

C.T. MALE ASSOCIATES, P.C.

SUBSURFACE INVESTIGATION OF SPILL AREAS  
AND SOIL REMOVAL REPORT

FIRST PRIZE CENTER  
EXCHANGE STREET  
CITY OF ALBANY, NEW YORK  
SPILL NO. 89-08716

OCTOBER 5, 1990

PREPARED FOR:

REALTY ASSETS, INC.  
76 Exchange Street  
Albany, New York 12205

PREPARED BY:

C. T. MALE ASSOCIATES, P.C.  
P.O. Box 727  
50 Century Hill Drive  
Latham, New York 12110  
(518) 786-7400

CTMA Project No.: 90.3039

UNAUTHORIZED ALTERATION OR ADDITION  
TO THIS DOCUMENT IS A VIOLATION OF  
SECTION 7209 SUBDIVISION 2 OF THE  
NEW YORK STATE EDUCATION LAW.

COPYRIGHT 1990  
C. T. MALE ASSOCIATES, P.C.

**C.T. MALE ASSOCIATES, P.C.**

**SUBSURFACE INVESTIGATION OF SPILL AREAS  
AND SOIL REMOVAL REPORT**

**FIRST PRIZE CENTER  
EXCHANGE STREET  
CITY OF ALBANY, NEW YORK  
SPILL NO. 89-08716**

**TABLE OF CONTENTS**

	<b><u>PAGE</u></b>
1.0 INTRODUCTION	1
2.0 FIELD EXCAVATION AND SOIL STAGING	3
2.1 GENERAL	
2.2 ORIGINAL DRUM SPILL AREA	
2.3 NEW DRUM SPILL AREA	
3.0 SOIL SAMPLING, LABORATORY ANALYSES AND RESULTS	8
3.1 GENERAL	
3.2 STOCKPILLED SOIL	
3.3 BOTTOM OF EXCAVATIONS	
3.4 LABORATORY ANALYSES RESULTS	
4.0 SUMMARY AND CONCLUSIONS	11

**APPENDICES**

- A. WORK PLAN SUBMITTED TO NYSDEC
- B. DRAWINGS
- C. INVESTIGATION AREA PHOTOGRAPHS
- D. LABORATORY ANALYSIS REPORT AND CHAIN OF CUSTODY RECORD

## **C.T. MALE ASSOCIATES, P.C.**

### **1.0 INTRODUCTION**

On August 23, 1990 C.T. Male Associates, P.C. conducted a subsurface investigation of soils at the First Prize Center site, in the area of the foundation for the former incinerator, where liquids had been spilled from staged drums. The investigations were conducted as requested by Mr. Thomas Sperbeck of the New York State Department of Environmental Conservation (NYSDEC) Region 4 Office, and in accordance with the NYSDEC approved work plan prepared by C. T. Male Associates and dated August 17, 1990. A copy of the work plan is included in Appendix A of this report. The First Prize Center site is located on Exchange Street in the City of Albany and Town of Colonie, New York. A site plan map, Drawing No. 90-473, Sheet 1 of 1, showing the location of the area investigated at the site is enclosed in Appendix B.

Prior to this investigation, drums of oil or oily waste had been stored on a concrete slab (foundation for former incinerator) along the northwest side of the property while awaiting disposal. The drums were reportedly tipped over by vandals, and an unknown quantity of waste was discharged to soils along the south end of the concrete pad. The discharge was reported to NYSDEC on December 4, 1989. Soils observed to be contaminated were excavated in this area and were staged in an area northwest of the pad. A diagram of this area of the site showing the concrete pad and the approximate location of the staged soil is included as Figure 1 in Appendix B of this report. After the original spill, the drums were moved to an area northwest of the concrete pad, adjacent to the staged soil pile. Apparently, the drums were again tipped over and it appeared that some oily liquids were released. This is a general explanation of the conditions leading up to this investigation. All the work and spill incidents described to this point were performed and/or occurred prior to C.T. Male Associates involvement at the site.

## **C.T. MALE ASSOCIATES, P.C.**

As described in the work plan enclosed in Appendix A, C.T. Male was contracted by Realty Assets, Inc. to investigate the two spill areas and evaluate the contaminated soils. This report describes the actual investigation which included soil excavation, soil sampling for volatile compounds screening in the field, and soil sampling of the excavated soil and bottom of the excavations for laboratory analyses; summarizes the findings; and based on the NYSDEC Petroleum Contaminated Soil Togs, "Handling and Disposition of Petroleum Contaminated Soil", presented in a memorandum dated June 14, 1990 makes recommendations for final actions in the spill area.

## **C.T. MALE ASSOCIATES, P.C.**

### **2.0 FIELD EXCAVATION AND SOIL SAMPLING**

#### **2.1 General**

On August 23, 1990, a representative of C.T. Male Associates, P.C. performed an exploratory investigation of soils in the area of the original drum spill and in the new drum spill area. Prior to this investigation, the 10± drums in the new drum spill area were reportedly secured and then placed in a secure area, by an employee of the First Prize Center. A backhoe for the investigation and an operator to perform the excavation work were provided by Realty Assets, Inc. The work was conducted under the direction of the C.T. Male representative. Photographs of the investigation area are enclosed in Appendix C.

In general, the sidewalls of the existing excavation from the initial spill area and visually contaminated soil adjacent to the south and southwest corner of the foundation for the former incinerator were excavated and staged on polyethylene adjacent to the existing stockpiled soil. Visually contaminated soil from the new spill area was also excavated and staged on polyethylene in a separate pile. Upon completion of the investigations the piles of soil were covered with polyethylene. The limit of excavations were determined by visual observations and by soil sampling and screening the samples in the field with a Photovac Microtip organic photoionization detection meter. Once field screening results and/or visual observations showed sufficient soil was excavated, a composite soil sample was taken from the bottom of each excavation to be analyzed in the laboratory to confirm that all contaminated soil had been excavated. Composite samples of the stockpiled soil were also taken and analyzed in the laboratory in accordance with the NYSDEC Petroleum Contaminated Soil Togs to determine if the contamination present in the excavated soil would leach out at

## **C.T. MALE ASSOCIATES, P.C.**

concentrations surpassing groundwater or drinking water standards and therefore require treatment or off-site disposal of the soil.

The excavations, soil sampling and field screening of soil samples are discussed in detail in Section 2.2 and 2.3.

### **2.2 Original Drum Spill Area**

Soil samples were collected along the walls of the existing excavation, south of the concrete incinerator pad. All soil samples were collected in clean glass jars. A headspace analysis was performed on each sample, in the field, with the Microtip total organic PID vapor meter. Soil sample locations and identifications are noted on Figure 1 in Appendix B. Table 1 on page 7 lists the soil sample head space analysis results for this investigation. Headspace analysis results showed a reading of  $60 \pm$  ppm for the sidewall soil sample collected along the south end of the pit (area of sample W-1). Additional soil was excavated 2 - 3 feet back along this pit and was removed and staged. New samples were then collected from the wall, (samples W-12 and W-13) and readings of 5.4 and 3.4 ppm were obtained. Readings between  $7 \pm$  ppm to  $30 \pm$  ppm (one reading of 44 ppm) were obtained in samples taken from the western and eastern perimeter of the initial spill area excavation. Visual oil contamination was not observed except in the area adjacent to the south and southwest edges of the concrete pad. The presence of ash and cinders anticipated to be from the former incinerator gave the soil a discolored appearance, but no petroleum/oil odor was encountered except at the referenced edges of the concrete pad. Since the sidewalls of the excavation did not appear to be contaminated, even though average readings of 25 ppm were obtained on the PID meter, it was decided to scrape the sidewalls of the excavation and not remove any additional soil horizontally pending laboratory analyses results of the

## C.T. MALE ASSOCIATES, P.C.

excavated soil. Sidewalls of the pit were excavated on the north side the concrete slab and partially around the western edge of the pad, to ensure that oily contamination had not entered the soils beneath the slab. A slight oil odor and a minor visual sheen was noted in the soils adjacent to the slab. A reading of 16± ppm volatile compounds was detected with the Microtip by headspace analysis screening at the latter location. All of the soil from the sidewall excavation was placed in the staging area. Soil throughout the pit was then excavated down to approximately 2 to 2.5 feet below grade, at which a clay layer was encountered. Soils above the clay layer consisted primarily of ash and cinders, and sandy soil.

Some visual oil contaminated soil appears to still be present under the south/southwest corner of the pad but was not able to be removed without first removing the concrete pad. It was decided not to remove the concrete pad unless laboratory analyses results indicated that it would be necessary

A control soil sample (W-11/CS-1) was taken approximately 25-30 feet west of the original drum spill area and screened by head space analysis. A reading of 7± ppm total volatile compounds was obtained. The ash and cinders fill in this area may be a source of the volatile compounds detected in the field control sample.

Along the north end of the concrete pad, in an area where some oil staining was noted on the pad, a small observation pit was excavated down approximately 2 feet below grade, along the edge of the pad. Soil samples were collected from the sidewall of the pit and headspace analysis was performed on each ( W-14 and W-15 in Table 1). No evidence of contamination (2.2 and 3.2 ppm) was noted on the field instrument. No visual contamination was observed in the pit. Materials from this pit were staged with the soils from the excavation south of the pad.

## **C.T. MALE ASSOCIATES, P.C.**

The soil pile of material excavated from the original drum spill area encompasses an area 45± feet by 12± feet and 5± feet high at the center.

### **2.3 New Drum Spill Area**

The drums which originally spilled oily waste to the soils adjacent to the concrete slab were reportedly moved to a new area, northwest of the concrete slab, (i.e., adjacent to the excavated spill pile) when the soils were originally excavated. The drums were then reportedly tipped again and some quantity of oily waste was apparently released to the ground in that area. Soils in this area (known as the new drum spill area) were excavated during the investigations to a depth of approximately 2 feet below grade where clay was encountered. Soil and ash/cinders were encountered above the clay. The excavated materials were placed in a separate pile southwest of the excavation. The soil excavated from the new drum spill area encompasses an area 15± feet by 15± feet and 5± feet high in the center. A total of 10 soil samples were collected from the sidewalls of the excavation, and headspace analysis was performed. Results of the headspace analysis (1± to 3± ppm) as shown on Table 1, indicated no obvious evidence of volatile compound contamination. No visual oily contamination was noted within the excavation. Soil samples were also collected from the bottom of the excavation and submitted for laboratory analyses. Laboratory analysis of these soils is described in section 3.0. Figure 1 in Appendix B shows the area of investigation and the sampling locations.

**C.T. MALE ASSOCIATES, P.C.**

**TABLE 1**  
**SOIL HEADSPACE ANALYSIS FIELD RESULTS**

Photovac Microtip Statistical Monitoring Report  
Averaging Interval:2305 Readings/15 Seconds

DATE	TIME	MIN	AVG	MAX	EVENT	STATUS	SAMPLE IDENTIFICATION
Aug 23,90	09:37	0.0	14.2	101.0	21	Ready	Calibration
	09:39	0.0	20.6	60.1	22	Ready	W-1
	09:40	0.0	6.6	27.4	23	Ready	W-2
	09:42	0.3	19.2	44.2	24	Ready	W-4
	09:43	1.2	9.7	23.1	25	Ready	W-5
	09:44	0.5	9.5	27.8	26	Ready	W-6
	09:45	0.0	14.2	23.8	27	Ready	W-7
	09:46	0.0	0.7	14.8	28	Ready	W-8
	09:54	0.0	0.4	7.4	29	Ready	W-9
	10:05	0.0	0.6	16.4	30	Ready	W-10
	10:16	0.0	0.7	7.1	31	Ready	W-11/CS-1 Control Sample
	10:51	0.0	0.0	0.0	32	Ready	No Sample
	11:33	0.0	0.1	5.4	33	Ready	W-12
	11:34	0.0	0.1	3.4	34	Ready	W-13
	11:41	0.0	0.6	2.2	35	Ready	W-14
	11:41	0.0	0.2	3.2	36	Ready	W-15
	12:28	0.0	0.1	1.1	37	Ready	W-16
	12:29	0.0	0.4	1.8	38	Ready	W-17
	12:30	0.0	1.5	3.1	39	Ready	W-18
	12:30	0.0	0.4	1.5	40	Ready	W-19
	12:31	0.0	0.8	1.8	41	Ready	W-20
	12:31	0.0	1.0	3.0	42	Ready	W-21
	12:32	0.0	0.8	3.0	43	Ready	W-22

## **C.T. MALE ASSOCIATES, P.C.**

### **3.0 SOIL SAMPLING AND LABORATORY ANALYSES**

#### **3.1 General**

Soil samples were collected in the field by a representative of C.T. Male Associates during the field investigation as described in section 3.2 and 3.3, and where shown on Figure 1 in Appendix B.

All samples were placed in coolers with ice packs at the time of collection, transported to the testing laboratory, and then composited in the laboratory prior to analysis. A copy of the laboratory analysis report and chain of custody record are presented in Appendix D. The laboratory analyses were performed by CTM Analytical Laboratory, Ltd. CTM Analytical is a New York State Department of Health approved laboratory and is on NYSDEC's list of technically acceptable laboratories.

The sampling plan described in the work plan that was approved by NYSDEC (a copy is enclosed in Appendix A) was followed, except that samples were also taken from the bottom of the excavations for laboratory analyses to confirm that all potentially contaminated soil had been excavated.

#### **3.2 Stockpiled Soil**

All soil pile samples were collected as vertical composites. Samples were collected by excavating into the pile with a backhoe, cleaning the sidewalls to expose undisturbed material, and scraping the sidewalls of the excavation vertically with the sample jar.

The two piles of stockpiled soil were treated as a single unit, and were divided into two equal grid areas. Four random

## **C.T. MALE ASSOCIATES, P.C.**

samples, for compositing to one sample in the laboratory were taken from each grid area.

Soil samples P-1, P-2, P-5, AND P-6 were composited to represent one half of the staged soil pile. Samples P-3, P-4, P-7 and P-8 were composited to represent the second half of the staged soil pile. A TCLP (toxicity characteristic leaching procedure) extraction was performed on the two composite samples and the extract was analyzed for volatile aromatic hydrocarbons by EPA Method 8020/503.1 and for base/neutral compounds and polynuclear aromatic hydrocarbons (PNAs) by EPA Method 8270 . These analyses were conducted to determine if petroleum contamination potentially present in the soil would leach out at concentrations exceeding ground water or drinking water standards.

A separate set of samples was collected from the "new drum spill area" soil pile to represent that pile as a separate unit in determining whether the soil is hazardous or not. Samples P-9, P-10, P-11 and P-12 were taken and composited into one sample. This sample was analyzed in the laboratory for PCB's, pH, and a TCLP extraction of the sample was analyzed for TCLP volatile organic compounds by EPA Method 8240 and for TCLP metals (arsenic, barium, cadmium, silver, lead, chromium, mercury, selenium), by EPA Method 6010 except for mercury by EPA Method 7470.

### **3.3 Bottom of Excavations**

Four samples were taken from the bottom of each excavation ("original" and "new" drum spill areas) for compositing in the laboratory into a single sample from each excavation area for analyses. The soil samples were taken using a clean stainless steel trowel. Soil samples B-1 through B-4 were taken along the south side of the concrete pad for the former incinerator. Soil

## **C.T. MALE ASSOCIATES, P.C.**

samples B-6 through B-9 were taken from the bottom of the new drum spill area excavation. A TCLP extraction was performed on each composite sample (2 total) and the extract was analyzed for volatile aromatic hydrocarbons by EPA Method 8020/503.1, and for base/neutrals and PNAs by EPA Method 8270. This sampling and analyses were performed to determine if any petroleum contamination potentially present in the remaining soil would leach out at concentrations exceeding groundwater or drinking water standards.

### **3.4 Laboratory Analyses Results**

No contamination above detection limits was reported for any of the soil samples submitted to the testing laboratory, except the composite soil sample taken only from the new drum spill area soil pile (i.e., P-9, P-10, P-11, and P-12). The composite soil sample taken from the new drum spill area soil pile showed trace concentrations of methylene chloride, barium, and chromium. The methylene chloride was reported at a concentration of 40 ug/l in this sample. The testing laboratory expects that it was introduced as a laboratory contaminant (see cover sheet of laboratory report in Appendix D). The concentrations of chromium (0.02 mg/l) and barium (0.49 mg/l) in this sample were detected at levels which are below the NYSDEC groundwater standards (6 NYCRR Part 703.5), the NYSDOH drinking water standards (10 NYCRR Part 5 and 170), and the TCLP maximum contaminant level (indicating the soil is not hazardous).

The results indicate that any contamination potentially present in the stockpiled soil is not leaching out at concentrations exceeding groundwater or drinking water standards; and that these same constituents are not leaching out of the soil in the bottom of the excavations.

## C.T. MALE ASSOCIATES, P.C.

### 4.0 SUMMARY AND CONCLUSIONS

During the field investigation, it was apparent that some amount of oily waste had been released to the soils in the area adjacent to the south and southwest corners of the concrete pad for the former incinerator. Some of the soils excavated from this area had a slight oily odor. Due to the fact that incinerator ash is present in this area south of the pad it was difficult to characterize soils as being "fill" or "discolored" when viewing the soils during excavation. No visual oily contamination was apparent in the initial drum spill area, except where indicated adjacent to the concrete pad. The field headspace analysis results did indicate some background level readings around the perimeter of the excavation, but there is no way to determine if these readings represented levels of contamination from the drum spill or if there was some other compound (potentially present in the ash/cinders) which affected the sensitivity of the field instrument. However, laboratory analyses results, indicated that any petroleum (volatile aromatic hydrocarbons, base/neutrals, and PNAs) contamination potentially present in the excavated soil is not leaching out at concentrations exceeding groundwater or drinking water standards under TCLP testing conditions. Based on the TCLP laboratory analyses results, it is anticipated that any potentially oil contaminated soil present under the concrete pad of the former incinerator would also not leach out at concentrations surpassing groundwater or drinking water standards.

The laboratory analyses results also indicated that any volatile aromatic hydrocarbons, base/neutral compounds or PNA contamination potentially present in the excavated soil from the new drum spill area was also not leaching out at concentrations exceeding groundwater or drinking water standards.

**C.T. MALE ASSOCIATES, P.C.**

Based on the soil sampling and laboratory analyses results, the soil is exempt from the requirements of 6 NYCRR Part 360 as identified in the NYSDEC Petroleum Contaminated Soil Togs, presented in a memorandum dated June 14, 1990, "Handling and Disposition of Petroleum Contaminated Soil," and therefore should be able to be returned to the excavations.

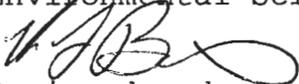
If you have any questions or require any additional information, please do not hesitate to contact this office at (581) 786-7400.

Respectfully Submitted

C.T. MALE ASSOCIATES, P.C.

Report prepared by:

Kim L. Baines  
Environmental Scientist

  
Reviewed and approved by:

  
David W. Roecker, P.E.  
Department Head, Environmental Engineering

LR/seh

**C.T. MALE ASSOCIATES, P.C.**

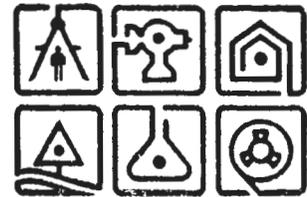
**APPENDIX A**

**WORK PLAN SUBMITTED TO NYSDEC**

# C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive  
P.O. Box 727  
Latham, New York 12110  
(518) 785-0976  
FAX (518) 785-3264

Engineering  
Surveying  
Architecture  
Landscape Architecture  
Laboratory Services  
Computer Services



August 17, 1990

New York State Department of Environmental Conservation  
2176 Guilderland Avenue  
Schenectady, NY 12306

Attn: Mr. Thomas Sperbeck

RE: Petroleum Spill Investigation  
First Prize Center  
Subsurface Investigation of Spill Area and Soil Removal  
CTMA Project No. 90.3039

Dear Mr. Sperbeck:

In reference to your letters to Mr. Robert Ganz, dated April 19 and June 21, 1990, we are currently working with Realty Assets, Inc. to perform the required petroleum spill assessment at the First Prize Center site located on Exchange Street in the City of Albany, New York. It appears that some additional quantity of oily material has been spilled from some of the ten drums in their current location, near the northernmost excavated staged soil pile. These drums were apparently tipped over since they were moved from the concrete pad. It is proposed to also investigate this area. A general outline of the services which C.T. Male has contracted to perform in assessing the spill areas and our proposed work plan are presented below.

1. A member of the Realty Assets, Inc. staff will secure the ten drums still present in the spill area, and move them to a secure covered area where they will be stored until sampling and disposal of the remaining contents has been completed.
2. Excavate the visually contaminated soil present from the initial spill area (estimate 45 $\pm$  cy) and from the new spill area (estimate 45 $\pm$  cy) where drums were tipped over; and stockpile the soil in two separate piles on two layers of polyethylene adjacent to the current stockpile of soil (estimate 67 $\pm$  cy). Take a soil sample per every 100 square feet from the bottom (if groundwater is not encountered) and perimeter of the excavations and screen the samples in the field for volatile compounds with a photoionization detector (PID) to determine if additional soil removal is warranted. If readings on the PID exceed levels agreed upon by NYSDEC, C.T. Male, and the Owner above background levels, then additional soil will be excavated as necessary and possible. If groundwater is encountered at the bottom of the excavations, soil samples taken from these areas may need to be analyzed in the laboratory since excessive moisture will effect the readings on the PID and potentially give misleading results.

C.T. MALE ASSOCIATES, P.C.

Mr. Thomas Sperbeck  
August 17, 1990  
Page -2-

3. To determine if the concentrations of petroleum constituents present in the previously and newly excavated soil is such that on-site treatment or off-site disposal is warranted it is proposed to take samples from the stockpiled soil and analyze the samples in accordance with the NYSDEC document, "Handling and Disposition of Petroleum Contaminated Soil, dated June 14, 1990". The soil piles will be divided into two equal areas and four samples from each area taken and composited for analysis, for a total of two samples to be analyzed in the laboratory. Soil sampling will be conducted via test pit excavations into the soil piles. The soil samples will be analyzed in the laboratory as follows: conduct a TCLP extraction on the soil samples and analyze the extract for volatile aromatic hydrocarbons (EPA Method 503.1/8020) and polynuclear aromatic hydrocarbons (EPA Method 8270). If the concentration of constituents present in the extract is below NYSDEC and NYSDOH groundwater/drinking water standards then it is our understanding that the soil can be placed back in the ground.
4. Determine if the ten drums that are still present in the drum staging area had ever been sampled and laboratory analyses performed on the samples. If no sampling has been conducted to date on these drums, it is proposed that the soil excavated from this drum spill area also be analyzed for EP toxic metals, percent chlorine, PCBs, and pH to determine if the soil meets the definition of a hazardous waste. It is proposed to take four samples and composite them for a total analysis of one sample. Soil sampling will be facilitated by test pit excavations into the soil piles.
5. Prepare a report on our observations including soil sampling and laboratory analyses results, and a determination on the proper method of disposal of the excavated soil.

In keeping with the most recent DEC guidelines for petroleum remediation (Handling and Disposition of Petroleum Contaminated Soil, document dated June 14, 1990), C.T. Male is suggesting that soils which exhibit TCLP contaminant concentrations below the applicable drinking water standards be backfilled and left on the subject site. This would reduce the amount of waste to be landfilled and would help reduce the economic burden of the cleanup.

C.T. MALE ASSOCIATES, P.C.

Mr. Thomas Sperbeck  
August 17, 1990  
Page -3-

We look forward to your comments. We would like to proceed with the soil excavation and soil sampling on Thursday, August 23, 1990 if approval is obtained from NYSDEC.

If you have any questions or require any additional information, please do not hesitate to contact myself or Liz Rovers at this office.

Respectfully submitted,

C.T. MALE ASSOCIATES, P.C.



Kim L. Baines  
Environmental Scientist

Reviewed and approved by:



David W. Roecker, P.E.  
Department Head, Environmental Engineering

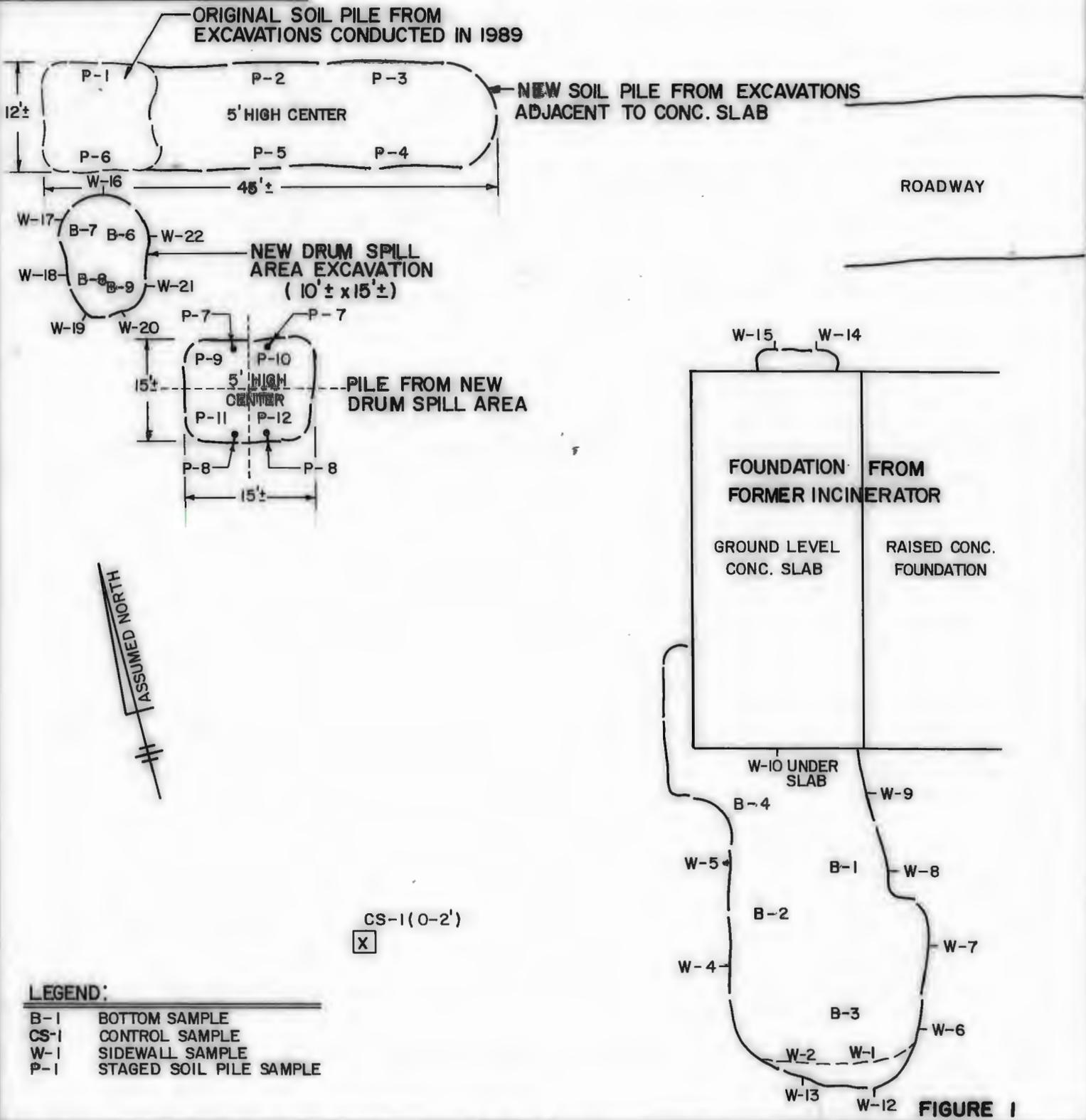
cc: Mr. Walter Lotz, Jr.  
Mr. Robert Ganz, Esq.

KLB/DWR/cmc

**C.T. MALE ASSOCIATES, P.C.**

**APPENDIX B**  
**DRAWINGS**

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW



BRUNING 44-232 70996

Date	RECORD OF WORK	Appr.	FIRST PRIZE CENTER SUBSURFACE INVESTIGATION OF SPILL AREAS	
			CITY OF ALBANY	COUNTY OF ALBANY, N.Y.
			<b>C. T. MALE ASSOCIATES, P.C.</b> 50 Century Hill Drive, P.O. Box 727, Latham, NY 12110 (518) 785-0976	
			Engineering Surveying Architecture Landscape Architecture Laboratory Services Computer Services	
Drafter: <i>RM</i>		Checker:		
Appr. by:		Proj. No. 90. 3039	SCALE: NONE	
			DATE: SEPTEMBER 13, 1990	



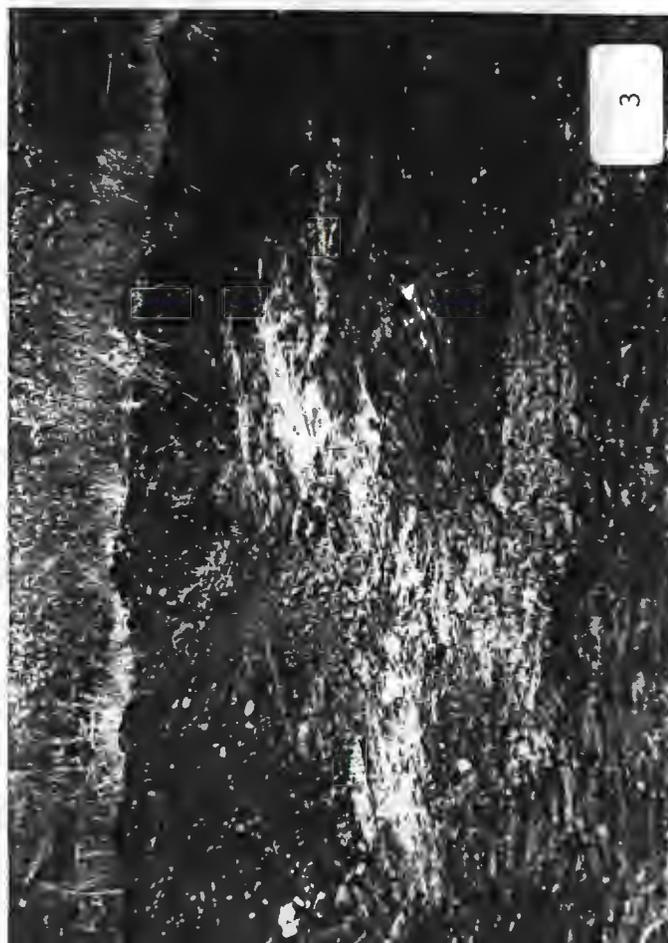
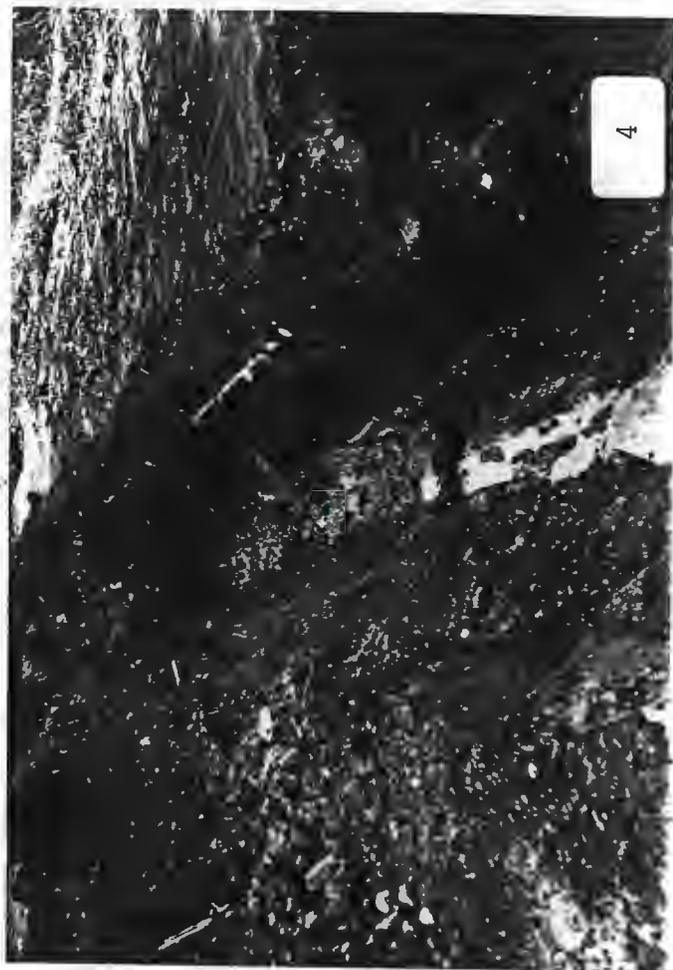
**C.T. MALE ASSOCIATES, P.C.**

**APPENDIX C**  
**INVESTIGATION AREA**  
**PHOTOGRAPHS**

**C.T. MALE ASSOCIATES, P.C.**

**KEY TO PHOTOGRAPHS**

1. Excavation along south end and southwest corner of concrete slab.
2. South end of concrete slab.
3. Excavation looking south from slab.
4. West side of slab on southwest corner.
- 5.-6. Original soil pile looking north, and closer view.
7. Pit where control sample was collected.





6

SOUTH SIDE OF  
SCAB  
8/23/90



5



7

**C.T. MALE ASSOCIATES, P.C.**

**APPENDIX D**

**LABORATORY ANALYSIS REPORT  
AND CHAIN OF CUSTODY RECORD**

CTM ANALYTICAL LABS, LTD.  
15 Century Hill Dr.  
Latham, NY 12110  
Phone: (518)785-1805 Fax: (518)785-0370

Laboratory Analysis Report  
Prepared for: C.T. MALE ASSOCIATES, P.C.  
Project Number: 90.00607  
Task Number: 900823N  
11 SEP 1990

Please note that all EPA 8020 and EPA 8270 analyses were completed on  
TCLP extracts for this report.

\* THE CONCENTRATION OF METHYLENE CHLORIDE IN THE ZHE BLANK WAS 24 MCG/L  
AFTER A DILUTION FACTOR OF 5 WAS APPLIED. THE CONCENTRATION OF  
METHYLEN CHLORIDE IN SAMPLE: 900823N 05, MAY BE DUE TO A LABORATORY  
ARTIFACT.

PLEASE NOTE

1. All results are calculated on a dry weight basis unless otherwise specified.
2. Reporting Limits for volatile and semivolatile organic compounds are expressed as Practical Quantitation Limits.

CERTIFICATIONS:

NYS E.L.A.P. ID NO: 10358	MA: NY052	CT: PH-0551
NJ: 73581	PA: 68-402	NH: 199014-C

C.T. MALE ASSOCIATES, P.C.  
 50 CENTURY HILL DRIVE  
 LATHAM NY 12110

CTM PROJECT #: 90.00607

Attention: LIZ ROVERS

CTM Task #: 900823N

Purchase Order Number: 90.03039  
 Date Sampled: 08/23/90 Time: 2:00 PM  
 Sampled By : BAINES  
 Sample Id: B-1,B-2,B-3,B-4  
 Location : FIRST PRIZE CENTER

CTM Sample No: 900823N 01  
 Date Received: 08/23/90  
 Collection Method: COMPOSITE  
 Matrix: SOIL

Parameters and Standard Methodology Used		Results	Analyst Reference
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED	RC 8/26
ZERO HEADSPACE EXTRACTION	SW-846 METHOD 1311	EXTRACTED	RK 8/26
BENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
TRICHLOROETHENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
TOLUENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
TETRACHLOROETHENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
CHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
ETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
p-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
m-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
o-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
STYRENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
ISO-PROPYLBENZENE (CUMENE)	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
BROMOBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
n-PROPYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
o-CHLOROTOLUENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
p-CHLOROTOLUENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
1,3,5-TRIMETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
tert-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
1,2,4-TRIMETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
m-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
sec-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
p-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
p-CYME (ISOPROPYLTOLUENE)	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
o-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
n-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
1,2,4-TRICHLOROBENZENE	SW-846 8020	<25 MCG/L	GC1 A:57 9/5
NAPHTHALENE	SW-846 8020	<25 MCG/L	GC1 A:57 9/5
HEXACHLOROBUTADIENE	SW-846 8020	<25 MCG/L	GC1 A:57 9/5
1,2,3-TRICHLOROBENZENE	SW-846 8020	<25 MCG/L	GC1 A:57 9/5
METHYL t BUTYL ETHER	SW-846 8020	<5 MCG/L	GC1 A:57 9/5
ACENAPHTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
ACENAPHTHYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
BENZO(A) ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
BENZO(A) PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5

(CONTINUES ON NEXT PAGE )

REMARKS:

C.T. MALE ASSOCIATES, P.C.  
 50 CENTURY HILL DRIVE  
 LATHAM NY 12110

CTM PROJECT #: 90.00607

CTM Task #: 900823N

Attention: LIZ ROVERS

Purchase Order Number: 90.03039  
 Date Sampled: 08/23/90 Time: 2:00 PM  
 Sampled By : BAINES  
 Sample Id: B-1,B-2,B-3,B-4  
 Location : FIRST PRIZE CENTER

CTM Sample No: 900823N 01  
 Date Received: 08/23/90  
 Collection Method: COMPOSITE  
 Matrix: SOIL

Parameters and Standard Methodology Used	Results	Analyst Reference
--	---------	-------------------

( CONTINUED FROM PREVIOUS PAGE )

BENZO(B) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
4-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
BENZO(K) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
CHRYSENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
DIBENZO-(A,H)-ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
FLUDRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
INDENO-(1,2,3)-(C,D)-PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
NAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
PHENANTHRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
EXTRACTION FOR TCLP B/N	EPA METHOD 625	EXTRACTED	RK 8/30
% SOLIDS	STD. METH. 15TH ED.209A	82 %	BT 9/6

REMARKS:

C.T. MALE ASSOCIATES, P.C.  
 50 CENTURY HILL DRIVE  
 LATHAM NY 12110

CTM PROJECT #: 90.00607

Attention: LIZ ROVERS

CTM Task #: 900823N

Purchase Order Number: 90.03039  
 Date Sampled: 08/23/90 Time: 2:00 PM  
 Sampled By : BAINES  
 Sample Id: B-6,B-7,B-8,B-9  
 Location : FIRST PRIZE CENTER

CTM Sample No: 900823N 02  
 Date Received: 08/23/90  
 Collection Method: COMPOSITE  
 Matrix: SOIL

Parameters and Standard Methodology Used		Results	Analyst Reference
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED	RC 8/26
ZERO HEADSPACE EXTRACTION	SW-846 METHOD 1311	EXTRACTED	RK 8/26
BENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
TRICHLOROETHENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
TOLUENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
TETRACHLOROETHENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
CHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
ETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
m-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
o-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
STYRENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
ISD-PROPYLBENZENE (CUMENE)	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
BROMOBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
n-PROPYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
o-CHLOROTOLUENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-CHLOROTOLUENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
1,3,5-TRIMETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
tert-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
1,2,4-TRIMETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
m-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
sec-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-CYME (ISOPROPYLTOLUENE)	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
o-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
n-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
1,2,4-TRICHLOROBENZENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
NAPHTHALENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
HEXACHLOROBUTADIENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
1,2,3-TRICHLOROBENZENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
METHYL t BUTYL ETHER	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
ACENAPTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
ACENAPHTYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
BENZO(A) ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
BENZO(A) PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5

(CONTINUES ON NEXT PAGE )

REMARKS:

C.T. MALE ASSOCIATES, P.C.  
 50 CENTURY HILL DRIVE  
 LATHAM NY 12110

CTM PROJECT #: 90.00607

Attention: LIZ ROVERS

CTM Task #: 900B23N

Purchase Order Number: 90.03039  
 Date Sampled: 08/23/90 Time: 2:00 PM  
 Sampled By : BAINES  
 Sample Id: B-6,B-7,B-8,B-9  
 Location : FIRST PRIZE CENTER

CTM Sample No: 900B23N 02  
 Date Received: 08/23/90  
 Collection Method: COMPOSITE  
 Matrix: SDIL

Parameters and Standard Methodology Used

Results

Analyst Reference

( CONTINUED FROM PREVIOUS PAGE )

Parameters and Standard Methodology Used	Results	Analyst Reference
BENZO(B) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS <10 MCG/L	CM 8:20 9/5
4-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS <10 MCG/L	CM 8:20 9/5
BENZO(K) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS <10 MCG/L	CM 8:20 9/5
CHRYSENE	SW-846 METHOD 8270 BASE/NEUTRALS <10 MCG/L	CM 8:20 9/5
DIBENZO-(A,H)-ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS <10 MCG/L	CM 8:20 9/5
FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS <10 MCG/L	CM 8:20 9/5
FLUORENE	SW-846 METHOD 8270 BASE/NEUTRALS <10 MCG/L	CM 8:20 9/5
INDENO-(1,2,3)-(C,D)-PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS <10 MCG/L	CM 8:20 9/5
NAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS <10 MCG/L	CM 8:20 9/5
PHENANTHRENE	SW-846 METHOD 8270 BASE/NEUTRALS <10 MCG/L	CM 8:20 9/5
PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS <10 MCG/L	CM 8:20 9/5
EXTRACTION FOR TCLP B/N	EPA METHOD 625	EXTRACTED
% SOLIDS	STD. METH. 15TH ED.209A	89 % RK 8/30 BT 9/6

REMARKS:

C.T. MALE ASSOCIATES, P.C.  
 50 CENTURY HILL DRIVE  
 LATHAM NY 12110

CTM PROJECT #: 90.00607

Attention: LIZ ROVERS

CTM Task #: 900823N

Purchase Order Number: 90.03039  
 Date Sampled: 08/23/90 Time: 2:00 PM  
 Sampled By: BAINES  
 Sample Id: P-1,P-2,P-5,P-6  
 Location: FIRST PRIZE CENTER

CTM Sample No: 900823N 03  
 Date Received: 08/23/90  
 Collection Method: COMPOSITE  
 Matrix: SOIL

Parameters and Standard Methodology Used		Results	Analyst Reference
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED	RC 8/26
ZERO HEADSPACE EXTRACTION	SW-846 METHOD 1311	EXTRACTED	RK 8/26
BENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
TRICHLOROETHENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
TOLUENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
TETRACHLOROETHENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
CHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
ETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
m-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
o-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
STYRENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
ISO-PROPYLBENZENE (CUMENE)	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
BROMOBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
n-PROPYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
o-CHLOROTOLUENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-CHLOROTOLUENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
1,3,5-TRIMETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
tert-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
1,2,4-TRIMETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
m-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
sec-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-CYME (ISOPROPYLTOLUENE)	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
o-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
n-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
1,2,4-TRICHLOROBENZENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
NAPHTHALENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
HEXACHLOROBUTADIENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
1,2,3-TRICHLOROBENZENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
METHYL t BUTYL ETHER	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
ACENAPHTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
ACENAPHTYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
BENZO(A) ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
BENZO(A) PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5

(CONTINUES ON NEXT PAGE )

REMARKS:

C.T. MALE ASSOCIATES, P.C.  
 50 CENTURY HILL DRIVE  
 LATHAM NY 12110

CTM PROJECT #: 90.00607

Attention: LIZ ROVERS

CTM Task #: 900B23N

Purchase Order Number: 90.03039  
 Date Sampled: 08/23/90 Time: 2:00 PM  
 Sampled By : BAINES  
 Sample Id: P-1,P-2,P-5,P-6  
 Location : FIRST PRIZE CENTER

CTM Sample No: 900B23N 03  
 Date Received: 08/23/90  
 Collection Method: COMPOSITE  
 Matrix: SOIL

Parameters and Standard Methodology Used

Results

Analyst Reference

( CONTINUED FROM PREVIOUS PAGE )

BENZO(B) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 6:20 9/5
4-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 6:20 9/5
BENZO(K) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 6:20 9/5
CHRYSENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 6:20 9/5
DIBENZO-(A,H)-ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 6:20 9/5
FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 6:20 9/5
FLUORENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 6:20 9/5
INDENO-(1,2,3)-(C,D)-PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 6:20 9/5
NAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 6:20 9/5
PHENANTHRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 6:20 9/5
PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 6:20 9/5
EXTRACTION FOR TCLP B/N	EPA METHOD 625	EXTRACTED		RK 8/30
% SOLIDS	STD. METH. 15TH ED.209A	85	%	BT 9/6

REMARKS:

C.T. MALE ASSOCIATES, P.C.  
 50 CENTURY HILL DRIVE  
 LATHAM NY 12110

CTM PROJECT #: 90.00607

Attention: LIZ ROVERS

CTM Task #: 900B23N

Purchase Order Number: 90.03039  
 Date Sampled: 08/23/90 Time: 2:00 PM  
 Sampled By: BAINES  
 Sample Id: P-3,P-4,P-7,P-8  
 Location: FIRST PRIZE CENTER

CTM Sample No: 900B23N 04  
 Date Received: 08/23/90  
 Collection Method: COMPOSITE  
 Matrix: SOIL

Parameters and Standard Methodology Used		Results	Analyst Reference
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED	RC 8/26
ZERO HEADSPACE EXTRACTION	SW-846 METHOD 1311	EXTRACTED	RK 8/27
BENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
TRICHLOROETHENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
TOLUENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
TETRACHLOROETHENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
CHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
ETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
m-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
o-XYLENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
STYRENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
ISO-PROPYLBENZENE (CUMENE)	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
BROMOBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
n-PROPYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
o-CHLOROTOLUENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-CHLOROTOLUENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
1,3,5-TRIMETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
tert-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
1,2,4-TRIMETHYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
m-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
sec-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
p-CYME (ISOPROPYLTOLUENE)	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
o-DICHLOROBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
n-BUTYLBENZENE	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
1,2,4-TRICHLOROBENZENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
NAPHTHALENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
HEXACHLOROBUTADIENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
1,2,3-TRICHLOROBENZENE	SW-846 8020	<25 MCG/L	GC1 A:58 9/5
METHYL t BUTYL ETHER	SW-846 8020	<5 MCG/L	GC1 A:58 9/5
ACENAPTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
ACENAPHTYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
BENZO(A) ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5
BENZO(A) PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10 MCG/L	CM 6:20 9/5

(CONTINUES ON NEXT PAGE )

REMARKS:

C.T. MALE ASSOCIATES, P.C.  
 50 CENTURY HILL DRIVE  
 LATHAM NY 12110

CTM PROJECT #: 90.00607

Attention: LIZ ROVERS

CTM Task #: 900823N

Purchase Order Number: 90.03039  
 Date Sampled: 08/23/90 Time: 2:00 PM  
 Sampled By: BAINES  
 Sample Id: P-3,P-4,P-7,P-8  
 Location: FIRST PRIZE CENTER

CTM Sample No: 900823N 04  
 Date Received: 08/23/90  
 Collection Method: COMPOSITE  
 Matrix: SOIL

Parameters and Standard Methodology Used

Results

Analyst Reference

( CONTINUED FROM PREVIOUS PAGE )

BENZO(B) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 8:20 9/5
4-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 8:20 9/5
BENZO(K) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 8:20 9/5
CHRYSENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 8:20 9/5
DIBENZO-(A,H)-ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 8:20 9/5
FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 8:20 9/5
FLUORENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 8:20 9/5
INDENO-(1,2,3)-(C,D)-PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 8:20 9/5
NAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 8:20 9/5
PHENANTHRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 8:20 9/5
PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	<10	MCG/L	CM 8:20 9/5
EXTRACTION FOR TCLP B/N	EPA METHOD 625	EXTRACTED		RK 8/30
% SOLIDS	STD. METH. 15TH ED.209A	87	%	BT 9/6

REMARKS:

C.T. MALE ASSOCIATES, P.C.  
 50 CENTURY HILL DRIVE  
 LATHAM NY 12110

CTM PROJECT #: 90.00607

Attention: LIZ ROVERS

CTM Task #: 900B23N

Purchase Order Number: 90.03039

CTM Sample No: 900B23N 05

Date Sampled: 08/23/90 Time: 2:00 PM

Date Received: 08/23/90

Sampled By : BAINES

Collection Method: COMPOSITE

Sample Id: P-9,P-10,P-11,P-12

Matrix: SOIL

Location : FIRST PRIZE CENTER

Parameters and Standard Methodology Used		Results	Analyst Reference
ZERO HEADSPACE EXTRACTION	SW-846 METHOD 1311	EXTRACTED	RK 8/26
ACRYLONITRILE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
BENZENE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
CARBON DISULFIDE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
CARBON TETRACHLORIDE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
CHLOROBENZENE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
CHLOROFORM (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
1,2-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
1,2-DICHLOROETHANE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
1,1-DICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
ISOBUTANOL (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
METHYLENE CHLORIDE (TCLP)	SW-846 METHOD 8240	* 40 MCG/L	JB A:82 8/31
METHYL ETHYL KETONE (TCLP)	SW-846 METHOD 8240	<50 MCG/L	JB A:82 8/31
1,1,1,2-TETRACHLOROETHANE-TCLPSW-846 METHOD 8240		<25 MCG/L	JB A:82 8/31
1,1,2,2-TETRACHLOROETHANE-TCLPSW-846 METHOD 8240		<25 MCG/L	JB A:82 8/31
TETRACHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
TOLUENE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
1,1,1-TRICHLOROETHANE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
1,1,2-TRICHLOROETHANE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
TRICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	<25 MCG/L	JB A:82 8/31
VINYL CHLORIDE (TCLP)	SW-846 METHOD 8240	<50 MCG/L	JB A:82 8/31
ARSENIC, BY TCLP	SW-846 METHOD 1311	<0.10 MG/L	A-1:108 9/6
BARIUM, BY TCLP	SW-846 METHOD 1311	0.49 MG/L	A-1:108 9/6
CADMIUM, BY TCLP	SW-846 METHOD 1311	<0.005 MG/L	A-1:108 9/6
CHROMIUM, BY TCLP	SW-846 METHOD 1311	0.02 MG/L	A-1:108 9/6
LEAD, BY TCLP	SW-846 METHOD 1311	<0.05 MG/L	A-1:108 9/6
MERCURY, BY TCLP	SW-846 METHOD 1311	<0.0005 MG/L	RC C:100 9/4
SELENIUM, BY TCLP	SW-846 METHOD 1311	<0.10 MG/L	A-1:108 9/6
SILVER, BY TCLP	SW-846 METHOD 1311	<0.01 MG/L	A-1:108 9/6
MERCURY PREP	SW-846 1311	COMPLETED	NAN 8/31
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED	RC 8/26
TOTAL METALS, HCL	STD. METH. 15TH ED.302D	COMPLETED	NAN 8/27
EXTRACTION FOR PCB	EPA SW-846 METHOD 8080	EXTRACTED	PC 8/29
PCB1016	SW-846 METHOD 8080	<10 MCG/KG	GC 3A:19 9/10
PCB1221	SW-846 METHOD 8080	<10 MCG/KG	GC 3A:19 9/10

(CONTINUES ON NEXT PAGE )

REMARKS:

C.T. MALE ASSOCIATES, P.C.  
 50 CENTURY HILL DRIVE  
 LATHAM NY 12110

CTM PROJECT #: 90.00607

CTM Task #: 900823N

Attention: LIZ ROVERS

Purchase Order Number: 90.03039  
 Date Sampled: 08/23/90 Time: 2:00 PM  
 Sampled By : BAINES  
 Sample Id: P-9,P-10,P-11,P-12  
 Location : FIRST PRIZE CENTER

CTM Sample No: 900823N 05  
 Date Received: 08/23/90  
 Collection Method: COMPOSITE  
 Matrix: SOIL

Parameters and Standard Methodology Used	Results	Analyst Reference
--	---------	-------------------

( CONTINUED FROM PREVIOUS PAGE )

PCB1232	SW-846 METHOD 8080	<10	MCG/KG	GC 3A:19 9/10
PCB1242	SW-846 METHOD 8080	<10	MCG/KG	GC 3A:19 9/10
PCB1248	SW-846 METHOD 8080	<10	MCG/KG	GC 3A:19 9/10
PCB1254	SW-846 METHOD 8080	<10	MCG/KG	GC 3A:19 9/10
PCB1260	SW-846 METHOD 8080	<10	MCG/KG	GC 3A:19 9/10
% SOLIDS	STD. METH. 15TH ED.209A	87	%	BT 9/6
SOIL PH MEASURED IN WATER	SW-846 9045	8.0	SU	FN 9/11

REMARKS:

AUTHORIZED FOR RELEASE:

*T. McNeill*

LEGEND: < = LESS THAN, > = GREATER THAN

MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM

# C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive  
 P.O. Box 727  
 Latham, New York 12110  
 (518) 785-0976



## LABORATORY SERVICES

### CHAIN OF CUSTODY RECORD

900823N

SHEET 1 OF 2

CLIENT AND PROJECT NAME FIRST PRIZE CENTER CTMA NO 90.3039	SAMPLERS: (Signature) 
--	---------------------------

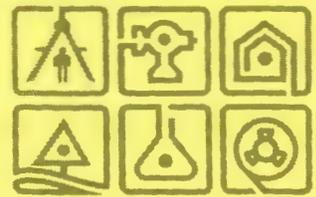
C T M SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME A = a.m. P = p.m.	SAMPLE TYPE		NUMBER OF CONT'S	ANALYSIS REQUIRED
				MATRIX	COMP GRAB		
01	B-1	8/23/90	2:00	A	SOIL	1	TCLP Extract +
	B-2			P		1	Analyze Extract for EPA method
	B-3			A		1	8020/503.1; and
	B-4			P		1	EPA Method 8270
02	B-5			A		1	↓ same ↓
	B-7			P		1	
	B-8			A		1	
03	B-9			P		1	↓ same ↓
	P-1			A		1	
04	P-2			P		1	↓ same ↓
	P-3			A		1	
	P-4			P		1	

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Dispatched by: (Signature) 	Date/Time 8/23/90 3:45 P	Received for Laboratory by: 
Method of Shipment: HAND DELIVERED		Date/Time 8/23/90 10M

Distribution: Orig. - Accompany Shipment  
 1 Copy - Coordinator Field Files

# C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive  
 P.O. Box 727  
 Latham, New York 12110  
 (518) 785-0976



## LABORATORY SERVICES

### CHAIN OF CUSTODY RECORD

SHEET 2 OF 2

900823N

CLIENT AND PROJECT NAME FIRST PRIZE CTR CTMA No. 90.3039	SAMPLERS: (Signature) 
--	---------------------------

CTM SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME A = a.m. P = p.m.	SAMPLE TYPE		NUMBER OF CONT'S	ANALYSIS REQUIRED
				MATRIX	COMP GRAB		
	P-5	8/23/90	2:00	A	SOIL	1	same ↓ same ↓
	P-6			A		1	
	P-7			A		1	
	P-8			A		1	
	P-9			A		1	TCLP Volatiles
	P-10			A		1	TCLP Metals,
	P-11			A		1	PH, PCBs
	P-12			A		1	
				P		1	
				A		1	
				P		1	
				A		1	
				P		1	
				A		1	
				P		1	

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Dispatched by: (Signature) 	Date/Time 8/23/90 3:45p	Received for Laboratory by: Date/Time 8/23/90 5:15pm
Method of Shipment: HAND DELIVERED		

Distribution: Orig. - Accompany Shipment  
 1 Copy - Coordinator Field Files

CTM-07000-01 (8/88)