PHASE II STUDY

48-58 CHARLOTTE STREET
ROCHESTER, NEW YORK

Prepared for:	Mr. Joseph J. Biondolillo Environmental Specialist The City of Rochester 30 Church Street Rochester, New York 14614
Prepared by:	Day Environmental, Inc 2144 Brighton-Henrietta Town Line Road Rochester, New York 14623
Project No.:	1427S-97
Date:	September 30, 1997

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1.0 INTRODUCTION

Day Environmental, Inc. ("DAY") performed a Phase II Study at 48-58 Charlotte Street, City of Rochester, County of Monroe, New York ("Site"). Figure 1 included in Appendix A shows the location of the Site. The Site consists of three contiguous parcels (refer to Figure 2 included in Appendix A).

1.1 Background

Day Environmental, Inc. (DAY) completed a Phase I Environmental Site Assessment (Phase I ESA) report (file #1274E-97) dated May 15, 1997 that included the above referenced properties ("Site"). The Site was historically improved with residential houses, and later by an automobile parking lot. The Phase I ESA report did not identify any on-site environmental concerns for the Site; however, the Phase I ESA report identified historical use of adjoining property as a potential environmental concern. An adjoining property (i.e., 42 Charlotte Street) located west of the Site is improved with a concrete block building which has been used in the past for auto repair.

DAY understands that the Site, along with other adjoining and/or nearby properties located to the west of the Site, may be redeveloped by the City of Rochester for residential purposes (i.e., homes that have full basements).

1.2 Purpose

The purpose of this Phase II Study was to complete limited subsurface work and sampling/analytical testing at the Site in order to evaluate whether contamination exists at the Site.

2.0 FIELDWORK AND ANALYTICAL TESTING

2.1 Fieldwork

Test Pits

On August 18, 1997, eleven test pits (TP-1 through TP-11) were excavated on the Site in the approximate locations illustrated on Figure 2 included in Appendix A. DAY retained Griffin Industrial Services, Inc. (Griffin) to provide a backhoe and operator to excavate the test pits. The purpose of these test pits was to evaluate whether contamination was present on the Site.

The test pits were excavated to depths ranging between approximately 8.0 feet and 9.0 feet below the ground surface. A DAY representative observed the in-situ and excavated fill encountered at the test pit locations, and this information was documented and is presented on a Test Pit Summary Table included in Appendix B. The ambient air above the in-situ and excavated fill/soil, and selected samples, at each test pit location was also screened using a Photovac Microtip Model HL-2000 photoionization detector (PID) equipped with a 10.6 eV lamp. The results of the PID screening are provided in the Test Pit Summary Table included in Appendix B. Selected soil and water samples were also collected for possible laboratory analysis (refer to Section 2.2).

2.2 Analytical Testing

Based on the field observations made during the August 18, 1997 field work, selected soil and water samples were submitted to Paradigm Environmental Services, Inc. (Paradigm), a New York State Department of Health (NYSDOH) approved laboratory, for analysis.

Soil Samples

The following soil samples were analyzed for New York State Department of Environmental Conservation (NYSDEC) STARS-listed volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method 8021:

- Sample 1427-01 from test pit TP-1(8-9');
- Sample 1427-03 from test pit TP-3(9');
- Sample 1427-04 from test pit TP-5(7.5-8.5');
- Sample 1427-05 from test pit TP-7(7.5-8.5'); and
- Sample 1427-06 from test pit TP-8(7.5-8.5').

Soil sample 1427-03 from test pit TP-3(9') was also analyzed for total petroleum hydrocarbons (TPH) using NYSDOH Method 310.13.

Soil sample 1427-02 collected from test pit TP-2(3') was analyzed for total RCRA metals.

A copy of Paradigm's laboratory report for these samples is included in Appendix C, and the test results for detected compounds/analytes are summarized in Table I (VOCs), Table II (TPH), and Table III (Metals) included in Appendix D.

Water Samples

Sample 1427-W1 from test pit TP-1(8.25') and sample 1427-W3 from test pit TP-4(7.25') were analyzed for NYSDEC STARS-listed VOCs using USEPA Method 8021. Water sample 1427-W2 from test pit TP-3(8.5') was analyzed for target compound list (TCL) and NYSDEC STARS-listed VOCs using USEPA Method 8260. (Note, since these samples were collected from open test pits, the resulting data should not be considered to represent actual groundwater conditions at these locations).

A copy of Paradigm's laboratory report for these samples is included in Appendix C, and the test results for detected compounds/analytes are summarized in Table IV (VOCs) included in Appendix D.

3.0 FINDINGS

3.1 Information Obtained from Test Pits

As shown on the Test Pit Summary Table included in Appendix B, the test pits were advanced to depths ranging between 8.0 feet and 9.0 feet below the ground surface. Equipment refusal, suggesting apparent top of bedrock, was encountered in the test pits at these depths. A layer of heterogeneous fill, consisting of reworked soil with lesser amounts of brick, concrete, cinders, ash, slag, wood, rubber, a blue granular solid, metal, ceramic material, and cut stone, was observed in the test pits from the ground surface to depths ranging between approximately 2.25 feet (i.e., TP-4) and 4.5 feet (i.e., TP-5) below the ground surface. The average thickness of fill encountered in the eleven test pits was calculated to be approximately 3.6 feet. Unusual odors were not detected to emanate from the fill material, with the exception of petroleum-like odors being detected on fill in test pit TP-3.

Apparent indigenous soil beneath the fill generally consisted of silty sands and sandy silts underlain by silt, sand and gravel, with lesser amounts of cobbles, boulders and clay. Standing water was observed in the eleven test pits at depths ranging between approximately 7.25 feet (TP-4) and 8.5 feet (TP-3) below the ground surface. The average depth to standing water observed in the test pits was approximately 7.9 feet below the ground surface.

As shown on the Test Pit Summary Table in Appendix B, peak PID readings detected on soil samples ranged between 0.3 parts per million (ppm) at test pit TP-11 and >2,500 ppm at test pits TP-3 and TP-5. Evidence of impacted soil (e.g., elevated PID readings, petroleum-like and/or VOC-like odors/staining, sheens, floating free product globules, etc.) was observed at test pits TP-1, TP-3, TP-4, TP-5, TP-6, TP-7, TP-8, and TP-10. The impact was generally observed in these test pits just above and/or within the saturated zone, with the exception of test pit TP-3 where petroleum-like odors were detected in unsaturated fill material located between 0 and 4 feet below the ground surface. Evidence of petroleum-like and/or VOC-like impact was not apparent at test pits TP-2, TP-9, and TP-11.

3.2 Analytical Test Results

The results of the analytical laboratory testing completed are included in Appendix C and summarized in Tables I through IV which are included in Appendix D. These results are further discussed in this section.

3.2.1 Soil Samples

VOCs

Five soil samples were analyzed for VOCs using USEPA Method 8021. As shown on Table I included in Appendix D, VOCs were not detected above laboratory detection

limits in sample 1427-01 from TP-1(8-9') or sample 1427-04 from TP-5(7.5-8.5'). The VOC sec-butylbenzene was detected in sample 1427-03 from TP-3(9') at a concentration of 453 parts per billion (ppb). The VOCs ethylbenzene and m,p-xylene were detected in sample 1427-05 from TP-7(7.5-8.5') at concentrations of 6.3 ppb and 8.0 ppb, respectively. The VOCs benzene, toluene, m,p-xylene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and p-isopropyltoluene were detected in sample 1427-06 from TP-8(7.5-8.5') at concentrations ranging between 327 ppb and 2,714 ppb.

Paradigm's laboratory report for sample 1427-03 from TP-3(9') and sample 1427-04 from TP-5(7.5-8.5') indicated that the detection limits were elevated by high levels of non-target hydrocarbons being present in these two samples.

TPH

Sample 1427-03 from TP-3(9') was also analyzed for TPH using NYSDOH Method 310.13. As shown on Table II included in Appendix D, 2,110,321 ppb of TPH, identified as paint thinner/stoddard solvent, was detected in this sample.

RCRA Metals

Sample 1427-02 from TP-2(3') was analyzed for total RCRA metals. As shown on Table III included in Appendix D, arsenic, barium, cadmium, chromium, lead, and selenium were detected in this sample at concentrations of 23.4 ppm, 178 ppm, 11.2 ppm, 19.4 ppm, 761 ppm, and 1.35 ppm, respectively. The metals mercury and silver were not detected above laboratory detection limits.

Case Narrative

Included in Appendix C is a case narrative and some chromatograms from Paradigm that provide additional insight regarding interpretation of the data. This information substantiates the results of the TPH sample for 1427-03 from TP-3(9') indicating it contains paint thinner/stoddard solvent. It also indicates that sample 1427-04 from TP-5(7.5-8.5') appears to contain the same array of petroleum hydrocarbons, which could lead to the interpretation that it also contains paint thinner/stoddard solvent. (Note, as shown on Figure 2 included in Appendix A, test pits TP-3 and TP-5 had the same peak PID reading of greater than 2,500 ppm). Paradigm's case narrative also indicates that the material detected in sample 1427-06 from TP-8(7.5-8.5') is an entirely different material or contains a different material that is commingled with paint thinner/stoddard solvent.

3.2.2 Water Samples

VOCs

Three water samples were analyzed for VOCs using USEPA Method 8021. As shown on Table IV included in Appendix D, the VOCs ethylbenzene and m,p-xylene were detected in sample 1427-W1 from TP-1(8.25') at concentrations of 2.1 ppb and 2.4 ppb respectively. Eight VOCs were detected in sample 1427-W2 from TP-3(8.5') at concentrations ranging between 2.9 ppb (benzene) and 21.3 ppb (acetone). The VOC benzene was detected in sample 1427-W3 from TP-4(7.25') at a concentration of 1.6 ppb. (Note, since these samples were collected from open test pits, these data should not be considered to represent actual concentrations of VOCs in groundwater at these locations).

3.3 Comparison of Analytical Results to Regulatory Guidelines

VOCs in Soil Samples

Table I provides a comparison of the detected concentrations of VOCs in the soil samples tested to appropriate guidance values and/or cleanup objectives listed in: 1) The January 24, 1994 NYSDEC Technical and Administrative Guidance Memorandum (TAGM) #4046: Determination of Soil Cleanup Objectives and Cleanup Levels; and 2) the August, 1992 NYSDEC Spill Technology and Remediation Series Memo #1 (STARS Memo #1), Petroleum-Contaminated Soil Guidance Policy. As shown, the concentrations of the VOC sec-butylbenzene (i.e., 453 ppb) detected in sample 1427-03 from TP-3(9') exceeds its respective STARS Memo #1 petroleum guidance value, and a TAGM #4046 recommended cleanup objective is not available. The concentrations of the VOCs ethylbenzene and m,p-xylene detected in sample 1427-05 from TP-7(7.5-8.5') do not exceed their respective TAGM #4046 recommended cleanup objectives or STARS Memo #1 petroleum guidance values. The concentrations of the six VOCs detected in sample 1427-06 from TP-8(7.5-8.5') exceed their respective TAGM #4046 recommended cleanup objectives and/or STARS Memo #1 petroleum guidance values.

TPH in Soil sample

TPH standard/guidance values have not been established by the NYSDEC; thus, standard/guidance values are not included on Table II. However, other states have established TPH standard/guidance values, and these values can be used for comparative purposes. For example, New Jersey requires the cleanup of impacted soil/fill with a TPH value in excess of 100,000 ppb. The detected concentration of TPH (i.e., 2,110,321 ppb) in sample 1427-03 from TP-3(9') exceeds this New Jersey clean up value.

Metals in Soil Sample

The detected concentrations of total metals in sample 1427-02 from TP-2(3') are compared in Table III to their respective background ranges that are listed in the NYSDEC Technical and

Administrative Guidance Memorandum #4046 (TAGM #4046), "Determination of Soil Cleanup Objectives and Cleanup Levels", January 24, 1994. The concentrations of total arsenic, cadmium and lead detected in sample 1427-02 exceed their respective background ranges. The concentrations of total barium, chromium, and selenium detected in sample 1427-02 are within their respective background ranges.

VOCs in Water Samples

Table IV provides a comparison of the detected concentrations of VOCs in the water samples tested to appropriate groundwater standards/guidance values listed in the October, 1993, Technical and Operational Guidance Series (TOGS 1.1.1), "Ambient Water Quality Standards and Guidance Values". (Note, since these samples were collected from open test pits, these data should not be considered to represent actual concentrations of VOCs in groundwater at these locations; thus TOGS 1.1.1 does not necessarily apply to these data). As shown, the concentrations of the VOCs ethylbenzene and m,p-xylene detected in sample 1427-W1 from TP-1(8.25') do not exceed their respective groundwater standards/guidance values. The concentrations of four of the eight VOCs detected in sample 1427-W2 from TP-3(8.5') exceed their respective groundwater standards/guidance values. The concentration of the VOC benzene (1.6 ppb) detected in sample 1427-W3 from TP-4(7.25') exceeds its respective groundwater standard (i.e., 0.7 ppb).

4.0 CONCLUSIONS AND RECOMMENDATIONS

DAY completed a Phase I ESA report dated May 15, 1997 that included the properties at 48-58 Charlotte Street ("Site"). The Site was historically improved with residential houses, and later by an automobile parking lot. The Phase I ESA report did not identify any on-site environmental concerns for the Site; however, the Phase I ESA report identified historical use of adjoining properties as a potential environmental concern. An adjoining property (i.e., 42 Charlotte Street) located west of the Site is improved with a concrete block building which has been used in the past for auto repair.

DAY understands that the Site, along with other adjoining and/or nearby properties located to the west of the Site, may be redeveloped by the City of Rochester for residential purposes (i.e., homes that have full basements).

A Phase II Study was performed at the Site in order to evaluate whether the adjoining properties have environmentally impacted the Site. The findings of the study, and the resulting conclusions and recommendations, are summarized below.

4.1 Findings

Evidence of petroleum and/or VOC impact (i.e., soil staining, oil-like globules, elevated PID readings up to greater than 2,500 ppm, odors, etc.) was encountered at the Site during this study. Such impact was encountered at test pits TP-1, TP-3, TP-4, TP-5, TP-6, TP-7, TP-8, and TP-10. The highest levels of impact were detected in test pits TP-3, TP-5, and TP-8. Test pit TP-3 is located in close proximity to the building located on the adjoining property to the west that has been historically used for auto repair (i.e., 42 Charlotte Street). Paint thinner/stoddard solvent appears to have been detected in at least test pits TP-3 and TP-5. Information obtained suggests that a different material, or a different material commingled with paint thinner/stoddard solvent, is present in other test pits at the Site.

A layer of heterogeneous fill, consisting of reworked soil with lesser amounts of brick, concrete, cinders, ash, slag, wood, rubber, a blue granular solid, metal, ceramic material, and cut stone, was observed in the test pits and had an average calculated thickness of approximately 3.6 feet. Unusual odors were not detected to emanate from the fill material; with the exception of petroleum-like odors detected in the fill in test pit TP-3. Elevated levels of the metals arsenic, cadmium, and lead were detected in a sample of fill from test pit TP-2.

The concentrations of some VOCs and metals detected in soil and/or groundwater samples from the Site exceeded their respective NYSDEC guidance values, recommended cleanup objectives, typical background ranges (i.e., for metals), or groundwater standards and/or guidance values. The VOCs detected in the water samples collected from the test pits should not be considered to accurately represent concentrations of VOCs in groundwater at the Site; however, the data is presented because it illustrates some of the VOCs that would be expected to be detected in the saturated zone at the Site.

4.2 Conclusions

The Site is contaminated by petroleum and VOC constituents. In general, the contamination is present just above, or within, the saturated zone, which indicates that contaminant migration is probably occurring (i.e., migrating via groundwater flow). The concentrations of some compounds detected in samples obtained from some of the test pits at the Site indicate a need for further study and/or remediation. The extent of contamination in the saturated zone was generally delineated at the Site; however, the source of the detected contaminants at the Site is still unknown.

4.3 Recommendations

Based on the findings of this study, the following actions are recommended to further address petroleum and/or VOC impacted media on the Site.

- Monitor nearby receptors (e.g., inside sewers, etc.) for the presence of VOC vapors and free product.

- Install at least three overburden/bedrock interface groundwater monitoring wells (e.g., Geoprobe wells) to evaluate groundwater quality, the presence or absence of free product, and groundwater flow direction at the Site. This information should assist in evaluating the potential source(s) of the petroleum and/or VOC contamination (e.g., off-site source vs. on-site source, etc.).

- Perform additional studies on and/or nearby the Site to further delineate the extent of contamination.

- Complete additional soil and groundwater analytical testing.

- Determine the source(s) of contamination, whether on-site or off-site, prior to implementing any remedial actions.

- Remediate impacted media at the Site. Although laboratory results for some of the soil samples showed levels of "target" compounds near or below NYSDEC guidance values, these samples contained numerous "non-target" hydrocarbons at higher concentrations. The soil samples in some locations also exhibited petroleum and/or VOC-type odors, and elevated PID readings that exceeded 2,500 ppm. DAY understands that the City of Rochester plans on redeveloping the Site with residential structures with full basements. Based on this planned use of the Site, impacted media containing "target" compounds and/or "non-target" hydrocarbons will need to be addressed (i.e., remediated) in order to minimize potential future construction worker and/or residential occupants' exposures (i.e., impacted media with elevated PID readings, nuisance odors, etc. will require special management and/or off-site disposal).

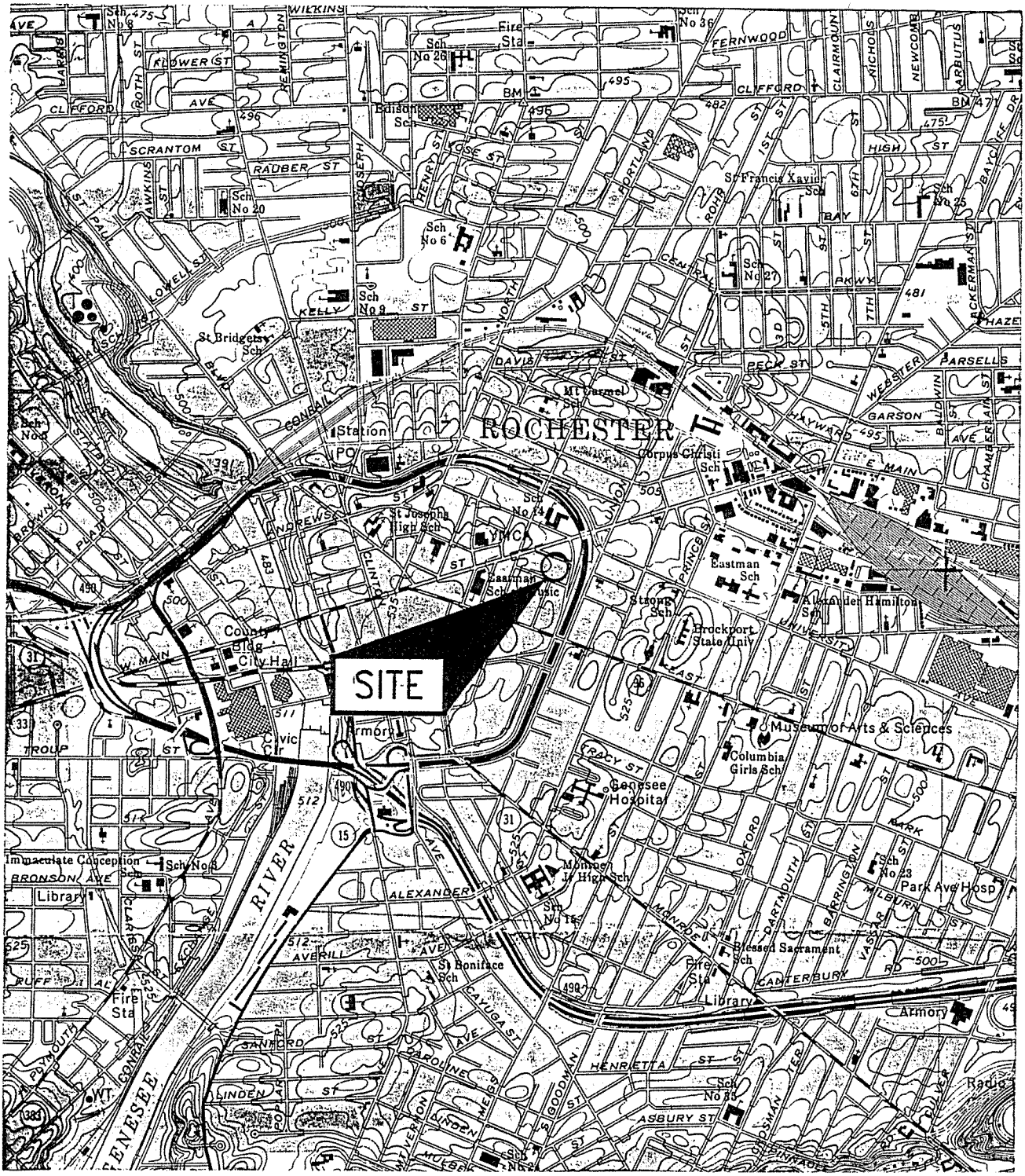
Based on the current use of the Site (i.e., vacant land) the fill does not appear to represent an environmental concern requiring further evaluation and/or remediation. However, since it appears that the use of the Site will be changed (i.e., develop the Site for residential purposes), the following actions are also recommended to further address fill that may contain elevated levels of metals.

- Remove the fill from the property or manage the fill in a way that it will minimize potential future exposure during and after development. For example, a soil and fill management plan could be developed and implemented to manage the fill on-site (i.e., by limiting its use to under paved areas, covering it with clean material, etc.). If the fill requires removal and can not be re-used on-site, it must then be disposed of in accordance with applicable regulations.

APPENDIX A

TIME PLOTTED: MON SEPT 15, 14:35:00 1997
FILENAME: CHARL1

REF1: BORDER3
REF2: REF2
REF3: REF3



DRAWING PRODUCED FROM: ROCHESTER EAST, N.Y.
N4307.5-W7730/7.5
1971
PHOTOREVISED 1978

PROJECT NO. 1427S-97	PROJECT TITLE 48-58 CHARLOTTE STREET ROCHESTER, NEW YORK	**DAY ENVIRONMENTAL, INC.** *ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK*	DATE 9/15/97
FIGURE 1	PHASE II STUDY		DRAWN BY
SHEET 1 OF 1	DRAWING TITLE PROJECT LOCUS MAP		SCALE 1" = 2000'

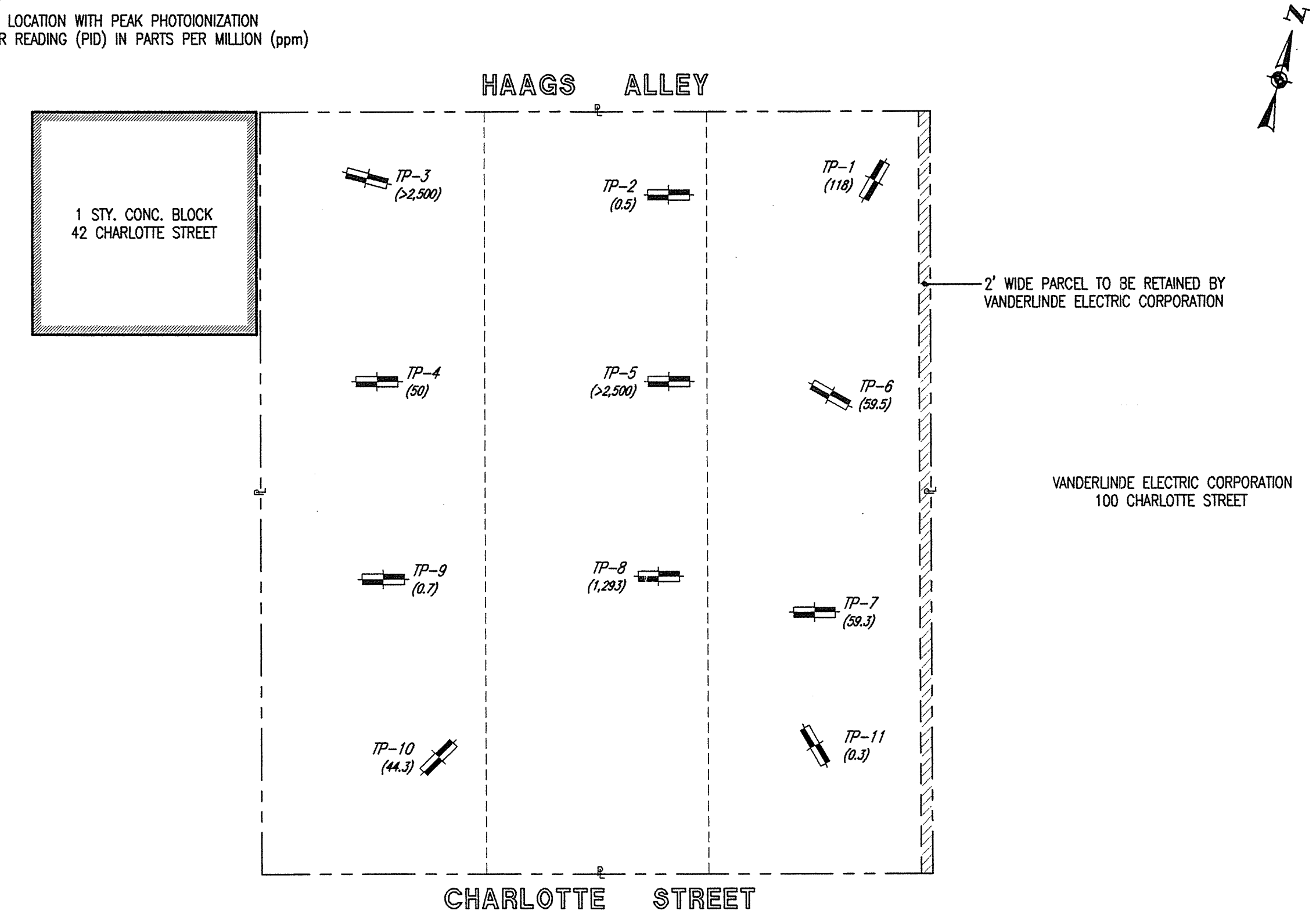
REF1: BORDER12
REF2: REF2
REF3: REF3

LEGEND

—— —℄— —— PROPERTY LINE

- - - - - - - - LOT LINE

TP–4 (50) TEST PIT LOCATION WITH PEAK PHOTOIONIZATION DETECTOR READING (PID) IN PARTS PER MILLION (ppm)



NOTES:

1. SITE PLAN PRODUCED FROM A TAX MAP OF THE CITY OF ROCHESTER, AND FROM A FIELD DIAGRAM MADE BY DAY ENVIRONMENTAL, INC. ON AUGUST 18, 1997.
2. LOCATIONS TAPE MEASURED FROM EXISTING SITE STRUCTURES AND SHOULD BE CONSIDERED ACCURATE TO THE DEGREE IMPLIED BY THE METHOD USED.

FIELD VERIFIED BY JAD/JJD	DATE 8/18/97	
DRAWN BY RJM	DATE DRAWN 9/12/97	
SCALE 1" = 20'	DATE ISSUED 9/29/97	

DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK

PROJECT TITLE
48–58 CHARLOTTE STREET
ROCHESTER, NEW YORK
PHASE II STUDY

DRAWING TITLE
SITE PLAN WITH TEST PIT LOCATIONS

PROJECT NO.
1427S–97

FIGURE 2

SHEET 1 OF 1

TIME PLOTTED: MON SEPT 29, 09:15:00 1997
FILENAME: CHARL2

APPENDIX B

TEST PIT SUMMARY TABLE

48 - 58 CHARLOTTE STREET
ROCHESTER, NEW YORK

TEST PIT LOCATION	PEAK PID READING (PPM)	DEPTH (FEET)	SAMPLE DESCRIPTION
TP-1	0.2	0 - 4.0'	Dark brown and tan Sand, Silt, Gravel, Brick, Concrete, Wood, Rubber, blue granular Solid (FILL). Damp.
	0.4	4.0' - 8.0'	Tan and red Silty SAND, some Gravel. Moist, mottled. ...grades to SILT, SAND and GRAVEL (TILL) at 6.5'.
	118 (98.2)	8.0' - 9.0'*	Tan platy SILT, some fine Sand and Gravel (weathered Rock). Moist to wet. Slight staining with a petroleum-like odor. ...water in test pit at 8.25' with a slight sheen.
TP-2	0.2	0 - 4.0'	Layers of brown to gray Sand, Cinders, Gravel, Ash, Slag, Metal, Wood, Roots (FILL). Damp.
	0.5	4.0' - 7.0'	Tan Silty SAND, some Gravel, trace Clay. Damp to moist, mottled. ...grades to tan SAND, SILT and GRAVEL (TILL).
	0.5	7.0' - 8.0'*	Tan Silty SAND, some Gravel. Damp, platy (weathered Rock).
TP-3	2.1(26.3)	0 - 4.0'	Brown, gray and black Sand, Cinders, Silt, Gravel, Brick, Glass, Wood, Metal (FILL). Slight weathered petroleum odor. Damp.
	0.3 38.3 412 826 (2,500+)	4.0' - 9.0'*	Reddish tan SAND and SILT, some Gravel, trace Clay. Damp to moist. ...grades to SAND, SILT and GRAVEL (TILL) ...boulders and weathered Rock at 8.0' ...heavy staining and strong petroleum-like odor at 8.25' ...water in test pit at 8.5' with heavy sheen and strong petroleum-like odor. Evidence of floating free product globules.

TEST PIT SUMMARY TABLE (Cont.)

TEST PIT LOCATION	PEAK PID READING (PPM)	DEPTH (FEET)	SAMPLE DESCRIPTION
TP-4	0.1	0 - 2.25'	Black and brown Sand, Gravel, Wood, Roots (FILL). Damp. ...seam of gray Ash at 2.0'
	0.2 50.0	2.25' - 8.0'*	Reddish tan Silty SAND, some Gravel and Cobbles. Damp to moist. ...grades to SAND, SILT and GRAVEL (TILL) at 4.5' ...water in test pit at 7.25'. Slight sheen and petroleum-like odor.
TP-5	0.2	0 - 4.5'	Brown and gray Sand, Silt, Gravel, Ash, Metal, Ceramic (FILL). Damp.
	0.1 118 (2,500+)	4.5' - 8.5'*	Reddish tan Sandy SILT, some Gravel and Cobbles. Damp to moist, mottled. ...grades to SAND, SILT and GRAVEL, trace Clay (TILL). Moist to wet. ...water in test pit at 7.5'. Heavy sheen, strong odor, evidence of product globules. ...heavy staining on saturated soils with strong petroleum-like odor.
TP-6	0.2	0 - 3.5'	Brown, tan, and black Sand, Silt, Gravel, Brick, Ash, Roots, Metal (FILL). Damp.
	0.3	3.5' - 7.5'	Tan Sandy SILT, some Gravel, trace Clay. Damp to moist, mottled.
	0.2	7.5' - 8.25'	Tan SAND, SILT, and GRAVEL, trace Clay and Cobbles. Moist to wet. ...water in test pit at 8.25'. No visible sheen.
	0.3 (59.5)	8.25' - 9.0'*	Tan and brown coarse SAND, some fine Gravel, trace Silt. Moist to wet.
TP-7	0.2	0 - 3.0'	Brown and tan Silt, Sand, Gravel, Brick, Roots (FILL). Damp.
	0.3 (10.6)	3.0' - 7.5'	Tan Silty SAND, some Gravel. Damp, mottled. ..becomes moist to wet at 7.0'.
	51.2 (59.3)	7.5' - 8.5'*	Brown coarse SAND, some Gravel. Moist. ...water in test pit at 8.0' with slight sheen.

TEST PIT SUMMARY TABLE (Cont.)

TEST PIT LOCATION	PEAK PID READING (PPM)	DEPTH (FEET)	SAMPLE DESCRIPTION
TP-8	0.1	0 - 2.0'	Gray, brown and tan Silt, Sand, Gravel, Ash, Cinders (FILL). Damp.
	0.3	2.0' - 4.0'	Brown Sand, Silt, Gravel, Roots, Ash, Brick, Concrete, Metal (FILL). Damp.
	0.3 222 (1,293)	4.0' - 8.5'*	Tan and yellow Sandy SILT, some fine Gravel. Damp, mottled. ...grades to tan SAND, SILT and GRAVEL (TILL) at 7.0' ...water in test pit at 7.5'. Heavy staining and strong petroleum-like odors.
TP-9	0.7	0 - 4.0'	Dark brown Sand, Gravel, Ash, old Foundation, Brick, Metal, Plastic (FILL). Damp.
	0.6	4.0' - 8.25'	Tan Sandy SILT, some Gravel, trace Cobbles. Damp to moist, mottled. ...water in test pit at 7.75'. No visible sheen.
TP-10	0.0	0 - 4.0'	Brown Sand, Silt, Gravel, cut Stone, Metal, Brick, Cinders (FILL). Damp.
	6.7 (44.3)	4.0' - 9.0'	Brown Sandy SILT, some Gravel and Cobbles. Damp to moist, mottled. ...weathered rock at 7.75' (platy SILT). ...water in test pit at 8.0'. Slight sheen and odor but no evidence of staining. ...Rock fragments at 8.25'. Slight petroleum-like odor with no staining.
TP-11	0.1	0 - 4.0'	Brown and gray Sand, Silt, Gravel, Ash, Metal (FILL). Damp.
	0.3	4.0' - 8.5'	Tan Sandy SILT, some Gravel, occasional Cobble. Damp to moist, mottled. ...grades to Sandy SILT and GRAVEL. Moist to wet. ...water in the test pit at 8.0'. Slight sheen, cohesive, silver in color. ...water in test pit at 8.0'
	0.2	8.5' - 9.0'*	Fractured Rock, some Silt and Sand. No unusual odors or staining. Wet.

APPENDIX C

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Aromatic Analysis Report For Solids (STARS List)

Client:	Day Environmental	**Lab Project No.:**	GE7262
		Lab Sample No.:	19459
Client Job Site:	Charlotte St. Rochester, NY	**Sample Type:**	Soil
Client Job No.:	1427S-97		
		Date Sampled:	08/18/97
Field Location:	1427-01	**Date Received:**	08/19/97
Field ID No.:	TP-1	**Date Analyzed:**	08/25/97

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 2.9
Benzene	ND < 2.9
Toluene	ND < 2.9
Ethylbenzene	ND < 2.9
m,p-Xylene	ND < 2.9
o-Xylene	ND < 2.9
Isopropylbenzene	ND < 2.9
n-Propylbenzene	ND < 2.9
1,3,5-Trimethylbenzene	ND < 2.9
tert-Butylbenzene	ND < 2.9
1,2,4-Trimethylbenzene	ND < 2.9
sec-Butylbenzene	ND < 2.9
p-Isopropyltoluene	ND < 2.9
n-Butylbenzene	ND < 2.9
Naphthalene	ND < 7.3

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Aromatic Analysis Report For Non-Potable Water (STARS List)

Client:	Day Environmental	**Lab Project No.:**	GE7262
		Lab Sample No.:	19460
Client Job Site:	Charlotte St. Rochester, NY		
Client Job No.:	1427S-97	**Sample Type:**	Water
		Date Sampled:	08/18/97
Field Location:	1427-W1	**Date Received:**	08/19/97
Field ID No.:	TP-1	**Date Analyzed:**	08/25/97

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-Butyl Ether	ND < 2.0
Benzene	ND < 0.7
Toluene	ND < 2.0
Ethylbenzene	2.1
m,p-Xylene	2.4
o-Xylene	ND < 2.0
Isopropylbenzene	ND < 2.0
n-Propylbenzene	ND < 2.0
1,3,5-Trimethylbenzene	ND < 2.0
tert-Butylbenzene	ND < 2.0
1,2,4-Trimethylbenzene	ND < 2.0
sec-Butylbenzene	ND < 2.0
p-Isopropyltoluene	ND < 2.0
n-Butylbenzene	ND < 2.0
Naphthalene	ND < 5.0

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
Environmental Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental, Inc.

Client Job Site: Charlotte Street
Rochester, New York

Client Job No.: 1427S-97

Field Location: TP-2

Field ID No.: 1427-02

Lab Project No.: GE7262
Lab Sample No. 19461

Sample Type: Soil

Date Sampled: 8/18/97
Date Received: 8/19/97

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Arsenic	8/22/97	EPA 7060	23.4
Barium	8/21/97	EPA 6010	178
Cadmium	8/21/97	EPA 6010	11.2
Chromium	8/21/97	EPA 6010	19.4
Lead	8/21/97	EPA 6010	761
Mercury	8/20/97	EPA 7471	<0.124
Selenium	8/22/97	EPA 7740	1.35
Silver	8/21/97	EPA 6010	<1.40

ELAP ID No.: 10958

Comments:

Approved By: _____
Laboratory Director

File ID: GE7262.XLS

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Volatile Aromatic Analysis Report For Soil (STARS List)

Client:	Day Environmental	Lab Project No.:	GE7262
		Lab Sample No.:	19462
Client Job Site:	Charlotte St. Rochester, NY	Sample Type:	Soil
Client Job No.:	1427S-97		
		Date Sampled:	08/18/97
Field Location:	1427-03	Date Received:	08/19/97
Field ID No.:	TP-3	Date Analyzed:	08/23/97

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 241
Benzene	ND < 241
Toluene	ND < 241
Ethylbenzene	ND < 241
m,p-Xylene	ND < 241
o-Xylene	ND < 241
Isopropylbenzene	ND < 241
n-Propylbenzene	ND < 241
1,3,5-Trimethylbenzene	ND < 241
tert-Butylbenzene	ND < 241
1,2,4-Trimethylbenzene	ND < 241
sec-Butylbenzene	453
p-Isopropyltoluene	ND < 241
n-Butylbenzene	ND < 241
Naphthalene	ND < 598

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected
Detection Limits elevated by high level non-target hydrocarbons

Approved By: _____
Laboratory Director

PARADIGM
Environmental
Services, Inc.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client:	Day Environmental	Lab Project No.:	GE7262
		Lab Sample No.:	19462
Client Job Site:	Charlotte St. Rochester, NY	Sample Type:	Soil
Client Job No.:	1427S-97		
		Date Sampled:	8/18/97
Field Location:	1427-03	Date Received:	8/19/97
Field ID No:	TP-3	Date Analyzed:	8/26/97

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Paint Thinner/ Stoddard Solvent	2,110,321	383,436

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: ND denotes Not Detected.

Approved By: _____
Laboratory Director

File ID: GE7262P1.XLS

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179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Laboratory Analysis Report For Non-Potable Water

Client:	Day Environmental	**Lab Project No.:**	GE7262
Client Job Site:	Charlotte St. Rochester, NY	**Lab Sample No.:**	19463
Client Job No.:	1427S-97	**Sample Type:**	Water
Field Location:	1427-W2	**Date Sampled:**	08/18/97
		Date Received:	08/19/97
Field ID No.:	TP-3	**Date Analyzed:**	08/25/97

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	ND < 2.0	Benzene	2.9
Bromomethane	ND < 2.0	Chlorobenzene	ND < 2.0
Bromoform	ND < 2.0	Ethylbenzene	5.8
Carbon tetrachloride	ND < 2.0	Toluene	3.8
Chloroethane	ND < 2.0	m,p - Xylene	4.6
Chloromethane	ND < 2.0	o - Xylene	ND < 2.0
2-Chloroethyl vinyl ether	ND < 2.0	Styrene	ND < 2.0
Chloroform	ND < 2.0		
Dibromochloromethane	ND < 2.0		
1,1-Dichloroethane	ND < 2.0		
1,2-Dichloroethane	ND < 2.0		
1,1-Dichloroethene	ND < 2.0	**Ketones & Misc.**	
trans-1,2-Dichloroethene	ND < 2.0	Acetone	21.3
1,2-Dichloropropane	ND < 2.0	Vinyl acetate	ND < 5.0
cis-1,3-Dichloropropene	ND < 2.0	2-Butanone	ND < 5.0
trans-1,3-Dichloropropene	ND < 2.0	4-Methyl-2-pentanone	ND < 5.0
Methylene chloride	ND < 5.0	2-Hexanone	ND < 5.0
1,1,2,2-Tetrachloroethane	ND < 2.0	Carbon disulfide	ND < 2.0
Tetrachloroethene	ND < 2.0		
1,1,1-Trichloroethane	ND < 2.0		
1,1,2-Trichloroethane	ND < 2.0		
Trichloroethene	ND < 2.0		
Vinyl Chloride	ND < 2.0		

Analytical Method: EPA 8260 ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By _____
Laboratory Director

GE7262V8.XLS

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Volatile Aromatic Analysis Report For Non-Potable Water (STARS List)
(Additional EPA 8260 Compounds)

Client:	Day Environmental	**Lab Project No.:**	GE7262
		Lab Sample No.:	19463
Client Job Site:	Charlotte St. Rochester, NY	**Sample Type:**	Water
Client Job No.:	1427S-97		
		Date Sampled:	08/18/97
Field Location:	1427-W2	**Date Received:**	08/19/97
Field ID No.:	TP-3	**Date Analyzed:**	08/25/97

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-Butyl Ether	ND < 2.0
Isopropylbenzene	ND < 2.0
n-Propylbenzene	ND < 2.0
1,3,5-Trimethylbenzene	ND < 2.0
tert-Butylbenzene	ND < 2.0
1,2,4-Trimethylbenzene	3.7
sec-Butylbenzene	10.9
p-Isopropyltoluene	ND < 2.0
n-Butylbenzene	10.4
Naphthalene	ND < 5.0

Analytical Method: EPA 8260 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

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Volatile Aromatic Analysis Report For Non-Potable Water (STARS List)

Client:	Day Environmental	**Lab Project No.:**	GE7262
		Lab Sample No.:	19464
Client Job Site:	Charlotte St. Rochester, NY	**Sample Type:**	Water
Client Job No.:	1427S-97		
		Date Sampled:	08/18/97
Field Location:	1427-W3	**Date Received:**	08/19/97
Field ID No.:	TP-4	**Date Analyzed:**	08/22/97

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-Butyl Ether	ND< 2.0
Benzene	1.6
Toluene	ND< 2.0
Ethylbenzene	ND< 2.0
m,p-Xylene	ND< 2.0
o-Xylene	ND< 2.0
Isopropylbenzene	ND< 2.0
n-Propylbenzene	ND< 2.0
1,3,5-Trimethylbenzene	ND< 2.0
tert-Butylbenzene	ND< 2.0
1,2,4-Trimethylbenzene	ND< 2.0
sec-Butylbenzene	ND< 2.0
p-Isopropyltoluene	ND< 2.0
n-Butylbenzene	ND< 2.0
Naphthalene	ND< 5.0

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

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Volatile Aromatic Analysis Report For Soil (STARS List)

Client:	Day Environmental	**Lab Project No.:**	GE7262
		Lab Sample No.:	19465
Client Job Site:	Charlotte St. Rochester, NY	**Sample Type:**	Soil
Client Job No.:	1427S-97		
		Date Sampled:	08/18/97
Field Location:	1427-04	**Date Received:**	08/19/97
Field ID No.:	TP-5	**Date Analyzed:**	08/23/97

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 221
Benzene	ND < 221
Toluene	ND < 221
Ethylbenzene	ND < 221
m,p-Xylene	ND < 221
o-Xylene	ND < 221
Isopropylbenzene	ND < 221
n-Propylbenzene	ND < 221
1,3,5-Trimethylbenzene	ND < 221
tert-Butylbenzene	ND < 221
1,2,4-Trimethylbenzene	ND < 221
sec-Butylbenzene	ND < 221
p-Isopropyltoluene	ND < 221
n-Butylbenzene	ND < 221
Naphthalene	ND < 549

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected
Detection Limits elevated by high level non-target hydrocarbons

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Aromatic Analysis Report For Solids (STARS List)

Client:	Day Environmental	**Lab Project No.:**	GE7262
		Lab Sample No.:	19466
Client Job Site:	Charlotte St. Rochester, NY	**Sample Type:**	Soil
Client Job No.:	1427S-97		
		Date Sampled:	08/18/97
Field Location:	1427-05	**Date Received:**	08/19/97
Field ID No.:	TP-7	**Date Analyzed:**	08/23/97

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 3.0
Benzene	ND < 3.0
Toluene	ND < 3.0
Ethylbenzene	6.3
m,p-Xylene	8.0
o-Xylene	ND < 3.0
Isopropylbenzene	ND < 3.0
n-Propylbenzene	ND < 3.0
1,3,5-Trimethylbenzene	ND < 3.0
tert-Butylbenzene	ND < 3.0
1,2,4-Trimethylbenzene	ND < 3.0
sec-Butylbenzene	ND < 3.0
p-Isopropyltoluene	ND < 3.0
n-Butylbenzene	ND < 3.0
Naphthalene	ND < 7.6

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

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ENVIRONMENTAL
SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

Volatile Aromatic Analysis Report For Soil (STARS List)

Client:	Day Environmental	**Lab Project No.:**	GE7262
		Lab Sample No.:	19467
Client Job Site:	Charlotte St. Rochester, NY	**Sample Type:**	Soil
Client Job No.:	1427S-97		
		Date Sampled:	08/18/97
Field Location:	1427-06	**Date Received:**	08/19/97
Field ID No.:	TP-8	**Date Analyzed:**	08/23/97

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 228
Benzene	594
Toluene	614
Ethylbenzene	ND < 228
m,p-Xylene	974
o-Xylene	ND < 228
Isopropylbenzene	ND < 228
n-Propylbenzene	ND < 228
1,3,5-Trimethylbenzene	2714
tert-Butylbenzene	ND < 228
1,2,4-Trimethylbenzene	2699
sec-Butylbenzene	ND < 228
p-Isopropyltoluene	327
n-Butylbenzene	ND < 228
Naphthalene	ND < 566

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(716) 647-2530 • (800) 724-1997
FAX (716) 647-3311

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		LAB PROJECT #
COMPANY	Day Environmental	COMPANY		
ADDRESS	2144 Brighton-Henrietta T.L. Rd	ADDRESS	Same	697262
CITY	Rochester STATE NY ZIP 14623	CITY STATE ZIP		P.O. #
ATT.	J. Dorety PHONE# 292-1090	ATT. PHONE#		
PROJECT NAME/SITE NAME:	Charlotte St	FAX#		☐ ADDENDUM
	Rochester NY	COMMENTS:	PID readings 2,500+ppm (03-04); 1,200+ (06); 50-100ppm (01,05)	
PROJECT #:	14275-97		*Hold TCLP Metals extract for RCRA results	TURN AROUND TIME (WORKING DAYS) ☐ ONE ☐ THREE ☑ FIVE(STD) ☐ OTHER
				REPRESENTATIVE:

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	REQUESTED ANALYSIS: 8021 STARS	8260 STARS	TPH 310.13	RCRA Metals TCLP Metals Extract	REMARKS	PARADIGM LAB SAMPLE NUMBER	ANALYTICAL COSTS
1	8/18/97	1050		X	TP-1/1427-01	Soil	1	X					19459	
2		1550		X	TP-1/1427-W1	Water	2	X					19460	
3		1120		X	TP-2/1427-02	Soil	1				X X		19461	
4		1205		X	TP-3/1427-03	Soil	1	X		X			19462	
5		1530		X	TP-3/1427-W2	Water	2		X				19463	
6		1540		X	TP-4/1427-W3	Water	2	X					19464	
7		1255		X	TP-5/1427-04	Soil	1	X					19465	
8		1400		X	TP-7/1427-05	Soil	1	X					19466	
9		1435		X	TP-8/1427-06	Soil	1	X					19467	
10														
11														
12														

RELINQUISHED BY: Joseph Dorety	DATE/TIME 8/19/97 12:45	RECEIVED BY:	DATE/TIME 8/19/97 12:45	SAMPLE CONDITION	CHECK # / TOTAL COST
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME	CARRIER COMPANY	AIR BILL NO. / P.I.F
RELINQUISHED BY:	DATE/TIME	RECEIVED FOR LAB BY:	DATE/TIME 8/19/97 1321	CARRIER PHONE #	DATE RESULTS REPORTED BY: / DATE/TIME

WHITE COPY-SAMPLE YELLOW COPY-FILE PINK COPY-RELINQUISHER

PARADIGM
ENVIRONMENTAL SERVICES, INC.

SEP 0 4 1997

TO: Joe Dorety
Day Environmental

RE: Charlotte Street /Project # 1427S-97

Additional Narrative:

Regarding your questions on the identity of the hydrocarbons present in the samples analyzed from the Charlotte Street site, I have provided some additional descriptive information below, and attached some chromatograms for your reference.

One sample, TP-3/1427-03, was analyzed for Petroleum Hydrocarbon content and ID. As our report indicated, and you can see from the chromatograms, the sample matches most closely with the Stoddard/Paint Thinner reference. There is some overlap in molecular weight/boiling point range with the lighter gasoline fractions, and the heavier kerosene/fuel oil fractions, but in my experience there is not enough similarity, even with some weathering, to suggest these materials as a source. To get a true "smoking gun" identification of the source, we would need to get a sample of possible source material to generate a reference chromatogram for fingerprinting.

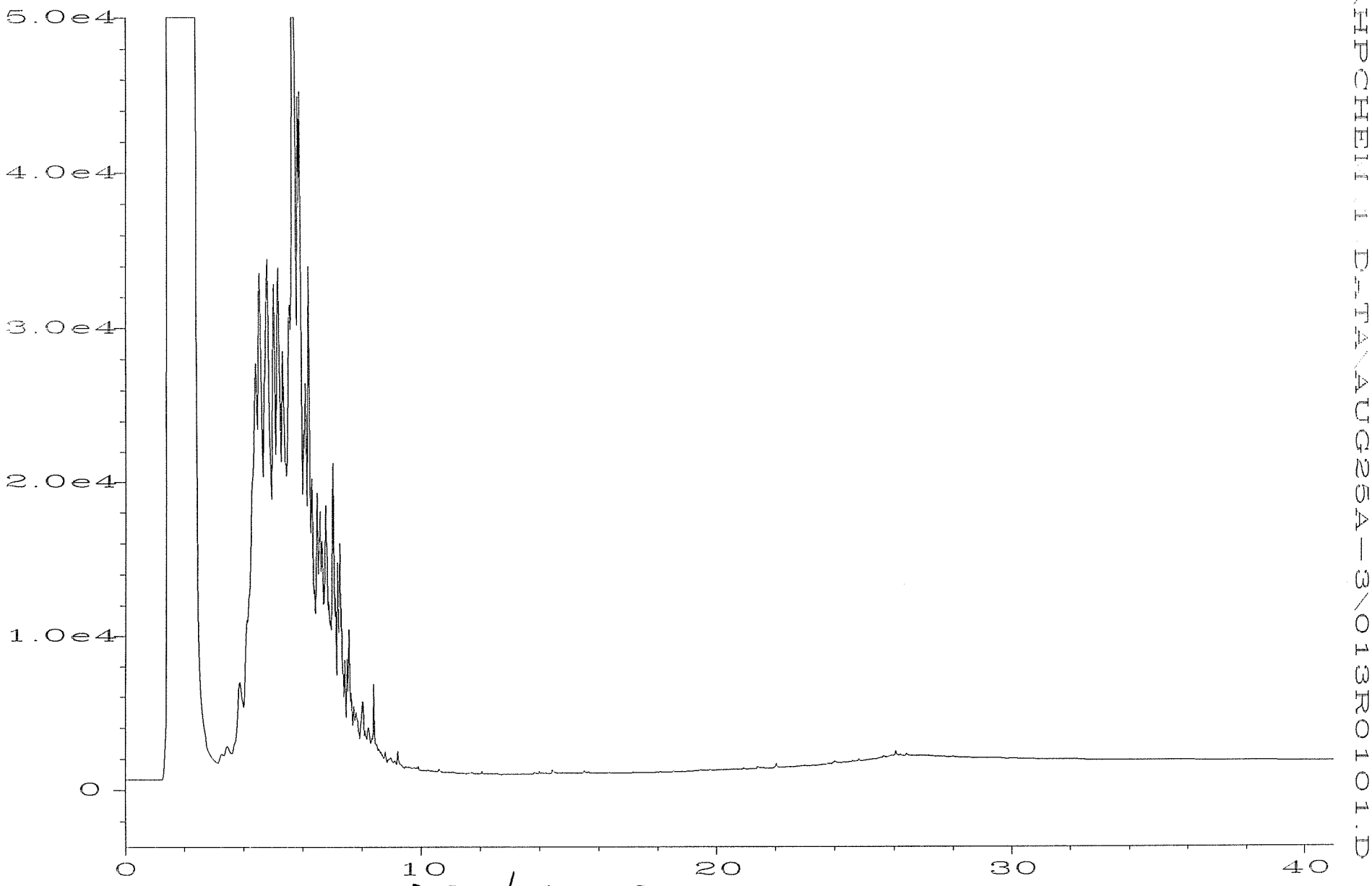
Although no other samples were analyzed specifically for PHC's, some additional information can be gained from the 8021 chromatograms. Using the 8021 chromatogram from sample "TP-3 1427-03" as a reference, you can see that the Stoddard/Paint Thinner PHC also generates a characteristic pattern in the 8021 run. If you compare this to "TP-5/1427-05", you can see that this sample contains primarily the same material. If you compare these to "TP-8/1427-06" however, you can see that this sample contains either an entirely different material, or a different material in combination with the Paint Thinner/Stoddard.

I hope this information is of some use to you on this project. If there are specific additional questions regarding the composition of these samples, I would be happy to try to help.

Bruce Hoogesteger

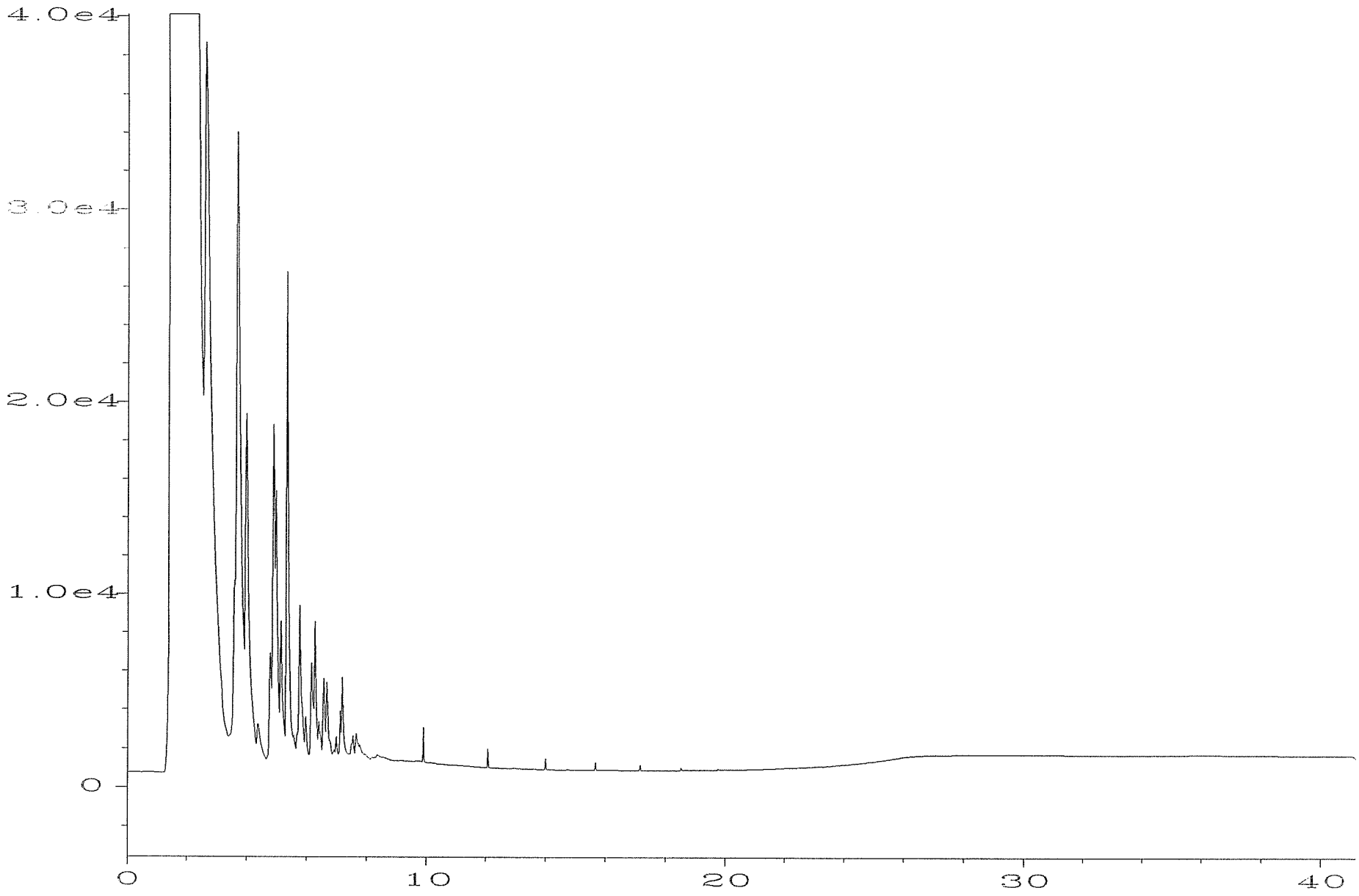
179 LAKE AVENUE • ROCHESTER, NY 14608 • (716) 647-2530

310.13

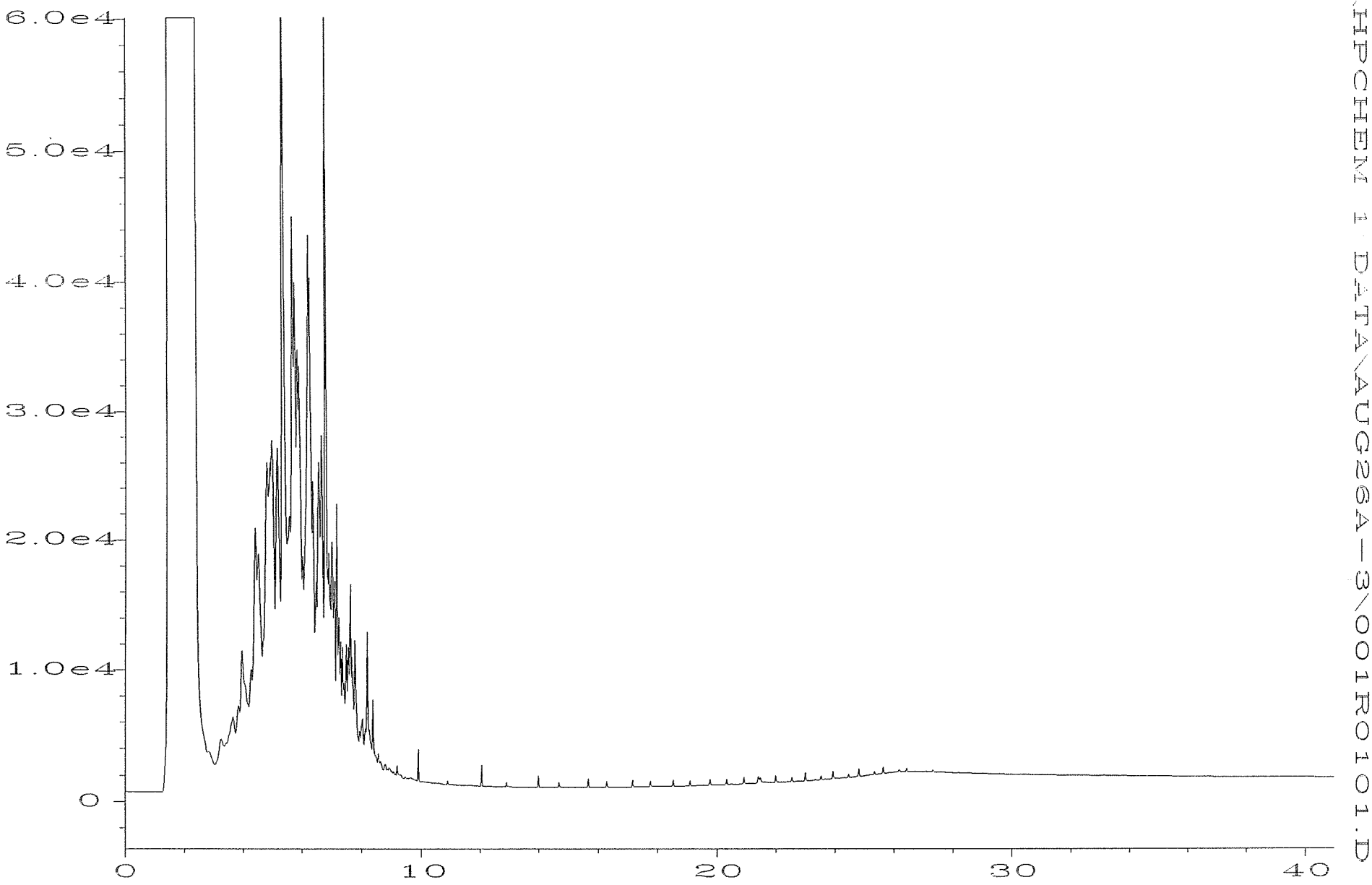


TP-3 / 1427-03

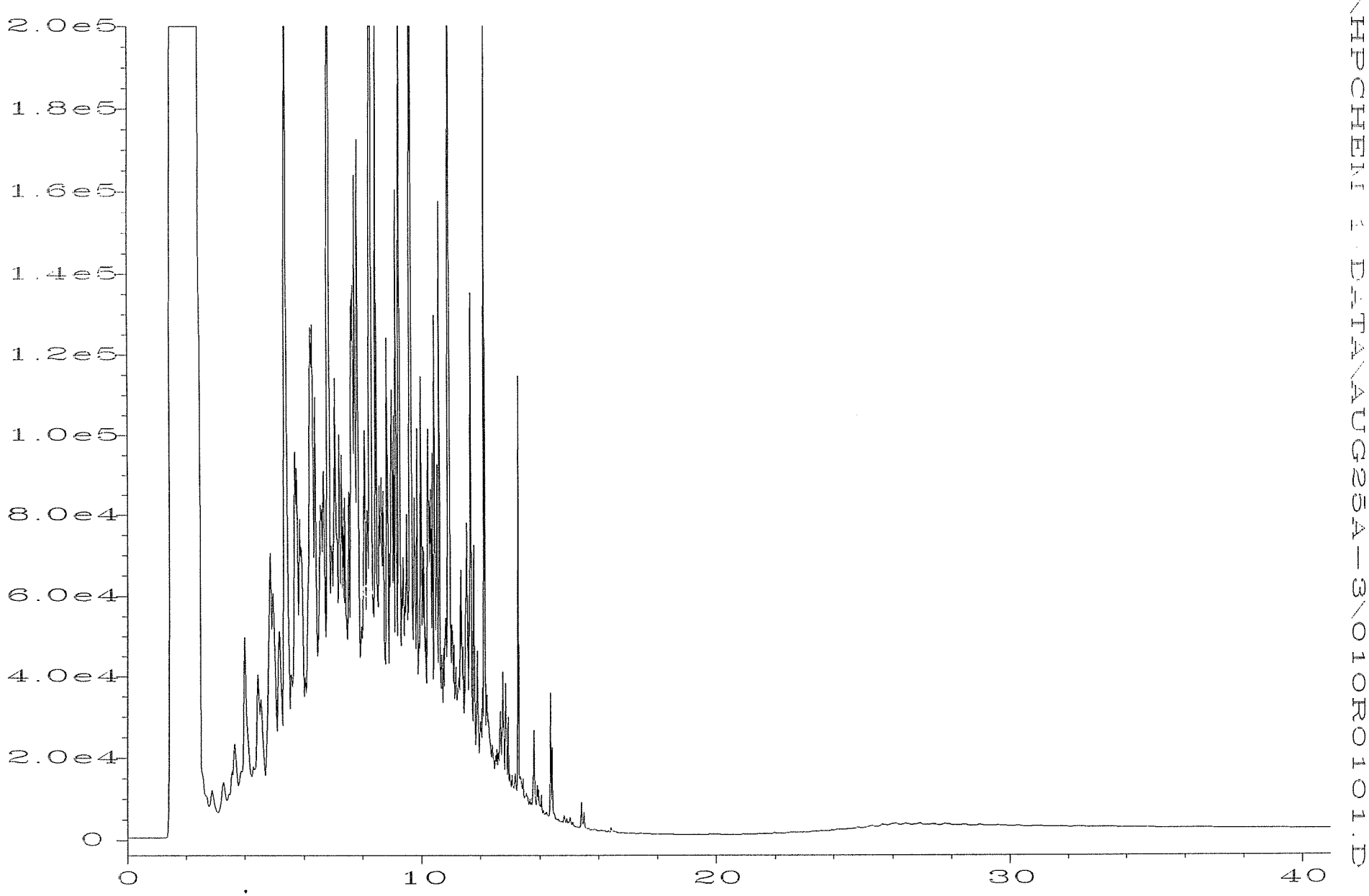
FIELD SAMPLE



GASOLINE REFERENCE STANDARD



STODDARD/PAINT THINNER REFERENCE STANDARD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1.4e5
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1.0e5
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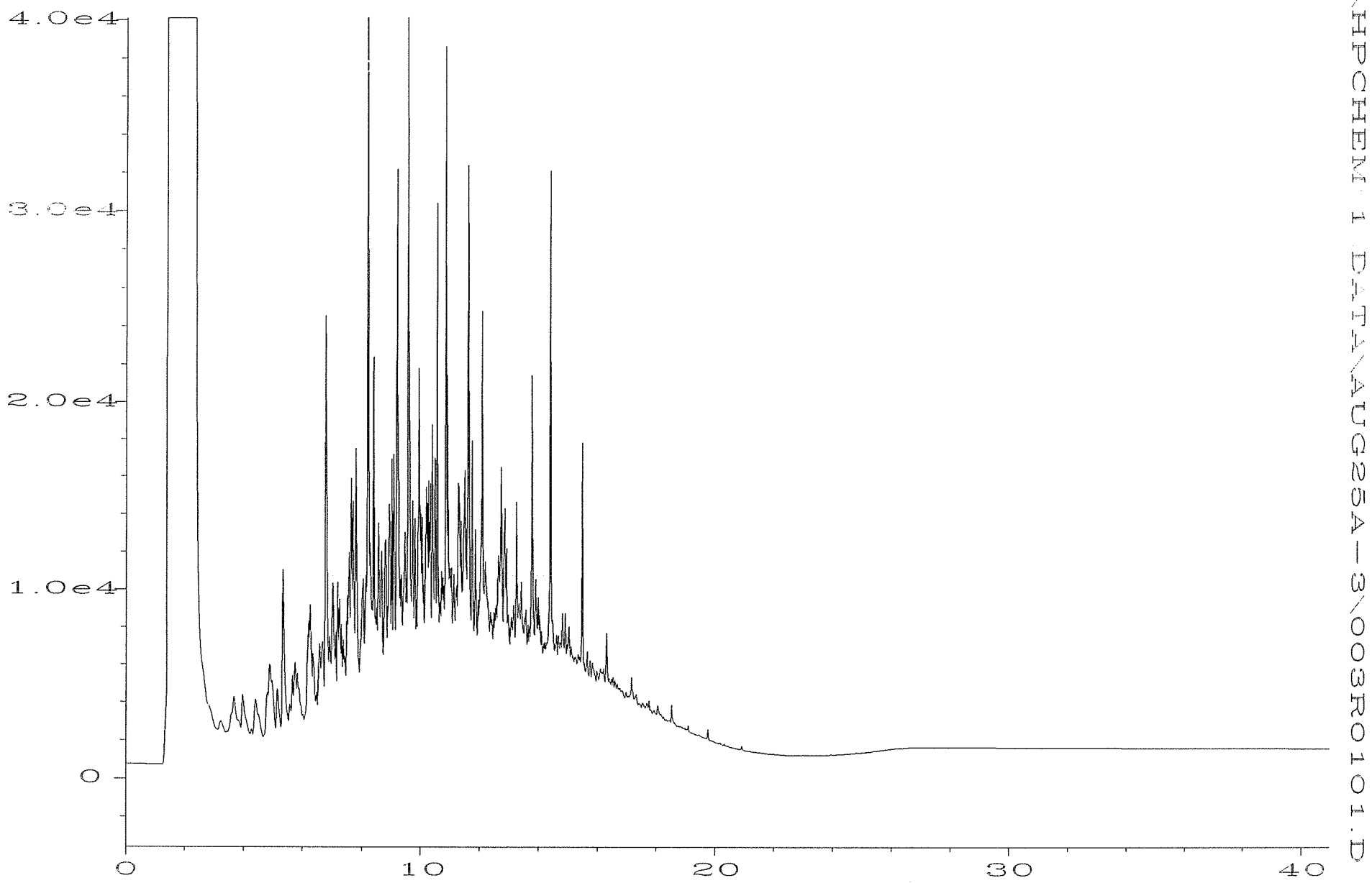
2.0e4
0
0
10
20
30
40
KEROSENE REFERENCE STANDARD



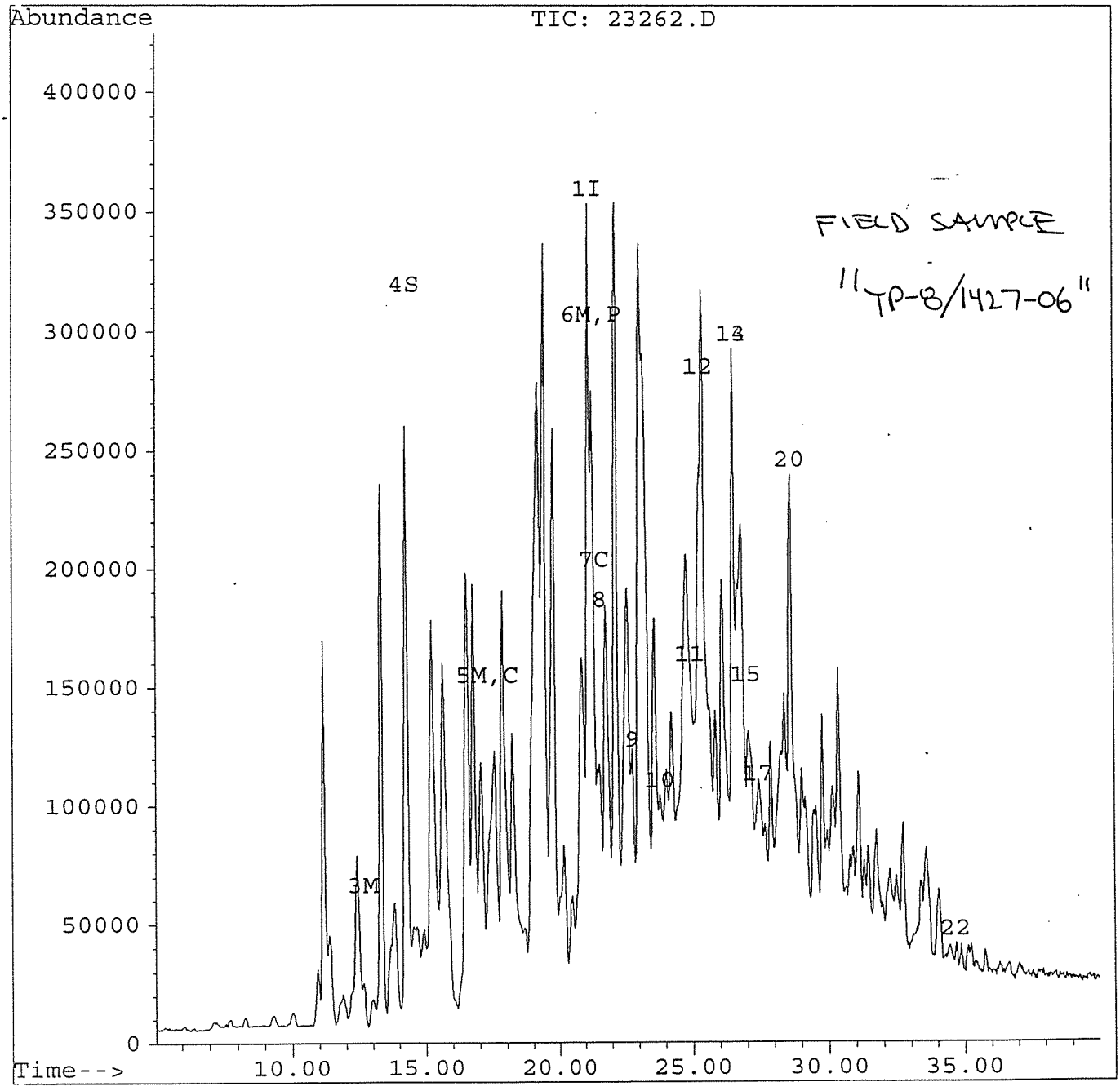
DIESEL REFERENCE STANDARD

Quantitation Report

Data File : C:\HPCHEM\1\DATA\23262.D
Acq Time : 23 Aug 97 7:17 pm
Sample : SOIL M/L #19467
Misc : EPA 8021 STARS, 100uL
Quant Time: Aug 23 19:57 1997

Operator:
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOASTARH.M
Title : Calibration Table For EPA Method 8021
Last Update : Mon Aug 18 08:51:06 1997
Response via : Multiple Level Calibration

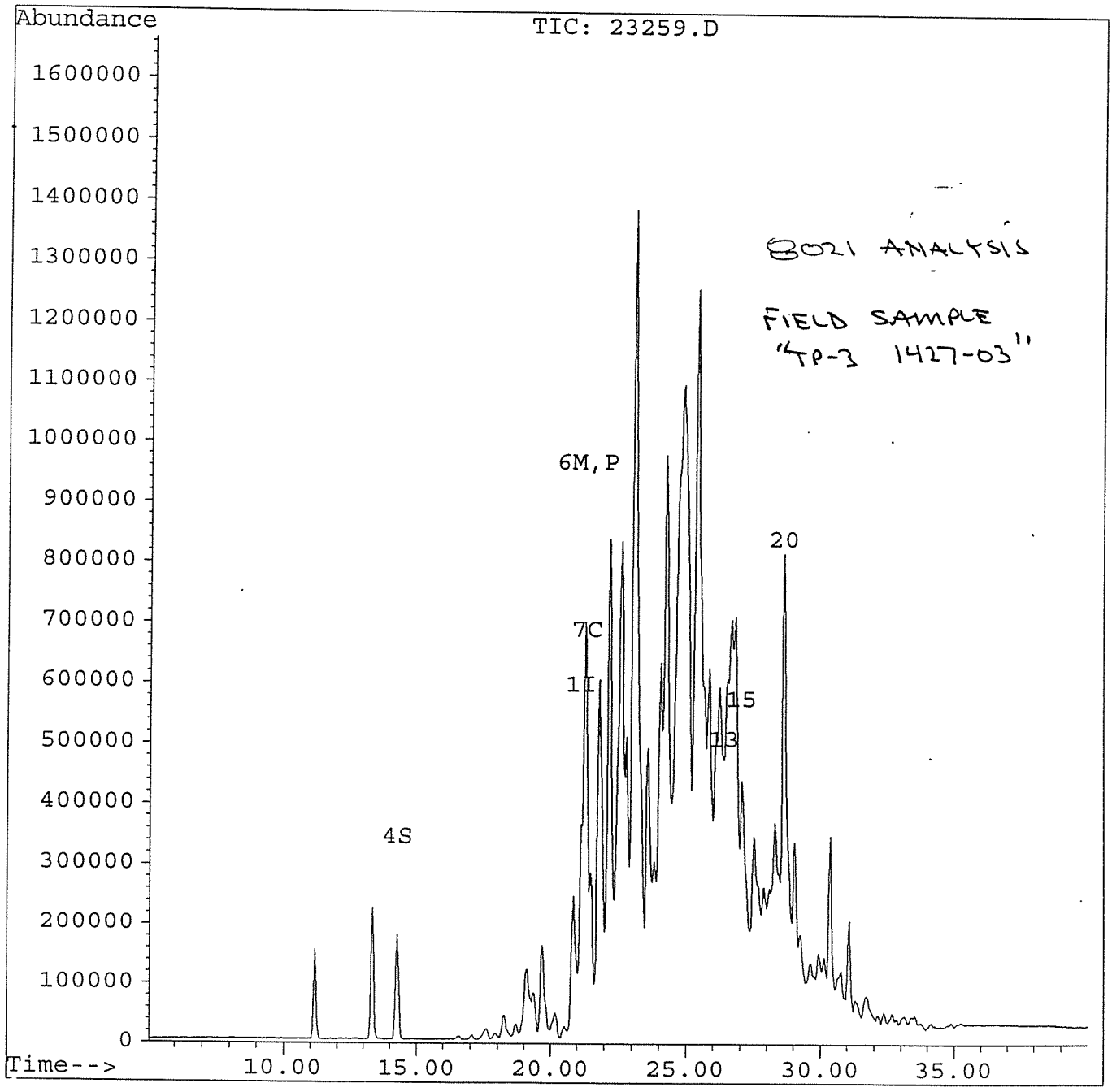


Quantitation Report

Data File : C:\HPCHEM\1\DATA\23259.D
Acq Time : 23 Aug 97 4:59 pm
Sample : SOIL M/L #19462
Misc : EPA 8021 STARS, 100uL
Quant Time: Aug 23 17:39 1997

Operator:
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOASTARH.M
Title : Calibration Table For EPA Method 8021
Last Update : Mon Aug 18 08:51:06 1997
Response via : Multiple Level Calibration

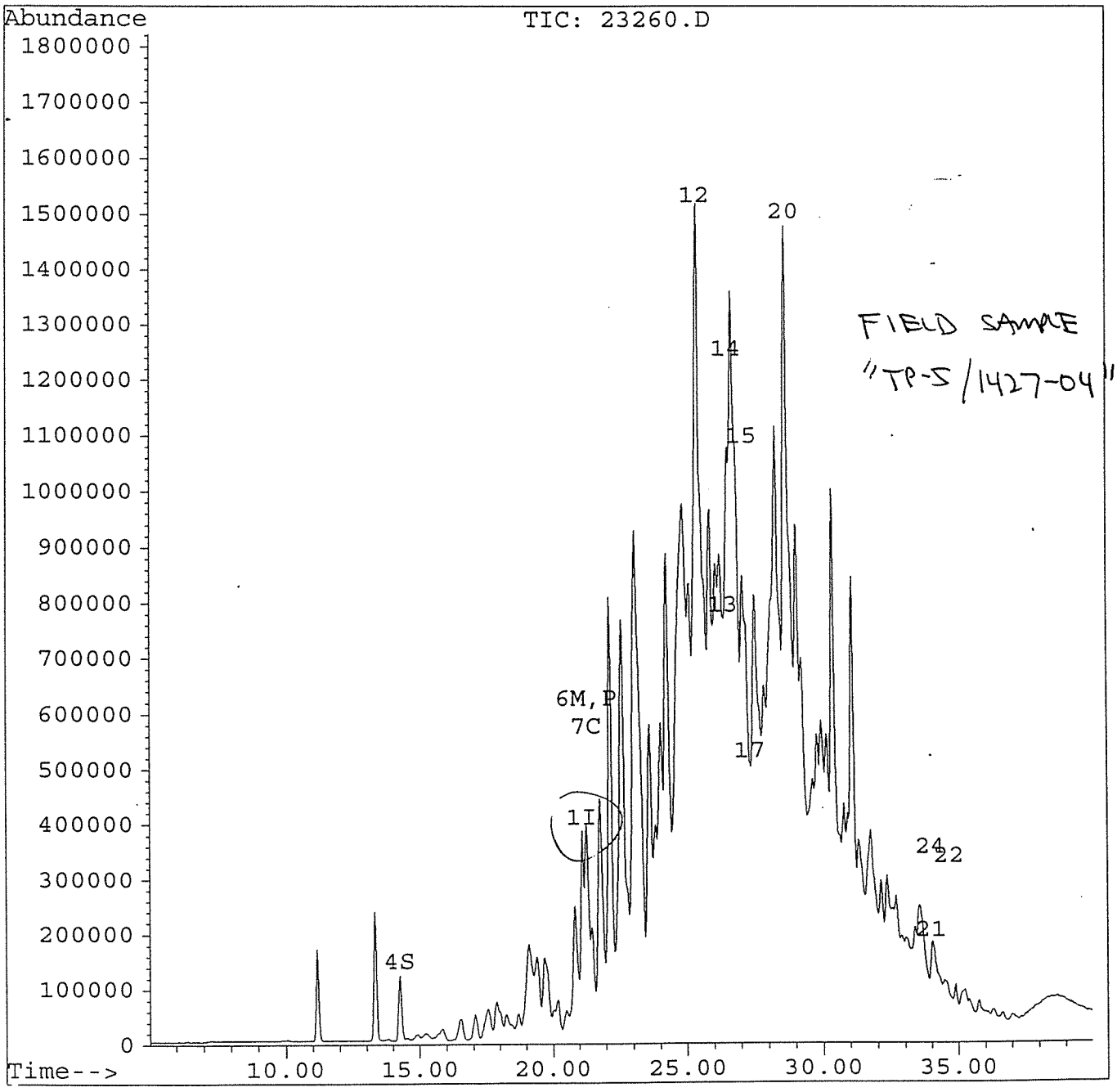


Quantitation Report

Data File : C:\HPCHEM\1\DATA\23260.D
Acq Time : 23 Aug 97 5:45 pm
Sample : SOIL M/L #19465
Misc : EPA 8021 STARS, 100uL
Quant Time: Aug 23 18:25 1997

Operator:
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOASTARH.M
Title : Calibration Table For EPA Method 8021
Last Update : Mon Aug 18 08:51:06 1997
Response via : Multiple Level Calibration



APPENDIX D

TABLE I

DETECTED VOLATILE ORGANIC COMPOUNDS ON SOIL SAMPLES

48-58 CHARLOTTE STREET ROCHESTER, NEW YORK

PARTS PER BILLION (PPB)

DETECTED COMPOUNDS	SOIL SAMPLE AND LOCATION					RECOMMENDED CLEANUP OBJECTIVE (1)	PETROLEUM GUIDANCE VALUE (2)
	1427-01 TP-1(8-9')	1427-03* TP-3(9')	1427-04* TP-5(7.5-8.5')	1427-05 TP-7(7.5-8.5')	1427-06 TP-8(7.5-8.5')		
benzene	ND	ND	ND	ND	594	60	14
toluene	ND	ND	ND	ND	614	1,500	100
ethylbenzene	ND	ND	ND	6.3	ND	5,500	100
m,p-xylene	ND	ND	ND	8.0	974	1,200	100
1,3,5-trimethylbenzene	ND	ND	ND	ND	2,714	NA	100
1,2,4-trimethylbenzene	ND	ND	ND	ND	2,699	NA	100
p-isopropyltoluene	ND	ND	ND	ND	327	NA	100
sec-butylbenzene	ND	453	ND	ND	ND	NA	100

ND = Not detected above laboratory detection limits.

NA = Not available.

PPB = Parts per billion.

(1) = Recommended Soil Cleanup Objective; January 24, 1994 NYSDEC TAGM #4046.

(2) = Petroleum-Contaminated Soil Guidance Value; August, 1992 NYSDEC STARS document.

* = Detection limits elevated by high level of non-target hydrocarbons.

TABLE II

DETECTED TOTAL PETROLEUM HYDROCARBONS (TPH) ON SOIL SAMPLES 1427-03

48-58 CHARLOTTE STREET ROCHESTER, NEW YORK

PARTS PER BILLION (PPB)

SOIL SAMPLE AND LOCATION	DETECTED CONCENTRATION AND TYPE
1427-03 TP-3(9')	2,110,321 paint thinner/stoddard solvent

PPB = Parts per billion.

TABLE III

DETECTED TOTAL RCRA METALS ON SOIL SAMPLE 1427-02

48-58 CHARLOTTE STREET ROCHESTER, NEW YORK

PARTS PER MILLION (PPM)

DETECTED ANALYTES	SAMPLE 1427-02 FROM TP-2(3')	TYPICAL BACKGROUND RANGE (1)
arsenic	23.4	3 - 12
barium	178	15 - 600
cadmium	11.2	0.1 - 1
chromium	19.4	1.5 - 40
lead	761	200 - 500 (2)
selenium	1.35	0.1 - 3.9

PPM = Parts per million.

(1) = Typical Background Range; January 24, 1994 NYSDEC TAGM #4046.

(2) = Average background range for lead in metropolitan or suburban areas or near highways.

TABLE IV

DETECTED VOLATILE ORGANIC COMPOUNDS ON WATER SAMPLES

48-58 CHARLOTTE STREET ROCHESTER, NEW YORK

PARTS PER BILLION (PPB)

DETECTED COMPOUNDS	SAMPLE AND LOCATION			PETROLEUM GUIDANCE VALUE (1)
	1427-W1 TP-1(8.25')	1427-W2 TP-3(8.5')	1427-W3 TP-4(7.25')	
benzene	ND	2.9	1.6	0.7
ethylbenzene	2.1	5.8	ND	5
toluene	ND	3.8	ND	5
m,p-xylene	2.4	4.6	ND	5
1,2,4-trimethylbenzene	ND	3.7	ND	5
sec-butylbenzene	ND	10.9	ND	5
n-butylbenzene	ND	10.4	ND	5
acetone	-	21.3	-	50

ND = Not detected above laboratory detection limits.

NA = Not available.

\- = Not tested for this compound.

PPB = Parts per billion.

(1) = Groundwater standards/guidance values; October, 1993 NYSDEC TOGS 1.1.1.