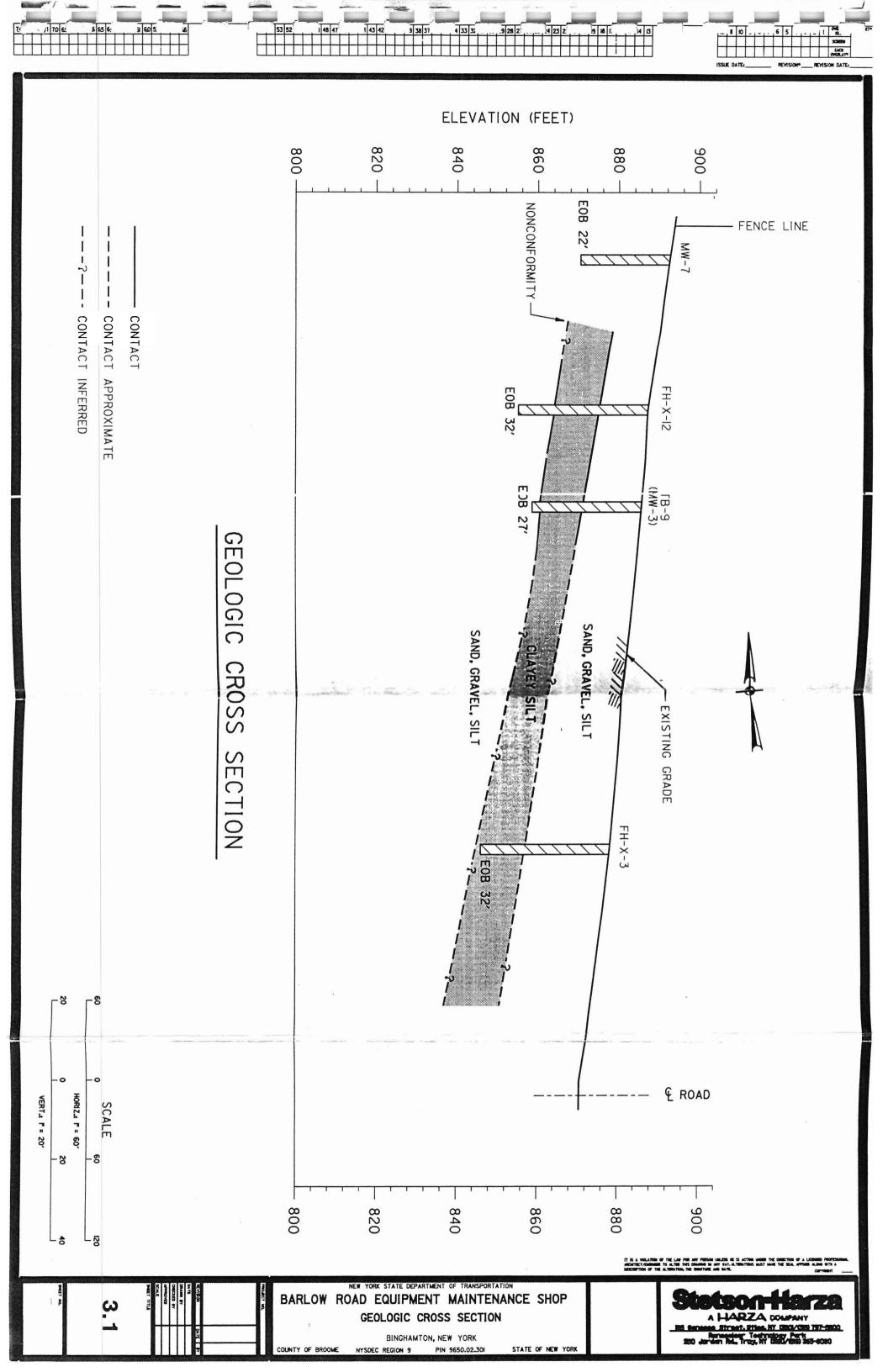
3.1 Geologic and Hydrogeologic Conditions

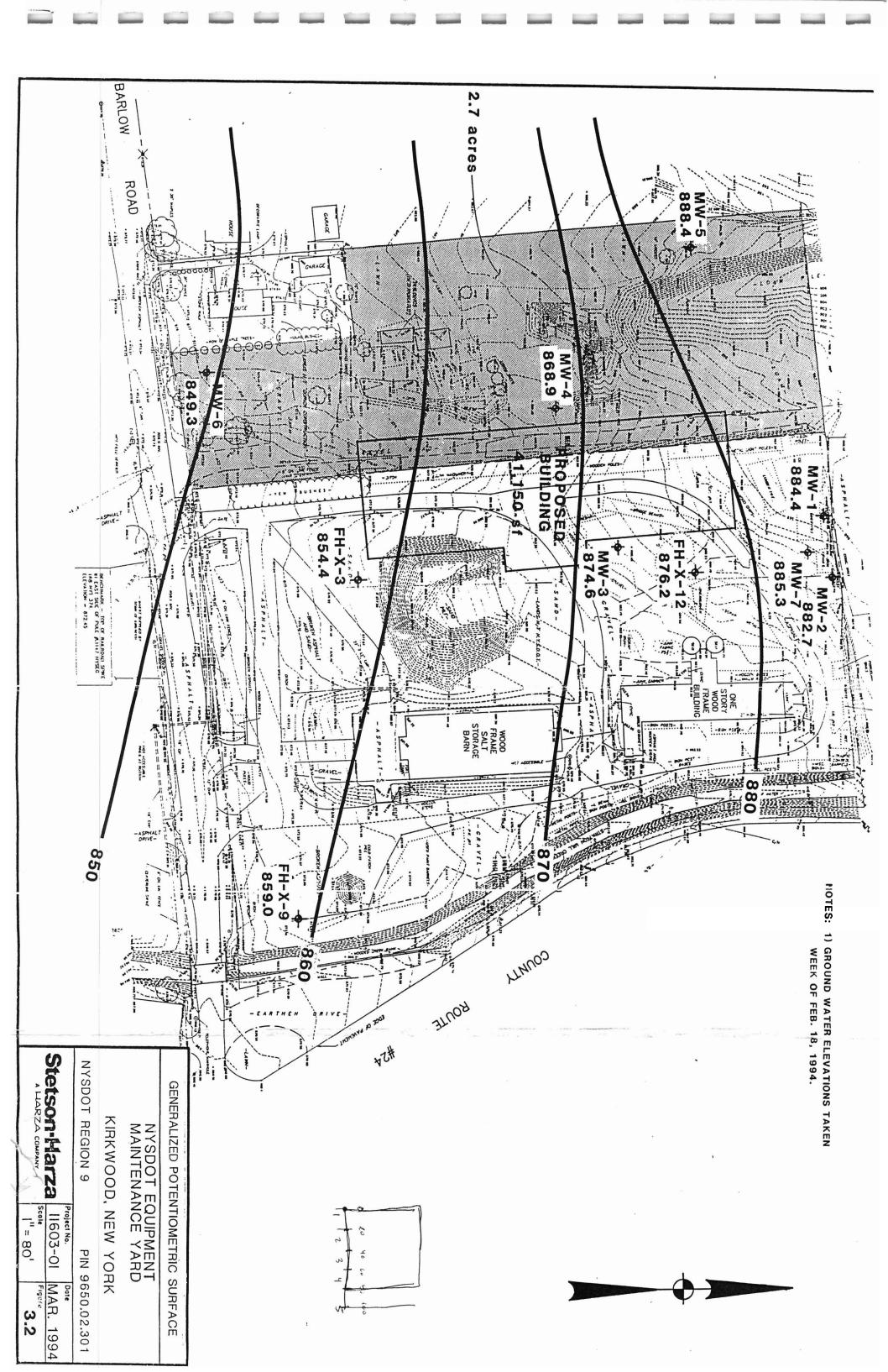
The site is located approximately 1/2 mile to the north of the Susquehanna River. Topography in the area slopes moderately to the south. The slope on-site averages 0.03 foot per foot (ft./ft.). Stratton Mill Creek flows southward along the eastern boundary of the property.

Subsurface soil borings show the site to be underlain by poorly graded sand, silt, and gravel overlying a clayey silt unit. The horizontal and vertical extent of the clayey silt unit is poorly defined. The silt unit was fully penetrated in Borings FH-X-12 and TB-9 (MW-3). The silt unit is approximately 10 feet thick at these locations and is underlain by a sand, silt, gravel unit. (See Figure 3.1).

Review of New York State Geologic Survey Map (Finger Lakes Sheet) shows the site to be underlain by Kame deposits. Kame deposits are stratified glacial drift deposited in contact with, or in close proximity to, melting ice. The presence of the clayey silt in only a few of the borings suggests that it does not have a broad extent in the area, which is indicative of ice-contact drift. Ice-contact stratified drift is characterized by a large range of sizes, chaotic sedimentary structures, slump structures, faults, and inclusions of till. However, the clayey silt layer was found in borings FH-X-3, TB-9(MW-3), and FH-X-12 at similar depths suggesting a continuous presence beneath these borings. None of the borings north of FH-X-12 penetrated the silt layer. This may be attributed to the heterogeneous nature of glacial drift or to excavating and filling activities.

Groundwater elevations range from 850.5 feet (MW-6) to 887.3 feet (MW-5) and are detailed on Table 3.1, Page 7, Monitoring Well and Groundwater Elevations. General flow direction is to the south-southwest with an average potentiometric gradient of 0.06 ft./ft. Figure 3.2 is a water table contour map of the site. Water was observed above, below and within the silt layer, and the water table was found in both the silt and till units.





888.5 861 27.5 24 ledan grad

TABLE 3.1

MONITORING WELL AND GROUNDWATER ELEVATIONS
Barlow Road, Kirkwood, NY

| | | | HOW ROad, RIE | | | |
|----------|---------------------|--------------------|---------------------|--------------------|---------------------|-----------------------|
| Well No. | Ground Elevation | Riser Elevation | B.O.W. Elevation | G.W. Elevation* | G.W. Below Grade | Approx. Top Screen |
| MW-1 | 896.5 | 897.4 | 876.4 | 886.5 | 10.0 | 886.5 |
| MW-2 | 890.4 | 892.1 | 873.2 | 883.0 | 7.4 | 883.4 |
| MW-3 | 885.5 | 885.2 | 860.9 | 875.8 | 9.7 | 870.5 |
| MW-4 | 881.2± | 880.7 | 861.1 | 872.7 | 8.5± | 872.0 |
| MW-5 | 890.9± | 890.4 | 874.4 | 887.3 | 3.6± | 885.0 |
| MW-6 | 878.2± | 877.7 | 841.3 | 850.5 | 27.7± | 850.0 |
| MW-7 | 892.4± | 891.9 | 874.1 | 884.7 | 7.7 | 883.4 |
| FH-X-3 | 877.5± | 881.2 | 844.8 | 854.4 | 23.1± | 853.5 |
| FH-X-9 | 873.8± | 876.4 | 849.2 | 859.0 | 14.8± | 859.8 |
| FH-X-12 | 888.0± | 889.7 | 863.5 | 876.2 | 11.8± | 871.0 |

^{*}Ground water elevations taken March, 1994 (MW-1 through MW-7) and February, 1994 (FH-X-3, FH-X-9, FH-X-12).

3.2 Phase II Soil Gas Survey Results

The soil gas survey, conducted February 1994, evacuated soil vapor from approximately 5 to 6 feet deep. Extending probes beyond this depth in most locations was not possible due to tightly packed soil. However, soil gas samples SG20 and SG21 reached depths of 10 and 9 feet respectively. The locations of the probes were chosen to determine the potential for airborne contamination which may adversely affect workers during building construction and occupants thereafter. Site conditions limited access to paved and plowed areas at the site. The building footprint soil gas sampling points and the Gorick site soil gas sampling points were obtained along the roadways. NYSDOT provided snow removal in designated areas where piles of equipment and debris were not stockpiled.

Low-level concentrations of trichloroethene (TCE), 1,1,1-trichloroethane (TCA) tetrachloroethene (PCE) or total volatile hydrocarbons (TVHC) were found at each of the 23 sampling locations in the following distribution frequency:

Table 3.2

| | - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 | a vaktorio e | Soil Gas Surv | ey Summary | | |
|------|---|-------------------------------|--|---|---------------------------------------|-------------|
| | No. of Locations Detected | Background Level (µg/L) | Highest Level Detected (µg/L) | Samples with Highest Concentration | Lowest Level Detected (µg/L) | SCG µg/L |
| TCA | 22 | 0.001 | 0.3 | SG1 - 5' | 0.0002 | 450 |
| TCE | 12 | N.D. | 4.0 | SG1 - 5' | 0.0003 | 33 |
| PCE | 11 | 0.0001 | 0.1 | SG1 - 5' | 0.0004 | 81 |
| TVHC | 8 | 0.2 | 14 | SG14 - 2' | 0.1 | n/a |

Although pure soil gas extracted from soil does not relate directly to ambient air concentrations, the Short-term Ambient Guideline Concentrations (SGC's) are listed in Table 3.2 for comparative purposes. These SGC concentrations are based on health or environmental effects which might be associated with acute exposures to sources of air contaminants. Exposures to the highest levels of soil gas shown are not likely in ambient air. The greatest exposure risks would be during excavation activities.

The only area of the site which was studied during both Phase I and II soil gas surveys was the reported trench area in the northwest section of the site. These results correlated.

The groundwater contamination at the site is not reflected in the soil gas due to the depth to groundwater and the tightness of subsurface soils. The low levels of contaminants detected at the site are not indicative of significant subsurface contamination which could adversely affect building construction and subsequent occupancy.

Report and Figures prepared by the soil gas subcontractor, Tracer Research Corporation are included in Appendix C.

3.3 Comparative Criteria for Soil and Groundwater

Analytical results are related to available criteria to describe the presence of contamination at the site. Groundwater results are compared to NYSDEC groundwater quality standards 6NYCRR, Part 703.

The recommended soil clean-up objective used in this report are taken from NYSDEC Technical Memorandum HWR-94-4046 (revised 1/24/94) and based on health derived values from the USEPA's Health Effects Assessment Summary Tables (HEASTs) and the water soil partitioning theory.

The water/soil partitioning theory is used to determine soil cleanup objectives which would be protective of groundwater/drinking water quality for its best use. This theory is conservative in nature and assumes that contaminated soil and groundwater are in direct contact. This theory is based upon the ability of organic matter in soil to adsorb organic chemicals. The approach predicts the maximum amount of contamination that may remain in soil so that leachate from the contaminated soil will not violate groundwater and/or drinking water standards.

The soil cleanup levels were developed for Superfund sites. The levels are used in this report for general comparison.

3.4 Subsurface Soil Sampling Results

Soil samples from seven (7) boring locations at the site were sampled, field screened, and submitted for laboratory analysis of volatile organic compounds, pesticides, PCBs, RCRA metals, and BTEX compounds. Table 3.3 shows the laboratory results for the subsurface soil samples. Four (4) volatile organics were found in soil borings at MW-2, MW-3, MW-4, and MW-7 in total concentrations ranging from 1.2 µg/Kg

to 5.9 μ g/Kg. The volatile organics detected were 1,1,1-trichloroethane, trans-1,2-dichloroethene, trichloroethene and 1,1-dichloroethene. The concentrations detected are well below the recommended soil cleanup levels.

Pesticides and PCBs were not detected in the soil boring samples. Petroleum product components xylene was found in the soil boring from MW-2 at 2 μ g/Kg, while benzene was detected in soil sample MW-7 at 1.9 μ g/Kg. The cleanup level for benzene is 60 μ g/Kg and xylene is 1,200 μ g/Kg.

Cyanide was not detected in the soil samples from the MW-1 through MW-7 borings.

Cadmium, chromium, and mercury were above clean-up objectives. However, the exceedences chromium and mercury are minor and the concentrations are within typical ranges. Cadmium and silver are outside typical ranges. Silver's clean-up objective is established as the site background level. The HEAST values for cadmium and silver (80,000 µg/Kg and 200,000 µg/Kg) were not exceeded.

A sample was collected from the mounded soil on the Gorick property designated LS-1. Volatile organic 1,1,1-Trichloroethane was detected at 1.2 μ g/kg. Cyanide, pesticides, PCB, and BTEX constituents were not detected. Mercury was detected at 182 μ g/Kg which is slightly above the clean-up objective of 100 μ g/Kg.

3.5 Phase II Surface Soil Sampling Results

Three soil samples were collected from a depth of approximately 1 foot from the proposed building footprint. Table 3.4 show the laboratory results for these surface soil samples. No volatile organic constituents were detected. Bis (2 ethyl hexyl) phthalate was detected in all three samples well below the recommended soil clean-up level.

Pesticide 4,4' DDT was found in sample SS-2 (1.46 μ g/kg) and SS-3 (0.78 μ g/kg); the regulatory level for 4,4' DDT is 2100 μ g/kg. Chlordane was detected below the cleanup level (540 μ g/kg) in soil sample SS-2 at 2.9 μ g/kg.

Cadmium exceeded the Soil Clean-Up Objective and is outside typical ranges. Cyanide was found in soil sample SS-3 at 424 μ g/kg. The NYSDEC clean-up objectives for cyanide are determined or a site-specific basis. The HEAST value for total cyanide is 2,000,000 μ g/kg.

3.6 Phase II Groundwater Sampling Results

Table 3.5 summarizes the laboratory results of groundwater samples. Groundwater from wells FH-X-3, FH-X-9, and FH-X-12 were resampled in February 1994. The results correlate to the initial Phase I results. FH-X-12 appears most heavily contaminated with chlorinated solvents and their associated degradation products. Trichloroethcne is the primary contaminant; the Phase I concentration was 1,120 μ g/L and the Phase II concentration was 1,810 μ g/L in FH-X-12. The groundwater standard for trichloroethene is 5 μ g/L. The levels of total volatile organics were 13,577 μ g/L and 20,096 μ g/L respectively.

Similarly, FH-X-3 and FH-X-9 maintained a consistent order of magnitude of organic contaminants during Phase I and II sampling events. Trichloroethene levels were 120 µg/L and 99.2 µg/L in FH-X-3 and 20.3 µg/L and 7.8 µg/L in FH-X-9.

Monitoring wells MW-2 through MW-7 were sampled in February 1994 initially and resampled in March 1994. All wells were clean of volatile organic contaminants with the exception of MW-2. Tetrachloroethene was detected during the February 1994 sampling event at $8.6~\mu g/L$ but was not detected during the March 1994 sampling event.

Cyanide, pesticides, and PCBs were not detected in the groundwater samples from the site monitoring wells. Petroleum product constituent xylene was found in MW-1 at 1.6 µg/L.

Metals detected in the groundwater were below New York State groundwater standards with the exception of sodium and chloride in monitoring well FH-X-3 which may be attributed to the storage and transport of road salt at the site.

Laboratory data sheets may be found in Appendix D.

TABLE 3.3
SUMMARY OF ANALYTES DETECTED IN SOIL SAMPLES

Barlow Road, Kirkwood, NY February 1994

| | | | Charles and the second | Hoad, Kirkwint Concentra | Company of the local division in the local d | CONTRACTOR DESCRIPTION | | | | Recommended Soil | Typical Background Ranges |
|--|-------------------------|------------------|-------------------------|-----------------------------|--|------------------------|-------------------------|----------------------------|----------------------------|--|---|
| List of Pollutants Detected | L8-1 | MW-1 (4-6) | MW-2 (8-10) | MW-3 (8-10) | MW-4 (20-22) | MW-5 (6-8) | MW-6 (8-10) | MW-7 (8-10) | MW-7 (Composite) | Cleanup Objective (ug/kg) # | For Metals in Soil Provided by NYSDEC (ug/kg) |
| BTEX VOLATILES | | | 2 (xylene) | | | | | 1.9 (benzene | | 60 (benzene) 1200 (xylene) | |
| 1,1,1-Trichloroethane trans-1,2-Dichloroethene Trichloroethene 1,1-Dichloroethene | 1.2 | | 2.6 | 4.5 | 1.2 2.6 2.1 | | | 1.2 | | 800 300 700 400 | |
| RCRA METALS | | | | | | | | | | | |
| Barium Cadmium Chromium | 52,200 | 50,300 15,200 | 110,000 10,700 | 140,000 23,700 21,500 | 89,600 21,500 18,900 | 67,500 14,800 | 106,000 13,400 | 99,300 21,600 20,500 | 98,500 19,500 16,200 | 300,000 or SB 1,000 or SB 10,000 or SB | 300,000 - 500,000 500 - 1,000 10,000 - 40,000 |
| Lead Mercury Silver | 11,300 182 18,200 | 16,700 140 | 12,000 154 16,600 | 16,200 118 | 13,600 480 | 17,900 285 | 29,000 201 21,100 | 11,800 151 14,000 | 11,300 130 20,600 | 30,000 or SB 100 SB | 10,000 - 300,000 10 - 3,400 100 - 5.000 |
| | | | | | | | | | | | |

[#] As per TAGM 92-4046 Determination of Soil Cleanup Objectives and Cleanup Levels

N/A indicates that data was not available.

^{*} As lubrication oil

^{**} As kerosene

SB is site background.

TABLE 3.4
Summary of Analytes Detected in Surface Soil Samples
Building Footprint Barlow Road Kirkwood, NY March 1994

| | | | | Recommended Soil |
|-----------------------------|-------|-------|-------|-----------------------------|
| Pollutants Detected (ug/kg) | SS-1 | SS-2 | SS-3 | Cleanup Objective (ug/kg) * |
| SEMIVOLATILES | | | | |
| | 1 | 1 | | |
| Bis(2-ethylhexyl)phthalate | 290 | 190 | 180 | 50,000 |
| RCRA METALS | | | | |
| Barium | 33600 | 52600 | 55400 | 300,000 or SB |
| Cadmium | 10100 | 10100 | 15000 | 1,000 or SB |
| Lead | 12700 | 29100 | 41100 | 30,000 or SB |
| PESTICIDES | | | | |
| Chlordane | | 2.9 | | 540 |
| 4,4'DDT | | 1.46 | 0.78 | 2,100 |
| TOTAL CYANIDE | | | 424 | 2,000,000 ** |

^{*} As per TAGM 92-4046 Determination of Soil Cleanup Objectives and Cleanup Levels

^{**} From USEPA's Health Effects Assessment Summary Tables (HEASTS). These levels are based on assuming human oral ingestion of soil or sediment.

SB Site background

TABLE 3.5

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

NYSDOT Equipment Maintenance Facility, Barlow Rd., Kirkwood, NY

page 1 of 2

| | | | Po | llutant Con | centrations | in Ground | Water (ug/ | L) | | | Comparative C | riteria (ug/L) |
|-------|-----------|--|--|---|--|--|--|--|---|---|--|----------------|
| | FH-X | -3 | FH-X | (-9 | FH-X | (-12 | MW- | 1 | MW- | 2 | | |
| date> | 11/93** | 2/94 | 11/93** | 2/94 | 11/93** | 2/94 | 2/94 | 3/94 | 2/94 | 3/94 | NYS GWS# | TCLP |
| | • | | • | | • | | 1.6 | • | | | | |
| | | | | | | | (xylene) | | | | N/A | N/A |
| | | | | | | | | | | | 1 1 | |
| | 1.1 | | | | | 1.6 | | | | | 7 | 6,000 |
| | | | | | 1.1 | 2.2 | | | | | 5 | NA |
| | | | | | 7.9 | | | | | | 5 | 500 |
| | | | 1.4 | 1.5 | 1.6 | 2.4 | | | | | 5 | NA |
| | 13.4 | 4.6 | 1.9 | | 215 | 188 | | | | | 5 | NA |
| | | | | | 4.2 | 2.5 | | | 8.6 | | 5 | 700 |
| | | | | | 7.9 | 2.9 | | | | | 5 | NA |
| | 120 | 99.2 | 20.3 | 7.8 | 1,120 | 1,810 | | | | | 5 | 500 |
| | | | | | | | | | | | | |
| | 280 | 310 | | | | | 1,460 | | | ٠ ا | 1,000 | 100,000 |
| | | | | | | | l | ٠ ا | | | 5 | 1,000 |
| | 9,250,000 | | 145,000 | | 63,000 | | | | | ٠ ا | 250,000 | NA |
| | | | | | 1 | | | | | ٠. | 50 | 5,000 |
| | 2 | 6 | | 5 | 5 | 4 | 3 | ١. | 4 | ٠ ا | 15 | 5,000 |
| | | | | | | | | ٠. | | | 2 | 2,000 |
| | | | | | | | | ١ ٠ | | ٠ ا | 50 | 5,000 |
| | 4,240,000 | | 152,000 | | 17,800 | | | | | ٠. | <20,000 | NA |
| | | | | | | | | | | | | |
| | date> | date> 11/93** 1.1 13.4 120 280 9,250,000 2 | 13.4 4.6 120 99.2 280 310 9,250,000 | FH-X-3 FH-3 date> 11/83** 2/94 11/83** 1.1 1.1 1.20 99.2 20.3 280 310 9,250,000 2 6 | FH-X-3 FH-X-9 date> 11/93** 2/94 11/93** 2/94 1.1 1.1 1.2 1.3.4 4.6 1.9 120 99.2 20.3 7.8 280 310 9,250,000 145,000 2 6 5 | FH-X-3 FH-X-9 FH-X date> 11/93** 2/94 11/93** 2/94 11/93** 1.1 1.1 1.1 7.9 13.4 4.6 1.9 215 4.2 7.9 120 99.2 20.3 7.8 1,120 280 310 9,250,000 145,000 63,000 2 6 5 5 | FH-X-3 FH-X-9 FH-X-12 date> 11/93** 2/94 11/93** 2/94 11/93** 2/94 1.1 | FH-X-3 FH-X-9 FH-X-12 MW date> 11/93** 2/94 11/93** 2/94 11/93** 2/94 2/94 1.1 | date> 11/83** 2/94 11/83** 2/94 11/83** 2/94 2/94 3/94 1.1 | FH-X-3 FH-X-9 FH-X-12 MW-1 MW-1 date> 11/93** 2/94 11/93** 2/94 11/93** 2/94 2/94 3/94 2/94 1.1 | FH-X-3 FH-X-12 MW-1 MW-2 date> 11/93** 2/94 11/93** 2/94 2/94 2/94 3/94 3/94 2/94 3/94 <td> FH-X-9</td> | FH-X-9 |

[#] New York State 6 NYCRR Part 703 GA Standard or NY T.O.G.S. 1.1.10 guidance value.

Blanks indicate the pollutant was not detected

NA Not available

^{*} Pollutant(s) not analyzed

^{**} Phase I sampling event

TABLE 3.5

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
NYSDOT Equipment Maintenance Facility, Barlow Rd., Kirkwood, NY

| | | | | Pol | lutant Concentr | Pollutant Concentrations in Groundwater (ug/L) | In Ground | water (ug/L | | 3 | | Comparative Criteria (ug/L) | riteria (ug/L) |
|--------------------------|-------|------|------|------|-----------------|--|-----------|-------------|------|------|------|-----------------------------|----------------|
| Pollutants Detected | | MW-3 | 8 | MW-4 | * | MW-5 | 10 | MW-6 | 89 | MW-7 | 7 | | |
| | date> | 2/94 | 3/94 | 2/94 | 3/94 | 2/94 | 3/94 | 2/94 | 3/94 | 2/94 | 3/94 | NYS GWS# | TCLP |
| втех | | | | | | | | | | | * | | |
| VOLATILE ORGANICS | | | | | | | | | | | | | |
| Chloroform | | | | | | | | | | | | 7 | 0009 |
| 1,1-Dichloroethane | | | | | | | | | | | | NO. | ¥ |
| 1,2-Dichloroethane | | | | | | | | | | | | ю | 200 |
| trans-1,2-Dichloroethene | | | | | | | | | | | | ın | ¥. |
| cis-1,2-Dichloroethene | | | | | | | | | | | | NO. | ¥ |
| Tetrachloroethene | | | | | | | | | | | | ın | 700 |
| 1,1,1-Trichloroethane | | | | | | | | | | | | ĸ | ¥. |
| Trichloroethene | | | | | | | | | | | | NO. | 200 |
| BCBA METALS | | | | | | | | | | | | | |
| Barium | | | ٠ | | ٠ | | | | | × | ٠ | 90 | 100 000 |
| Cadmium | | | | | | | ٠ | | | | ٠ | ın | 1000 |
| Chloride | | | ٠ | | ٠ | | * | | * | | * | 250,000 | N A |
| Chromium | | | * | | * | | | | * | | • | 20 | 2000 |
| Lead | | | * | | | 4 | | 12 | | - | • | 15 | 2000 |
| Mercury | | | | | ٠ | | | | * | | * | 8 | 2000 |
| Silver | | | * | | ٠ | | * | | * | | * | 20 | 2000 |
| Sodium | | | * | | • | | ٠ | | | | | <20,000 | ¥ |
| | | | | | | | | | | | | | |

N w York State 6 NYCRR Part 703 GA Standard or NY T.O.G.S. 1.1.10 guidence value.
* Pc_utant(s) not analyzed
Blan i indicate the pollutant was not detected
NA h it available

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusion

Results indicate that groundwater contamination is present at the Barlow Road site. The primary contaminant is trichloroethene which was detected in the groundwater sample from monitoring well FH-X-12 at 1120 μ g/L and 1,810 μ g/L. This concentration level exceeds New York State guidance value of 5 μ g/L for trichloroethene as well as the TCLP regulatory level of 500 μ g/L which indicates that the groundwater would need to be classified as a hazardous waste based on the toxicity characteristic. Samples from monitoring wells FH-X-3 and FH-X-9 contained lower levels of trichloroethene (120 μ g/L, 99.2 μ g/L, and 20.3 μ g/L and 7.8 μ g/L respectively). The groundwater from these wells exceeds New York State guidance values for trichloroethene.

Seven (7) additional wells (MW-1 through MW-7) were installed to determine if the source of contamination was originating off-site. MW-1 and MW-2 were located as upgradient wells. MW-7 was positioned in a reported trench area where toluene had been disposed. MW-2, located approximately midpoint on the northern boundary of the site, was the only monitoring well exhibiting volatile organic contamination with tetrachloroethylene detected at $8.6~\mu g/L$. A subsequent sampling event did not find any volatile organic contaminants in this well.

The subsurface soil strata at Barlow Road is thought to be heterogeneous and groundwater flow may be meandering along subsurface channels. This condition may explain why groundwater contamination was found in FH-X-12, FH-X-3, and FH-X-9, and not in MW-3 and MW-4.

Soils did not exhibit significant organic contamination. Trichloroethene was detected at well locations FH-X-3, FH-X-9, and MW-3 in soil samples at 8.9 μ g/Kg, 3.6 μ g/Kg, and 4.5 μ g/Kg. These levels are well below the recommended clean-up standard of 700 μ g/Kg. The leachability of trichloroethene is considered relatively high and does not often remain attached to soil in high concentrations but rather migrates to groundwater with rain infiltration. Low levels of several chlorinated solvents and their degradation products were detected in soil samples. These low levels do not appear to be indicative of localized subsurface soil contamination.

Concentrations of certain metals were detected in soil samples at well locations above soil clean-up objectives, including cadmium, chromium, lead, mercury, and silver. However, only cadmium and silver were above typical ranges. Cadmium consistently showed up in soil samples from all well locations while silver showed up at five of the new well locations. The metals were not present in groundwater and may not pose a significant contamination problem. Salt was evident in groundwater. Sodium and chloride concentration were above the guidance values.

Based on this study, construction of the proposed building is not expected to be adversely affected by the site conditions nor render an impedance to subsequent site remediation. No demonstrated health concerns due to the existing groundwater contamination has been found. Furthermore, the Phase II Hazardous Waste

Assessment has not shown any significant evidence that the groundwater contamination originates from off-site sources.

While the study conducted of the adjacent Gorick property was limited in scope, soil vapor results, subsurface soil and groundwater analytical data do not indicate that the site is contaminated in a manner which would preclude acquisition by NYSDOT.

4.2 Recommendations

Since no off-site source has been identified, the NYSDEC may require that the NYSDOT undertake a remedial action to address groundwater contamination. The primary contaminant, trichloroethene, has low solubility and high volatility, and can be removed effectively via volatization. Design, construction, operation, maintenance, and testing of an on-site remedial alternative may cost the NYSDOT \$150,000 to \$400,000 over a three-year period depending on the clean-up option chosen.

In situ methods of volatization such as air sparging may not be effective due to the silt present in the saturated zone. Pumping groundwater through extraction or recovery wells is a feasible option. Treatment of recovered groundwater could be accomplished with an air stripper and/or carbon adsorption. However, if it is necessary to reduce sodium levels, an ion-exchange unit may need to be added in series. Treated water could be discharged to the Binghamton-Johnston City POTW with an industrial discharge permit or to Stratton Mills Creek with a SPDES Permit. NYSDOT may wish to explore 2 or 3 different remedial alternatives in a feasibility study which will include cost estimates and rank alternatives based on overall effectiveness.

The feasibility study offers the decision maker conceptual costs versus implementability versus effectiveness of appropriate remedial alternatives for the Barlow Road site.

Remedial technologies which may be evaluated in the feasibility study include in-situ air sparging, in situ biological treatment or hydraulic containment (slurry walls). Also, pump and treat systems using carbon adsorption instead of air stripping could be evaluated and ancillary treatment to remove salt from groundwater may need to be addressed. A limited report of this nature would likely cost between \$10,000 and \$15,000.

If an on-site recovery and treatment system is determined to be the most feasible option, it would be desirable to place a 4-inch well in close vicinity of FH-X-12. The current 2-inch well is not adequate for a recovery well in this location given the significant levels of trichloroethene. In conjunction with this well installation, the NYSDOT should consider placing 1 or 2 more wells east from FH-X-12 to ensure to eastward extent of the contaminant plume is being captured. The NYSDOT may also consider taking a soil sample at or near the surface in the vicinity of MW-3 and MW-7 and testing for metals using the Toxicity Characteristic Leaching Procedure (TCLP) to confirm that the metals present, especially cadmium and silver, will not likely leach into groundwater.

Field studies and analytical data have not shown contamination present at the Gorick site which would preclude property acquisition and building construction. While the potential for airborne health concerns during construction have not been demonstrated, it is recommended that the building contractor retain a health and safety officer capable of screening for hazardous material in the event questionable subsurface conditions are encountered during excavation.

5.0 LIMITATIONS

The purpose of an environmental assessment is to reasonable evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such and assessment (which may include professional opinions) is conducted.

No investigation is thorough enough to absolutely rule out the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not therefore be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

Environmental conditions may exist at the site that cannot be identified by visual observation. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our client, or where specific environmental contaminants have been previously reported by others, naturally occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.

Where the scope of services is limited to interview and/or review of readily available reports and literature, any conclusions, and/or recommendations are necessarily based largely on information supplied by others, the accuracy or sufficiency of which may not be independently reviewed by us.

Any opinions and/or recommendations presented apply to site conditions existing at the time of performance of services. We are unable to report on or accurately predict generally unforeseeable events which may impact the site following performance of services, whether occurring naturally or caused by external forces. Therefore, we cannot assume responsibility of such events or their impact.

We also cannot assume responsibility for changes in environmental standards, practices, or regulations.

APPENDIX A

Correspondence



STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION ONE MARINE MIDLAND PLAZA BINGHAMTON, N.Y. 13901-3330

RECEIVED

JAN 5 1984

STETSUN-HANZA

JOHN C. EGAN
COMMISSIONER

RICHARD R. CHURCH REGIONAL DIRECTOR

EQUIPMENT MAINTENANCE SHOP
BARLOW ROAD
TOWN OF KIRKWOOD
BROOME COUNTY, NEW YORK

MEETING NOTES
MONDAY, DECEMBER 20, 1993

ATTENDEES:

Richard Church, Director, NYSDOT Region 9
Gene Badger, Assistant to Director, NYSDOT Region 9
Ted Day, NYSDOT Regional Highway Maintenance
Ed Fahrenkopf, Director, NYSDOT Equipment Management
Ben Gardiner, Regional Equipment Manager
Don Herring, NYSDOT Equipment Management
Frank Moorhead, NYSDOT Regional Design Engineer
Bill Pasquale, NYSDOT Broome County Residency
Stan Preston, NYSDOT Region 9 Real Estate
Joel Robinson, NYSDOT Region 9 Environmental Coordinator
Mauricio Roma, NYSDOT Environmental Analysis Bureau
Paul Romano, Environmental Engineer, Stetson-Harza
Patricia Rosato, Environmental Engineer, Stetson-Harza
Tom Suozzo, NYSDEC Division of Hazardous Waste
Amy Maref, Environmental Specialist, NYSDOT Region 9

i. Project Overview

R. Church provided an overview of the proposed project. The project involves the construction of a new Equipment Maintenance Shop which will require a minimum of five acres to operate effectively. The Barlow Road site is five acres. In order to maintain some of the existing activities on the site additional property is required. Acquisition of the Gorick property would add another 2.5 acres to the project site.

Concurrently, there are several activities underway including: OGS design of facility, hazardous waste investigation, and purchase of Gorick property.

- R. Church summarized the issues to be addressed at the meeting:
- . Can the Gorick property be purchased based on the presence of hazardous waste?
- Can the existing site be salvaged for the purpose of an Equipment Maintenance Shop? If so, what is the timeframe? (before 4/1/94 or after 4/1/94)
- If a hazardous waste remedial plan is required, what is the timeframe for design and construction?
- Assuming the site is not feasible for the Equipment Maintenance Shop, what type of follow-up is required (i.e. what is the future of the site).

2. Hazardous Waste Investigation

A Hazardous Waste Investigation was conducted by Stetson-Harza. A Preliminary Draft Report summarizing the results was distributed at the meeting.

The field investigation included a geophysical survey using ground penetrating radar, soil vapor investigation, soil sampling from nine soil boring locations, and groundwater sampling from three monitoring wells.

Although the results of the investigation indicated that generally the borings, soil vapor and radar investigation showed minimal levels of contamination, trichloroethene (TCE) was above groundwater standards in the three monitoring wells. In well FHX-12 the groundwater failed TCLP limit of 500 ppb.

Based on the results of the groundwater monitoring, it is necessary for NYSDOT to identify the source of the TCE. To obtain more information with regard to the quality of groundwater, source of contamination, extent of contamination, and direction of groundwater flow additional wells will be required. Two monitoring wells should be installed north of FHX-12 at the property and one well adjacent to the Gorick property to the west (where new building is proposed). In addition, further soil gas vapor testing should be conducted at the Barlow Road site and Gorick property using a portable gas chronographer.

According to T. Suozzo, NYSDEC, the proposed building can be built on the site provided the following conditions are met:

Building will not inhibit remediation.

Workers will not be exposed to contamination during construction.

Once building is constructed there will be no impact on indoor air quality.

The Barlow Road site is a good candidate for State Superfund listing. T. Suozzo will discuss the project with Ralph Manna, NYSDEC Regional Director. NYSDEC will not initiate action to list the site until further investigation is completed.

Discussion ensued regarding the purchase of the Gorick property. It was recommended that monitoring wells to test groundwater quality and a soil gas vapor investigation be completed prior to property acquisition.

Stetson-Harza will prepare a workplan for the additional investigation required on NYSDOT's Barlow Road site and Corick property. The workplan will be reviewed by Region 9, EAB, and NYSEDC. It is anticipated that the workplan will be submitted the first week of January 1994 and field testing will be started in the second week of January 1994. Test results will be available by March 15, 1994.

3. Acquisition of Gorick Property

Conduct investigation of property prior to acquisition.

- S. Preston will request permission from Mr. Gorick to conduct field investigation on the site. The workplan will be reviewed with Mr. Gorick so that he clearly understands the scope of NYSDOT's investigation.
- 4. Legal and Financial Issues
- E. Fahrenkopf with R. Church will contact Darrell Harp regarding legal issues and Mike McCarthy regarding financial issues (move letting date to next year).
- A. Zaref will contact Greg Menard, Consultant Management regarding funding for the additional investigation.

1.2/28/93

ABZ1:965002NT.MTG



Breeme County
HEALTH DEPARTMENT
One Wall Street / Binghamton, New York 12901 / (607) 778-8865

David E. Wertman, M.P.A., Public Health Director

Timothy M. Grippen, County Executive

February 15, 1994

Amy Saref Environmental Specialist MYSDOT Design Section Binghanton Regional Office 81 State St. Binghanton, MY 13901

Re: MYSDOT Equipment Maintenance Yard Investigation 12 Barlow Road, Kirkwood

Dear Ms. Baref:

The Broome County Health Department (BCHD) has reviewed the preliminary site investigation report for the above-referenced facility. A number of recommendations are listed below; these are intended to ensure that sufficient data is collected to characterise potential threats to human health and the environment during Phase II of the site investigation.

- (1) Workers excavating in the area of the proposed new building could be exposed to site-related chemicals either through inhalation of fugitive dust, skin contact or accidental ingestion of soil. In addition, dust generated during foundation or grading work could blow off-site and potentially affect people living or working there. It is therefore recommended that a comprehensive sampling effort be directed at the area of the proposed new building to determine whether or not surface and subsurface soils there are contaminated. Since the site as a whole has been used as an equipment yard for a number of years, and it is unclear what, if any, maintenance-related activities took place in the footprint of the proposed building, it is recommended that at least several surface soil samples be collected here and analyzed for heavy metals, volatile and semi-volatile chemicals. A similar effort should be made to characterise potential subsurface contamination in the area of the proposed new building, at least down to the level of the deepest proposed excavation.
- (2) Background soil and groundwater samples should be collected to determine whether chemicals detected at the storage yard are site-related, or part of a larger area-wide problem.
- (3) It is possible that equipment used to apply herbicides was stored, washed or loaded at the facility under

investigation. Soil samples collected during Phase II should therefore target this class of chemicals, in addition to the other groups of potential pollutants analysed for during Phase I.

- (4) Soil gas results indicate that VOC hot spots exist near the existing one-story wood frame building, and to the north and south of the drum storage area. These may be indicative of solvent contamination in vadose sone soils. It is recommended that further investigations be performed at these locations to characterise the types and concentrations of chemicals present.
- (5) It is recommended that cyanide be added to the list of analytic parameters when groundwater samples are tested. This compound, or closely-related chemical variants, is often used in small amounts as an anti-caking agent in road salt, a material that appears to be abundant on-site.
- (6) Development and purge water removed from on-site monitoring wells should be drumed for later disposal, especially in areas with known groundwater problems. This would prevent cross-contamination of previously clean surface soils, thereby minimizing future clean-up costs and preventing exposure to workers at the facility.
- (7) It is recommended that a Health and Safety Plan be developed for future construction and/or remedial activities at this site. The plan should assess the potential risks to human health posed by exposure to the various chemical contaminants detected on-site, and suggest methods (such as dust control, the use of protective clothing, etc.) to minimize these risks.
- (9) Samples should be collected in the vicinity of the drum storage area after soils are excavated to ensure that all contamination has been removed.
- (9) The lateral extent of the silt layer underlying the site should be documented in one or more geologic cross sections. A water table contour map would also be useful in determining contaminant migration directions in the subsurface.

questions concerning this matter.

Very Truly Yours,

Ronald S. Brink

Groundwater Management

Specialist

cc: Tom Sucsec - MYSDEC Kirkwood

RSB/disk MYSDOT.wpf



Broome County HEALTH DEPARTMENT One Wall Street / Binghamton, New York 12901 / (607) 778-8885

David E. Wertman, M.P.A., Public Health Director

Timothy M. Grippen, County Executive

| DATE/TIME: Feb. 15, 1994 PLEASE DELIVER THE FOLLOWING PAGES TO: AMU Zaler, Design Scot. FROM: Con Stink FAX NO. (607) 778-2838 TOTAL NUMBER OF PAGES INCLUDING COVER: IF ALL PAGES ARE NOT RECEIVED, PLEASE CALL (607) 778-2802. |
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| NOTES: |
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STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION ONE MARINE MIDLAND PLAZA BINGHAMTON, N.Y. 13901-3330

RECEIVED

MAR 1 8 1994

STEISUN-HAKZA

JOHN C. EGAN COMMISSIONER

RICHARD R. CHURCH REGIONAL DIRECTOR

March 15, 1994

Broome County Health Department One Wall Street Binghamton, New York 13901

Attn:

Ronald S. Brink

Groundwater Management Specialist

Re:

PIN 9650.02.301 NYSDOT Region 9

Equipment Maintenance Shop

Barlow Road Town of Kirkwood Broome County

Dear Mr. Brink:

I am writing to confirm our recent telephone conversation regarding your letter of February 15, 1994 regarding recommendations relative to the Phase II site investigation for the above referenced project.

- 1. Three surface soil samples were obtained at a depth of 1-2 feet on March 14, 1994 and will be analyzed for heavy metals, volatile and semi-volatile chemicals, pesticides, and cyanide. Comprehensive sampling of the subsurface soils has been performed in and around the footprint of the proposed building during Phases I and II of the site investigation. Based on the soil gas investigations and subsurface soil samples it does not appear that there are contaminants that would have an effect on worker safety during construction of the building.
- 2. Soil and groundwater samples were obtained from ten (10) monitoring wells on DOT's site and Mr. Gorick's property to the west. The ten monitoring wells provide adequate information regarding the background soil and groundwater conditions in the project area.
- During the Phase II site investigation seven (7) soil samples were tested for the presence of pesticides. The test results indicated non-detectable levels of pesticides in all seven samples.

- 4. The soil in the vicinity of the drum storage area will be scraped to approximately one (1) foot during the remediation of that area of the site. Soil testing in this area will be performed as part of this remediation effort.
- 5. The presence of cyanide was tested in the seven soil samples during the Phase II site investigation. The test results indicated non-detectable levels of cyanide in all seven samples. Groundwater samples from monitoring wells 1 7 were taken on March 14-15, 1994. The groundwater samples will be tested for cyanide.
- 6. Development and purge water removed from the on-site monitoring wells has been drummed and will be properly disposed of to prevent cross contamination of previously clean surface soils.
- 7. A Health and Safety Plan will be developed for future construction and remedial activities at the site. The Plan will assess the potential risks to human health posed by exposure to the various contaminants detected on-site, and suggest methods to minimize risks.
- 8. Soil samples will be collected in the vicinity of the drum storage area after the soils are excavated to ensure that all contamination has been removed. Efforts are currently underway to procure services for the removal of the drums and contaminated soils.
- 9. Stetson-Harza will provide a geologic cross section that documents the lateral extent of the silt layer underlying the site and a water table contour map in their report summarizing the results of the Phase II site investigation.

If you have any questions or require any additional information please feel free to call me at 771-5592. Thank you for your assistance in this matter.

Very truly yours,

Amy B. Zaref

Environmental Specialist

amy 3 zaref

c: R. Church

T. Suozzo

M. Roma

file (2)

blue

2871 - 965002 -h

TELECON



181 Genesee Street Utica, New York 13501-2168 (315) 797-5800 FAX (315) 797-8143

Stetson-Harza No. 6793

Date:

March 18, 1994

Confirming conversation on March 11, 1994 among M. Roma, NYSDOT EAB; A. Zaref, NYSDOT Region 9; P. Rosato, S-H

Subject:

Barlow Road Hazardous Waste Investigation

- Phase II has initially indicated that NYSDOT may be the source of groundwater contamination at the site. If NYSDOT is the source, wouldn't contamination be present in MW-3 and not MW-2? May be due to heterogeneity of material or hydraulic gradient; source may be east of MW-2, limited data to the east of MW-2.
- Monitoring well No.2 up-gradient at the fence line contained 8.6 ppb PCE.
- Soil samples detected low level of contaminants which seem to be reflective of groundwater contamination.
- The lack of contamination in MW-3 is puzzling.
- M. Roma requested review of soil boring logs to determine heterogeneity of the soil.
- Consensus that second round of sampling is appropriate for MW1-7. Samples to be analyzed for EPA 8010 and CN.
- Three surface samples will be collected from 0 to 2 feet and analyzed for target compound list volatile and semi-volatile organic compounds, pesticides, metals and cyanide per request of Broome County Health Department.
 - M. Roma has suggested a soil gas survey grid near the north fence line later in the spring. Material stockpiled in area will need to be relocated.
- Gorick has an injection well on site. EPA has this data and requested Gorick to remove it.
- Feasibility Study for site remediation may use a geoprobe on the Gorick site and at the north end of the property for soil gas using a PID to investigate the source of PCE and TCE after NYSDOT has cleared the area. This activity may be concurrent with building construction.
- NYSDOT is proceeding with plans to acquire Gorick property to the west of the NYSDOT site and construction of the equipment maintenance building.

PR/dms 3/18/94

APPENDIX B

Boring Logs, Well Development Logs, Well Drawings

Stetson-Harza Boring No. <u>TB-7 (MW-1)</u> Sheet <u>1</u> of <u>1</u> A HARZA COMPANY Comments/Figures: Bottom of well set at 20' 10' screen from 20' to 10' Project: NYSDOT Barlow Road S-H # 6793 Sandpack from 20' to 8' Bentonite seal from 8' to 5' Grout from 5' to surface **Method of Investigation** Lockable steel protective casing installed Driller: North Star Drilling Drill Method: HSA 4 1/4° ID Date Started: 2-16-94 Soil Sampler: Continuous Date Completed: 2-16-94 Continuous Split Spoon Sample Hammer: Wt: 140 lb. Fall 30 in. N Rec **Material Description** Strata Remarks Depth Samp. Sample Depth Blows on Sampler Change From To per 6 inches # (ft) Depth (R) Brown Silty SAND and GRAVEL 1 0 3 6 11 2 6 20 9 10 3 15 50/.3 Brown fine to coarse SAND and GRAVEL, trace 20 21 24 19 16 SILT (dry) 45 10 10 16 18 23 22 6 10 12 6 11 18 15 29 Brown-reddish SAND, GRAVEL, some SILT (some 12 29 19 18 15 37 24 moisture) 7 14 15 15 17 6 15 24 22 8 Brown-reddish SAND, GRAVEL, some SILT (wet) 20 18 20 6 8 10 14 18 20 E.O.B.

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|----------------------|-------|--------|------------------------|----------|---------------|-----------------|--------------|------------|--|------------------|--|
| S | e | S | Of | | | ar | \mathbf{Z} | 9 | Boring No. TB-8 (MW-2) | Sheet | 1 of1 |
| | | | RZ | | | | | | Comments/Figures: | | |
| Project | NYS | | now Road | | | H# | 6793 | | Bottom of well set at 17' 10' screen from 17' to 7' Sandpack from 17' to 5' Bentonite seel from 5' to 3' Grout from 3' to surface | | |
| | | | od of In | | ition | | | | Lockable steel protective casing installed | | |
| Driller: Drill Me | had: | | Star Drilli 1/4" ID | ng | | | | - | | | |
| Date St | | 2-17-9 | | Date C | ompl | eted: | 2-17 | -94 | | | |
| Soil Sar | | | uous Spl | | | | | | ** | | |
| Sample | Hamme | r: Wt: | 140 | lb. F | all _ | 30 in. | | | | | |
| | | 1 | | | - | | T - | _ | | | |
| Depth | Samp. | From | Depth To | | on S 6 inc | Sampler ches | N | Rec | Material Description | Strata Change | Remarks |
| | | (11) | (11) | | | | \vdash | - | | Depth | |
| 1 | - | 0 | 2 | 1 | 2 | 3 ; | 3 5 | - | Brown topsoil, ice, SILT, SAND | | |
| 1 | 1 | - 0 | 2 | 1 | | 3 . | 1 3 | 1 | Brown Silty SAND, fine to coarse | | |
| 1 | 2 | 2 | 4 | 3 | 2 | 3 : | 3 5 | 6 | Comit Siny Grand, fine to comite | | |
| 5 | | - | | | - | | | 1 | Brown, green and red Silty SAND (moist) | | |
| | 3 | 4 | 6 | 2 | 2 | 8 1: | 2 10 | 20 | 1 | | |
| 1 | | | | | | | | | Brown fine to coerse SAND and GRAVEL (moist) | | |
| | 4 | 6 | 8 | 12 | 10 | 19 2 | 2 28 | 4 | | | |
| | | | | | | | | _ | Brown-gray SAND, GRAVEL (wet) | | |
| 10 | 5 | 8 | 10 | 39 | 15 | 25 1 | 0 40 | 8 | • | | |
| | | - | | | | | - | - | Top 4" brown Sandy SILT (moist). Rest brown, green | | |
| | 6 | 10 | 12 | 15 | 14 | 22 2 | 36 | 20 | and red SAND and GRAVEL, trace SILT (dry to moist) Brown-gray fine to ocerse SAND and GRAVEL | | * |
| 1 | 7 | 12 | 14 | 22 | 25 | 21 1 | 9 46 | 21 | | | |
| 15 | - | 12 | 14 | -22 | 25 | 21 1 | - | 21 | 1 | | |
| 10 | | | | | | 1.15 | \top | | Brown and gray fine to coarse SAND and GRAVEL | 1 | |
| 17 | 8 | 15 | 17 | 6 | 14 | 21 1 | 8 3 | | some SILT | | |
| | | | | | | | 1.0 | | E.O.B. | | |
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Stetson-Harza Boring No. TB-9 (MW-3) Sheet _ 1 of _ 1 A LARZA COMPANY Comments/Figures: Bottom of well set at 25.5' 6" sump to 25" Project: NYSDOT Barlow Road S-H # 6793 10' screen from 25' to 15' Sandpack from 25.5' to 12' Bentonite seal from 12' to 9' Method of Investigation Grout from 9' to 1' Driller: North Star Drilling Flush mount curb box installed HSA 4 1/4" ID; Pilot 6 1/2" ID final Drill Method: Date Completed: Date Started: 2-14-94 2-15-94 Soil Sampler: Continuous Split Spoon Sample Hammer: Wt: 140 lb. Fall 30 in. **Material Description** Depth Samp. Sample Depth Blows on Sampler N Rec Strata Remarks From To per 6 inches Change (11) Depth (ft) Brown SILT and fine SAND 10 18 Top 8" brown SILT, rest GRAVEL and SAND 4 8 18 26 16 Brown GRAVEL 3 6 28 37 50 65 14 8 50/.3 4 Brown Silty SAND and GRAVEL (moist) 10 8 20 25 50/.3 12 Driller switched to 4 1/4" 10 7 12 18 40 30 auger to finish hole. Will 18 Brown Clayey SILT, SAND and GRAVEL redrill with 6 1/2" upon 12 25 15 16 14 31 18 completion (soil is 'boney') .15 15 Brown Clayey SILT (bottom 4" wet) 15 17 4 4 6 8 10 20 Reddish brown and green Sandy SILT and CLAY 4 6 8 8 14 24 (moist) saturated 20 25 Brown Sandy SILT, some CLAY, little fine GRAVEL (wet) 27 4 8 8 12 16 24 E.O.B.

| S | e | S | Of | | | a | | | | Boring No. TB-10 (MW-4) | Sheet | |
|--|--------------------------|-----------------------------|--|---|-----------------------------|--------|-----|---------------|-----|--|---------------------------|--|
| | | ЦД | S. 1990 Section 1 | 000000000000000000000000000000000000000 | Chicken Co. | | | | | Comments/Figures: | | |
| Project: Driller: Drill Met Date Str Soil Sample | hod: arted: npler: | HSA 4 2-17-94 Continu | od of In Star Drilli 1/4" ID; I | rvestigating Pilot 6 Date C | ation 3 1/2" Complete | ID fin | al | 6793 2-18- | | Bottom of well set at 20' 6" sump to 19.5' 10' screen from 19.5' to 9.5' Sandpack from 20' to 7' Bentonite seel from 7' to 4' Grout from 4' to 1' Flush mount curb box installed | | |
| Depth | Samp. | Sample From (ft) | Depth To | Blows | s on S r 6 inc | | ler | N | Rec | Material Description | Strata Change Depth | Remarks |
| | | (1.5) | (10) | | | | | | | Brown SILT with coarse SAND and GRAVEL | оори: | |
| | 1 | 0 | 2 | 8 | 12 | 5 | 4 | 17 | | Brown-gray fine to coarse SAND and GRAVEL, tr. SILT | | Water getting into spoon |
| 5 | 2 | 2 | 4 | 8 | 14 | 22 | 16 | 36 | 4 | | | by draining into hole from ice on surface |
| | 3 | 4.5 | 6 | | 42 | 27 | 29 | 69 | 6 | Brown SAND and GRAVEL, trace SILT | | |
| | 4 | 6 | 8 | 32 | 31 | 34 | 42 | 65 | 24 | Brown SAND and GRAVEL | | |
| 10 | 5 | 8.5 | 10 | | 17 | 21 | 34 | 38 | 12 | | | |
| | | | | | | | | , | | | | |
| | | | | | _ | | | | | | | |
| 15 | | | | | | | | | | Brown Clayey SILT | 15 | |
| | 6 | 15 | 17 | 6 | 8 | 11 | 11 | 19 | 22 | | | |
| 20 | | | | | | | | | | | | |
| | - | ~ | ~ | - | 7 | 40 | 40 | 47 | - | Brown,red and green Clayey SILT, some SAND | - | |
| 22 | 7 | 20 | 22 | 6 | 7 | 10 | 12 | 17 | 20 | E.O.B. | | |
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Stetson-Harza Boring No. TB-11 (MW-5) Sheet _ 1 of _ 1 A HARZA COMPANY Comments/Figures: Bottom of well set at 16' Project: NYSDOT Barlow Road S-H# 6793 10' screen from 16' to 6' Sendoeck from 16' to 4' Bentonite seal from 4' to 1' Grout from 1' to surface Method of Investigation Flush mount curb box installed Driller: **North Star Drilling** Drill Method: HSA 4 1/4" ID 2-21-94 Date Started: 2-21-94 Date Completed: Soil Sampler: Continuous Split Spoon Sample Hammer: Wt: 140 lb. Fall 30 in. Remarks **Material Description** Strata Depth Samp. Sample Depth Blows on Sampler Rec Change From To per 6 inches Depth (ft) **(ft)** Moist SILT, fine SAND and little GRAVEL 9 14 3 6 10 10 15 16 31 12 18 Brown fine to coarse SAND and GRAVEL (moist to 5 10 16 15 14 31 22 wet), trace SILT Brown fine to coarse SAND and GRAVEL (wet), 4 45 43 28 24 71 14 trace SILT Brown fine to coarse SAND and GRAVEL (dry), 5 10 7 16 20 22 20 trace SILT 10 36 Top half SAND and GRAVEL: bottom brown and red 20 SILT (moist to wet) -----10 12 19 12 12 12 24 11 6 Brown SILT, trace SAND (some reddish color), trace 7 12 14 9 12 14 14 26 24 STONE 15 E.O.B.

| S | e | is | Dſ | | | a | | 7 | 3 | Boring No. <u>TB-12 (MW-6)</u> | Sheet | 1 of1 |
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| | A | НΑ | RZ | 4 c | ОМІ | PAN | Υ | | | Comments/Figures: | | |
| Project: | NYS | DOT Ber | low Rosc | | _ | S-H ® | | 6793 | • | Bottom of well set at 35' 10' screen from 38' to 28' Sandpack from 38' to 26' Bentonite seal from 26' to 23' Grout from 23' to 1' Flush mount curb box installed | | |
| Driller: Drill Met Date Str Soil San Sample | arted: npler: | North S HSA 4 2-21-94 Continu | tar Drilli 1/4° ID lous Spl | Date C | Compl | eted: | | 2-21 | 94 | | P | , |
| Depth | Samp. | Sample | То | 1000 | s on S or 6 in | | ler | N | Rec | Material Description | Strata Change Depth | Remarks |
| | - | (ft) | (ft) | | | | - | _ | \vdash | Moist dk. brown SILT, some fine to coarse SAND with | Deptri | |
| | 1 | 0 | 2 | 3 | 4 | 4 | 3 | 8 | | organics (topsoil) | | |
| | | 1 4 | | 3 | | - | 3 | ° | 1 | Moist brown fine to medium SAND, some coarse SAND, | | • |
| | 2 | 2 | A | 10 | 10 | 16 | 17 | 26 | | little fine GRAVEL | | |
| 5 | - | 1 | | ,,, | 10 | 10 | | - | | Moist brown fine to coarse SAND, some fine to coarse | | |
| _ | 3 | 4 | 6 | 16 5 | 50/.4 | | | | | GRAVEL, little COBBLES | | |
| | _ | | | | - | | | | | | | |
| | 4 | 6 | 8 | 16 | 19 | 22 | 27 | 41 | | 1 | | |
| 1 | | | | - | | | | | | 1 | | |
| 10 | 5 | 8 | 10 | 14 | 21 | 24 | 30 | 45 | | 1 | | |
| | | | | | | | | | | 1 | | |
| | 6 | 10 | 12 | 18 | 19 | 40 | 28 | 59 | | | | |
| | | | | | | | | | | | | |
| | 7 | 12 | 14 | 17 | 26 | 20 | 20 | 46 | | | | |
| 15 | | | | | | | 7 | | | | 1 | |
| | | | | | | | | | | | | |
| | 8 | 15 | 17 | 8 | 14 | 14 | 15 | 28 | | Dry brown fine to coarse SAND and GRAVEL | | |
| | | | | | | | | | | | | |
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| | 10 | 25 | 27 | 7 | 14 | 16 | 25 | 30 | 1 | - | | |
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| 30 | | 1 | | | | | | - | | | | |
| 30 | | 1 | | | | | | _ | 1 | Brown fine to coarse SAND and GRAVEL, little to | | |
| | 11 | 30 | 32 | 18 | 20 | 18 | 16 | 38 | | some SILT (wet) | | |
| | | 1 | 04 | - | | | | | | | | |
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| 35 | | | | | | | | | | 1 | | |
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| | | 1 5 7 1 | 148 07 | a hys | 15 A | | | | | | | |
| | | 1 | No. | | de . | | | | | Wet brown compact fine to coarse SAND, little SILT, | | |
| 40 | 12 | 38 | 40 | 8 | 10 | 12 | 18 | 22 | _ | trace CLAY | | |
| | | | 1 7 1 | | | 11 | | | | E.O.B | | |
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| | | | RZ | | | | | | | Comments/Figures: | | * 1 |
| Soil Sa | t: NYS | Meth North & HSA 4 2-15-9 Continu | nod of In Star Drilli 1/4" ID; 4 uous Spl | vestiga ng Pilot 6 Date C it Spooi | ation | ID fin | al | 5793 2-15- | | Bottom of well set at 19.5' 6" sump to 19' 10' screen from 19' to 9' Sendpeck from 19.5' to 7' Bentonite seel from 7' to 4' Grout from 4' to surface Flush mount curb box installed | | |
| Depth- | Samp. | Sample From | Depth To | Blows | on S 6 inc | | or | N | Rec | Material Description | Strata Change Depth | Remarks |
| | | | | | | | | | | Brown SILT, topsoil | | |
| | 1 | 0 | 2 | 5 | 4 | 5 | 9 | 9 | 18 | Brown SAND and fine to medium GRAVEL | | |
| | 2 | 2 | 4 | 7 | 19 | 22 | 18 | 41 | 4 | BIOWIT GRAND BIR HIN OF THE BIR HIN | | |
| 5 | +- | 45 | | | 40 | | 20 | 63 | - | Lt. brown broken GRAVEL and SAND | | |
| | 3 | 4.5 | 6 | | 19 | 44 | 20 | 63 | - 0 | LL brown Clayey SILT, SAND, some GRAVEL | | |
| | 4 | 6 | 8 | 9 | 14 | 9 | 14 | 23 | 16 | | | |
| 10 | 5 | 8 | 10 | 12 | 13 | 34 5 | 0/4 | 47 | 8 | Brown coarse SAND, fine to medium GRAVEL, some SILT | | |
| | | | | | | | | | | Brown Clayey SILT with coarse SAND and GRAVEL | | |
| | 6 | 10 | 12 | 9 | 16 | 21 | 21 | 37 | 22 | LL brown SILT, SAND and GRAVEL | | |
| | 7 | 12 | 14 | 40 | 38 | 36 | 28 | 74 | 18 | • | | |
| 15 | - | | | | | | - | | _ | | | |
| | 8 | 15 | 17 | 15 | 19 | 20 | 28 | 39 | 16 | Brown SAND and GRAVEL (wet) | | |
| | | | | | | | | | | | | |
| 20 | | - | | | | | - | | - | | | |
| 20 | | 1 | | | | | - 1 | | | | | |
| 22 | | | | | | | | | | Brown SAND and GRAVEL (very wet) | | ÷ |
| | 9 | 20 | 22 | - 11 | 15 | 20 | 32 | 35 | 24 | | | ÷i |
| | 9 | 20 | 22 | . 11 | 15 | 20 | 32 | 35 | 24 | Brown SAND and GRAVEL (very wet) | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 244 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | | 11 | 15 | 20 | 32 | 35 | 24 | | | |
| | 9 | 20 | 22 | 11 | 15 | 20 | 32 | 35 | 24 | | | |

Project: NYSDOT BARLOW ROAD Well #: MW-1

Project #: 6793

Date Started: 2-17-94 Elevations: TOR (Top of Riser): 897.4

Ground Level: 896.5

Bottom of Well:

Development Method: PERISTALTIC PUMP

Developed By: JLB

 Initial Water Level (TOR):
 13.0
 Date:
 2-17-94
 Time:
 1520

 Final Water Level (TOR):
 18.0
 Date:
 2-17-94
 Time:
 1700

1 Well Volume = 8.35 gallons
Total Volume Removed: 25 gallons

| | | Critoro | | Temp | Conductivity | Truspielity | |
|---------|------------|---------|------|------|--------------|-------------|-------------------|
| Date | Time | #Gmeyed | 28 | (8) | (Umino/em.) | (NTU) | Comments |
| 2-17-94 | 1520 | initial | 7.10 | 9.6 | 430 | >200 | |
| | | 5 | 7.03 | 10.2 | 420 | >200 | |
| | | 10 | 7.16 | 9.8 | 380 | >200 | |
| | | 15 | 7.14 | 9.8 | 380 | >200 | |
| | 4.0 | 20 | 7.16 | 9.7 | 375 | >200 | |
| | | 25 | 7.17 | 9.4 | 360 | >200 | |
| | | | | | | | discontinued |
| | | | | | | | pumping @ 25 gal. |
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Project: NYSDOT BARLOW ROAD Well #: MW-2

Project #: 6793

Date Started: 2-18-94 Elevations: TOR (Top of Riser): 892.1

Ground Level: 890.4

Bottom of Well:

Development Method: PERISTALTIC PUMP

Developed By: JLB

 Initial Water Level (TOR):
 9.5
 Date:
 2-18-94
 Time:
 900

 Final Water Level (TOR):
 17.5
 Date:
 2-18-94
 Time:
 Time:

Final Water Level (TOR): 17.5 Date: 1 Well Volume = 8.14 gallons

Total Volume Removed: 25 gallons

| | | Callens | | Temp | Conductivity | HUIO GIR | |
|---------------|----------------------|---------------|------|------|--------------|------------|-------------------|
| Date | Time | (2(em/e)//e/d | 92 | (9) | (Brobio/em.) | (800) | Comments |
| 2-18-94 | 900 | initial | 6.98 | 8.2 | 300 | >200 | |
| | | 5 | 7.11 | 8.4 | 320 | 154 | |
| | | 10 | 7.21 | 8.6 | 300 | >200 | |
| | | 15 | 6.96 | 7.6 | 300 | >200 | 2 |
| | | 20 | 6.62 | 8.7 | 300 | 87 | |
| | | 25 | 6.85 | 9.2 | 280 | >200 | |
| | | | | | | | discontinued |
| | | | | | | | pumping @ 25 gal. |
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| Project: NYSDOT BA | RLOW ROAL | <u> </u> | _Well #: | MW-3 | | |
|--------------------------|-----------|----------|---------------|-----------------|-------|-------|
| Project #: 6793 | | | - - | | | |
| Date Started: | 2-16-94 | | Elevations: | TOR (Top of Ris | er): | 885.2 |
| | | | _ | Ground Level: | | 885.5 |
| | | | | Bottom of Well: | | |
| Development Method: | PERISTAL | TIC PUMP | _ | _ | | |
| Developed By: | BEP, JLB | | _ | | | |
| Initial Water Level (TOF | R): | 10.6 | Date: | 2-16-94 | Time: | |
| Final Water Level (TOR) |): | 18.6 | Date: | 2-17-94 | Time: | |
| 1 Well Volume = | 19 | gallons | _ | | | |

60 gallons

| | | Californ | | Hame | (empletelivity) | atture) (eligy | |
|---------|---------------|----------|------|------|-----------------|----------------|-------------------|
| Date | Time | Removed | ρН | (8) | (umho/em.) | (NTU) | Comments |
| 2-16-94 | | 30 | | | | | pumped 30 gal. |
| | | | * | | | | 2-16-94 |
| | | | | | | | |
| 2-17-94 | | 35 | 6.76 | 7.6 | 460 | 105 | |
| | | 40 | 6.85 | 8.6 | 520 | 140 | |
| | | 45 | 6.74 | 8.3 | 440 | >200 | |
| | | 50 | 6.64 | 9 | 435 | >200 | |
| | | 55 | 6.84 | 9.5 | 400 | >200 | |
| | | 60 | 6.70 | 9.4 | 420 | >200 | discontinued |
| | | | | | | | pumping @ 60 gal. |
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| | and allow the | No. of | | | | | |

Comments:

Total Volume Removed:

MW-4

Well #:

Ground Level:

Bottom of Well:

Development Method: PERISTALTIC PUMP

NYSDOT BARLOW ROAD

Developed By: BEP

Project:

 Initial Water Level (TOR):
 15.4
 Date:
 2-21-94
 Time:
 1330

 Final Water Level (TOR):
 16.5
 Date:
 2-22-94
 Time:
 1030

1 Well Volume = 7.2 gallons
Total Volume Removed: 24 gallons

| | Gallons | | Temp. | Conductivity | Turbleny | |
|------|---------|-------------------------------|---|---|--|---|
| Time | Removed | pН | (C) | (umho/cm.) | (NTU) | Comments |
| 1330 | initial | 6.50 | 9.1 | 460 | >200 | |
| | 5 | 6.60 | 9.1 | 450 | >200 | pumped dry |
| | | | | | | @ 10 gal.@ 1440 |
| 900 | | | | | | continued pumping |
| | | | | | (| 2-22-94 @ 10 gal. |
| | 1 1 | | | | | |
| | 25 | 6.22 | 7.1 | 560 | 95 | |
| * | | | | | | discontinued |
| | | | | | | pumping @ 25 gal. |
| | | | | | | @1030 WL=16.5 |
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| | | Time Removed 1330 initial 5 | Time Removed pH 1330 initial 6.50 5 6.60 900 initial(10) 5.75 15 5.77 20 6.18 | Time Removed pH (C) 1330 initial 6.50 9.1 5 6.60 9.1 900 initial(10) 5.75 7.9 15 5.77 6.8 20 6.18 6.8 | Time Removed pH (C) (umho/cm.) 1330 initial 6.50 9.1 460 5 6.60 9.1 450 900 initial(10) 5.75 7.9 540 15 5.77 6.8 530 20 6.18 6.8 540 | Time Removed pH (C) (umho/cm.) (NTU) 1330 initial 6.50 9.1 460 >200 5 6.60 9.1 450 >200 900 initial(10) 5.75 7.9 540 >200 15 5.77 6.8 530 55 20 6.18 6.8 540 93 |

Comments:

Project: NYSDOT BARLOW ROAD Well #: MW-5

Project #: 6793

Date Started: 2-22-94 Elevations: TOR (Top of Riser): 890.4

Ground Level:

Bottom of Well:

Development Method: PERISTALTIC PUMP

Developed By: BEP

 Initial Water Level (TOR):
 2.0
 Date:
 2-22-94
 Time:
 1230

 Final Water Level (TOR):
 6.0
 Date:
 2-22-94
 Time:
 1310

1 Well Volume = 9 gallons

Total Volume Removed: 28 gallons

| | | Gallons | | Temp. | Conductivity | Turbidity | |
|---------|--------|---------|------|-------|--------------|-----------|-------------------|
| Date | Time | Remove: | 99 | (0) | (timbo/ens) | (NTU) | Comments |
| 2-22-94 | 1230 | 5 | 5.50 | 5.8 | 400 | >200 | |
| 1 1 | | 10 | 5.60 | 5.6 | 400 | >200 | |
| | | 15 | 5.52 | 4.5 | 460 | >200 | |
| 1 | | 20 | 5.90 | 4.4 | 450 | >200 | |
| | | | | | | | discontinued |
| | | | | | | | pumping @ 28 gal. |
| 1 | | | | | | | pumping & 20 gai. |
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| | DEV 13 | | | | | | |

NYSDOT BARLOW ROAD Well #: MW-6 Project: Project #: 6793 Elevations: TOR (Top of Riser): 2-22-94 877.7 **Date Started: Ground Level: Bottom of Well:** Development Method: PVC bailer **Developed By: BEP** Initial Water Level (TOR): 28.4 Date: 1100 2-22-94 Final Water Level (TOR): Date: Time:

1 Weil Volume = 6.8 galions

Total Volume Removed: 21 galions

| Date | Time | Gallons Removed | pH | Temp. (C) | Conductivity (umho/cm.) | Turbidity (NTU) | Comments |
|---------|------|--------------------|------|--------------|----------------------------|--------------------|-------------------|
| 2-22-94 | 1100 | 5 | 5.75 | 6.8 | 480 | >200 | |
| | | 10 | 5.78 | 6.8 | 480 | >200 | |
| | | 15 | 5.70 | 7.5 | 440 | >200 | |
| | | 20 | 5.72 | 7.8 | 440 | >200 | |
| | | | | | | | discontinued |
| | | , | | | | | bailing @ 21 gal. |
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MW-7

6793 Project #: Elevations: TOR (Top of Riser): 891.9 2-17-94 **Date Started: Ground Level: Bottom of Well:**

Well #:

Development Method: peristaltic pump

NYSDOT BARLOW ROAD

JLB **Developed By:**

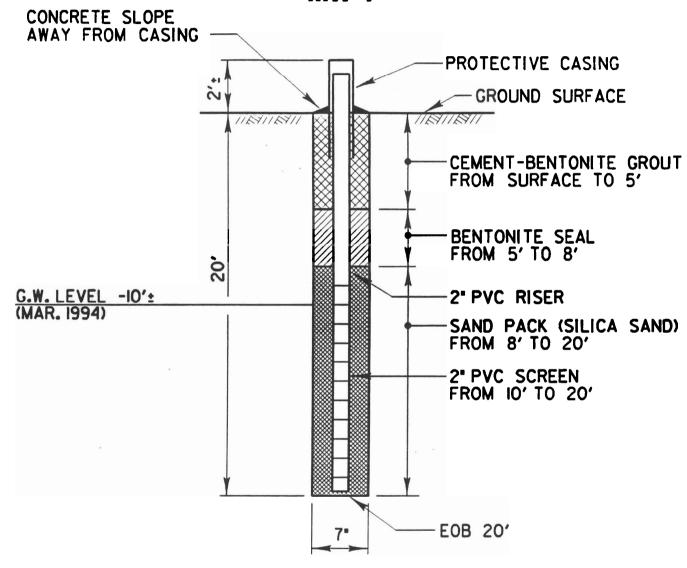
Project:

initial Water Level (TOR): 6.7 Date: 2-17-94

940 Time: Final Water Level (TOR): 16.6 Date: Time:

16.8 gallons 1 Well Volume = **Total Volume Removed:** 55 gallons

| | | Gallons | | Temp. | Conductivity | Turbling | |
|---------|------|---------|------|-------|--------------|----------|-------------------|
| Date | Time | Removed | pН | (6) | (umho/cm.) | (ATO) | Comments |
| 2-17-94 | | 30 | 6.97 | 8.9 | 455 | >200 | |
| | | 35 | 7.07 | 8.8 | 430 | >200 | |
| | | 40 | 7.25 | 8.8 | 440 | >200 | |
| | | 45 | 7.28 | 8.8 | 440 | >200 | |
| | | 50 | 7.23 | 9 | 430 | >200 | |
| | | 55 | 7.19 | 9.1 | 420 | >200 | discontinued |
| | | | | | | | pumping @ 55 gal. |
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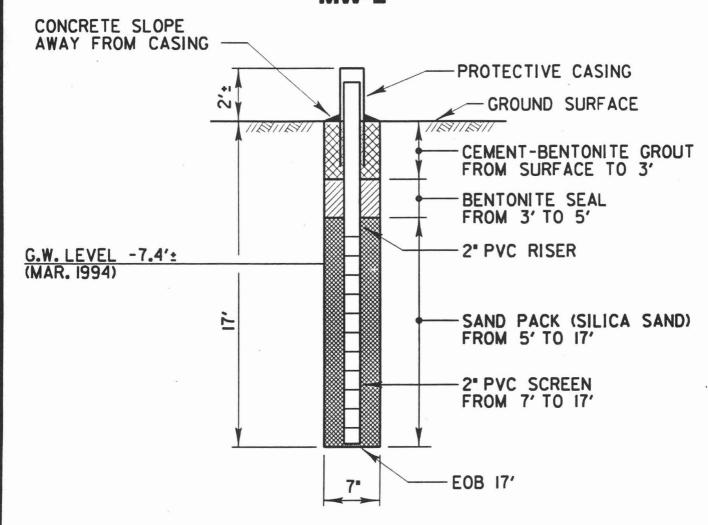
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LARZA COMPANY

Street,UtloaNY 13501/(315)797-5800 Rensselaer Technology Park 250 Jordan Rd., Troy, NY 12180/15181283-8080

DATE

DRAWN 6793 NYSDOT BARLOW ROAD FACILITY



SCALE: HORIZ. I" = 1'-0" VERT. I" = 5'-0"

Stetson-Harza

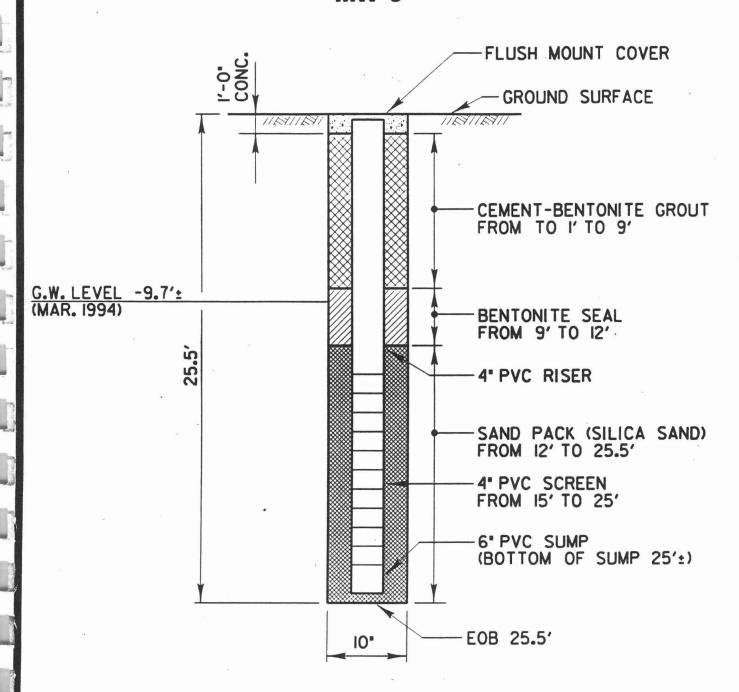
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STREET, UTICANY 13501/(35)797-5800

Rensselder Technology Park 250 Jordan Rd., Troy,NY (2180/15/8)283-8080 DATE

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NO. 6793

NYSDOT BARLOW ROAD FACILITY



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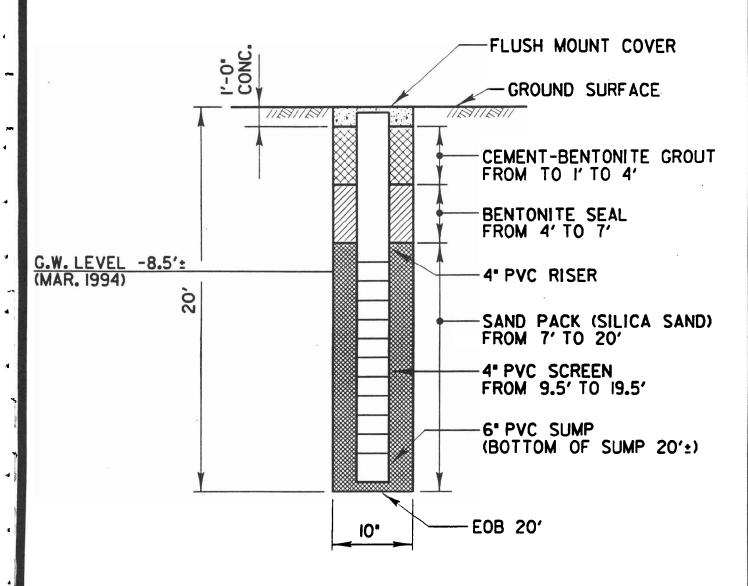
Stetson-Harza

Rensselder Technology Park 250 Jordan Rd., Troy, NY 12180/15181283-8080

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NYSDOT BARLOW ROAD FACILITY



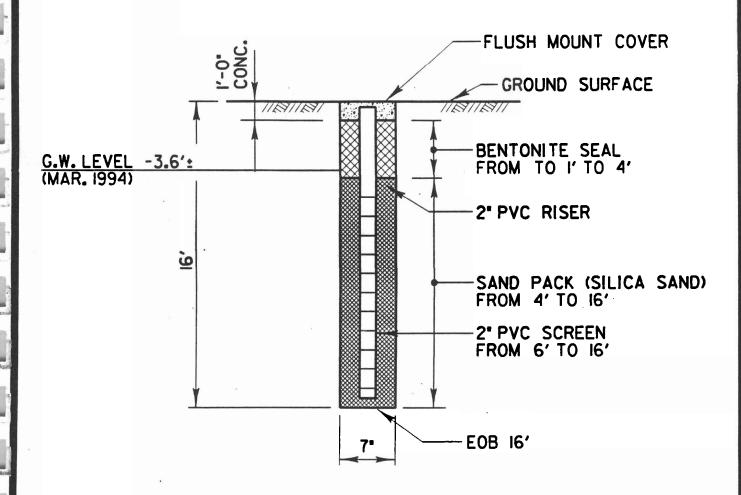
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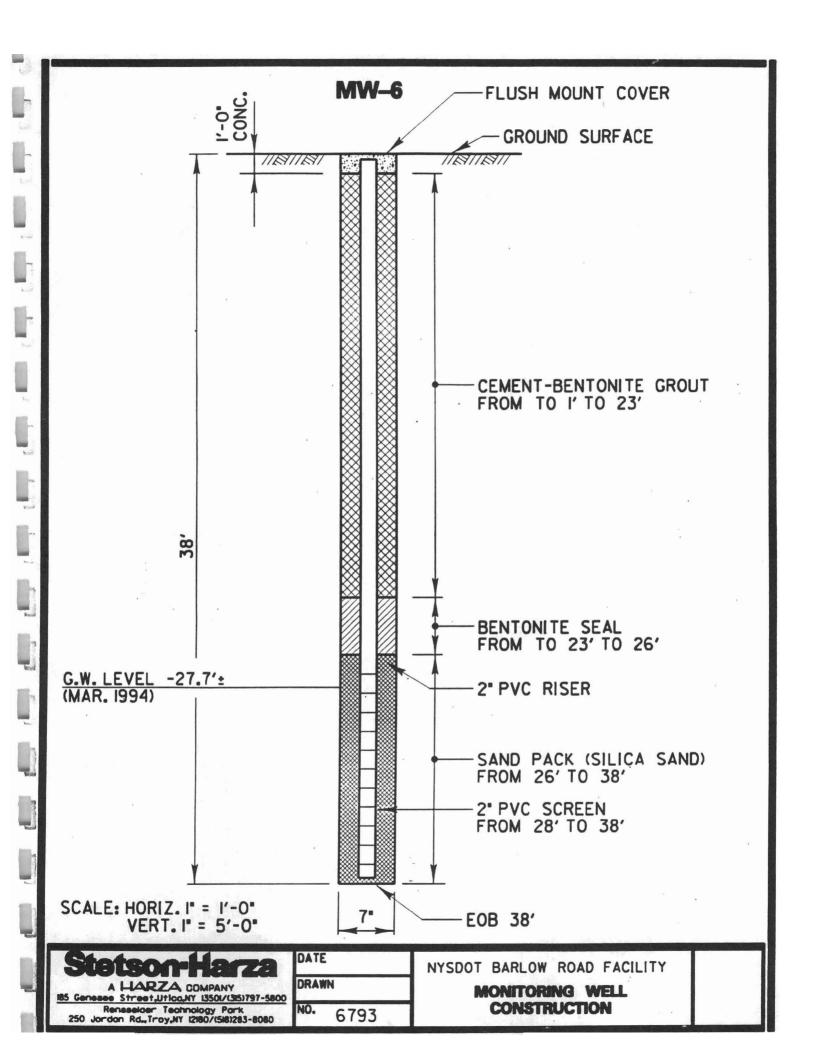


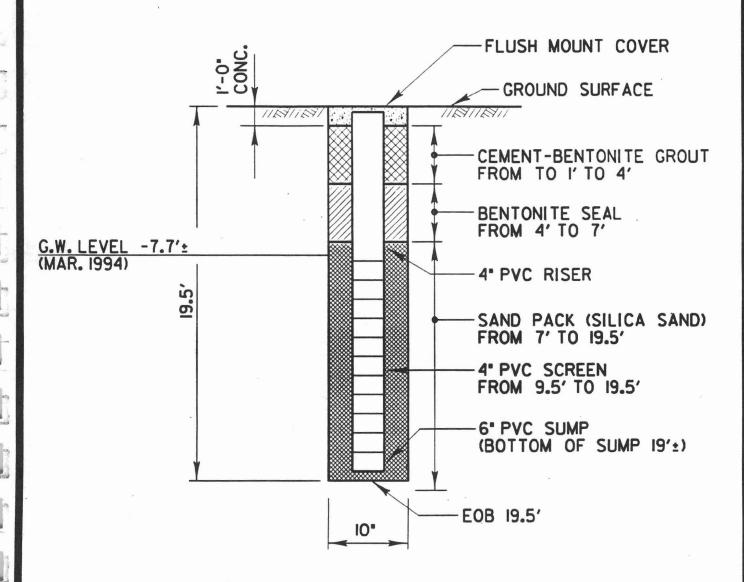
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NYSDOT BARLOW ROAD FACILITY





SCALE: HORIZ. I" = 1'-0" VERT. I" = 5'-0"

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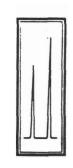
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NYSDOT BARLOW ROAD FACILITY

APPENDIX C

Soil Gas Survey

Tracer Research Corporation



Vapor Trace® Shallow Soil Gas Investigation

NEW YORK STATE DEPT OF TRANSPORTATION (NYSDOT) Kirkwood, New York

February 14 through 17, 1994

Tracer Research Corporation



Vapor Trace® Shallow Soil Gas Investigation

NEW YORK STATE DEPT OF TRANSPORTATION Kirkwood, New York February 14 through 17, 1994

Prepared for:

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Telephone: (908) 274-1888 FAX: (908) 274-2922

Submitted by: Mainle Mainle Mainle Stive D

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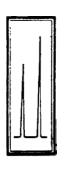


TABLE OF CONTENTS

| 1.0 | NYSDOT SITE INVESTIGATION | |
|----------|--|-----|
| 2.0 | SITE DESCRIPTION | 2 |
| 3.0 | SOIL GAS SAMPLING PARAMETERS | 2 |
| 4.0 | ANALYTICAL PARAMETERS | 3 |
| 5.0 | QUALITY ASSURANCE AND QUALITY CONTROL | 5 |
| 6.0 | RESULTS | 8 |
| APPEN | NDIX A Condensed Data | A-1 |
| | TABLES | |
| Table 1 | I. Soil Gas Sample Summary | 2 |
| Table 2 | 2. Detection Limits for Target Compounds | 5 |
| Table 3. | 3. Quality Assurance Samples | 7 |



1.0 NYSDOT SITE INVESTIGATION

Tracer Research Corporation (Tracer Research) performed a Vapor Trace® shallow soil gas invertigation at the New York State Department of Transportation (NYSDOT) site located at Barlow Road in Kirkwood, New York. The investigation was conducted February 14 through 17, 1994 for Stetson-Harza of Utica, New York.

1.1 Objective

The purpose of the investigation was to determine the extent of possible soil and/or groundwater contamination by screening the shallow soil gas for the presence of volatile organic compounds (VOCs). The soil gas samples were collected and analyzed for the following analyte classes and compounds:

Analyte Class: Hydrocarbon total volatile hydrocarbons (TVHC)

Analyte Class: Halocarbon

1,1,1 trichloroethane (TCA) trichloroethene (TCE) tetrachloroethene (PCE)

1.2 Overview of Results

For this investigation, twenty-three samples were collected from twenty-three sampling locations. Samples were collected at depths of 2 to 10 feet below ground surface (bgs). A summary of the results of the investigation is presented in Table 1. A depth profile sample was collected at location SG20. A sample was collected from location SG19, however, it was not analyzed.



Table 1. Soil Gas Sample Summary

| Compound | # of samples in which compound was detected | Low conc. µg/L | High conc. µg/L | Sample(s) with high conc. |
|----------|---|----------------------|-----------------------|---------------------------|
| TVHC | 8 | 0.1 | 14 | SG14-2' |
| TCA | 22 | 0.0003 | 0.3 | SG1-5' |
| TCE | 12 | 0.003 | 4 | SG1-5' |
| PCE | 11 | 0.0004 | 0.1 | SG1-5' |

NA = Not Applicable

2.0 SITE DESCRIPTION

The soil gas samples were collected around the Vehicle Maintenance shed and yard of the NYSDOT at the Barlow Road site. Samples were collected through gravel, asphalt, and snow cover. The Stetson-Harza field representative reported that the subsurface of the site consists of glacial till with some rubble. The depth to groundwater was reported to be greater than 13 feet bgs and flows to the west.

3.0 SOIL GAS SAMPLING PARAMETERS

Soil gas sampling probes consisted of 7- to 14-foot lengths of 3/4-inch diameter hollow steel pipe. The probes were fitted with detachable drive tips and hydraulically pushed and/or pounded to depths of 2 to 10 feet bgs. A rock drill and compressor was used to drill through the gravel, asphalt and concrete.

The aboveground end of each probe was fitted with an aluminum reducer (manifold) and a length of polyethylene tubing leading to a vacuum pump. Soil gas was pulled by the vacuum pump into the probe. Samples were collected in a syringe by inserting a syringe needle through a silicone rubber segment in the evacuation line



and down into the steel probe. The vacuum was monitored by a vacuum gauge to ensure an adequate gas flow from the vadose zone was maintained.

The volume of air within the probe was purged by evacuating 7 to 14 probe volumes of gas. The evacuation time in minutes versus the vacuum in inches of mercury (Hg) was used to calculate the necessary evacuation time. The vacuum in inches Hg was recorded at each sampling location.

Sample probe vacuums ranged from 2 to 17 inches Hg. The vacuum capacity of the pump was approximately 22 inches Hg.

4.0 ANALYTICAL PARAMETERS

During this investigation, up to 10 milliliters (mL) of soil gas were collected for each sample and immediately analyzed in the Tracer Research analytical van. Subsamples (replicates) from these samples were injected into the gas chromatograph (GC) in volumes of 1 to 1000 microliters (µL) depending on the VOC concentrations in the sample.

Analytical instruments were calibrated daily using fresh working standards made from National Institute of Sciences and Technology (NIST) traceable standards and reagent blanked solvents.

4.1 Chromatographic System

A Varian 3300 gas chromatograph, equipped with a flame ionization detector (FID), an electron capture detector (ECD), and two computing integrators, was used for the soil gas analyses. The compounds were separated in the GC on two 6-foot by 1/8 inch outer diameter (OD) packed analytical column (10% OV101 stationary phase bonded to 80/100 mesh Chromosorb W support). Both columns were in a temperature controlled oven. The hydrocarbons were detected on the FID and the halocarbons were detected on the ECD. Nitrogen was used as the carrier gas.

The instrument calibrations were checked periodically throughout the day to monitor the response factors and retention times. The following paragraphs explain the GC, FID, and ECD processes.



GC Process

The soil gas is injected into the GC where it is swept through the analytical column by the carrier gas. The detector senses the presence of a component different from the carrier gas and converts that information to an electrical signal. The components of the sample pass through the column at different rates, according to their individual properties, and are detected by the detector. Compounds are identified by the time it takes them to pass through the column (retention time).

FID Process

The FID utilizes a flame produced by the combustion of hydrogen and air. When a component, which has been separated on the GC analytical column, is introduced into the flame, a large increase in ions occurs. A collector with a polarizing voltage is applied near the flame and the ions are attracted and produce a current, which is proportional to the amount of the sample compound in the flame. The electrical current causes the computing integrator to record a peak on a chromatogram. By measuring the area of the peak and comparing that area to the integrator response of a known aqueous standard, the concentration of the analyte in the sample is determined.

ECD Process

The ECD captures low energy thermal electrons that have been ionized by beta particles. The flow of these captured electrons into an electrode produces a small current, which is collected and measured. When the halogen atoms (halocarbons) are introduced into the detector, electrons that would otherwise be collected at the electrode are captured by the sample, resulting in decreased current. The current causes the computing integrator to record a peak on a chromatogram. The area of the peak is compared to the peak generated by a known standard to determine the concentration of the analyte.



4.2 Analyses

The detection limits for target compounds depend on the sensitivity of the detector to the individual compound as well as the volume of the sample injection. The detection limits of the target compounds were calculated from the response factor, the sample injection size, and the calculated minimum peak size (area) observed under the conditions of the analyses. If any compound was not detected in an analysis, the detection limit is given as a "less than" value, e.g., $<0.01 \mu g/L$. The approximate detection limits for the target compounds are presented in Table 2.

Table 2. Detection Limits for Target Compounds

| Compound | Detection Limits (µg/L) |
|----------|-------------------------|
| TVHC | 0.1 |
| TCA | 0.00008 |
| TCE | 0.0003 |
| PCE | 0.0001 |

5.0 QUALITY ASSURANCE AND QUALITY CONTROL

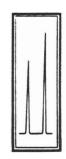
Tracer Research's Quality Assurance (QA) and Quality Control (QC) program was followed to maintain data that was reproducible through the investigation. An overview presenting the significant aspects of this program is presented below.

Soil Gas Sampling Quality Assurance

To ensure consistent collection of samples, the following procedures are performed:

- Sampling Manifolds

Tracer Research's custom designed sampling manifold connects the sample probe to the vacuum line and pump. The manifold is designed to eliminate sample exposure to the polymeric (plastic) materials that connect the probe to the vacuum pump.



The sampling manifold is attached to the end of the probe, forming an air tight union between the probe and the silicone tubing septum. The septum connects the manifold to the pump vacuum line and permits syringe sampling.

This sampling system allows the sample to be taken upstream of the sampling pump, manifold, and septum. Since cross contamination of sampling equipment can be a major problem, Tracer Research replaces the materials (probe and syringe), between sampling points, that contact the soil gas before or during sampling.

-Sampling Probes

Steel probes are used only once each day. To eliminate the possibility of cross contamination, they are washed with high pressure soap and hot water spray, or steam-cleaned. Enough sampling probes are carried on each van to avoid the need to re-use any during the day.

-Glass Syringes

Glass syringes are used for only one sample a day and are washed and baked out at night. If they must be used twice, they are purged with carrier gas (nitrogen) and baked out between probe samplings.

-Sampling Efficiency

Soil gas pumping is monitored by a vacuum gauge to ensure that an adequate flow of gas from the soil is maintained. A reliable gas sample can be obtained if the sample vacuum gauge reading is at least 2 inches Hg less than the maximum measured vacuum of the vacuum pump.

Analytical Quality Assurance Samples

Quality assurance samples are performed at the minimum frequencies listed in Table 3. The actual frequency depends on the number of samples analyzed each day and the length of time of the survey.



Table 3. Quality Assurance Samples

| Sample type | Frequency |
|------------------------------|----------------------------------|
| Ambient Air Samples | 3 per day or 1 per site |
| Analytical Method Blanks | 5% (1 per 20 samples or 1 a day) |
| Continuing Calibration Check | 20% (1 every 5 samples) |
| Field System Blank | 1 per day |
| Reagent Blank | 1 per set of working standards |
| Replicate Samples | 10 to 100% of all samples |

The ambient air samples are obtained on site by sampling the air immediately outside the mobile analytical van and directly injecting it into the GC. Analytical method blanks are taken to demonstrate that the analytical instrumentation is not contaminated. These are performed by injecting carrier gas (nitrogen) into the GC with the sampling syringe. Subsampling syringes are also checked in this fashion.

Continuing calibration checks are analyzed to verify the detector response for the target VOCs. If the response changes by more than 25 percent, the gas chromatograph is recalibrated and new response factors are calculated. Field system blanks are analyzed to check for contamination of the sampling apparatus, e.g., probe and sampling syringe. A sample is collected using standard soil gas sampling procedures, but without putting the probe into the ground. The results are compared to those obtained from a concurrently analyzed ambient air sample.

If the field system blanks detect compounds of interest at concentrations that indicate equipment contamination or concentrations that exceed normal background levels (ambient air analysis), corrective actions are performed. If the problem cannot be corrected, an out-of-control event is documented and reported. Field system blanks are not performed every day if clean probes are still available. Field system blanks are performed after any probe decontamination process.

A reagent blank is performed to ensure the solvent used to dilute the stock standards is not contaminated. Analytical instruments are calibrated daily using



fresh working standards made from National Institute of Sciences and Technology traceable standards and reagent blanked solvents.

Quantitative precision is assured by replicating analysis of 10 to 100 percent of the samples. The percentage is based on the sample analysis time. Replicate analyses are performed by subsampling vapors from the same sampling syringe.

The injector port septa through which soil gas samples are injected into the GC are replaced daily to prevent possible gas leaks from the chromatographic column. All sampling and subsampling syringes are decontaminated after use and are not used again until they have been decontaminated by washing in anionic detergent and baking at 90°C.

6.0 RESULTS

The analytical results from this soil gas investigation are condensed in Appendix A. The data are presented by location and by analyte concentration. When the compound was not detected, the detection limit is presented as a "less than" value, e.g., $<0.01 \mu g/L$.

Soil gas samples are identified by sample location and sampling depth. For example, SG1-5' represents a soil gas sample collected at location 1 at a depth of 5 feet bgs.

A sample location map and contour maps for TCA and PCE are provided. Both compounds have the same contour trends. The highest concentrations of both compounds are centered around locations SG1 and SG2. TCA and PCE extend to the west along the road. TCA concentrations ranged from 0.0003 to $0.3~\mu g/L$. PCE concentrations ranged from 0.0004 to $0.1~\mu g/L$.

Tracer Research Corporation



APPENDIX A Condensed Data

TRACER RESEARCH CORPORATION - ANALYTICAL RESULTS STETSON HARZA/ NEW YORK DEPARTMENT OF TRANSPORTATION MAINTENANCE YARD/ KIRKWOOD, NEW YORK/ 124-0058-S 02/14/94

| SAMPLE | TCA µg/L | TCE µg/L | PCE μg/L | TVHC μg/L |
|--------|-------------|-------------|-------------|--------------|
| AIR | 0.0003 | <0.0003 | 0.0001 | <0.1 |
| SG1-5' | 0.3 | 4 | 0.1 | 1 |
| SG2-3' | 0.2 | 2 | 0.01 | 0.5 |
| SG3-5' | 0.05 | 0.4 | 0.008 | . 0.1 |
| SG4-5' | 0.04 | 0.2 | 0.004 | 0.2 |
| SG5-5' | 0.03 | 0.1 | 0.003 | < 0.1 |
| | | | | |
| AIR | 0.0002 | <0.0003 | 0.0001 | <0.1 |

Analyzed by: J. Oliver Proofed by: J. Oliver

TRACER RESEARCH CORPORATION - ANALYTICAL RESULTS STETSON HARZA/ NEW YORK DEPARTMENT OF TRANSPORTATION MAINTENANCE YARD/ KIRKWOOD, NEW YORK/ 124-0058-S 02/15/94

| SAMPLE | TCA µg/L | TCE µg/L | PCE μg/L | TVHC µg/L | |
|---------|-------------|-------------|-------------|--------------|-----|
| AIR | 0.0003 | <0.0003 | <0.0001 | <0.1 | 8.1 |
| SG6-5' | 0.02 | 0.02 | <00003 | <0.1 | |
| SG7-5' | 0.01 | 0.03 | < 0.0003 | < 0.1 | |
| SG8-5' | 0.02 | 0.07 | < 0.0003 | <0.1 | |
| AIR | 0.0003 | < 0.0003 | <0.0001 | <0.1 | |
| SG9-5' | 0.008 | 0.01 | < 0.0003 | <0.1 | |
| SG10-5' | 0.007 | 0.03 | 0.0004 | < 0.1 | |
| SG11-6' | 0.01 | 0.004 | < 0.0001 | 0.2 | |
| SG12-5' | 0.0008 | < 0.0003 | < 0.0001 | <0.1 | |
| SG13-5' | < 0.00008 | < 0.003 | < 0.0001 | < 0.1 | |
| SG14-2' | 0.002 | 0.003 | 0.002 | 14 | |
| AIR | 0.0002 | <0.0003 | <0.0001 | <0.1 | |

Analyzed by: I Oliver Proofed by: I M

STETSON HARZA/ NEW YORK DEPARTMENT OF TRANSPORTATION MAINTENANCE YARD/ KIRKWOOD, NEW YORK/ 124-0058-S TRACER RESEARCH CORPORATION - ANALYTICAL RESULTS 02/16/94

| | TCA | TCE | PCE | TVHC | |
|--------------------|-------------|---------------|--------------|-----------|--|
| SAMPLE | hg/L | µg/L | µg/L | µg/L | |
| AIR | 0.0003 | <0.0003 | <0.0001 | <0.1 | |
| SG15-4' | 0.0003 | <0.0003 | <0.0001 | <0.1 | |
| SG16-3. | 0.0003 | <0.0003 | <0.0001 | <0.1 | |
| SG17-5' | 0.001 | <0.0003 | <0.0001 | <0.1 | |
| AIR | 0.0003 | <0.0003 | <0.0001 | 0.2 | |
| SG18-5' SG19-5' | 0.002 NA | <0.0003 NA | 0.0004 NA | 0.1 NA | |

NA = Not Analyzed

Analyzed by: J. Oliver Proofed by:

TRACER RESEARCH CORPORATION - ANALYTICAL RESULTS STETSON HARZA/ NEW YORK DEPARTMENT OF TRANSPORTATION MAINTENANCE YARD/ KIRKWOOD, NEW YORK/ 124-0058-S 02/17/94

| SAMPLE | TCA µg/L | TCE µg/L | PCE µg/L | TVH μg/L |
|----------|-------------|-------------|-------------|-------------|
| AIR | 0.001 | <0.0003 | <0.0001 | <0.1 |
| SG20-6' | 0.0007 | < 0.001 | < 0.0007 | 0.4 |
| SG21-9' | 0.0007 | < 0.0005 | 0.0008 | 0.3 |
| SG20-10' | 0.001 | < 0.0005 | 0.002 | <0.1 |
| SG22-6' | 0.001 | < 0.0005 | 0.002 | <0.1 |
| SG23-6' | 0.0009 | < 0.0005 | < 0.0003 | <0.1 |
| AIR | 0.0007 | < 0.0003 | < 0.0001 | <0.1 |
| | j. | 1. | | |

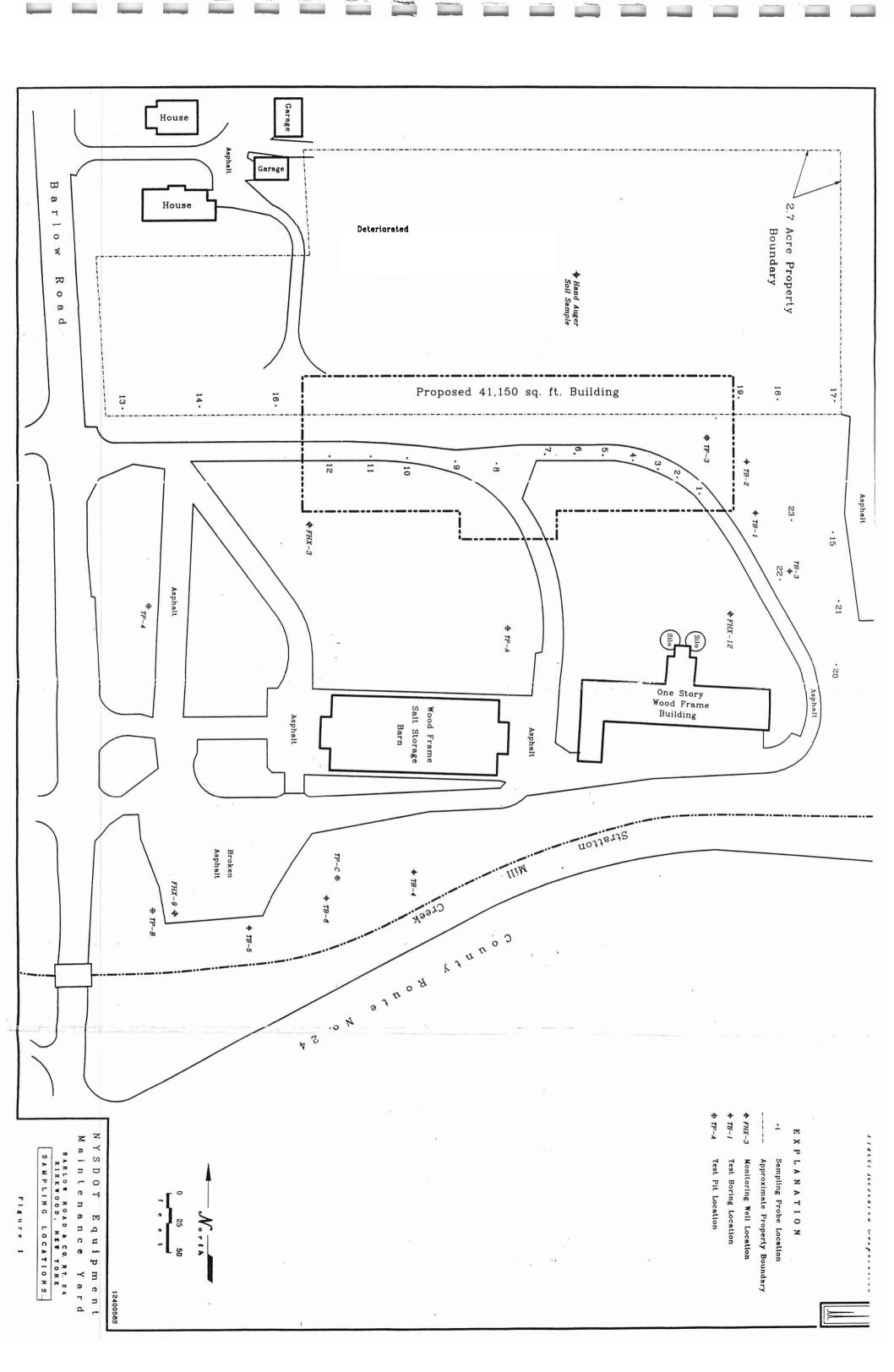
Analyzed by: J. Oliver
Proofed by: J. M.

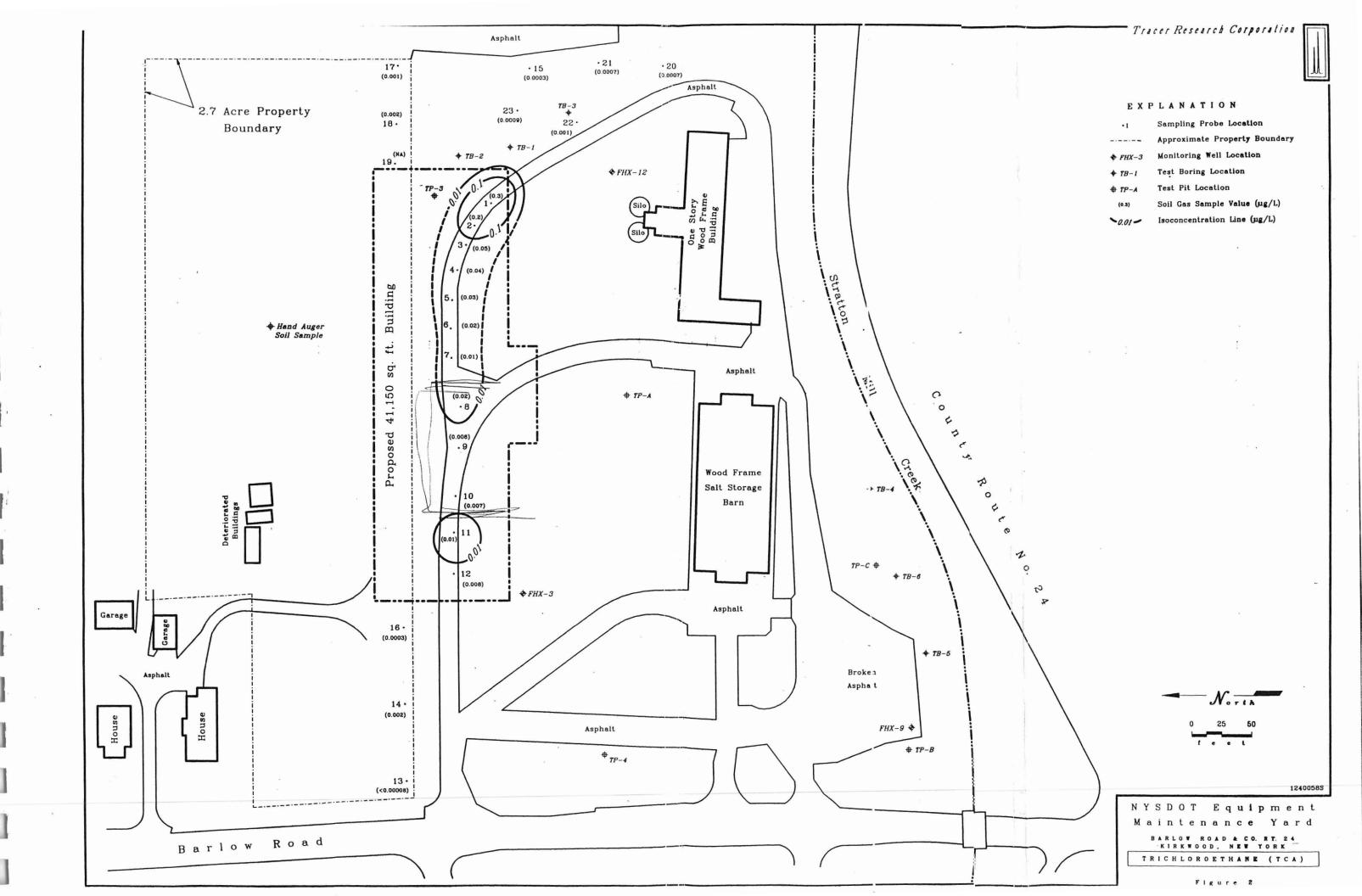
Tracer Research Corporation

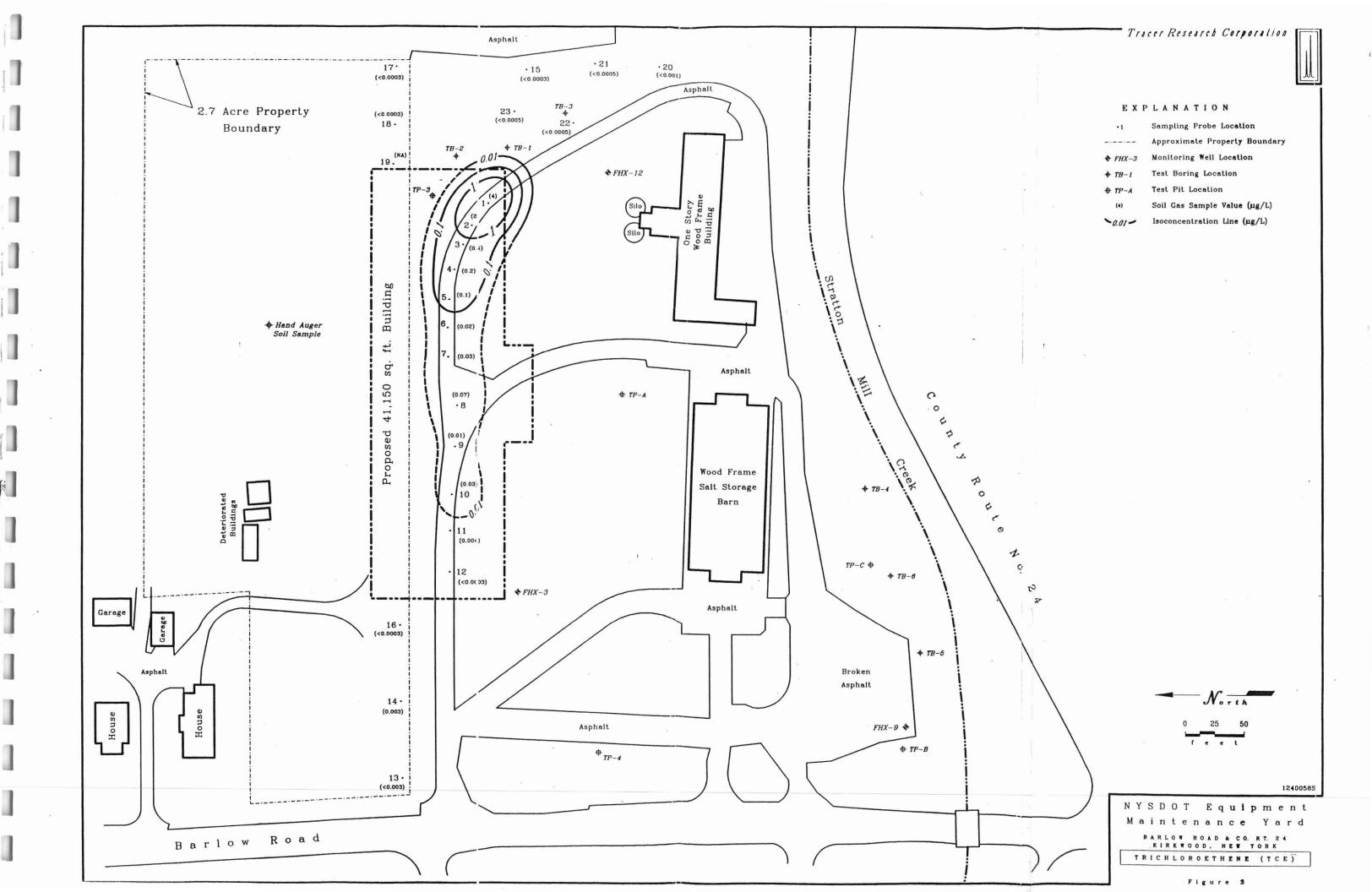
Tracer Research Corporation



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APPENDIX D

Laboratory Data



LABORATORY REPORT Lab Log No: 9402235

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road NYSDOT

Report Date: Sampling Date: 03/04/94 02/17/94 B. Phillips

Sampled By: Date Received: Analyzed by:

02/22/94

EAC, 03/01/94

MW-7 **VOLATILES BY METHOD EPA 8010** Sample ID:

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

Sample ID: FHX-3

181 Genesee Street Utica, NY 13501-2158

Site: Barlow Rd. NYSDOT

Report Date: Sampling Date: 03/04/94 02/16/94 P. Rosato

Sampled By: Date Received:

02/18/94

Analyzed by: EAC, 02/24/94

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | *4.6* |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | *99.2* |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Rd. NYSDOT

Report Date: Sampling Date:

03/04/94 02/16/94 P. Possto

Sampled By: Date Received: P. Rosato 02/18/94

Analyzed by:

EAC, 02/24/94

Sample ID: FHX-9 VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | *1.5* |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | *7.8* |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



CORTLAND, N.Y. 13045

P.O. BOX 5150 607-753-3403 LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Rd. NYSDOT

Report Date: Sampling Date: 03/04/94 02/16/94 P. Rosato

Sampled By: Date Received:

02/18/94

EAC, 02/24/94 Analyzed by:

VOLATILES BY METHOD EPA 8010 Sample ID: FHX-12

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | *1.6* |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | *2.2* |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | *2.4* |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | *188* |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | *2.5* |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | *2.9* |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | *1810* |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.
These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Rd. NYSDOT

Report Date: 03/04/94 Sampling Date: 02/17/94

Sampled By: P. Rosato 02/18/94 Date Received:

EAC, 02/24/94 Analyzed by:

VOLATILES BY METHOD EPA 8010 Sample ID: MW-3

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/i | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.
These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

CORTLAND, N.Y. 13045

Site: Barlow Rd. NYSDOT

Report Date: Sampling Date:

03/04/94 02/17/94

Sampled By: Date Received: P. Rosato 02/18/94

Analyzed by: EAC, 02/24/94

Sample ID: Trip Blank

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND . |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |
| • | | | | |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



LABORATORY REPORT Lab Log No: 9402209

CORTLAND, N.Y. 13045

P.O. BOX 5150 607-753-3403

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Rd. NYSDOT

Report Date:

03/04/94 02/16/94

Sampling Date: Sampled By: Date Received:

P. Rosato 02/18/94

Analyzed by:

EAC, 03/02/94

Sample ID: MW-1 (4-6)

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/kg | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 1.0 | ND |
| Bromoform | 75-25-2 | ug/kg | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 1.0 | ND |
| Chloroform | 67-66-3 | ug/kg | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/kg | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/kg | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/kg | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/kg | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/kg | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/kg | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/kg | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

Sample ID:

181 Genesee Street Utica, NY 13501-2168

MW-2 (8-10)

Site: Barlow Rd. NYSDOT

Report Date: Sampling Date:

03/04/94 02/17/94

Sampled By: Date Received: Analyzed by: P. Rosato 02/18/94

EAC, 03/02/94

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/kg | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 1.0 | ND |
| Bromoform | 75-25-2 | ug/kg | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 1.0 | ND |
| Chloroform | 67-66-3 | ug/kg | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/kg | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/kg | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 1.0 | *2.6* |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 1.0 | ND |
| 1,1,2-Tetrachloroethane | 630-20-6 | ug/kg | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/kg | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/kg | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/kg | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/kg | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Rd. NYSDOT

Sample ID: MW-3 (8-10)

Report Date: Sampling Date:

Analyzed by:

03/04/94 02/15/94

Sampled By: Date Received:

P. Rosato 02/18/94

EAC, 03/02/94

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/kg | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 1.0 | ND |
| Bromoform | 75-25-2 | ug/kg | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 1.0 | ND |
| Chloroform | 67-66-3 | ug/kg | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/kg | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/kg | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/kg | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/kg | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/kg | 1.0 | *4.5* |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/kg | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/kg | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.
These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

Sample ID:

181 Genesee Street Utica, NY 13501-2168

MW-7 (8-10)

Site: Barlow Rd. NYSDOT

Report Date: Sampling Date:

03/04/94 02/15/94

Sampled By: Date Received: P. Rosato 02/18/94

Analyzed by: EAC, 03/02/94

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/kg | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 1.0 | ND |
| Bromoform | 75-25-2 | ug/kg | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 1.0 | ND |
| Chloroform | 67-66-3 | ug/kg | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/kg | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/kg | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 1.0 | *1.2* |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/kg | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/kg | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/kg | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/kg | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/kg | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



3845 ROUTE 11 SOUTH, P.O. BOX 5150 CORTLAND, N.Y. 13045 607-753-3403 LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

Sample ID:

181 Genesee Street Utica, NY 13501-2168

MW-7 Composite

Site: Barlow Rd. NYSDOT

Report Date: Sampling Date:

03/04/94 02/15/94

Sampled By: Date Received: P Rosato 02/18/94

Analyzed by: EAC, 03/02/94

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/kg | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 1.0 | ND |
| Bromoform | 75-25-2 | ug/kg | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 1.0 | ND |
| Chloroform | 67-66-3 | ug/kg | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 1.0 | ND |
| . Dibromochloromethane | 124-48-1 | ug/kg | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/kg | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/kg | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/kg | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/kg | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/kg | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/kg | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza

Report Date: 3/04/94 Sampling Date: 2/22/94

Site: Barlow Road NYSDOT

Sample: Water - MW-4

Sampled By:

B.Phillips

Date Received: 2/22/94
Lab Log No: 9402235

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .01 | ND |
| 319-84-6 | Alpha-BHC | .01 | ND |
| 319-85-7 | Beta-BHC | .01 | ND |
| 319-85-8 | Delta-BHC | .01 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .01 | ND |
| 57-74-9 | Chlordane | .05 | ND |
| 72-54-8 | 4,4'-DDD | .01 | ND |
| 72-55-9 | 4,4'-DDE | .01 | ND |
| 50-29-3 | 4,4'DDT | .01 | ND |
| 60-57-1 | Dieldrin | .01 | ND |
| 959-98-8 | Endosulfan I | .01 | ND |
| 33213-65-9 | Endosulfan II | .01 | ND |
| 1031-07-8 | Endosulfan Sulphate | .01 | ND |
| 72-20-8 | Endrin | .01 | ND |
| 744-93-4 | Endrin Aldehyde | .01 | ND |
| 76-44-8 | Heptachlor _ | .01 | ND |
| 1024-57-3 | Heptachlor Epoxide | .01 | ND |
| 72-43-5 | Methoxychlor | .025 | ND |
| 8001-35-2 | Toxaphene | .20 | ND |
| 12674-11-2 | PCB 1016 | .05 | ND |
| 11104-28-2 | PCB 1221 | .05 | ND |
| 11141-16-5 | PCB 1232 | .05 | ND |
| 53469-21-9 | PCB 1242 | .05 | ND |
| 12672-29-6 | PCB 1248 | .05 | ND |
| 11097-69-1 | PCB 1254 | .05 | ND |
| 11096-82-5 | PCB 1260 | .05 | ND |

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Sampling Date: 2/22/94

Site: Barlow Road NYSDOT Sampled By: B.Phillips

Date Received: 2/22/94
Sample: Water - MW-5
Lab Log No: 9402235

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .01 | ND |
| 319-84-6 | Alpha-BHC | .01 | ND |
| 319-85-7 | Beta-BHC | .01 | ND |
| 319-85-8 | Delta-BHC | .01 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .01 | ND |
| 57-74-9 | Chlordane | .05 | ND |
| 72-54-8 | 4,4'-DDD | .01 | ND |
| 72-55-9 | 4,4'-DDE | .01 | ND |
| 50-29-3 | 4,4'DDT | .01 | ND |
| 60-57-1 | Dieldrin | .01 | ND |
| 959-98-8 | Endosulfan I | .01 | ND |
| 33213-65-9 | Endosulfan II | .01 | ИD |
| 1031-07-8 | Endosulfan Sulphate | .01 | ND |
| 72-20-8 | Endrin | .01 | ND |
| 744-93-4 | Endrin Aldehyde | .01 | ND |
| 76-44-8 | Heptachlor | .01 | ND |
| 1024-57-3 | Heptachlor Epoxide | .01 | מא |
| 72-43-5 | Methoxychlor | .025 | ND |
| 8001-35-2 | Toxaphene | .20 | ND |
| 12674-11-2 | PCB 1016 | .05 | ND |
| 11104-28-2 | PCB 1221 | .05 | ND |
| 11141-16-5 | PCB 1232 | .05 | ND |
| 53469-21-9 | PCB 1242 | .05 | ND |
| 12672-29-6 | PCB 1248 | .05 | ND |
| 11097-69-1 | PCB 1254 | .05 | ND |
| 11096-82-5 | PCB 1260 | .05 | ND |

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Sampling Date: 2/22/94

Site: Barlow Road NYSDOT Sampled By: B. Phillips

Date Received: 2/22/94

Sample: Water - MW-6 Lab Log No: 9402235

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .01 | ND |
| 319-84-6 | Alpha-BHC | .01 | ND |
| 319-85-7 | Beta-BHC | .01 | ND |
| 319-85-8 | Delta-BHC | .01 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .01 | ND |
| 57-74-9 | Chlordane | .05 | ND |
| 72-54-8 | 4,4'-DDD | .01 | ND |
| 72-55-9 | 4,4'-DDE | .01 | ND |
| 50-29-3 | 4,4'DDT | .01 | ND |
| 60-57-1 | Dieldrin | .01 | ND |
| 959-98-8 | Endosulfan I | .01 | ND |
| 33213-65-9 | Endosulfan II | .01 | ND |
| 1031-07-8 | Endosulfan Sulphate | .01 | ND |
| 72-20-8 | Endrin | .01 | ND |
| 744-93-4 | Endrin Aldehyde | .01 | ND |
| 76-44-8 | Heptachlor | .01 | ND |
| 1024-57-3 | Heptachlor Epoxide | .01 | ND |
| 72-43-5 | Methoxychlor | .025 | ND |
| 8001-35-2 | Toxaphene | .20 | ND |
| 12674-11-2 | PCB 1016 | .05 | ND |
| 11104-28-2 | PCB 1221 | .05 | ND |
| 11141-16-5 | PCB 1232 | .05 | ND |
| 53469-21-9 | PCB 1242 | .05 | ND |
| 12672-29-6 | | .05 | ND |
| 11097-69-1 | PCB 1254 | .05 | ND |
| 11096-82-5 | PCB 1260 | .05 | ND |

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza

Report Date: 3/04/94

Site: Barlow Road NYSDOT

Sampling Date: 2/17/94
Sampled By: B.Phillips

Sample: Water - MW-7

Date Received: 2/22/94 Lab Log No: 9402235

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .01 | ND |
| 319-84-6 | Alpha-BHC | .01 | ND |
| 319-85-7 | Beta-BHC | .01 | ND |
| 319-85-8 | Delta-BHC | .01 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .01 | ND |
| 57-74-9 | Chlordane | .05 | ND |
| 72-54-8 | 4,4'-DDD | .01 | ND |
| 72-55-9 | 4,4'-DDE | .01 | ND |
| 50-29-3 | 4,4'DDT | .01 | ND |
| 60-57-1 | Dieldrin | .01 | ND |
| 959-98-8 | Endosulfan I | .01 | ND |
| 33213-65-9 | Endosulfan II | .01 | ND |
| 1031-07-8 | Endosulfan Sulphate | .01 | ND |
| 72-20-8 | Endrin | .01 | ND |
| 744-93-4 | Endrin Aldehyde | .01 | ND |
| 76-44-8 | Heptachlor | .01 | ND |
| 1024-57-3 | Heptachlor Epoxide | .01 | ND |
| 72-43-5 | Methoxychlor | .025 | ND |
| 8001-35-2 | Toxaphene | .20 | ND |
| 12674-11-2 | PCB 1016 | .05 | ND |
| 11104-28-2 | PCB 1221 | .05 | ND |
| 11141-16-5 | PCB 1232 | .05 | ND |
| 53469-21-9 | PCB 1242 | .05 | ND |
| 12672-29-6 | PCB 1248 | .05 | ND |
| 11097-69-1 | PCB 1254 | .05 | ND |
| 11096-82-5 | PCB 1260 | .05 | ND |

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza

Report Date: 3/04/94

Sampling Date: 2/21/94

Site:

Barlow Road NYSDOT

Sampled By: Date Received: 2/22/94

B.Phillips

Sample: Soil - LS-1

Lab Log No:

9402235

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | 1.34 | ND |
| 319-84-6 | Alpha-BHC | 1.34 | ND |
| 319-85-7 | Beta-BHC | 1.34 | ND |
| 319-85-8 | Delta-BHC | 1.34 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | 1.34 | ND |
| 57-74-9 | Chlordane | 6.70 | ND |
| 72-54-8 | 4,4'-DDD | 1.34 | ND |
| 72-55-9 | 4,4'-DDE | 1.34 | ND |
| 50-29-3 | 4,4'DDT | 1.34 | ND |
| 60-57-1 | Dieldrin | 1.34 | ND |
| 959-98-8 | Endosulfan I | 1.34 | ND |
| 33213-65-9 | Endosulfan II | 1.34 | ND |
| 1031-07-8 | Endosulfan Sulphate | 1.34 | ND |
| 72-20-8 | Endrin | 1.34 | ND |
| 744-93-4 | Endrin Aldehyde | 1.34 | ND |
| 76-44-8 | Heptachlor | 1.34 | ND |
| 1024-57-3 | Heptachlor Epoxide | 1.34 | ND |
| 72-43-5 | Methoxychlor | 3.35 | ND |
| 8001-35-2 | Toxaphene | 27.0 | ND |
| 12674-11-2 | PCB 1016 | 6.70 | ND |
| 11104-28-2 | PCB 1221 | 6.70 | ND |
| 11141-16-5 | PCB 1232 | 6.70 | ND |
| 53469-21-9 | PCB 1242 | 6.70 | ND |
| 12672-29-6 | PCB 1248 | 6.70 | ND |
| 11097-69-1 | PCB 1254 | 6.70 | ND |
| 11096-82-5 | PCB 1260 | 6.70 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Sampling Date: 2/21/94

Site: Barlow Road NYSDOT Sampled By: B.Phillips

Date Received: 2/22/94
Sample: Soil - MW-5 (6-8)
Lab Log No: 9402235

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | 1.34 | ND |
| 319-84-6 | Alpha-BHC | 1.34 | ND |
| 319-85-7 | Beta-BHC | 1.34 | ND |
| 319-85-8 | Delta-BHC | 1.34 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | 1.34 | ND |
| 57-74-9 | Chlordane | 6.70 | ND |
| 72-54-8 | 4,4'-DDD | 1.34 | ND |
| 72-55-9 | 4,4'-DDE | 1.34 | ND |
| 50-29-3 | 4,4'DDT | 1.34 | ND |
| 60-57-1 | Dieldrin | 1.34 | ND |
| 959-98-8 | Endosulfan I | 1.34 | ND |
| 33213-65-9 | Endosulfan II | 1.34 | ND |
| 1031-07-8 | Endosulfan Sulphate | 1.34 | ND |
| 72-20-8 | Endrin | 1.34 | ND |
| 744-93-4 | Endrin Aldehyde | 1.34 | ND |
| 76-44-8 | Heptachlor | 1.34 | ND |
| 1024-57-3 | Heptachlor Epoxide | 1.34 | ND |
| 72-43-5 | Methoxychlor | 3.35 | ND |
| 8001-35-2 | Toxaphene | 27.0 | ND |
| 12674-11-2 | PCB 1016 | 6.70 | ND |
| 11104-28-2 | PCB 1221 | 6.70 | ND |
| 11141-16-5 | PCB 1232 | 6.70 | ND |
| 53469-21-9 | PCB 1242 | 6.70 | ND |
| 12672-29-6 | | 6.70 | ND |
| 11097-69-1 | PCB 1254 | 6.70 | ND |
| 11096-82-5 | PCB 1260 | 6.70 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza

Report Date: 3/04/94

Site: Barlow Road NYSDOT

Sampling Date: 2/21/94
Sampled By: B.Phillips

Site: Barlow Road Nisbor

Date Received: 2/22/94

Sample: Soil - MW-6 (8-10)

Lab Log No: 9402235

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | 1.34 | ND |
| 319-84-6 | Alpha-BHC | 1.34 | ND |
| 319-85-7 | Beta-BHC | 1.34 | ND |
| 319-85-8 | Delta-BHC | 1.34 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | 1.34 | ND |
| 57-74-9 | Chlordane | 6.70 | ND |
| 72-54-8 | 4,4'-DDD | 1.34 | ND |
| 72-55-9 | 4,4'-DDE | 1.34 | ND |
| 50-29-3 | 4,4'DDT | 1.34 | ND |
| 60-57-1 | Dieldrin | 1.34 | ND |
| 959-98-8 | Endosulfan I | 1.34 | ND |
| 33213-65-9 | Endosulfan II | 1.34 | ND |
| 1031-07-8 | Endosulfan Sulphate | 1.34 | ND |
| 72-20-8 | Endrin | 1.34 | ND |
| 744-93-4 | Endrin Aldehyde | 1.34 | |
| 76-44-8 | Heptachlor | 1.34 | ND |
| 1024-57-3 | Heptachlor Epoxide | 1.34 | ND |
| 72-43-5 | Methoxychlor | 3.35 | ND |
| 8001-35-2 | Toxaphene | 27.0 | ND |
| 12674-11-2 | PCB 1016 | 6.70 | ND |
| 11104-28-2 | PCB 1221 | 6.70 | ND |
| 11141-16-5 | PCB 1232 | 6.70 | ND |
| 53469-21-9 | PCB 1242 | 6.70 | ND |
| 12672-29-6 | | 6.70 | ND |
| 11097-69-1 | PCB 1254 | 6.70 | ND |
| 11096-82-5 | PCB 1260 | 6.70 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.



LABORATORY REPORT Lab Log No: 9402235

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 4, 1994

Sampling Date: 02/17/94
Sampled By: B. Phillips
Date Received: 02/22/94

Site:

Barlow Road NYSDOT

Sample ID: MW-7

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|----------|------------|----------|-----|-------|-------|--------|
| Arsenic | 200.7/6010 | 03/03/94 | SRG | mg/l | .10 | ND |
| Barium | 200.7/6010 | 03/03/94 | SRG | mg/l | .050 | ND |
| Cadmium | 200.7/6010 | 03/03/94 | SRG | mg/l | .05 | ND |
| Chromium | 200.7/6010 | 03/03/94 | SRG | mg/1 | .05 | ND |
| Lead | 239.2/7421 | 02/24/94 | SRG | mg/L | .001 | .001 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | mg/L | .0004 | ND |
| Selenium | 200.7/6010 | 03/03/94 | SRG | mg/L | .10 | ND |
| Silver | 200.7/6010 | 03/03/94 | SRG | mg/L | .10 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402235

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 4, 1994

Sampling Date: 02/21/94
Sampled By: B. Phillips
Date Received: 02/22/94

Site: Barlow Road NYSDOT

Sample ID: MW-6 (8-10)

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-------|---------|------|----------|
| Arsenic | 200.7/6010 | 03/03/94 | SRG | ug/g | 9.59 | ND |
| Barium | 200.7/6010 | 03/03/94 | SRG | ug/g | 4.79 | 106 |
| Cadmium | 200.7/6010 | 03/03/94 | SRG | ug/g | 4.79 | 13.4 |
| Chromium | 200.7/6010 | 03/03/94 | SRG | ug/g | 4.79 | ND |
| Digest | 3050 | , , | SAG D | ate Com | | 02/24/94 |
| Lead | 239.2/7421 | 02/24/94 | SRG | ug/g | .959 | 29.0 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | ug/g | .077 | .201 |
| Selenium | 200.7/6010 | 03/03/94 | SRG | ug/g | 9.59 | ND |
| Silver | 200.7/6010 | 03/03/94 | SRG | ug/g | 9.59 | 21.1 |
| Total Cyanide | 335.2/9010 | 03/02/94 | JEC | ug/g | .20 | ND |

Dry weight basis.

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403 LABORATORY REPORT Lab Log No: 9402235

Client: Stetson-Harza

181 Genesee Street 13501-2168 Utica, NY

Report Date:

March 4, 1994

Sampling Date: 02/22/94 Sampled By:

B. Phillips

Date Received: 02/22/94

Site:

Barlow Road NYSDOT

Sample ID: **MW-6**

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|----------|------------|----------|-----|-------|-------|--------|
| Arsenic | 200.7/6010 | 03/03/94 | SRG | mg/l | .10 | ND |
| Barium | 200.7/6010 | 03/03/94 | SRG | mg/l | .050 | .32 |
| Cadmium | 200.7/6010 | 03/03/94 | SRG | mg/l | .05 | ND |
| Chromium | 200.7/6010 | 03/03/94 | SRG | mg/l | .05 | ND |
| Lead | 239.2/7421 | 02/24/94 | SRG | mg/L | .001 | .012 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | mg/L | .0004 | ND |
| Selenium | 200.7/6010 | 03/03/94 | SRG | mg/L | .10 | ND |
| Silver | 200.7/6010 | 03/03/94 | SRG | mg/L | .10 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402235

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 4, 1994

Sampling Date: 02/21/94 B. Phillips Sampled By: Date Received: 02/22/94

Site:

Barlow Road NYSDOT

Sample ID: MW-5 (6-8)

| UNITS | DL | RESULT |
|--|---|--|
| The second secon | | |
| ug/g | 10.6 | ND |
| ug/g | 5.28 | 67.5 |
| ug/g | 5.28 | 14.8 |
| ug/g | 5.28 | ND |
| ate Com | | 02/24/94 |
| ug/g | .106 | 17.9 |
| ug/g | .090 | .285 |
| ug/g | 10.6 | ND |
| ug/g | 10.6 | ND |
| ug/g | .20 | ND |
| | ug/g ug/g ate Com ug/g ug/g ug/g ug/g | ug/g 5.28 ug/g 5.28 ug/g 5.28 ate Com ug/g .106 ug/g .090 ug/g 10.6 ug/g 10.6 |

Dry weight basis.

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



CORTLAND, N.Y. 13045

607-753-3403

LABORATORY REPORT Lab Log No: 9402235

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 4, 1994

Sampled By:

Sampling Date: 02/22/94 B. Phillips Date Received: 02/22/94

Site:

Barlow Road NYSDOT

Sample ID: MW-5

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|----------|------------|----------|-----|-------|-------|--------|
| Arsenic | 200.7/6010 | 03/03/94 | SRG | mg/l | .10 | ND |
| Barium | 200.7/6010 | 03/03/94 | SRG | mg/l | .050 | ND |
| Cadmium | 200.7/6010 | 03/03/94 | SRG | mg/l | .05 | ND |
| Chromium | 200.7/6010 | 03/03/94 | SRG | mg/l | .05 | ND |
| Lead | 239.2/7421 | 02/24/94 | SRG | mg/L | .001 | .004 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | mg/L | .0004 | ND |
| Selenium | 200.7/6010 | 03/03/94 | SRG | mg/L | .10 | ND |
| Silver | 200.7/6010 | 03/03/94 | SRG | mg/L | .10 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



CORTLAND, N.Y. 13045

607-753-3403

LABORATORY REPORT Lab Log No: 9402235

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Barlow Road NYSDOT

Report Date:

March 4, 1994

Sampling Date: 02/22/94 Sampled By: B. Phillips

Date Received: 02/22/94

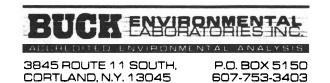
Sample ID: MW-4

Site:

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|----------|------------|----------|-----|-------|-------|--------|
| Arsenic | 200.7/6010 | 03/03/94 | SRG | mg/l | .10 | ND |
| Barium | 200.7/6010 | 03/03/94 | SRG | mg/l | .050 | ND |
| Cadmium | 200.7/6010 | 03/03/94 | SRG | mg/1 | .05 | ND |
| Chromium | 200.7/6010 | 03/03/94 | SRG | mg/l | .05 | ND |
| Lead | 239.2/7421 | 02/24/94 | SRG | mg/L | .001 | ND |
| Mercury | 245.1/7470 | 02/28/94 | SRG | mg/L | .0004 | ND |
| Selenium | 200.7/6010 | 03/03/94 | SRG | mg/L | .10 | ND |
| Silver | 200.7/6010 | 03/03/94 | SRG | mg/L | .10 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Lab Log No: 9402235

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 4, 1994

Sampling Date: 02/22/94
Sampled By: B. Phillips
Date Received: 02/22/94

Site: Barlow Road NYSDOT

Sample ID: LS-1

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-------|----------|------|----------|
| Arsenic | 200.7/6010 | 03/03/94 | SRG | ug/g | 12.1 | ND |
| Barium | 200.7/6010 | 03/03/94 | SRG | ug/g | 6.06 | 52.2 |
| Cadmium | 200.7/6010 | 03/03/94 | SRG | ug/g | 6.06 | ND |
| Chromium | 200.7/6010 | 03/03/94 | SRG | ug/g | 6.06 | ND |
| Digest | 3050 | | SAG I | Date Com | | 02/24/94 |
| Lead | 239.2/7421 | 02/24/94 | SRG | ug/g | .121 | 11.3 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | ug/g | .097 | .182 |
| Selenium | 200.7/6010 | 03/03/94 | SRG | ug/g | 12.1 | ND |
| Silver | 200.7/6010 | 03/03/94 | SRG | ug/g | 12.1 | 18.2 |
| Total Cyanide | 335.2/9010 | 03/02/94 | JEC | ug/g | .20 | ND |

Dry weight basis.

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



CORTLAND, N.Y. 13045

607-753-3403

NYS ELAP CERT 10795

LABORATORY REPORT

Report Date: Client: STETSON-HARZA 3/04/94

Sampling Date: 2/17,2/22/94 Site:

Barlow Road NYSDOT Sampled By: B.Phillips Date Received: 2/22/94 Analysis Date: 3/01/94

9402235 Samples: Water Lab Log No:

BTEX (By EPA 8020 and NYSDOH 310-19)

| Sample ID & Dates | Benzene | Toluene | Ethyl Benzene | (m,p,o) Xylenes | Late Peaks |
|----------------------|----------|----------|------------------|--------------------|---------------|
| 2/17, 2/22/94 | | | | | |
| MW-4 MW-5 | ND ND | ND ND | ND ND | ND ND | ND ND |
| MW-6 | ND | ND | ND | ND | ND |
| MW-7 | ND | ND | ND | ND | ND |

All concentrations are reported as ug/L.

ND indicates that no amount greater than 1.0 ug/L was detected.

This analysis is certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.



CORTLAND, N.Y. 13045

607-753-3403

NYS ELAP CERT 10795

LABORATORY REPORT

Client: STETSON-HARZA Report Date: 3/04/94

Sampling Date: 2/21/94 Sampled By: B.Phillips Site: Barlow Road NYSDOT

Date Received: 2/22/94 Analysis Date: 3/02/94 Sample: Soils Lab Log No: 9402235

BTEX (By EPA 5030 and 8020)

| Sample ID & Dates | Benzene | Toluene | Ethyl Benzene | (m,p,o) Xylenes | Late Peaks |
|-----------------------------------|----------------|----------------|------------------|--------------------|---------------|
| 2/22/94 | | | | | |
| LS-1 MW-5 (6-8) MW-6 (8-10) | ND ND ND | ND ND ND | ND ND ND | ND ND | ND ND Y |

All concentrations are reported as ug/kg.

ND indicates that no amount greater than 1.0 ug/kg was detected.

This analysis is certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402235

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road NYSDOT

Report Date: Sampling Date:

03/04/94 02/22/94 B. Phillips

Sampled By: Date Received:

02/22/94

EAC, 03/02/94 Analyzed by:

Sample ID: LS-1

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/kg | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 1.0 | ND |
| Bromoform | 75-25-2 | ug/kg | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 1.0 | ND |
| Chloroform | 67-66-3 | ug/kg | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/kg | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/kg | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/kg | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/kg | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 1.0 | *1.2* |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/kg | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/kg | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/kg | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



LABORATORY REPORT Lab Log No: 9402235

3845 ROUTE 11 SOUTH, CORTLAND, N.Y. 13045

P.O. BOX 5150 607-753-3403

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road NYSDOT

Report Date:

03/04/94 02/21/94

Sampling Date: Sampled By: Date Received:

B. Phillips 02/22/94

Analyzed by: EAC, 03/02/94

Sample ID: MW-5 (6-8)

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/kg | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 1.0 | ND |
| Bromoform | 75-25-2 | ug/kg | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 1.0 | ND |
| Chloroform | 67-66-3 | ug/kg | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/kg | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/kg | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/kg | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/kg | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/kg | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/kg | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/kg | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402235

Client: Stetson-Harza

Sample ID:

181 Genesee Street Utica, NY 13501-2168

MW-6 (8-10)

Site: Barlow Road NYSDOT

Report Date: Sampling Date:

03/04/94 02/21/94

Sampled By: Date Received:

B. Phillips 02/22/94

Analyzed by: EAC, 03/02/94

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/kg | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 1.0 | ND |
| Bromoform | 75-25-2 | ug/kg | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 1.0 | ND |
| Chloroform | 67-66-3 | ug/kg | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/kg | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/kg | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/kg | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/kg | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/kg | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/kg | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/kg | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



181 Genesee Street

Site: Barlow Road NYSDOT

Utica, NY 13501-2168

P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402235

Report Date: Sampling Date:

03/04/94 02/22/94 B. Phillips

Sampled By: Date Received:

B. Phillips 02/22/94

Analyzed by:

EAC, 03/01/94

Sample ID: MW-4

Client: Stetson-Harza

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|-----------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND. |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



3845 ROUTE 11 SOUTH, P.O. BOX 5150 CORTLAND, N.Y. 13045 607-753-3403

LABORATORY REPORT Lab Log No: 9402235

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road NYSDOT

Report Date: Sampling Date:

03/04/94 02/22/94 B. Phillips

Sampled By: B. P. Date Received: 02/2/2 Analyzed by: EAC

02/22/94

EAC, 03/01/94

Sample ID: MW-5 VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| rans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402235

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road NYSDOT

Report Date: Sampling Date:

03/04/94 02/22/94 B. Phillips

Sampled By: Date Received:

02/22/94

Analyzed by: EAC, 03/01/94

Sample ID: MW-6

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87 <i>-</i> 5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Sampling Date: 2/18/94

Site: Barlow Road NYSDOT Sampled By: P.Rosato Date Received: 2/18/94

Sample: Water - MW-1 Lab Log No: 9402208

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .01 | ND |
| 319-84-6 | Alpha-BHC | .01 | ND |
| 319-85-7 | Beta-BHC | .01 | ND |
| 319-85-8 | Delta-BHC | .01 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .01 | ND |
| 57-74-9 | Chlordane | .05 | ND |
| 72-54-8 | 4,4'-DDD | .01 | ND |
| 72-55-9 | 4,4'-DDE | .01 | ND |
| 50-29-3 | 4,4'DDT | .01 | ND |
| 60-57-1 | Dieldrin | .01 | ND |
| 959-98-8 | Endosulfan I | .01 | ND |
| 33213-65-9 | Endosulfan II | .01 | ND |
| 1031-07-8 | Endosulfan Sulphate | .01 | ND |
| 72-20-8 | Endrin | .01 | ND |
| 744-93-4 | Endrin Aldehyde | .01 | ND |
| 76-44-8 | Heptachlor | .01 | ND |
| 1024-57-3 | Heptachlor Epoxide | .01 | ND |
| 72-43-5 | Methoxychlor | .025 | ND |
| 8001-35-2 | Toxaphene | .20 | ND |
| 12674-11-2 | PCB 1016 | .05 | ND |
| 11104-28-2 | PCB 1221 | .05 | ND |
| 11141-16-5 | PCB 1232 | .05 | ND |
| 53469-21-9 | PCB 1242 | .05 | ND |
| 12672-29-6 | PCB 1248 | .05 | ND |
| 11097-69-1 | PCB 1254 | .05 | ND |
| 11096-82-5 | PCB 1260 | .05 | ND |

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. Laboratory Director



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Site: Barlow Road NYSDOT Sampled By: P.Rosato

Date Received: 2/18/94

Sample: Water - MW-2 Lab Log No: 9402208

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .01 | ND |
| 319-84-6 | Alpha-BHC | .01 | ND |
| 319-85-7 | Beta-BHC | .01 | ND |
| 319-85-8 | Delta-BHC | .01 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .01 | ND |
| 57-74-9 | Chlordane | .05 | ND |
| 72-54-8 | 4,4'-DDD | .01 | ND |
| 72-55-9 | 4,4'-DDE | .01 | ND |
| 50-29-3 | 4,4 DDT | .01 | ND |
| 60-57-1 | Dieldrin | .01 | ND |
| 959-98-8 | Endosulfan I | .01 | ND |
| 33213-65-9 | Endosulfan II | .01 | ND |
| 1031-07-8 | Endosulfan Sulphate | .01 | ND |
| 72-20-8 | Endrin | .01 | ND |
| 744-93-4 | Endrin Aldehyde | .01 | ND |
| 76-44-8 | Heptachlor | .01 | ND |
| 1024-57-3 | Heptachlor Epoxide | .01 | ND |
| 72-43-5 | Methoxychlor | .025 | ND |
| 8001-35-2 | Toxaphene | .20 | ND |
| 12674-11-2 | PCB 1016 | .05 | ND |
| 11104-28-2 | PCB 1221 | .05 | ND |
| 11141-16-5 | PCB 1232 | .05 | ND |
| 53469-21-9 | PCB 1242 | .05 | ND |
| 12672-29-6 | PCB 1248 | .05 | ND |
| 11097-69-1 | PCB 1254 | .05 | ND |
| 11096-82-5 | PCB 1260 | .05 | ND |

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. Laboratory Director



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Sampling Date: 2/18/94

Site: Barlow Road NYSDOT Sampled By: P.Rosato
Date Received: 2/18/94

Sample: Soil - MW-4 (20-22) Lab Log No: 9402208

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

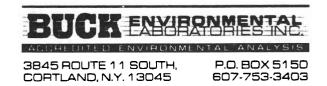
| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | 1.34 | ND |
| 319-84-6 | Alpha-BHC | 1.34 | ND |
| 319-85-7 | Beta-BHC | 1.34 | ND |
| 319-85-8 | Delta-BHC | 1.34 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | 1.34 | ND |
| 57-74-9 | Chlordane | 6.70 | ND |
| 72-54-8 | 4,4'-DDD | 1.34 | ND |
| 72-55-9 | 4,4'-DDE | 1.34 | ND |
| 50-29-3 | 4,4'DDT | 1.34 | ND |
| 60-57-1 | Dieldrin | 1.34 | ND |
| 959-98-8 | Endosulfan I | 1.34 | ND |
| 33213-65-9 | Endosulfan II | 1.34 | ND |
| 1031-07-8 | Endosulfan Sulphate | 1.34 | ND |
| 72-20-8 | Endrin | 1.34 | ND |
| 744-93-4 | Endrin Aldehyde | 1.34 | ND |
| 76-44-8 | Heptachlor | 1.34 | ND |
| 1024-57-3 | Heptachlor Epoxide | 1.34 | ND |
| 72-43-5 | Methoxychlor | 3.35 | ND |
| 8001-35-2 | Toxaphene | 27.0 | ND |
| 12674-11-2 | PCB 1016 | 6.70 | ND |
| 11104-28-2 | PCB 1221 | 6.70 | ND |
| 11141-16-5 | PCB 1232 | 6.70 | ND |
| 53469-21-9 | PCB 1242 | 6.70 | ND |
| 12672-29-6 | PCB 1248 | 6.70 | ND |
| 11097-69-1 | PCB 1254 | 6.70 | ND |
| 11096-82-5 | PCB 1260 | 6.70 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. Laboratory Director

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Lab Log No: 9402208

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 4, 1994

Sampling Date: 02/18/94
Sampled By: P. Rosato
Date Received: 02/18/94

Site:

Barlow Rd. NYSDOT

Sample ID: MW-1

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|----------|------------|----------|-----|-------|-------|--------|
| Arsenic | 200.7/6010 | 02/28/94 | SRG | mg/l | .10 | ND |
| Barium | 200.7/6010 | 02/28/94 | SRG | mg/l | .050 | 1.46 |
| Cadmium | 200.7/6010 | 02/28/94 | SRG | mg/1 | .05 | ND |
| Chromium | 200.7/6010 | 02/28/94 | SRG | mg/l | .05 | ND |
| Lead | 239.2/7421 | 02/28/94 | SRG | mg/L | .001 | .003 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | mg/L | .0004 | ND |
| Selenium | 200.7/6010 | 02/28/94 | SRG | mg/L | .10 | ND |
| Silver | 200.7/6010 | 02/28/94 | SRG | mg/L | .10 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



CORTLAND, N.Y. 13045

607-753-3403

LABORATORY REPORT Lab Log No: 9402208

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Rd. NYSDOT Report Date:

March 4, 1994

Sampling Date: 02/18/94 Sampled By: P. Rosato Date Received: 02/18/94

Sample ID: MW-2

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|----------|------------|----------|-----|-------|-------|--------|
| Arsenic | 200.7/6010 | 02/28/94 | SRG | mg/l | .10 | ND |
| Barium | 200.7/6010 | 02/28/94 | SRG | mg/l | .050 | ND |
| Cadmium | 200.7/6010 | 02/28/94 | SRG | mg/1 | .05 | ND |
| Chromium | 200.7/6010 | 02/28/94 | SRG | mg/1 | .05 | ND |
| Lead | 239.2/7421 | 02/28/94 | SRG | mg/L | .001 | .004 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | mg/L | .0004 | ND |
| Selenium | 200.7/6010 | 02/28/94 | SRG | mg/L | .10 | ND |
| Silver | 200.7/6010 | 02/28/94 | SRG | mg/L | .10 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



LABORATORY REPORT Lab Log No: 9402208

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 4, 1994

Sampling Date: 02/18/94
Sampled By: P. Rosato
Date Received: 02/18/94

Site: Barlow Rd. NYSDOT

Sample ID: MW-4 (20-22)

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-------|---------|------|----------|
| Arsenic | 200.7/6010 | 02/28/94 | SRG | ug/g | 12.6 | ND |
| Barium | 200.7/6010 | 02/28/94 | SRG | ug/g | 6.30 | 89.6 |
| Cadmium | 200.7/6010 | 02/28/94 | SRG | ug/g | 6.30 | 21.5 |
| Chromium | 200.7/6010 | 02/28/94 | SRG | ug/g | 6.30 | 18.9 |
| Digest | 3050 | • | SAG D | ate Com | | 02/24/94 |
| Lead | 239.2/7421 | 02/28/94 | SRG | ug/g | .126 | 13.6 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | ug/g | .101 | .480 |
| Selenium | 200.7/6010 | 02/28/94 | SRG | ug/g | 12.6 | ND |
| Silver | 200.7/6010 | 02/28/94 | SRG | ug/g | 12.6 | ND |
| Total Cyanide | 335.2/9010 | 03/02/94 | JEC | ug/g | .20 | · ND |

Dry weight basis.

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

NYS ELAP CERT 10795

LABORATORY REPORT

Client: STETSON-HARZA Report Date: 3/04/94

Site: Barlow Road NYSDOT Sampled By: P.Rosato

Date Received: 2/18/94
Analysis Date: 3/02/94

Sample: Soil - MW-4 (20-22) Lab Log No: 9402208

BTEX (By EPA 5030 and 8020)

| Sample ID & Dates | Benzene | Toluene | Ethyl Benzene | (m,p,o) Xylenes | Late Peaks |
|----------------------|---------|---------|------------------|--------------------|---------------|
| 2/18/94 | | | | | 3 |
| MW-4 (20-22) | ND | ND | ND | ND | ND |

All concentrations are reported as ug/kg.

ND indicates that no amount greater than 1.0 ug/kg was detected.

This analysis is certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

John H. Buck, P.E. Laboratory Director

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NYS ELAP CERT 10795

LABORATORY REPORT

Client: STETSON-HARZA

Report Date:

3/04/94

Site:

Barlow Road NYSDOT

Sampling Date: Sampled By:

2/18/94 P.Rosato

Date Received: Analysis Date:

2/18/94

Lab Log No:

2/24/94 9402208

Samples: Water

BTEX (By EPA 8020 and NYSDOH 310-19)

| Sample ID & Dates | Benzene | Toluene | Ethyl Benzene | (m,p,o) Xylenes | Late Peaks |
|----------------------|----------|----------|------------------|--------------------|---------------|
| 2/18/94 | | | | | |
| MW-1 MW-2 | ND ND | ND ND | ND ND | 1.6 ND | ND ND |

All concentrations are reported as ug/L.

ND indicates that no amount greater than 1.0 ug/L was detected.

This analysis is certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

/John H. Buck, P.E. / Laboratory Director



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402208

Client: Stetson-Harza

Sample ID: MW-1

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Rd. NYSDOT

Report Date: Sampling Date: 03/04/94 02/18/94 P. Rosato

Sampled By: Date Received:

02/18/94

Analyzed by: EAC, 02/24/94

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | . 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402208

Client: Stetson-Harza

Sample ID:

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Rd. NYSDOT

MW-2

Report Date: Sampling Date:

03/04/94 02/18/94

Sampled By: Date Received:

P. Rosato 02/18/94

Analyzed by: EAC, 02/24/94

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | . 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | *8.6* |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402208

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Rd. NYSDOT

Report Date: Sampling Date: Sampled By: 03/04/94 02/18/94 P. Rosato

Date Received:

02/18/94

Analyzed by: EAC, 03/02/94

Sample ID: MW-4 (20-22) VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/kg | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 1.0 | ND |
| Bromoform | 75-25-2 | ug/kg | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 1.0 | ND |
| Chloroform | 67-66-3 | ug/kg | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/kg | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/kg | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 1.0 | *2.1* |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 1.0 | *2.6* |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/kg | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/kg | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 1.0 | *1.2* |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/kg | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/kg | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/kg | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Sampling Date: 2/15/94

Site: Barlow Road NYSDOT Sampled By: P.Rosato Date Received: 2/17/94

Sample: Soil - MW-7 (8-10) Lab Log No: 9402209

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | 1.34 | ND |
| 319-84-6 | Alpha-BHC | 1.34 | ND |
| 319-85-7 | Beta-BHC | 1.34 | ND |
| 319-85-8 | Delta-BHC | 1.34 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | 1.34 | ND |
| 57-74-9 | Chlordane | 6.70 | ND |
| 72-54-8 | 4,4'-DDD | 1.34 | ND |
| 72-55-9 | 4,4'-DDE | 1.34 | ND |
| 50-29-3 | 4,4'DDT | 1.34 | ND |
| 60-57-1 | Dieldrin | 1.34 | ND |
| 959-98-8 | Endosulfan I | 1.34 | ND |
| 33213-65-9 | Endosulfan II | 1.34 | ND |
| 1031-07-8 | Endosulfan Sulphate | 1.34 | ND |
| 72-20-8 | Endrin | 1.34 | ND |
| 744-93-4 | Endrin Aldehyde | 1.34 | ND |
| 76-44-8 | Heptachlor | 1.34 | ND |
| 1024-57-3 | Heptachlor Epoxide | 1.34 | ND |
| 72-43-5 | Methoxychlor | 3.35 | ND |
| 8001-35-2 | Toxaphene | 27.0 | ND |
| 12674-11-2 | PCB 1016 | 6.70 | ND |
| 11104-28-2 | PCB 1221 | 6.70 | ND |
| 11141-16-5 | PCB 1232 | 6.70 | ND |
| 53469-21-9 | PCB 1242 | 6.70 | ND |
| 12672-29-6 | PCB 1248 | 6.70 | ND |
| 11097-69-1 | PCB 1254 | 6.70 | ND |
| 11096-82-5 | PCB 1260 | 6.70 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. Laboratory Director



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Sampling Date: 2/15/94

Site: Barlow Road NYSDOT Sampled By: P.Rosato Date Received: 2/17/94

Sample: Soil - MW-7 Composite Lab Log No: 9402209

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | 1.34 | ND |
| 319-84-6 | Alpha-BHC | 1.34 | ИD |
| 319-85-7 | Beta-BHC | 1.34 | ND |
| 319-85-8 | Delta-BHC | 1.34 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | 1.34 | ND |
| 57-74-9 | Chlordane | 6.70 | ND |
| 72-54-8 | 4,4'-DDD | 1.34 | ND |
| 72-55-9 | 4,4'-DDE | 1.34 | ND |
| 50-29-3 | 4,4'DDT | 1.34 | ND |
| 60-57-1 | Dieldrin | 1.34 | ND |
| 959-98-8 | Endosulfan I | 1.34 | ND |
| 33213-65-9 | Endosulfan II | 1.34 | ND |
| 1031-07-8 | Endosulfan Sulphate | 1.34 | ND |
| 72-20-8 | Endrin | 1.34 | ND |
| 744-93-4 | Endrin Aldehyde | 1.34 | ND |
| 76-44-8 | Heptachlor | 1.34 | ND |
| 1024-57-3 | Heptachlor Epoxide | 1.34 | ND |
| 72-43-5 | Methoxychlor | 3.35 | ND |
| 8001-35-2 | Toxaphene | 27.0 | ND |
| 12674-11-2 | PCB 1016 | 6.70 | ND |
| 11104-28-2 | PCB 1221 | 6.70 | ND |
| 11141-16-5 | PCB 1232 | 6.70 | ND |
| 53469-21-9 | PCB 1242 | 6.70 | ND |
| 12672-29-6 | PCB 1248 | 6.70 | ND |
| 11097-69-1 | PCB 1254 | 6.70 | ND |
| 11096-82-5 | PCB 1260 | 6.70 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. Laboratory Director



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Sampling Date: 2/16/94

Site: Barlow Road NYSDOT Sampled By: P.Rosato Date Received: 2/17/94

Sample: Soil - MW-1 (4-6) Lab Log No: 9402209

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | 1.34 | ND |
| 319-84-6 | Alpha-BHC | 1.34 | ND |
| 319-85-7 | Beta-BHC | 1.34 | ND |
| 319-85-8 | Delta-BHC | 1.34 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | 1.34 | ND |
| 57-74-9 | Chlordane | 6.70 | ND |
| 72-54-8 | 4,4'-DDD | 1.34 | ND |
| 72-55-9 | 4,4'-DDE | 1.34 | ND |
| 50-29-3 | 4,4'DDT | 1.34 | ND |
| 60-57-1 | Dieldrin | 1.34 | ND |
| 959-98-8 | Endosulfan I | 1.34 | ND |
| 33213-65-9 | Endosulfan II | 1.34 | ND |
| 1031-07-8 | Endosulfan Sulphate | 1.34 | ND |
| 72-20-8 | Endrin | 1.34 | ND |
| 744-93-4 | Endrin Aldehyde | 1.34 | ND |
| 76-44-8 | Heptachlor | 1.34 | ND |
| 1024-57-3 | Heptachlor Epoxide | 1.34 | ND |
| 72-43-5 | Methoxychlor | 3.35 | ND |
| 8001-35-2 | Toxaphene | 27.0 | ND |
| 12674-11-2 | PCB 1016 | 6.70 | ND |
| 11104-28-2 | PCB 1221 | 6.70 | ND |
| 11141-16-5 | PCB 1232 | 6.70 | ND |
| 53469-21-9 | PCB 1242 | 6.70 | ND |
| 12672-29-6 | PCB 1248 | 6.70 | ND |
| 11097-69-1 | PCB 1254 | 6.70 | ND |
| 11096-82-5 | PCB 1260 | 6.70 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. / Laboratory Director



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date:

Report Date: 3/04/94 Sampling Date: 2/17/94

Site: Barlow Road NYSDOT

Sampled By: P.Rosato
Date Received: 2/17/94

Sample: Soil - MW-2 (8-10)

Lab Log No: 9402209

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | 1.34 | ND |
| 319-84-6 | Alpha-BHC | 1.34 | ND |
| 319-85-7 | Beta-BHC | 1.34 | ND |
| 319-85-8 | Delta-BHC | 1.34 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | 1.34 | ND |
| 57-74-9 | Chlordane | 6.70 | ND |
| 72-54-8 | 4,4'-DDD | 1.34 | ND |
| 72-55-9 | 4,4'-DDE | 1.34 | ND |
| 50-29-3 | 4,4'DDT | 1.34 | ND |
| 60-57-1 | Dieldrin | 1.34 | ND |
| 959-98-8 | Endosulfan I | 1.34 | ND |
| 33213-65-9 | Endosulfan II | 1.34 | ND |
| 1031-07-8 | Endosulfan Sulphate | 1.34 | ND |
| 72-20-8 | Endrin | 1.34 | ND |
| 744-93-4 | Endrin Aldehyde | 1.34 | ND |
| 76-44-8 | Heptachlor | 1.34 | ND |
| 1024-57-3 | Heptachlor Epoxide | 1.34 | ND |
| 72-43-5 | Methoxychlor | 3.35 | ИD |
| 8001-35-2 | Toxaphene | 27.0 | ND |
| 12674-11-2 | PCB 1016 | 6.70 | ND |
| 11104-28-2 | PCB 1221 | 6.70 | ND |
| 11141-16-5 | PCB 1232 | 6.70 | ND |
| 53469-21-9 | PCB 1242 | 6.70 | ND |
| 12672-29-6 | PCB 1248 | 6.70 | ND |
| 11097-69-1 | PCB 1254 | 6.70 | ND |
| 11096-82-5 | PCB 1260 | 6.70 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

/John H. Buck, P.E. Laboratory Director



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Sampling Date: 2/15/94
Site: Barlow Road NYSDOT Sampled By: P.Rosato

Date Received: 2/17/94
Sample: Soil - MW-3 (8-10)
Lab Log No: 9402209

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | 1.34 | ND |
| 319-84-6 | Alpha-BHC | 1.34 | ND |
| 319-85-7 | Beta-BHC | 1.34 | ND |
| 319-85-8 | Delta-BHC | 1.34 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | 1.34 | ND |
| 57-74-9 | Chlordane | 6.70 | ND |
| 72-54-8 | 4,4'-DDD | 1.34 | ND |
| 72-55-9 | 4,4'-DDE | 1.34 | ND |
| 50-29-3 | 4,4'DDT | 1.34 | ND |
| 60-57-1 | Dieldrin | 1.34 | ND |
| 959-98-8 | Endosulfan I | 1.34 | ND |
| 33213-65-9 | Endosulfan II | 1.34 | ND |
| 1031-07-8 | Endosulfan Sulphate | 1.34 | ND |
| 72-20-8 | Endrin | 1.34 | ND |
| 744-93-4 | Endrin Aldehyde | 1.34 | ND |
| 76-44-8 | Heptachlor | 1.34 | ND |
| 1024-57-3 | Heptachlor Epoxide | 1.34 | ND |
| 72-43-5 | Methoxychlor | 3.35 | ND |
| 8001-35-2 | Toxaphene | 27.0 | ND |
| 12674-11-2 | PCB 1016 | 6.70 | ND |
| 11104-28-2 | PCB 1221 | 6.70 | ND |
| 11141-16-5 | PCB 1232 | 6.70 | ND |
| 53469-21-9 | PCB 1242 | 6.70 | ND |
| 12672-29-6 | PCB 1248 | 6.70 | ND |
| 11097-69-1 | PCB 1254 | 6.70 | ND |
| 11096-82-5 | PCB 1260 | 6.70 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. Laboratory Director



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Sampling Date: 2/16/94
Site: Barlow Road NYSDOT Sampled By: P.Rosato

Date Received: 2/17/94
Sample: Water - FHX-12
Lab Log No: 9402209

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .01 | ND |
| 319-84-6 | Alpha-BHC | .01 | ND |
| 319-85-7 | Beta-BHC | .01 | ND |
| 319-85-8 | Delta-BHC | .01 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .01 | ND |
| 57-74-9 | Chlordane | .05 | ND |
| 72-54-8 | 4,4'-DDD | .01 | ND |
| 72-55-9 | 4,4'-DDE | .01 | ND |
| 50-29-3 | 4,4'DDT | .01 | ND |
| 60-57-1 | Dieldrin | .01 | ND |
| 959-98-8 | Endosulfan I | .01 | ND |
| 33213-65-9 | Endosulfan II | .01 | ND |
| 1031-07-8 | Endosulfan Sulphate | .01 | ND |
| 72-20-8 | Endrin | .01 | ND |
| 744-93-4 | Endrin Aldehyde | .01 | ND |
| 76-44-8 | Heptachlor | .01 | ND |
| 1024-57-3 | Heptachlor Epoxide | .01 | ND |
| 72-43-5 | Methoxychlor | .025 | ND |
| 8001-35-2 | Toxaphene | .20 | ND |
| 12674-11-2 | PCB 1016 | .05 | ND |
| 11104-28-2 | PCB 1221 | .05 | ND |
| 11141-16-5 | PCB 1232 | .05 | ND |
| 53469-21-9 | PCB 1242 | .05 | ND |
| 12672-29-6 | PCB 1248 | .05 | ND |
| 11097-69-1 | PCB 1254 | .05 | ND |
| 11096-82-5 | PCB 1260 | .05 | ND |

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. Laboratory Director



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza

3/04/94 Report Date:

Sampling Date: 2/16/94

P.Rosato

Site:

Barlow Road NYSDOT

Sampled By: Date Received: 2/17/94

Sample: Water - FHX-9

Lab Log No: 9402209

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .01 | ND |
| 319-84-6 | Alpha-BHC | .01 | ND |
| 319-85-7 | Beta-BHC | .01 | ND |
| 319-85-8 | Delta-BHC | .01 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .01 | ND |
| 57-74-9 | Chlordane | .05 | ND |
| 72-54-8 | 4,4'-DDD | .01 | ND |
| 72-55-9 | 4,4'-DDE | .01 | ND |
| 50-29-3 | 4,4'DDT | .01 | ND |
| 60-57-1 | Dieldrin | .01 | ND |
| 959-98-8 | Endosulfan I | .01 | ND |
| 33213-65-9 | Endosulfan II | .01 | ND |
| 1031-07-8 | Endosulfan Sulphate | .01 | ND |
| 72-20-8 | Endrin | .01 | ND |
| 744-93-4 | Endrin Aldehyde | .01 | ND |
| 76-44-8 | Heptachlor | .01 | ND |
| 1024-57-3 | Heptachlor Epoxide | .01 | ND |
| 72-43-5 | Methoxychlor | .025 | ND |
| 8001-35-2 | Toxaphene | .20 | ND |
| 12674-11-2 | PCB 1016 | .05 | ND |
| 11104-28-2 | PCB 1221 | .05 | ND |
| 11141-16-5 | PCB 1232 | .05 | ND |
| 53469-21-9 | PCB 1242 | .05 | ND |
| 12672-29-6 | PCB 1248 | .05 | ND |
| 11097-69-1 | PCB 1254 | .05 | ND |
| 11096-82-5 | PCB 1260 | .05 | ND |

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

> John H. Buck, P.E. Laboratory Director



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date:

Report Date: 3/04/94 Sampling Date: 2/16/94

Site: Barlow Road NYSDOT Sampled By: P.Rosato Date Received: 2/17/94

Sample: Water - FHX-3 Lab Log No: 9402209

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|--------------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .01 | ND |
| 319-84-6 | Alpha-BHC | .01 | ND |
| 319-85-7 | Beta-BHC | .01 | ND |
| 319-85-8 | Delta-BHC | .01 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .01 | ND |
| 57-74-9 | Chlordane | .05 | ND |
| 72-54-8 | 4,4'-DDD | .01 | ND |
| 72-55-9 | 4,4'-DDE | .01 | ND |
| 50-29-3 | 4,4'DDT | .01 | ND |
| 60-57-1 | Dieldrin | .01 | ND |
| 959-98-8 | Endosulfan I | .01 | ND |
| 33213-65-9 | | .01 | ND |
| 1031-07 - 8 | Endosulfan Sulphate | .01 | ND |
| 72-20-8 | Endrin | .01 | ND |
| 744-93-4 | Endrin Aldehyde | .01 | ND |
| 76-44-8 | Heptachlor | .01 | ND |
| 1024-57-3 | Heptachlor Epoxide | .01 | ND |
| 72-43-5 | Methoxychlor | .025 | ND |
| 8001-35-2 | Toxaphene | .20 | ND |
| 12674-11-2 | PCB 1016 | .05 | ND |
| 11104-28-2 | PCB 1221 | .05 | ND |
| 11141-16-5 | PCB 1232 | .05 | ND |
| 53469-21-9 | PCB 1242 | .05 | ND |
| 12672-29-6 | PCB 1248 | .05 | ND |
| 11097-69-1 | PCB 1254 | .05 | ND |
| 11096-82-5 | PCB 1260 | .05 | ND |

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. Laboratory Director

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P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: Stetson-Harza Report Date: 3/04/94

Sampling Date: 2/17/94
Site: Barlow Road NYSDOT Sampled By: P.Rosato
Date Received: 2/17/94

Sample: Water - MW-3 Lab Log No: 9402209

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .01 | ND |
| 319-84-6 | Alpha-BHC | .01 | ND |
| 319-85-7 | Beta-BHC | .01 | ND |
| 319-85-8 | Delta-BHC | .01 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .01 | ND |
| 57-74-9 | Chlordane | .05 | ND |
| 72-54-8 | 4,4'-DDD | .01 | ND |
| 72-55-9 | 4,4'-DDE | .01 | ND |
| 50-29-3 | 4,4'DDT | .01 | ND |
| 60-57-1 | Dieldrin | .01 | ND |
| 959-98-8 | Endosulfan I | .01 | ND |
| 33213-65-9 | Endosulfan II | .01 | ND |
| 1031-07-8 | Endosulfan Sulphate | .01 | ND |
| 72-20-8 | Endrin | .01 | ND |
| 744-93-4 | Endrin Aldehyde | .01 | ND |
| 76-44-8 | Heptachlor | .01 | ND |
| 1024-57-3 | Heptachlor Epoxide | .01 | ND |
| 72-43-5 | Methoxychlor | .025 | ND |
| 8001-35-2 | Toxaphene | .20 | ND |
| 12674-11-2 | PCB 1016 | .05 | ND |
| 11104-28-2 | PCB 1221 | .05 | ND |
| 11141-16-5 | PCB 1232 | .05 | ND |
| 53469-21-9 | PCB 1242 | .05 | ND |
| 12672-29-6 | PCB 1248 | .05 | ND |
| 11097-69-1 | PCB 1254 | .05 | ND |
| 11096-82-5 | PCB 1260 | .05 | ND |

All concentrations are reported as ug/L. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. Laboratory Director



CORTLAND, N.Y. 13045 607-753-3403 LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Rd. NYSDOT Report Date: March 4, 1994

Sampling Date: 02/16/94 Sampled By: P. Rosato Date Received: 02/18/94

Sample ID: MW-1 (4-6)

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|----------|------|----------|
| | 000 5/5010 | 00/00/04 | | , | 11.5 | |
| Arsenic | 200.7/6010 | 02/28/94 | SRG | ug/g | 11.7 | ND |
| Barium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.85 | 50.3 |
| Cadmium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.85 | 15.2 |
| Chromium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.85 | ND |
| Digest | 3050 | | SAG | Date Com | | 02/24/94 |
| Lead | 239.2/7421 | 02/24/94 | SRG | ug/g | .117 | 16.7 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | ug/g | .094 | .140 |
| Selenium | 200.7/6010 | 02/28/94 | SRG | ug/g | 11.7 | ND |
| Silver | 200.7/6010 | 02/28/94 | SRG | ug/g | 11.7 | ND |
| Total Cyanide | 335.2/9010 | 03/02/94 | JEC | ug/g | .20 | ND |

Dry weight basis.

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



CORTLAND, N.Y. 13045

P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street

Report Date: March 4, 1994

Sampling Date: 02/17/94 P. Rosato

Utica, NY 13501-2168 Sampled By: Date Received: 02/18/94

Site: Barlow Rd. NYSDOT

Sample ID: MW-3

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|----------|------------|----------|-----|-------|-------|--------|
| Arsenic | 200.7/6010 | 02/28/94 | SRG | mg/l | .10 | ND |
| Barium | 200.7/6010 | 02/28/94 | SRG | mg/l | .05 | ND |
| Cadmium | 200.7/6010 | 02/28/94 | SRG | mg/l | .05 | ND |
| Chromium | 200.7/6010 | 02/28/94 | SRG | mg/l | .05 | ND |
| Lead | 239.2/7421 | 02/28/94 | SRG | mg/L | .001 | ND |
| Mercury | 245.1/7470 | 02/28/94 | SRG | mg/L | .0004 | ND |
| Selenium | 200.7/6010 | 02/28/94 | SRG | mg/L | .10 | ND |
| Silver | 200.7/6010 | 02/28/94 | SRG | mg/L | .10 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: Sampling Date: 02/17/94

March 4, 1994

Sampled By:

P. Rosato

Date Received: 02/18/94

Site:

Barlow Rd. NYSDOT

Sample ID: MW-2 (8-10)

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|----------|------|----------|
| Arsenic | 200.7/6010 | 02/28/94 | SRG | ug/g | 11.9 | ND |
| Barium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.95 | 110 |
| Cadmium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.95 | 10.7 |
| Chromium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.95 | ND |
| Digest | 3050 | | SAG | Date Com | | 02/24/94 |
| Lead | 239.2/7421 | 02/28/94 | SRG | ug/g | .119 | 12.0 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | ug/g | .095 | .154 |
| Selenium | 200.7/6010 | 02/28/94 | SRG | ug/g | 11.9 | ND |
| Silver | 200.7/6010 | 02/28/94 | SRG | ug/g | 11.9 | 16.6 |
| Total Cyanide | 335.2/9010 | 03/02/94 | JEC | ug/g | .20 | ND |

Dry weight basis.

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Rd. NYSDOT

Report Date:

March 4, 1994

Sampling Date: 02/16/94 Sampled By: P. Rosato Date Received: 02/18/94

Sample ID: FHX-9

| METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|------------|--|---|---|--|---|
| 200.7/6010 | 02/28/94 | SRG | mg/l | .10 | ND |
| 200.7/6010 | 02/28/94 | SRG | | .05 | ND |
| 200.7/6010 | 02/28/94 | SRG | | .05 | ND |
| 200.7/6010 | 02/28/94 | SRG | | .05 | ND |
| 239.2/7421 | 02/24/94 | SRG | | .001 | .005 |
| 245.1/7470 | 02/28/94 | SRG | | .0004 | ND |
| 200.7/6010 | 02/28/94 | SRG | | .10 | ND |
| 200.7/6010 | 02/28/94 | SRG | mg/L | .10 | ND |
| | 200.7/6010 200.7/6010 200.7/6010 200.7/6010 239.2/7421 245.1/7470 200.7/6010 | 200.7/6010 02/28/94 200.7/6010 02/28/94 200.7/6010 02/28/94 200.7/6010 02/28/94 239.2/7421 02/24/94 245.1/7470 02/28/94 200.7/6010 02/28/94 | 200.7/6010 02/28/94 SRG 200.7/6010 02/28/94 SRG 200.7/6010 02/28/94 SRG 200.7/6010 02/28/94 SRG 239.2/7421 02/24/94 SRG 245.1/7470 02/28/94 SRG 200.7/6010 02/28/94 SRG | 200.7/6010 02/28/94 SRG mg/l 200.7/6010 02/28/94 SRG mg/l 200.7/6010 02/28/94 SRG mg/l 200.7/6010 02/28/94 SRG mg/l 239.2/7421 02/24/94 SRG mg/L 245.1/7470 02/28/94 SRG mg/L 200.7/6010 02/28/94 SRG mg/L | 200.7/6010 02/28/94 SRG mg/l .10 200.7/6010 02/28/94 SRG mg/l .05 200.7/6010 02/28/94 SRG mg/l .05 200.7/6010 02/28/94 SRG mg/l .05 239.2/7421 02/24/94 SRG mg/L .001 245.1/7470 02/28/94 SRG mg/L .0004 200.7/6010 02/28/94 SRG mg/L .10 |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



CORTLAND, N.Y. 13045

607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 4, 1994

Sampling Date: 02/16/94 Sampled By: P. Rosato Date Received: 02/18/94

Site: Barlow Rd. NYSDOT

Sample ID: FHX-3

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|----------|------------|----------|-----|-------|-------|--------|
| Arsenic | 200.7/6010 | 02/28/94 | SRG | mg/l | .10 | ND |
| Barium | 200.7/6010 | 02/28/94 | SRG | mg/l | .05 | .31 |
| Cadmium | 200.7/6010 | 02/28/94 | SRG | mg/l | .05 | ND |
| Chromium | 200.7/6010 | 02/28/94 | SRG | mg/l | .05 | ND |
| Lead | 239.2/7421 | 02/24/94 | SRG | mg/L | .001 | .006 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | mg/L | .0004 | ND |
| Selenium | 200.7/6010 | 02/28/94 | SRG | mg/L | .10 | ND |
| Silver | 200.7/6010 | 02/28/94 | SRG | mg/L | .10 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



CORTLAND, N.Y. 13045

607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street 13501-2168 Utica, NY

Report Date:

March 4, 1994

Sampling Date: 02/16/94 Sampled By: P. Rosato Date Received: 02/18/94

Site: Barlow Rd. NYSDOT

Sample ID: FHX-12

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|----------|------------|----------|-----|-------|-------|--------|
| Arsenic | 200.7/6010 | 02/28/94 | SRG | mg/l | .10 | ND |
| Barium | 200.7/6010 | 02/28/94 | SRG | mg/l | .05 | ND |
| Cadmium | 200.7/6010 | 02/28/94 | SRG | mg/l | .05 | ND |
| Chromium | 200.7/6010 | 02/28/94 | SRG | mg/l | .05 | ND |
| Lead | 239.2/7421 | 02/24/94 | SRG | mg/L | .001 | .004 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | mg/L | .0004 | ND |
| Selenium | 200.7/6010 | 02/28/94 | SRG | mg/L | .10 | ND |
| Silver | 200.7/6010 | 02/28/94 | SRG | mg/L | .10 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Sampled By:

Report Date:

March 4, 1994

Sampling Date: 02/15/94 P. Rosato Date Received: 02/18/94

Site:

Barlow Rd. NYSDOT

Sample ID: MW-7 Composite

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|----------|------|----------|
| Arsenic | 200.7/6010 | 02/28/94 | SRG | ug/g | 10.8 | ND |
| Barium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.40 | 98.5 |
| Cadmium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.40 | 19.5 |
| Chromium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.40 | 16.2 |
| Digest | 3050 | , , | SAG | Date Com | | 02/24/94 |
| Lead | 239.2/7421 | 02/24/94 | SRG | ug/g | .108 | 11.3 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | ug/g | .087 | .130 |
| Selenium | 200.7/6010 | 02/28/94 | SRG | ug/g | 10.8 | ND |
| Silver | 200.7/6010 | 02/28/94 | SRG | ug/g | 10.8 | 20.6 |
| Total Cyanide | 335.2/9010 | 03/02/94 | JEC | ug/g | .20 | ND |

Dry weight basis.

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



CORTLAND, N.Y. 13045

607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date:

March 4, 1994

Sampling Date: 02/15/94 Sampled By:

P. Rosato

Date Received: 02/18/94

Site:

Barlow Rd. NYSDOT

Sample ID: MW-7 (8-10)

| TEST | METHOD | ANALYZED | вч | UNITS | DL | RESULT |
|---------------|------------|----------|-----|----------|------|----------|
| Arsenic | 200.7/6010 | 02/28/94 | SRG | ug/g | 10.8 | ND |
| Barium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.40 | 99.3 |
| Cadmium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.40 | 21.6 |
| Chromium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.40 | 20.5 |
| Digest | 3050 | | SAG | Date Com | | 02/24/94 |
| Lead | 239.2/7421 | 02/28/94 | SRG | ug/g | .108 | 11.8 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | ug/g | .086 | .151 |
| Selenium | 200.7/6010 | 02/28/94 | SRG | ug/g | 10.8 | ND |
| Silver | 200.7/6010 | 02/28/94 | SRG | ug/g | 10.8 | 14.0 |
| Total Cyanide | 335.2/9010 | 03/02/94 | JEC | ug/g | .20 | ND |

Dry weight basis.

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9402209

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 4, 1994

Sampling Date: 02/15/94 Sampled By: P. Rosato Date Received: 02/18/94

Site:

Barlow Rd. NYSDOT

Sample ID: MW-3 (8-10)

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|----------|------|----------|
| Arsenic | 200.7/6010 | 02/28/94 | SRG | ug/g | 10.8 | ND |
| Barium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.40 | 140 |
| Cadmium | 200.7/6010 | 02/28/94 | SRG | ug/g | 5.40 | 23.7 |
| Chromium | 200.7/6010 | 02/28/94 | SRG | ug/g | 10.8 | 21.5 |
| Digest | 3050 | , | SAG | Date Com | | 02/24/94 |
| Lead | 239.2/7421 | 02/24/94 | SRG | ug/g | .108 | 16.2 |
| Mercury | 245.1/7470 | 02/28/94 | SRG | ug/g | .086 | .118 |
| Selenium | 200.7/6010 | 02/28/94 | SRG | ug/g | 10.8 | ND |
| Silver | 200.7/6010 | 02/28/94 | SRG | ug/g | 10.8 | ND |
| Total Cyanide | 335.2/9010 | 03/02/94 | JEC | ug/g | .20 | ND |

Dry weight basis.

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

NYS ELAP CERT 10795

LABORATORY REPORT

Client: STETSON-HARZA Report Date: 3/04/94

Sampling Date: 2/15-2/17/94

Site: Barlow Road NYSDOT Sampled By: P.Rosato
Date Received: 2/17/94
Analysis Date: 3/02/94
Sample: Soils Lab Log No: 9402209

BTEX (By EPA 5030 and 8020)

| Sample ID & Dates | Benzene | Toluene | Ethyl Benzene | (m,p,o) Xylenes | Late Peaks |
|----------------------|---------|---------|------------------|--------------------|---------------|
| 2/15-2/17/94 | | | | | |
| MW-1 (4-6) | ND | ND | ND | ND | |
| MW-2 (8-10) | ND | ND | ND | 2.0 | Y |
| MW-3 (8-10) | ND | ND | ND | ND | ND |
| MW-7 (8-10) | 1.9 | ND | ND | ND | ND |
| MW-7 Comp. | ND | ND | ND | ND | Y |

All concentrations are reported as ug/kg.

ND indicates that no amount greater than 1.0 ug/kg was detected.

This analysis is certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

John H. Buck, P.E. Laboratory Director



NYS ELAP CERT 10795

LABORATORY REPORT

Client: STETSON-HARZA Report Date: 3/04/94

Sampling Date: 2/16-2/17/94

Site: Barlow Road NYSDOT Sampled By: P.Rosato
Date Received: 2/17/94
Analysis Date: 2/24/94
Samples: Water Lab Log No: 9402209

BTEX (By EPA 8020 and NYSDOH 310-19)

| Sample ID & Dates | Benzene | Toluene | Ethyl Benzene | (m,p,o) Xylenes | Late Peaks |
|------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 2/16-2/17/94 | | | | | |
| MW-3 FXH-3 FXH-9 FXH-12 Trip Blank | ND ND ND ND | ND ND ND ND | ND ND ND ND | ND ND ND ND | ND ND ND ND |
| Trip Blank | ND | D ND | ND | ND | ND |

All concentrations are reported as ug/L.

ND indicates that no amount greater than 1.0 ug/L was detected.

This analysis is certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

John H. Buck, P.E. Laboratory Director



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

MW-1

Site: Barlow Road

Sample ID:

Report Date: Sampling Date:

03/30/94 03/14/94

Sampled By: Date Received: P.Rosato 03/15/94

Analyzed by: EAC, 03/22/94

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/1 | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Client: Stetson-Harza

181 Genesee Street

Utica, NY 13501-2168

Site: Barlow Road Report Date: March 30, 1994

Sampling Date: 03/14/94 Sampled By: P.Rosato Date Received: 03/15/94

Sample ID: **MW-1**

TEST METHOD **ANALYZED** BY UNITS DLRESULT Total Cyanide 335.2/9010 03/23/94 **JEC** mg/L .001 ND

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



3845 ROUTE 11 SOUTH, **CORTLAND, N.Y. 13045**

P.O. BOX 5150 607-753-3403

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road

Report Date:

03/30/94 03/14/94

Sampling Date: Sampled By:

P.Rosato 03/15/94

Date Received: Analyzed by:

EAC, 03/22/94

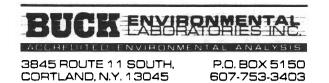
VOLATILES BY METHOD EPA 8010 Sample ID: MW-2

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | . 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 30, 1994

Sampling Date: 03/14/94 Sampled By: P.Rosato Date Received: 03/15/94

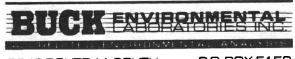
Site: Barlow Road

Sample ID: MW-2

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|-------|------|--------|
| Total Cyanide | 335.2/9010 | 03/23/94 | JEC | mg/L | .001 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



181 Genesee Street

MW-3

Utica, NY 13501-2168

P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

Report Date:

03/30/94 03/15/94

Sampling Date: Sampled By:

P.Rosato

Date Received: Analyzed by:

03/15/94 EAC, 03/24/94

Site: Barlow Road

Sample ID:

Client: Stetson-Harza

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND . |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 7:-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Sampled By:

Sampling Date: 03/15/94
Sampled By: P.Rosato

March 30, 1994

Date Received: 03/15/94

Report Date:

Site: Bar

Barlow Road

Sample ID: MW-3

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|-------|------|--------|
| Total Cyanide | 335.2/9010 | 03/23/94 | JEC | mg/L | .001 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road

Report Date:

03/30/94

Sampling Date: Sampled By:

03/15/94 P.Rosato

Date Received:

03/15/94

Analyzed by:

EAC, 03/24/94

MW-4 Sample ID:

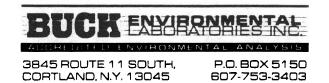
VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | .ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/1 | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 30, 1994

Sampling Date: 03/15/94 Sampled By: P.Rosato Date Received: 03/15/94

Site: Barlow Road

Sample ID: MW-4

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|-------|------|--------|
| Total Cyanide | 335.2/9010 | 03/23/94 | JEC | mg/L | .001 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road

Report Date:

03/30/94

Sampling Date: Sampled By:

03/15/94 P.Rosato

Date Received:

03/15/94

Analyzed by:

EAC, 03/24/94

VOLATILES BY METHOD EPA 8010 Sample ID: **MW-5**

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | . 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



CORTLAND, N.Y. 13045

607-753-3403

LABORATORY REPORT Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 30, 1994

Sampling Date: 03/15/94 Sampled By: P.Rosato Date Received: 03/15/94

Site:

Barlow Road

Sample ID: MW-5

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|-------|------|--------|
| Total Cyanide | 335.2/9010 | 03/23/94 | JEC | mg/L | .001 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



3845 ROUTE 11 SOUTH, P.O. BOX 5150 CORTLAND, N.Y. 13045 607-753-3403 LABORATORY REPORT Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

MW-6

Site: Barlow Road

Sample ID:

Report Date: Sampling Date:

03/30/94 03/14/94

Sampled By: Date Received: P.Rosato 03/15/94

Analyzed by: EAC, 03/22/94

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/i | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road

Report Date: March 30, 1994

Sampling Date: 03/14/94 Sampled By: P.Rosato Date Received: 03/15/94

Sample ID: MW-6

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|-------|------|--------|
| Total Cyanide | 335.2/9010 | 03/23/94 | JEC | mg/L | .001 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



3845 ROUTE 11 SOUTH, CORTLAND, N.Y. 13045

607-753-3403

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road

Report Date: Sampling Date: 03/30/94 03/14/94

Sampled By: Date Received: P.Rosato

Analyzed by:

03/15/94 EAC, 03/22/94

VOLATILES BY METHOD EPA 8010 MW-7 Sample ID:

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/l | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.



Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: Sampling Date: 03/14/94

March 30, 1994

Sampled By:

P.Rosato Date Received: 03/15/94

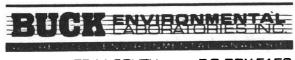
Site: Barlow Road

MW-7 Sample ID:

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|-------|------|--------|
| Total Cyanide | 335.2/9010 | 03/23/94 | JEC | mg/L | .001 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

Client: Stetson-Harza

> 181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road

SS-1

Sample ID:

Report Date:

03/30/94 Sampling Date: 03/14/94

Sampled By: P.Rosato Date Received: 03/15/94

Analyzed by: MM, 03/28/94

VOLATILES BY METHOD 8240

| ANALYTE | CAS # | UNITS | DL | RESULT |
|--|---------------------|----------------|------------|----------|
| Acetone | 67-64-1 | ug/kg | 100 | ND |
| Benzene | 71-43-2 | ug/kg | 5.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 5.0 | ND |
| 3romoform | 75-25-2 | ug/kg | 5.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 10 | ND |
| 2-Butanone | 78-93-3 | ug/kg | 100 | ND |
| Carbon Disulfide | 75-15-0 | ug/kg | 100 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 5.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 5.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 10 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 10 | ND |
| Chloroform | 67-66-3 | ug/kg | 5.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 10 | ND |
| oibromochloromethane | 124-48-1 | ug/kg | 5.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 5.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 5.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 5.0 | ND |
| oichlorodifluoromethane | 75-71-8 | ug/kg | 5.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 5.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 5.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 5.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 5.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 5.0 | ND |
| 1.2-Dichloropropane | 78-87-5 | ug/kg | 5.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | | 5.0 | ND |
| | 10061-01-5 | ug/kg | 5.0 | ND |
| trans-1,3-Dichloropropene | 100-41-4 | ug/kg | 5.0 | ND |
| thyl benzene | 591-78-6 | ug/kg | 50 | ND |
| ?-Hexanone | | ug/kg | 5.0 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 50 | |
| -Methyl-2-Pentanone | 108-10-1 | ug/kg | 20 | ND |
| ATBE | 1634-04-4 | ug/kg | | ND |
| Styrene | 100-42-5 | ug/kg | 5.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 5.0 | ND |
| etrachloroethene | 127-18-4 | ug/kg | 5.0 | ND |
| oluene | 108-88-3 | ug/kg | 5.0 | ND ND |
| ,1,1-Trichloroethane ,1,2-Trichloroethane | 71-55-6 79-00-5 | ug/kg | 5.0 | ND |
| richloroethene | 79-00-5 | ug/kg | | ND ND |
| richloroethene richlorofluoromethane | 79-01-6 75-69-4 | ug/kg | 5.0 5.0 | ND ND |
| | | ug/kg | 50 | ND ND |
| /inyl Acetate /inyl Chloride | 108-05-4 75-01-4 | ug/kg | 10 | ND |
| (ylenes (m,o,p) | 1330-20-7 | ug/kg ug/kg | 5.0 | ND ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

Lab Log No: 9403172

-PAGE 1 of 2-

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road

Report Date: 03/30/94 Sampling Date: 03/14/94 Sampled By: P.Rosato Date Received: 03/15/94

Analyzed by: MM, 03/22/94

Semi-Volatiles by EFA 8270

Sample ID: SS-1

| Sample 1D: 55-1 Semi-volatiles by E | | | v diathes by | ELA 02/0 |
|-------------------------------------|----------------------------------|----------------|--------------|----------|
| ANALYTE | CAS# | UNITS | DL | RESULT |
| Acenaphthene | 83-32-9 | ug/kg | 170 | ND |
| Acenaphthylene | 208-96-8 | ug/kg | 170 | ND |
| Anthracene | 120-12-7 | ug/kg | 170 | ND |
| Benzo(a)anthracene | 56-55-3 | ug/kg | 330 | ND |
| Benzo(a)pyrene | 50-32-8 | ug/kg | 170 | ND |
| Benzo(b)fluoranthene | 205-99-2 | ug/kg | 170 | ND |
| Benzo(ghi)perylene | 191-24-2 | ug/kg | 170 | ND |
| Benzo(k)fluoranthene | 207-08-9 | ug/kg | 170 | ND |
| Benzoic Acid | 65-85-0 | ug/kg | 1700 | ND |
| Benzyl Alcohol | 100-51-6 | ug/kg | 670 | ND |
| Benzyl butyl phthalate | 85 - 68-7 | ug/kg | 170 | ND |
| Bis(2-choroethoxy)methane | 111-91-1 | ug/kg | 330 | ND |
| Bis(2-chloroethyl)ether | 111-44-4 | ug/kg | 330 | ND |
| Bis(2-chloroisopropyl)ether | 108-60-1 | ug/kg | 330 | ND |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | ug/kg | 170 | *290* |
| 4-Bromophenyl-phenyl ether | 101-55-3 | ug/kg | 170 | ND |
| 4-Chloro-3-methylphenol | 59-50-7 | ug/kg | 170 | ND |
| 4-Chloroaniline | 106-47-8 | ug/kg | 670 | ND |
| 2-Chloronaphthalene | 91-58-7 | ug/kg | 170 | ND |
| 2-Chlorophenol | 95-57-8 | ug/kg | 170 | ND |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | ug/kg | 170 | ND |
| Chrysene | 218-01-9 | ug/kg | 170 | ND |
| Dibenzo(a,h)anthracene | 53-70-3 | ug/kg | 170 | ND |
| Dibenzofuran | 132-64-9 | ug/kg | 330 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 170 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 170 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 170 | ND |
| 3,3'-Dichlorobenzidine | 91-94-1 | ug/kg | 670 | ND |
| 2,4-Dichlorophenol | 120-83-2 | ug/kg | 170 | ND |
| Diethyl phthalate | 84-66-2 | ug/kg ug/kg | 170 | ND |
| 2,4-Dimethylphenol | 105-67-9 | | 170 | ND |
| Dimethyl phthalate | 131-11-3 | ug/kg ug/kg | 170 | ND |
| Di-n-butyl phthalate | 84-74-2 | ug/kg | 170 | ND |
| Di-n-octyl phthalate | 117-84-0 | | 170 | ND |
| 2,4-Dinitrophenol | 51-28-5 | ug/kg ug/kg | 1700 | ND |
| 2,4-Dinitrophenol | 121-14-2 | | 330 | ND |
| 2,6-Dinitrotoluene | 606-20-2 | ug/kg | 170 | ND |
| Fluoranthene | 206-44-0 | ug/kg | 170 | ND |
| Fluorene | 200 -44- 0 86-73-7 | ug/kg | 170 | ND |
| I IUUICHE | 00-/3-/ | ug/kg | 170 | ND |

-CONTINUED ON NEXT PAGE-



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

-PAGE 2 of 2-

| Sample ID: SS-1 | | Semi- | Volatiles by | EPA 8270 |
|----------------------------|-----------|-------|--------------|----------|
| ANALYTE | CAS# | UNITS | DL | RESULT |
| Hexachlorobutadiene | 87-68-3 | ug/kg | 170 | ND |
| Hexachlorocyclopentadiene | 77-47-4 | ug/kg | 170 | ND |
| Hexachloroethane | 67-72-1 | ug/kg | 170 | ND |
| Indeno(1,2,3-c,d)pyrene | 193-39-5 | ug/kg | 170 | ND |
| Isophorone | 78-59-1 | ug/kg | 170 | ND |
| 2-Methyl-4,6-dinitrophenol | 534-52-1 | ug/kg | 840 | ND |
| 2-Methylnaphthalene | 91-57-6 | ug/kg | 330 | ND |
| 2-Methylphenol | 95-48-7 | ug/kg | 330 | ND |
| 4-Methylphenol | 106-44-5 | ug/kg | 330 | ND |
| Naphthalene | 91-20-3 | ug/kg | 170 | ND |
| 2-Nitroaniline | 88-74-4 | ug/kg | 1700 | ND |
| 3-Nitroaniline | 99-09-2 | ug/kg | 1700 | ND |
| 4-Nitroaniline | 100-01-06 | ug/kg | 1700 | ND |
| Nitrobenzene | 98-95-3 | ug/kg | 170 | ND |
| 2-Nitrophenol | 88-75-5 | ug/kg | 170 | ND |
| 4-Nitrophenol | 100-02-7 | ug/kg | 170 | ND |
| n-Nitrosodimethylamine | 62-75-9 | ug/kg | 170 | ND |
| n-Nitroso-di-n-propylamine | 621-64-7 | ug/kg | 170 | ND |
| n-Nitrosodiphenylamine | 86-30-6 | ug/kg | 170 | ND |
| Pentachlorophenol | 87-86-5 | ug/kg | 170 | ND |
| Phenanthrene | 85-01-8 | ug/kg | 330 | ND |
| Phenol | 108-95-2 | ug/kg | 170 | ND |
| Pyrene | 129-00-0 | ug/kg | 170 | ND |
| 1,2,4-Trichlorobenzene | 120-82-1 | ug/kg | 170 | ND |
| 2,4,5-Trichlorophenol | 95-95-4 | ug/kg | 330 | ND |
| 2,4,6-Trichlorophenol | 88-06-2 | ug/kg | 170 | ND |

Note: Uncorrected for moisture content.

Note: Bis(2-ethylhexyl)phthalate is a common labortatory contaminant.
"nd" - None detected greater than detection limit (DL) noted.
These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: STETSON-HARZA

Report Date: 3/30/94 Sampling Date: 3/14/94

Site: Barlow Road

Sampled By:

P.Rosato

Sample: Soil - SS-1

Lab Log No: 9403172

PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .33 | ND |
| 319-84-6 | Alpha-BHC | .33 | ND |
| 319-85-7 | Beta-BHC | .33 | ND |
| 319-85-8 | Delta-BHC | .33 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .33 | ND |
| 57-74-9 | Chlordane | 1.65 | ND |
| 72-54-8 | 4,4'-DDD | .33 | ND |
| 72-55-9 | 4,4'-DDE | .33 | ND |
| 50-29-3 | 4,4'DDT | .33 | ND |
| 60-57-1 | Dieldrin | .33 | ND |
| 959-98-8 | Endosulfan I | .33 | ND |
| 33213-65-9 | Endosulfan II | .33 | ND |
| 1031-07-8 | Endosulfan Sulphate | .33 | ND |
| 72-20-8 | Endrin | .33 | ND |
| 744-93-4 | Endrin Aldehyde | .33 | ND |
| 76-44-8 | Heptachlor | .33 | ND |
| 1024-57-3 | Heptachlor Epoxide | .33 | ND |
| 72-43-5 | Methoxychlor | .83 | ND |
| 8001-35-2 | Toxaphene | 6.60 | ND |
| 12674-11-2 | PCB 1016 | 1.65 | ND |
| 11104-28-2 | PCB 1221 | 1.65 | ND |
| 11141-16-5 | PCB 1232 | 1.65 | ND |
| 53469-21-9 | PCB 1242 | 1.65 | ND |
| 12672-29-6 | PCB 1248 | 1.65 | ND |
| 11097-69-1 | PCB 1254 | 1.65 | ND |
| 11096-82-5 | PCB 1260 | 1.65 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. Laboratory Director



CORTLAND, N.Y. 13045

607-753-3403

LABORATORY REPORT Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road Report Date: March 31, 1994

Sampling Date: 03/14/94 Sampled By: P.Rosato Date Received: 03/15/94

Sample ID: SS-1

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|----------|------|----------|
| Arsenic | 200.7/6010 | 03/24/94 | SRG | ug/g | 11.2 | ND |
| Barium | 200.7/6010 | 03/24/94 | SRG | ug/g | 5.60 | 33.6 |
| Cadmium | 200.7/6010 | 03/24/94 | SRG | ug/g | 5.60 | 10.1 |
| Chromium | 200.7/6010 | 03/24/94 | SRG | ug/g | 5.60 | ND |
| Digest | 3050 | | SAG | Date Com | | 03/16/94 |
| Lead | 239.2/7421 | 03/29/94 | SRG | ug/g | .112 | 12.7 |
| Mercury | 245.1/7471 | 03/22/94 | SRG | ug/g | .078 | ND |
| Selenium | 200.7/6010 | 03/24/94 | SRG | ug/g | 11.2 | ND |
| Silver | 200.7/6010 | 03/24/94 | SRG | ug/g | 11.2 | ND |
| Total Cyanide | 335.2/9010 | 03/23/94 | JEC | ug/g | .20 | ND |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road

Report Date: 03/30/94

Sampling Date: 03/14/94
Sampled By: P.Rosato
Date Received: 03/15/94

Analyzed by: MM, 03/28/94

Sample ID: SS-2 VOLATILES BY METHOD 8240

| ANALYTE | CAS # | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Acetone | 67-64-1 | ug/kg | 100 | ND |
| Benzene | 71-43-2 | ug/kg | 5.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 5.0 | ND |
| Bromoform | 75-25-2 | ug/kg | 5.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 10 | ND |
| 2-Butanone | 78-93-3 | ug/kg | 100 | ND |
| Carbon Disulfide | 75-15-0 | ug/kg | 100 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 5.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 5.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 10 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 10 | ND |
| Chloroform | 67-66-3 | ug/kg | 5.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 10 | ND |
| Dibromochloromethane | 124-48-1 | ug/kg | 5.0 | ND |
| 1.2-Dichlorobenzene | 95-50-1 | ug/kg | 5.0 | ND |
| 1,2-bichtorobenzene | 541-73-1 | ug/kg | 5.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 5.0 | ND |
| ochlorodifluoromethane | 75-71-8 | ug/kg | 5.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 5.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 5.0 | ND |
| | 75-35-4 | | 5.0 | ND |
| 1,1-Dichloroethene | | ug/kg | 5.0 | |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 5.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 5.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 5.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 5.0 | ND |
| thyl benzene | 100-41-4 | ug/kg | 5.0 | ND |
| 2-Hexanone | 591-78-6 | ug/kg | 50 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 5.0 | ND |
| -Methyl-2-Pentanone | 108-10-1 | ug/kg | 50 | ND |
| 1TBE | 1634-04-4 | ug/kg | 20 | ND |
| Styrene | 100-42-5 | ug/kg | 5.0 | ND |
| ,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 5.0 | ND |
| etrachloroethene | 127-18-4 | ug/kg | 5.0 | ND |
| oluene | 108-88-3 | ug/kg | 5.0 | ND |
| ,1,1-Trichloroethane | 71-55-6 | ug/kg | 5.0 | ND |
| ,1,2-Trichloroethane | 79-00-5 | ug/kg | 5.0 | ND |
| richloroethene | 79-01-6 | ug/kg | 5.0 | ND |
| richlorofluoromethane | 75-69-4 | ug/kg | 5.0 | ND |
| inyl Acetate | 108-05-4 | ug/kg | 50 | ND |
| inyl Chloride | 75-01-4 | ug/kg | 10 | ND |
| (ylenes (m,o,p) | 1330-20-7 | ug/kg | 5.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

-PAGE 1 of 2-

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road

Report Date: 03/30/94 Sampling Date:03/14/94 Sampled By: P.Rosato Date Received: 03/15/94

Analyzed by: MM, 03/22/94

| Sample ID: SS-2 | | Semi- | Volatiles by | EPA 8270 |
|-----------------------------|-----------|-------|--------------|----------|
| ANALYTE | CAS# | UNITS | DL | RESULT |
| Acenaphthene | 83-32-9 | ug/kg | 170 | ND |
| Acenaphthylene | 208-96-8 | ug/kg | 170 | ND |
| Anthracene | 120-12-7 | ug/kg | 170 | ND |
| Benzo(a)anthracene | 56-55-3 | ug/kg | 330 | ND |
| Benzo(a)pyrene | 50-32-8 | ug/kg | 170 | ND |
| Benzo(b)fluoranthene | 205-99-2 | ug/kg | 170 | ND |
| Benzo(ghi)perylene | 191-24-2 | ug/kg | 170 | ND |
| Benzo(k)fluoranthene | 207-08-9 | ug/kg | 170 | ND |
| Benzoic Acid | 65-85-0 | ug/kg | 1700 | ND |
| Benzyl Alcohol | 100-51-6 | ug/kg | 670 | ND |
| Benzyl butyl phthalate | 85-68-7 | ug/kg | 170 | ND |
| Bis(2-choroethoxy)methane | 111-91-1 | ug/kg | 330 | ND |
| Bis(2-chloroethyl)ether | 111-44-4 | ug/kg | 330 | ND |
| Bis(2-chloroisopropyl)ether | 108-60-1 | ug/kg | 330 | ND |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | ug/kg | 170 | *190* |
| 4-Bromophenyl-phenyl ether | 101-55-3 | ug/kg | 170 | ND |
| 4-Chloro-3-methylphenol | 59-50-7 | ug/kg | 170 | ND |
| 4-Chloroaniline | 106-47-8 | ug/kg | 670 | ND |
| 2-Chloronaphthalene | 91-58-7 | ug/kg | 170 | ND |
| 2-Chlorophenol | 95-57-8 | ug/kg | 170 | ND |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | ug/kg | 170 | ND |
| Chrysene | 218-01-9 | ug/kg | 170 | ND |
| Dibenzo(a,h)anthracene | 53-70-3 | ug/kg | 170 | ND |
| Dibenzofuran | 132-64-9 | ug/kg | 330 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 170 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 170 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 170 | ND |
| 3,3'-Dichlorobenzidine | 91-94-1 | ug/kg | 670 | ND ND |
| 2,4-Dichlorophenol | 120-83-2 | ug/kg | 170 | ND ND |
| Diethyl phthalate | 84-66-2 | ug/kg | 170 | ND |
| 2,4-Dimethylphenol | 105-67-9 | ug/kg | 170 | ND |
| Dimethyl phthalate | 131-11-3 | ug/kg | 170 | ND |
| Di-n-butyl phthalate | 84-74-2 | ug/kg | 170 | ND |
| Di-n-octyl phthalate | 117-84-0 | ug/kg | 170 | ND |
| 2,4-Dinitrophenol | 51-28-5 | ug/kg | 1700 | ND |
| 2,4-Dinitrotoluene | 121-14-2 | ug/kg | 330 | ND |
| 2.6-Dinitrotoluene | 606-20-2 | ug/kg | 170 | ND |
| Fluoranthene | 206-44-0 | ug/kg | 170 | ND |
| Fluorene | 86-73-7 | ug/kg | 170 | ND |



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

-PAGE 2 of 2-

| Sample ID: SS-2 | | Semi- | Volatiles by | EPA 8270 |
|----------------------------|-----------|-------|--------------|----------|
| ANALYTE | CAS# | UNITS | DL | RESULT |
| Hexachlorobutadiene | 87-68-3 | ug/kg | 170 | ND |
| Hexachlorocyclopentadiene | 77-47-4 | ug/kg | 170 | ND |
| Hexachloroethane | 67-72-1 | ug/kg | 170 | ND |
| Indeno(1,2,3-c,d)pyrene | 193-39-5 | ug/kg | 170 | ND |
| Isophorone | 78-59-1 | ug/kg | 170 | ND |
| 2-Methyl-4,6-dinitrophenol | 534-52-1 | ug/kg | 840 | ND |
| 2-Methylnaphthalene | 91-57-6 | ug/kg | 330 | ND |
| 2-Methylphenol | 95-48-7 | ug/kg | 330 | ND |
| 4-Methylphenol | 106-44-5 | ug/kg | 330 | ND |
| Naphthalene | 91-20-3 | ug/kg | 170 | ND |
| 2-Nitroaniline | 88-74-4 | ug/kg | 1700 | ND |
| 3-Nitroaniline | 99-09-2 | ug/kg | 1700 | ND |
| 4-Nitroaniline | 100-01-06 | ug/kg | 1700 | ND |
| Nitrobenzene | 98-95-3 | ug/kg | 170 | ND |
| 2-Nitrophenol | 88-75-5 | ug/kg | 170 | ND |
| 4-Nitrophenol | 100-02-7 | ug/kg | 170 | ND |
| n-Nitrosodimethylamine | 62-75-9 | ug/kg | 170 | ND |
| n-Nitroso-di-n-propylamine | 621-64-7 | ug/kg | 170 | ND |
| n-Nitrosodiphenylamine | 86-30-6 | ug/kg | 170 | ND |
| Pentachlorophenol | 87-86-5 | ug/kg | 170 | ND |
| Phenanthrene | 85-01-8 | ug/kg | 330 | ND |
| Phenol Phenol | 108-95-2 | ug/kg | 170 | ND |
| Pyrene | 129-00-0 | ug/kg | 170 | ND |
| 1,2,4-Trichlorobenzene | 120-82-1 | ug/kg | 170 | ND |
| 2,4,5-Trichlorophenol | 95-95-4 | ug/kg | 330 | ND |
| 2,4,6-Trichlorophenol | 88-06-2 | ug/kg | 170 | ND |

Note: Uncorrected for moisture content.

Note: Bis(2-ethylhexyl)phthalate is a common labortatory contaminant.
"nd" - None detected greater than detection limit (DL) noted.
These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

3/30/94 Client: STETSON-HARZA Report Date: Sampling Date: 3/14/94 Site: Barlow Road Sampled By: P.Rosato

Sample: Soil - SS-2 Lab Log No: 9403172

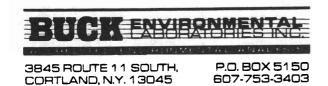
PESTICIDES AND PCB'S (Py EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .33 | ND |
| 319-84-6 | Alpha-BHC | .33 | ND |
| 319-85-7 | Beta-BHC | .33 | ND |
| 319-85-8 | Delta-BHC | .33 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .33 | ND |
| 57-74-9 | Chlordane | 1.65 | 2.90 |
| 72-54-8 | 4,4'-DDD | .33 | ND |
| 72-55-9 | 4,4'-DDE | .33 | ND |
| 50-29-3 | 4,4'DDT | .33 | 1.46 |
| 60-57-1 | Dieldrin | .33 | ND |
| 959-98-8 | Endosulfan I | .33 | ND |
| 33213-65-9 | Endosulfan II | .33 | ND |
| 1031-07-8 | Endosulfan Sulphate | .33 | ND |
| 72-20-8 | Endrin | .33 | ND |
| 744-93-4 | Endrin Aldehyde | .33 | ND |
| 76-44-8 | Heptachlor | .33 | ND |
| 1024-57-3 | Heptachlor Epoxide | .33 | ND |
| 72-43-5 | Methoxychlor | .83 | ND |
| 8001-35-2 | Toxaphene | 6.60 | ND |
| 12674-11-2 | PCB 1016 | 1.65 | ND |
| 11104-28-2 | PCB 1221 | 1.65 | ND |
| 11141-16-5 | PCB 1232 | 1.65 | ND |
| 53469-21-9 | PCB 1242 | 1.65 | ND |
| 12672-29-6 | PCB 1248 | 1.65 | ND |
| 11097-69-1 | PCB 1254 | 1.65 | ND |
| 11096-82-5 | PCB 1260 | 1.65 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

> Mr Dence John H. Buck, P.E. Laboratory Director



Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 31, 1994

Sampling Date: 03/14/94 Sampled By: P.Rosato Date Received: 03/15/94

Site: Barlow Road

Sample ID: SS-2

| METHOD | | DV | UNITS | \mathbf{DL} | RESULT |
|------------|--|---|---|---|--|
| | ANALYZED | BY | UNITE | | KEBULI |
| 200.7/6010 | 03/24/94 | SRG | ug/g | 11.2 | ND |
| 200.7/6010 | 03/24/94 | SRG | ug/g | 5.59 | 52.6 |
| 200.7/6010 | 03/24/94 | SRG | ug/g | 5.59 | 10.1 |
| 200.7/6010 | 03/24/94 | SRG | ug/g | 5.59 | ND |
| 3050 | | SAG D | ate Com | | 03/16/94 |
| 239.2/7421 | 03/29/94 | SRG | ug/g | .112 | 29.1 |
| 245.1/7471 | 03/22/94 | SRG | ug/g | .096 | ND |
| 200.7/6010 | | SRG | | 11.2 | ND |
| 200.7/6010 | 03/24/94 | SRG | ug/g | 11.2 | ND |
| 335.2/9010 | 03/23/94 | JEC | ug/g | .20 | ND |
| | 200.7/6010 200.7/6010 200.7/6010 3050 239.2/7421 245.1/7471 200.7/6010 200.7/6010 | 200.7/6010 03/24/94 200.7/6010 03/24/94 200.7/6010 03/24/94 3050 239.2/7421 03/29/94 245.1/7471 03/22/94 200.7/6010 03/24/94 200.7/6010 03/24/94 | 200.7/6010 03/24/94 SRG 200.7/6010 03/24/94 SRG 200.7/6010 03/24/94 SRG 3050 SAG D 239.2/7421 03/29/94 SRG 245.1/7471 03/22/94 SRG 200.7/6010 03/24/94 SRG 200.7/6010 03/24/94 SRG | 200.7/6010 03/24/94 SRG ug/g 200.7/6010 03/24/94 SRG ug/g 200.7/6010 03/24/94 SRG ug/g 3050 SAG Date Com 239.2/7421 03/29/94 SRG ug/g 245.1/7471 03/22/94 SRG ug/g 200.7/6010 03/24/94 SRG ug/g 200.7/6010 03/24/94 SRG ug/g | 200.7/6010 03/24/94 SRG ug/g 5.59 200.7/6010 03/24/94 SRG ug/g 5.59 200.7/6010 03/24/94 SRG ug/g 5.59 3050 SAG Date Com 239.2/7421 03/29/94 SRG ug/g .112 245.1/7471 03/22/94 SRG ug/g .096 200.7/6010 03/24/94 SRG ug/g 11.2 200.7/6010 03/24/94 SRG ug/g 11.2 |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Site: Barlow Road

Report Date: 03/30/94

Sampling Date: 03/14/94 Sampled By: P.Rosato Date Received: 03/15/94

Analyzed by: MM, 03/28/94

Sample ID: SS-3 VOLATILES BY METHOD 8240

| ANALYTE | CAS # | UNITS | DL | RESULT |
|--|------------|----------------|-----|--------|
| | 67-64-1 | ug/kg | 100 | ND |
| Acetone Benzene | 71-43-2 | ug/kg | 5.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/kg | 5.0 | ND |
| Bromoform | 75-25-2 | ug/kg | 5.0 | ND |
| Bromomethane | 74-83-9 | ug/kg | 10 | ND |
| 2-Butanone | 78-93-3 | ug/kg | 100 | ND |
| Carbon Disulfide | 75-15-0 | ug/kg | 100 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/kg | 5.0 | ND |
| Chlorobenzene | 108-90-7 | ug/kg | 5.0 | ND |
| Chloroethane | 75-00-3 | ug/kg | 10 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/kg | 10 | ND |
| Chloroform | 67-66-3 | ug/kg | 5.0 | ND |
| Chloromethane | 74-87-3 | ug/kg | 10 | ND |
| Dibromochloromethane | 124-48-1 | ug/kg | 5.0 | ND |
| 1.2-Dichlorobenzene | 95-50-1 | ug/kg | 5.0 | ND |
| 1,3-Dichtorobenzene | 541-73-1 | ug/kg | 5.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 5.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 5.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 5.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 5.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 5.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 5.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 5.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 5.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 5.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 5.0 | ND |
| Ethyl benzene | 100-41-4 | ug/kg | 5.0 | ND |
| 2-Hexanone | 591-78-6 | ug/kg | 50 | ND |
| Methylene Chloride | 75-09-2 | ug/kg | 5.0 | ND |
| 4-Methyl-2-Pentanone | 108-10-1 | ug/kg | 50 | ND |
| MTBE | 1634-04-4 | ug/kg | 20 | ND |
| Styrene | 100-42-5 | ug/kg | 5.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 5.0 | ND |
| i,i,2,2-letrachtoroethane Tetrachtoroethene | 127-18-4 | ug/kg ug/kg | 5.0 | ND |
| Toluene | 108-88-3 | ug/kg | 5.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 5.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 5.0 | ND |
| Trichloroethene | 79-01-6 | ug/kg | 5.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 5.0 | ND |
| Vinyl Acetate | 108-05-4 | ug/kg | 50 | ND |
| Vinyl Chloride | 75-01-4 | ug/kg | 10 | ND |
| (ylenes (m,o,p) | 1330-20-7 | ug/kg | 5.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

-PAGE 1 of 2-

Client: Stetson-Harza

181 Genesee Street

Utica, NY 13501-2168

Site: Barlow Road

Report Date: 03/30/94 Sampling Date:03/14/94 Sampled By: P.Rosato Date Received: 03/15/94

Analyzed by: MM, 03/22/94

| Sample ID: SS-3 | | Semi- | Volatiles by | EPA 8270 |
|-----------------------------|-----------------------|----------------|--------------|----------|
| ANALYTE | CAS# | UNITS | DL | RESULT |
| Acenaphthene | 83-32-9 | ug/kg | 170 | ND |
| Acenaphthylene | 208- 96- 8 | ug/kg | 170 | ND |
| Anthracene | 120-12-7 | ug/kg | 170 | ND |
| Benzo(a)anthracene | 56-55-3 | ug/kg | 330 | ND |
| Benzo(a)pyrene | 50-32-8 | ug/kg | 170 | ND |
| Benzo(b)fluoranthene | 205-99-2 | ug/kg | 170 | ND |
| Benzo(ghi)perylene | 191-24-2 | ug/kg | 170 | ND |
| Benzo(k)fluoranthene | 207-08-9 | ug/kg | 170 | ND |
| Benzoic Acid | 65-85-0 | ug/kg | 1700 | ND |
| Benzyl Alcohol | 100-51-6 | ug/kg | 670 | ND |
| Benzyl butyl phthalate | 85-68-7 | ug/kg | 170 | ND |
| Bis(2-choroethoxy)methane | 111-91-1 | ug/kg | 330 | ND |
| Bis(2-chloroethyl)ether | 111-44-4 | ug/kg | 330 | ND |
| Bis(2-chloroisopropyl)ether | 108-60-1 | ug/kg | 330 | ND |
| Bis(2-ethylhexyl)phthálate | 117-81-7 | ug/kg | 170 | *180* |
| l-Bromophenyl-phenyl ether | 101-55-3 | ug/kg | 170 | ND |
| -Chloro-3-methylphenol | 59-50-7 | ug/kg | 170 | ND |
| -Chloroaniline | 106-47-8 | ug/kg | 670 | ND |
| 2-Chloronaphthalene | 91-58-7 | ug/kg | 170 | ND |
| 2-Chlorophenol | 95-57-8 | ug/kg | 170 | ND |
| -Chlorophenyl phenyl ether | 7005-72-3 | ug/kg | 170 | ND |
| Chrysene | 218-01-9 | ug/kg | 170 | ND |
| Dibenzo(a,h)anthracene | 53-70-3 | ug/kg | 170 | ND |
| Dibenzofuran | 132-64-9 | ug/kg | 330 | ND |
| ,2-Dichlorobenzene | 95-50-1 | ug/kg | 170 | ND |
| ,3-Dichlorobenzene | 541-73-1 | ug/kg | 170 | ND |
| ,4-Dichlorobenzene | 106-46-7 | ug/kg | 170 | ND |
| 3,3'-Dichlorobenzidine | 91-94-1 | ug/kg | 670 | ND |
| 2,4-Dichlorophenol | 120-83-2 | ug/kg | 170 | ND |
| Diethyl phthalate | 84-66-2 | ug/kg | 170 | ND |
| 2,4-Dimethylphenol | 105-67-9 | ug/kg | 170 | ND |
| Dimethyl phthalate | 131-11-3 | ug/kg | 170 | ND |
| Di-n-butyl phthalate | 84-74-2 | ug/kg | 170 | ND |
| Di-n-octyl phthalate | 117-84-0 | ug/kg | 170 | ND |
| 4,4-Dinitrophenol | 51-28-5 | ug/kg | 1700 | ND ND |
| 2,4-Dinitrotoluene | 121-14-2 | ug/kg | 330 | ND |
| 2.6-Dinitrotoluene | 606-20-2 | ug/kg | 170 | ND |
| Fluoranthene | 206-44-0 | ug/kg | 170 | ND ND |
| Fluorene | 86-73-7 | ug/kg ug/kg | 170 | ND ND |
| 1001000 | 00-13-1 | ug/kg | 170 | עוו |

-CONTINUED ON NEXT PAGE-



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

-PAGE 2 of 2-

| Sample ID: SS-3 | Semi-Volatiles by EPA 8270 | | | | |
|----------------------------|----------------------------|-------|------|--------|--|
| ANALYTE | CAS# | UNITS | DL | RESULT | |
| Hexachlorobutadiene | 87-68-3 | ug/kg | 170 | ND | |
| Hexachlorocyclopentadiene | 77-47-4 | ug/kg | 170 | ND | |
| Hexachloroethane | 67-72-1 | ug/kg | 170 | ND | |
| Indeno(1,2,3-c,d)pyrene | 193-39-5 | ug/kg | 170 | ND | |
| Isophorone | 78-59-1 | ug/kg | 170 | ND | |
| 2-Methyl-4,6-dinitrophenol | 534-52-1 | ug/kg | 840 | ND | |
| 2-Methylnaphthalene | 91-57-6 | ug/kg | 330 | ND | |
| 2-Methylphenol | 95-48-7 | ug/kg | 330 | ND | |
| 4-Methylphenol | 106-44-5 | ug/kg | 330 | ND | |
| Naphthalene | 91-20-3 | ug/kg | 170 | ND | |
| 2-Nitroaniline | 88-74-4 | ug/kg | 1700 | ND | |
| 3-Nitroaniline | 99-09-2 | ug/kg | 1700 | ND | |
| 4-Nitroaniline | 100-01-06 | ug/kg | 1700 | ND | |
| Nitrobenzene | 98-95-3 | ug/kg | 170 | ND | |
| 2-Nitrophenol | 88-75-5 | ug/kg | 170 | ND | |
| 4-Nitrophenol | 100-02-7 | ug/kg | 170 | ND | |
| n-Nitrosodimethylamine | 62-75-9 | ug/kg | 170 | ND | |
| n-Nitroso-di-n-propylamine | 621-64-7 | ug/kg | 170 | ND | |
| n-Nitrosodiphenylamine | 86-30-6 | ug/kg | 170 | ND | |
| Pentachlorophenol | 87-86-5 | ug/kg | 170 | ND | |
| Phenanthrene | 85-01-8 | ug/kg | 330 | ND | |
| Phenol | 108-95-2 | ug/kg | 170 | ND | |
| Pyrene | 129-00-0 | ug/kg | 170 | ND | |
| 1,2,4-Trichlorobenzene | 120-82-1 | ug/kg | 170 | ND | |
| 2,4,5-Trichlorophenol | 95-95-4 | ug/kg | 330 | ND | |
| 2,4,6-Trichlorophenol | 88-06-2 | ug/kg | 170 | ND | |

Note: Uncorrected for moisture content.

Note: Bis(2-ethylhexyl)phthalate is a common labortatory contaminant.
"nd" - None detected greater than detection limit (DL) noted.
These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT

Client: STETSON-HARZA Report Date: 3/30/94
Site: Barlow Road Sampling Date: 3/14/94
Sampled By: P.Rosato
Sample: Soil - SS-3 Lab Log No: 9403172

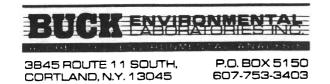
PESTICIDES AND PCB'S (By EPA 8080 Methodology)

| CAS No. | COMPOUND | DL | RESULT |
|------------|---------------------|------|--------|
| 309-00-2 | Aldrin | .33 | ND |
| 319-84-6 | Alpha-BHC | .33 | ND |
| 319-85-7 | Beta-BHC | .33 | ND |
| 319-85-8 | Delta-BHC | .33 | ND |
| 58-89-9 | Gamma-BHC (Lindane) | .33 | ND |
| 57-74-9 | Chlordane | 1.65 | ND |
| 72-54-8 | 4,4'-DDD | .33 | ND |
| 72-55-9 | 4,4'-DDE | .33 | ND |
| 50-29-3 | 4,4'DDT | .33 | 0.78 |
| 60-57-1 | Dieldrin | .33 | ND |
| 959-98-8 | Endosulfan I | .33 | ND |
| 33213-65-9 | Endosulfan II | .33 | ND |
| 1031-07-8 | Endosulfan Sulphate | .33 | ND |
| 72-20-8 | Endrin | .33 | ND |
| 744-93-4 | Endrin Aldehyde | .33 | ND |
| 76-44-8 | Heptachlor | .33 | ND |
| 1024-57-3 | Heptachlor Epoxide | .33 | ND |
| 72-43-5 | Methoxychlor | .83 | ND |
| 8001-35-2 | Toxaphene | 6.60 | ND |
| 12674-11-2 | PCB 1016 | 1.65 | ND |
| 11104-28-2 | PCB 1221 | 1.65 | ND |
| 11141-16-5 | PCB 1232 | 1.65 | ND |
| 53469-21-9 | PCB 1242 | 1.65 | ND |
| 12672-29-6 | PCB 1248 | 1.65 | ND |
| 11097-69-1 | PCB 1254 | 1.65 | ND |
| 11096-82-5 | PCB 1260 | 1.65 | ND |

All concentrations are reported as ug/kg. ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation.

John H. Buck, P.E. Laboratory Director



Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168 Report Date: March 31, 1994

Sampling Date: 03/14/94 Sampled By: P.Rosato Date Received: 03/15/94

Site: Barlow Road

Sample ID: SS-3

| TEST | METHOD | ANALYZED | BY | UNITS | DL | RESULT |
|---------------|------------|----------|-----|----------|------|----------|
| Arsenic | 200.7/6010 | 03/24/94 | SRG | ug/g | 9.40 | ND |
| Barium | 200.7/6010 | 03/24/94 | SRG | ug/g | 4.70 | 55.4 |
| Cadmium | 200.7/6010 | 03/24/94 | SRG | ug/g | 4.70 | 15.0 |
| Chromium | 200.7/6010 | 03/24/94 | SRG | ug/g | 4.70 | ND |
| Digest | 3050 | | SAG | Date Com | | 03/16/94 |
| Lead | 239.2/7421 | 03/29/94 | SRG | ug/g | .094 | 41.1 |
| Mercury | 245.1/7471 | 03/22/94 | SRG | ug/g | .103 | ND |
| Selenium | 200.7/6010 | 03/24/94 | SRG | ug/g | 9.40 | ND |
| Silver | 200.7/6010 | 03/24/94 | SRG | ug/g | 9.40 | ND |
| Total Cyanide | 335.2/9010 | 03/23/94 | JEC | ug/g | .20 | .424 |

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



P.O. BOX 5150 607-753-3403

LABORATORY REPORT Lab Log No: 9403172

Client: Stetson-Harza

181 Genesee Street Utica, NY 13501-2168

Trip Blank

Site: Barlow Road

Sample ID:

Report Date: Sampling Date: 03/30/94 03/15/94

Sampled By: Date Received: P.Rosato 03/15/94

Analyzed by: EAC, 03/23/94

VOLATILES BY METHOD EPA 8010

| ANALYTE | CAS# | UNITS | DL | RESULT |
|---------------------------|------------|-------|-----|--------|
| Bromobenzene | 108-86-1 | ug/l | 1.0 | ND |
| Bromodichloromethane | 75-27-4 | ug/l | 1.0 | ND |
| Bromoform | 75-25-2 | ug/l | 1.0 | ND |
| Bromomethane | 74-83-9 | ug/l | 1.0 | ND |
| Carbon Tetrachloride | 56-23-5 | ug/l | 1.0 | ND |
| Chlorobenzene | 108-90-7 | ug/l | 1.0 | ND |
| Chloroethane | 75-00-3 | ug/l | 1.0 | ND |
| 2-Chloroethylvinyl ether | 110-75-8 | ug/l | 1.0 | ND |
| Chloroform | 67-66-3 | ug/l | 1.0 | ND |
| Chloromethane | 74-87-3 | ug/l | 1.0 | ND |
| Dibromochloromethane | 124-48-1 | ug/l | 1.0 | ND |
| Dibromomethane | 74-95-3 | ug/l | 1.0 | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ug/l | 1.0 | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ug/l | 1.0 | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ug/l | 1.0 | ND |
| Dichlorodifluoromethane | 75-71-8 | ug/l | 1.0 | ND |
| 1,1-Dichloroethane | 75-34-3 | ug/l | 1.0 | ND |
| 1,2-Dichloroethane | 107-06-2 | ug/l | 1.0 | ND |
| 1,1-Dichloroethene | 75-35-4 | ug/l | 1.0 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | ug/l | 1.0 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ug/l | 1.0 | ND |
| 1,2-Dichloropropane | 78-87-5 | ug/l | 1.0 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/l | 1.0 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/l | 1.0 | ND |
| Methylene Chloride | 75-09-2 | ug/l | 1.0 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/l | 1.0 | ND |
| 1,1,2-Tetrachloroethane | .630-20-6 | ug/l | 1.0 | ND |
| Tetrachloroethene | 127-18-4 | ug/l | 1.0 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ug/i | 1.0 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ug/l | 1.0 | ND |
| Trichloroethene | 79-01-6 | ug/l | 1.0 | ND |
| Trichlorofluoromethane | 75-69-4 | ug/l | 1.0 | ND |
| 1,2,3-Trichloropropane | 96-18-4 | ug/l | 1.0 | ND |
| Vinyl Chloride | 75-01-4 | ug/l | 1.0 | ND |

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.