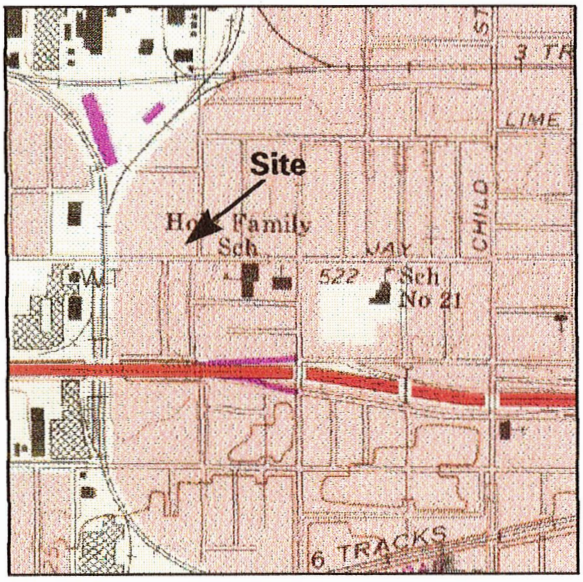
PHASE II ENVIRONMENTAL SITE ASSESSMENT

485 Hague Street
City of Rochester
Monroe County, New York



Prepared for:

Mr. Rene Gignac
Woerner Industries, Inc.
Rochester, New York

C and O Technologies

March 1998

C and O Technologies

1100 University Ave.
Rochester, NY 14607

Tel: (716) 256-6211
Fax: (716) 256-6244

March 23, 1998

Mr. Rene Gignac
Woerner Industries, Inc.
485 Hague Street
Rochester, New York 14606

Re: Phase II Environmental Site Assessment
485 Hague Street
Rochester, New York

Dear Mr. Gignac:

Attached is the Phase II Environmental Site Assessment Report for the above-referenced location. This assessment has been completed per your direction and represents the findings of C&O Technologies, Inc.

We appreciate the opportunity to have provided you this service. If you have any questions, please feel free to call me at 256-6211.

Respectfully submitted,

C&O TECHNOLOGIES, INC.

Thomas Ruggieri

Thomas Ruggieri, P.E.
Vice President

attachments

PHASE II ENVIRONMENTAL SITE ASSESSMENT

485 HAGUE STREET
CITY OF ROCHESTER
MONROE COUNTY, NEW YORK

Prepared for:
Mr. Rene Gignac
Woerner Industries, Inc.
485 Hague Street
Rochester, New York 14606

Prepared by:
C&O Technologies, Inc.
1100 University Avenue
Rochester, New York 14607

March 23, 1998

Table of Contents

Figures

Appendices

1. Introduction

This report summarizes the findings of the Phase II Environmental Site Assessment conducted on March 11 and 17, 1998 at 485 Hague Street (Woerner Industries) in the City of Rochester, Monroe County, New York (Figure 1–"the Site"). This assessment was completed based on the recommendations of the C&O Technologies, Inc. Phase I Environmental Site Assessment of February 13, 1998.

The objective of this assessment was the following:

1. Determine whether soil or groundwater at the Site has been impacted by the former operation of the gas station.
2. Determine, as is possible with drilling equipment, whether tanks associated with the former gas station still exist at the Site.
3. Determine whether soil or groundwater has been impacted by former discharges from Building 5's western sump. It was recently determined that the contents of this sump was formerly pumped to the grassed area behind Building 5.
4. Determine whether the Building 5 eastern sump gravity drain flows to the Monroe County Pure Waters sewer system.

2. Description of Field Methods

2.1 Building 5 Drainage Evaluation

In order to evaluate the configuration and condition of drains in Building 5, Woerner Industries cleared and cleaned the building. Upon determination of the location of drains, an attempt was then made to clean identified drains by a professional drain cleaning service. The results of this work are presented in Section 3.

2.2 Soil Borings

Field methods consisted of the drilling of twelve soil borings in order to;

a) determine the general soils types at the Site;
b) evaluate the Site for the presence of underground tanks; and,
c) evaluate the Site for the presence of soil or ground water contamination.

Soil boring locations were selected based on the following:

a) Information provided on the 1961 Sanborn Fire Insurance Map. This map showed the location of the former gas station office, as well as at least two gas tanks.
b) Review of 19612 aerial photograph provided by the Monroe County Environmental Management Council.
c) Information provided by Mr. Dick Kretivich, former operator of the gas station. Mr. Kretivich stated that he operated the station from approximately 1953 through 1960, at which point the station shut down. Just prior to starting work in 1953, new tanks were installed and were located off to the right of the office (facing Jay Street).

All soil borings were completed by Matrix Environmental, using a direct push drill rig. Soil samples were collected every 2 feet in individual acetate core sleeves. All down-hole equipment was decontaminated between samples.

A portion of each of soil boring was collected and saved for subsequent analysis. Samples were composited as shown in Table 1. Samples were analyzed for total volatile and semi-volatile organic compounds (except B10) to determine if they fall below the NYSDEC Alternative Guidance Values for petroleum contaminated soils (STARS Memo #1).

In addition, soil samples collected on March 11 were screened with an HNu meter to evaluate the presence of volatile organic vapors. The results of this testing is included in the boring logs.

Boring logs and laboratory results are included in Appendices A and B, respectively.

Table 1. Sample Compositing

Sample Name	Sample Composite
S1	B7: 0'-2' and 2'-4'
S2	B9: 7½'-12'
S3	B10: 6'-9'
S4	B4C: 4'-8' B8: 4'-9'

3. Findings

3.1 Building 5 Drainage Evaluation

After cleaning of the Building 5 maintenance pit, two separate sumps were identified, one at the eastern end of the pit and a second one at the western end.

The eastern sump was approximately 2½ foot square by 2½ foot. It contained what appeared to be a 2-inch diameter overflow line. An attempt was made to clean this line, however, this effort proved unsuccessful. Roto-Rooter personnel stated that, it appeared the line did not flow into a sewer, but simply dead-ended after several feet.

The western sump was apparently connected in the past to a pump that discharged to the grassed area behind Building 5. A soil boring was completed in this area to a depth of 4 feet. Results are presented in Table 2 and Appendix B, and showed the area to be free of petroleum products.

3.2 Soil borings and Laboratory Analysis

The locations of the soil borings completed as a part of this assessment are shown in Figure 2. No tanks or other appurtenances were observed during these field activities.

Sample collection and observation showed the majority of soils at the Site to consist of fine sands, and to be free of petroleum contamination. Borings indicated that only one portion of the Site has been impacted by petroleum products—the area around borings B4C, B8, and B9. Based on historical Site information, this area is located directly west of the former gas station office, and the apparent location of former gas tanks (per the Sanborn Fire Insurance Maps).

Petroleum materials found in individual borings from this area were present in distinct layers. In addition, petroleum was initially found at a depth of 4 feet in boring B4C, while it was not observed until a depth of 7½ feet in boring B10. This implies that the source of petroleum is not a leak, since with a leak, petroleum products generally are found at consistent depths in localized areas.

These observations, as well as the absence of any tanks, seems to imply these petroleum materials were probably spoils from the former tank excavation that were disposed of in the excavation at the time of the tank's removal.

Laboratory results of the soil samples are summarized in Tables 2, and presented graphically in Figure 3.

Table 2. Analytical Results

	Analytical result (mg/kg)				NYSDEC STARS Alternative Guidance Value
Analysis	S1	S2	S3	S4	(mg/kg)
ethylbenzene	ND	1,249	365	ND	100
m,p xylene	ND	3,665	1,482	ND	100
o-xylene	ND	212	197	ND	100
isopropylbenzene	ND	300	70	ND	100
n-propylbenzene	ND	1,702	369	ND	100
1,3,5 trimethylbenzene	ND	3,762	912	ND	100
tert-butylbenzene	ND	1,221	327	ND	100
1,2,4 trimethylbenzene	ND	11,206	3,043	ND	100
p-isopropyltoluene	ND	570	120	ND	100
napthalene	ND	1,466	475	ND	200
flouranthene	ND	ND	854	NA	1,000
phenanthrene	ND	ND	1,259	NA	1,000
pyrene	ND	ND	863	NA	1,000
benzo (k) flouranthene	ND	ND	477	NA	0.04

ND: not detected
NA: not analyzed

Analytical results indicate the following:

a) Soils at a depth of between 4 and 9 feet in the area of borings B4C and B8 are above the NYSDEC STARS Alternative Guidance Value for petroleum compounds.

b) Soils at a depth of between 7½ and 9 feet in the area of boring B9 is above the NYSDEC STARS Alternative Guidance Value for petroleum compounds.

c) No petroleum compounds were detected in soil samples taken at a depth of between 0 and 4 feet at the discharge point of the Building 5 sump pump.

4. Conclusions

Based on the findings of the above described Phase II Environmental Site Assessment, C&O Technologies concludes the following:

a) Soils in the area of the former Building 5 sump pump discharge do not contain petroleum products, and this area does not represent a Recognized Environmental Condition.

b) Former fuel storage tanks have apparently been removed from the Site.

c) Soils in the area of boring B4C, B8, and B9 are above NYSDEC STARS Alternative Guidance Values for Petroleum Contaminated Soils and, based on the ASTM E1527-97 Standard, represent a Recognized Environmental Condition.

d) It is probable that the petroleum products in the above noted area are residual material left from the excavation of the tanks, and do not represent a significant environmental concern.

e) Total volume of petroleum impacted soils is estimated at 125 cubic yards.

f) There are no present requirements to notify the NYSDEC or other regulatory agencies of the findings of this report.

5. Certification

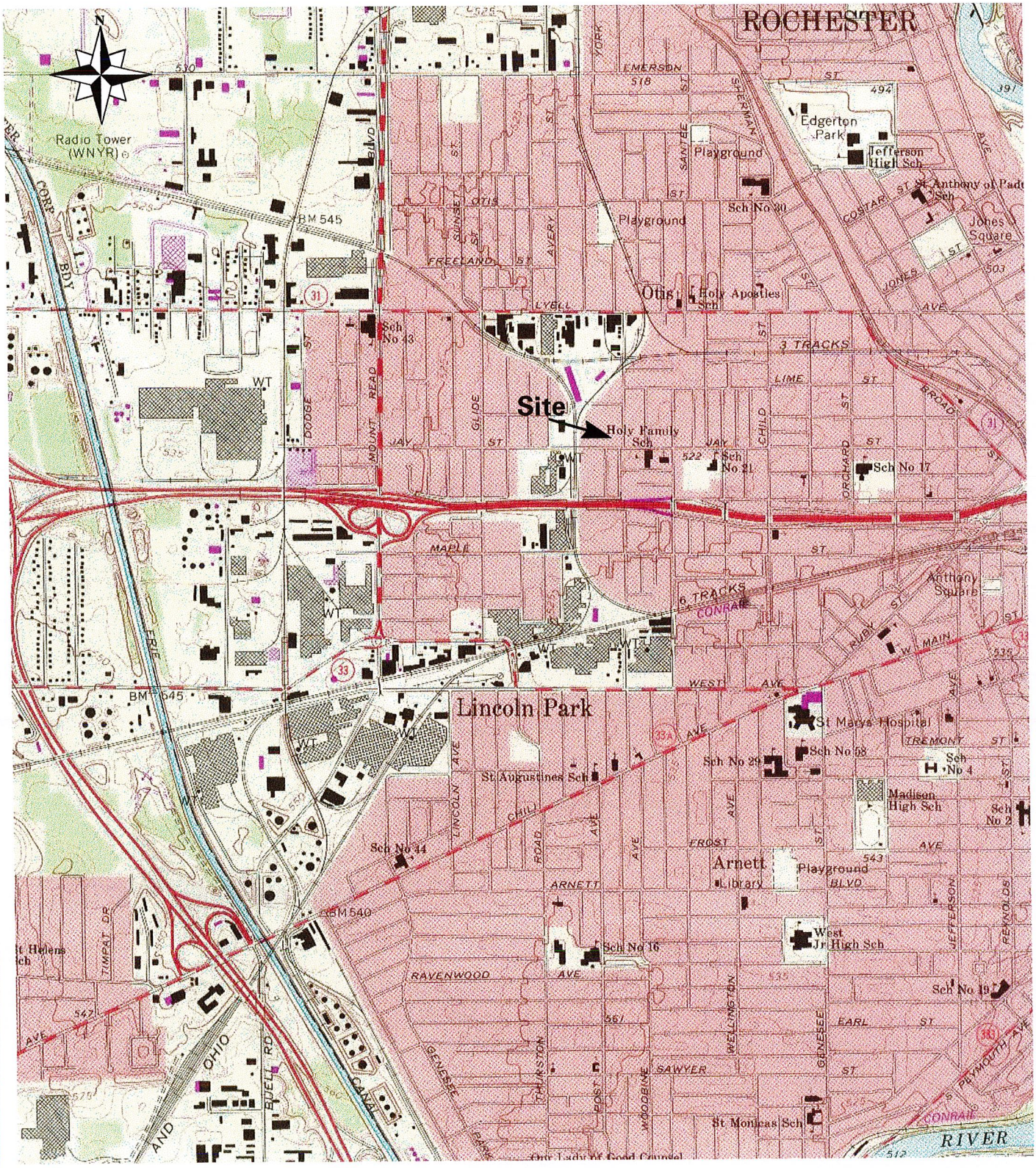
C&O Technologies certifies the accuracy of this report, to the best of our knowledge, based on the information collected as described in the Scope of Work of this assessment. A copy of all information collected during this assessment, including photographs, maps, notes, and other material will be kept on file at the offices of C&O Technologies. This information is available at your request.

Respectfully submitted,

C&O TECHNOLOGIES, INC.

Thomas Ruggieri

By Thomas Ruggieri, P.E.
Vice President

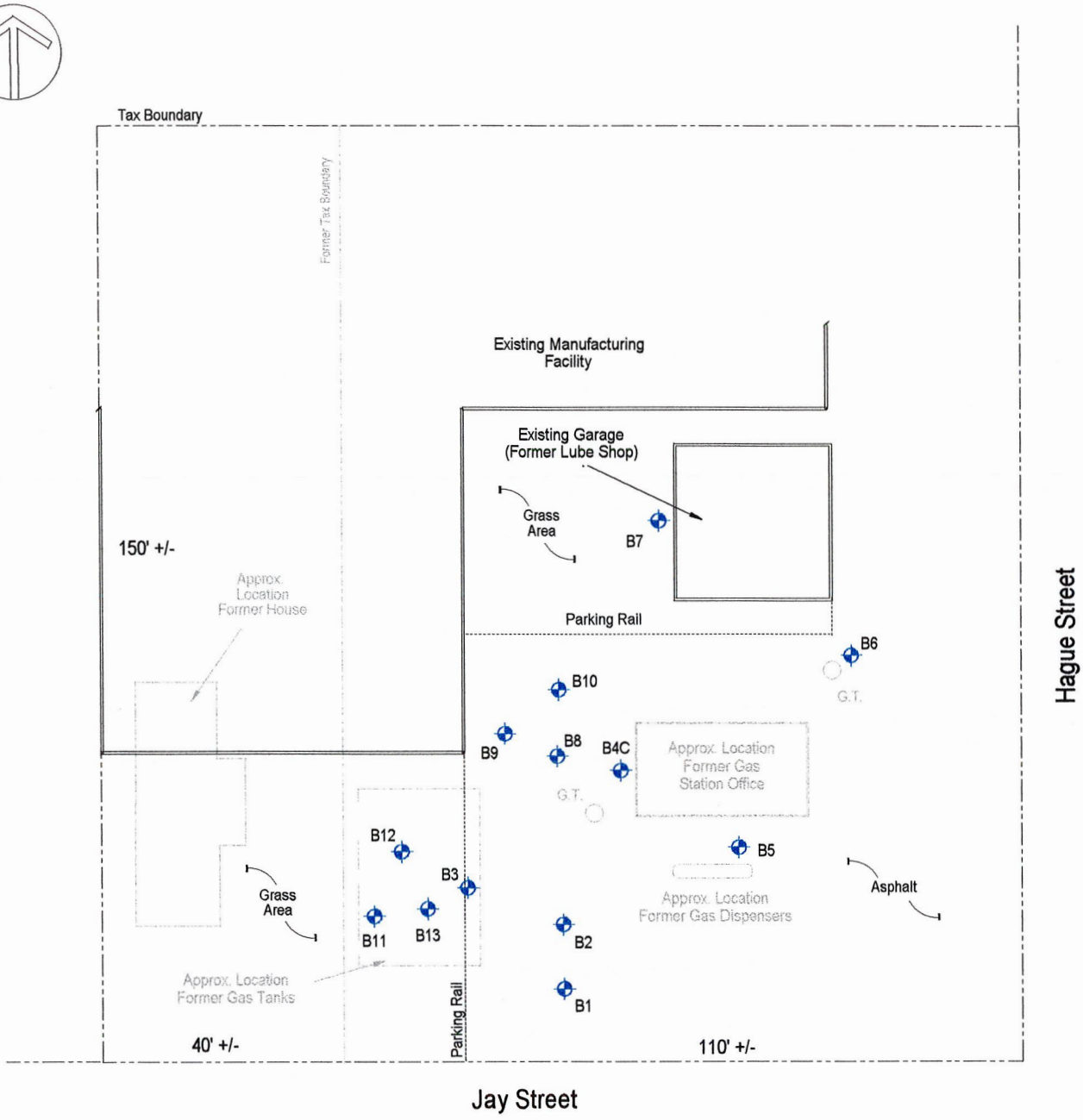


C and O Technologies
1100 University Ave.
Rochester, New York 14607
Tel: (716) 256-6211
Fax: (716) 256-6244

Figure 1

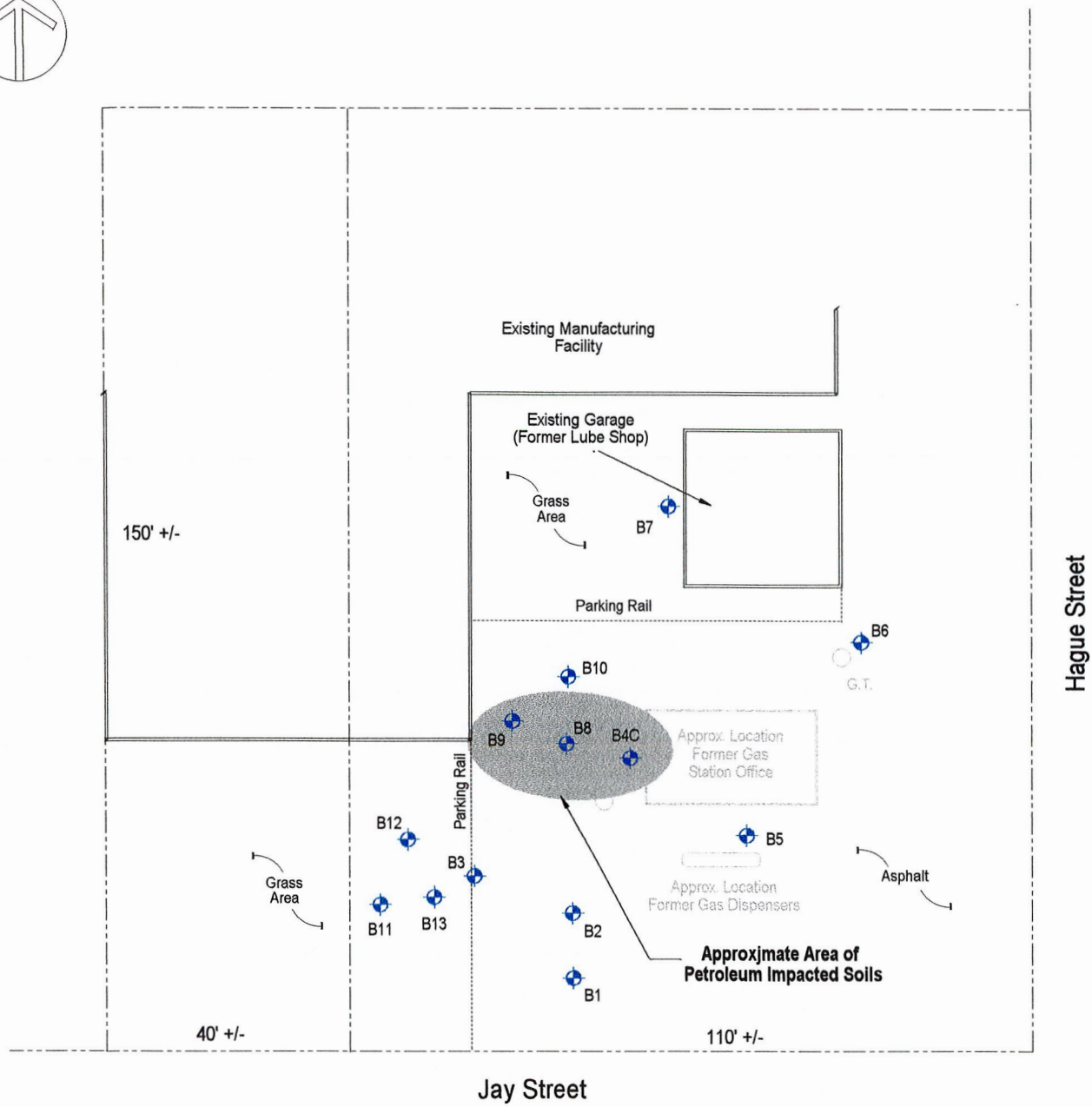
Site Location Map
485 Hague Street
Rochester, New York

Date: February 1998
Scale: 1:24000
Drawn by: TJR
Map source: USGS Quad., Rochester West, NY



Notes:
1. Site boundaries per Monroe County Tax Map.
2. G.T. = Gas Tanks per Sanborn Fire Insurance Map.
3. Former Gas Station Office location per 1961 aerial photograph and Sanborn Fire Insurance Map.
4. Gas dispenser location per 1961 aerial photograph.
5. Gas tank locations per interview with former owner (Dick Kretivik).

C&O Technologies C&O Technologies, Inc. 1100 University Ave. Rochester, New York 14607	**Figure 2** Soil Boring Locations 471 Hague Street Rochester, New York	Drawn by: TJR Scale: None Date: March 1998 Sources: 1961 Aerial/Sanborn Fire Maps Monroe County Tax Map



Notes:
1. Site boundaries per Monroe County Tax Map.
2. G.T. = Gas Tanks per Sanborn Fire Insurance Map.
3. Former Gas Station Office location per 1961 aerial photograph and Sanborn Fire Insurance Map.
4. Gas dispenser location per 1961 aerial photograph.
5. Gas tank locations per interview with former owner (Dick Kretivik).

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1100 University Ave.
Rochester, New York 14607

Figure 3

Area of Petroleum Impacted Soils
471 Hague Street
Rochester, New York

Drawn by: TJR

Scale: None

Date: March 1998

Sources: 1961 Aerial/Sanborn Fire Maps
Monroe County Tax Map

Appendix A
Boring Logs

Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/11/98
End Date 3/11/98
Geologist Ruggieri

Boring # B1
Drilling Co Matrix Environmental, Inc.
Driller Steve
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	0 - 2					8	Asphalt, sub-base	HNu <1.0 ppm
	2 – 4					12	Sand, trace silt and gravel	HNu <1.0 ppm
	4 – 5.5					16	Fine sand, trace silt	Water at 5'
								Refusal at 5.5'
								HNu <1.0 ppm

C&O Technologies

Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/11/98
End Date 3/11/98
Geologist Ruggieri

Boring # B2
Drilling Co Matrix Environmental, Inc.
Driller Steve
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	2 - 4					12	Fine sand with some silt	HNu <1.0 ppm
	4 - 6					24	Fine sand w/silt grading to	HNu <1.0 ppm
							fine sand	Water at 5'
	6 - 7					12	Sand with some silt	HNu <1.0 ppm
								Refusal at 7'

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Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/11/98
End Date 3/11/98
Geologist Ruggieri

Boring # B3
Drilling Co Matrix Environmental, Inc.
Driller Steve
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	2 - 4					20	Fine sand	HNu <1.0 ppm
	4 - 6					20	Sand grading to fine sand	HNu <1.0 ppm
							with some silt	Water at 5.5'
	6 - 8					12	Sand and gravel	HNu <1.0 ppm
	8 – 9.75					18	Wet sand with some silt	HNu <1.0 ppm
							and gravel	Refusal at 9.75'

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Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/11/98
End Date 3/11/98
Geologist Ruggieri

Boring # B4C
Drilling Co Matrix Environmental, Inc.
Driller Steve
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
								B4A, refusal at 1.5'
								B4B, refusal al 1.5'
	2 - 4					6	Fill	HNu 35 ppm
	4 - 6					6	Fill	HNu 30 ppm
	6 – 8					16	fill	HNu 60 ppm
								Petroleum odor
								Water at 6'

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Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/11/98
End Date 3/11/98
Geologist Ruggieri

Boring # B5
Drilling Co Matrix Environmental, Inc.
Driller Steve
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	2- 4						Fine sand	HNu 1.0 ppm
	4 - 6						Fine sand	HNu <1.0 ppm
								Water at 5'

Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/11/98
End Date 3/11/98
Geologist Ruggieri

Boring # B6
Drilling Co Matrix Environmental, Inc.
Driller Steve
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	2 - 4					12	Fine sand, trace silt	HNu <1.0 ppm
	4 - 6					24	Fine sand	HNu <1.0 ppm
								Water at 5'
	6 - 8					24	Fine sand	HNu 1.5 ppm

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Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/11/98
End Date 3/11/98
Geologist Ruggieri

Boring # B7
Drilling Co Matrix Environmental, Inc.
Driller Steve
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	0 - 2					20	Topsoil	HNu <1.0 ppm
	2 – 4					20	Fine sand	HNu <1.0 ppm

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Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/11/98
End Date 3/11/98
Geologist Ruggieri

Boring # B8
Drilling Co Matrix Environmental, Inc.
Driller Steve
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	2 - 4					8	Fine sand	HNu 5 ppm
	4 – 6					6	Fine sand, trace silt	HNu 15 ppm
	6 – 8					12	Fine sand	HNu 3 ppm
								Wet
								Petroleum odor
	8 - 9					12	Fine sand	HNu 1.5 ppm
								Petroleum odor, wet
								Refusal at 9'
								Water from 8' – 9'
								sample has odor but
								no sheen.

CDM Technologies

Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/11/98
End Date 3/11/98
Geologist Ruggieri

Boring # B9
Drilling Co Matrix Environmental, Inc.
Driller Steve
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	2 - 4					6	Fill/sand and gravel	HNu 10 ppm
	4 - 6					10	Fine sand	HNu 5 ppm
	6 – 7.5					18	Fine sand	HNu <1.0 ppm
	7.5 - 8							HNu 210 ppm
								Petroleum odor
	8 - 10					18	Fine sands mixed with some fill	HNu 150 ppm
								Petroleum odor
								Petroleum soils are
								layered between clean
								sand
	10 - 12					18	Fine sands	Petroleum odors
								Water

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Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/11/98
End Date 3/11/98
Geologist Ruggieri

Boring # B10
Drilling Co Matrix Environmental, Inc.
Driller Steve
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	4 – 6					22	Fine sands	HNu <1.0 ppm
	6 - 8					24	Fine sands	HNu <1.0 ppm
								Water at 6.5'
	8 - 10						Fine sands	HNu <1.0 ppm
								Stained soil at 9.5'
								Refusal at 10'

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Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/17/98
End Date 3/17/98
Geologist Ruggieri

Boring # B11
Drilling Co Matrix Environmental, Inc.
Driller Pat
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	2 – 4					16	Fine sand	
	4 – 6					20	Fine sand	
	6 - 8					20	Fine sand	Refusal at 8'

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Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/17/98
End Date 3/17/98
Geologist Ruggieri

Boring # B12
Drilling Co Matrix Environmental, Inc.
Driller Pat
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	2 – 4					16	Fine sand	
	4 – 6					16	Fine sand	
	6					4	Fine sand/rock	Refusal at 6'+

C&O Technologies

Subsurface Boring Log

Client Woerner Industries, Inc.
Location 471-485 Hague Street
Start Date 3/17/98
End Date 3/17/98
Geologist Ruggieri

Boring # B13
Drilling Co Matrix Environmental, Inc.
Driller Pat
Drilling Method Direct Push

#	Sample Depth	Blows				R	Description	Remarks
	(ft)	0-6	6-12	12-18	18-24	(in)		
	2 – 4					16	Fine sand	
	4 – 6					22	Fine sand	
	6 - 8					20	Fine sand	

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Appendix B
Laboratory Results

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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:	**C&O Technologies, Inc.**	**Lab Project No.:**	98-0355
		Lab Sample No.:	2202
Client Job Site:	485 Hague St.		
		Sample Type:	Soil Composite 2:1
Client Job No.:	N/A		
		Date Sampled:	03/11/98
Field Location:	B7, 0'-2' and 2'-4'	**Date Received:**	03/12/98
Field ID No.:	N/A	**Date Analyzed:**	03/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 4.4
Benzene	ND< 4.4
Toluene	ND< 4.4
Ethylbenzene	ND< 4.4
m,p-Xylene	ND< 4.4
o-Xylene	ND< 4.4
Isopropylbenzene	ND< 4.4
n-Propylbenzene	ND< 4.4
1,3,5-Trimethylbenzene	ND< 4.4
tert-Butylbenzene	ND< 4.4
1,2,4-Trimethylbenzene	ND< 4.4
sec-Butylbenzene	ND< 4.4
p-Isopropyltoluene	ND< 4.4
n-Butylbenzene	ND< 4.4
Naphthalene	ND< 11.1

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

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

980355V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Solids (STARS List)

Client: C&O Technology, Inc.
Client Job Site: 485 Hague St.
Client Job No.: N/A
Field Location: B7, 0'-2' and 2'-4'
Field ID No.: N/A

Lab Project No. 98-0355
Lab Sample No 2202
Sample Type: Soil Composite 2:1
Date Sampled: 03/11/98
Date Received: 03/12/98
Date Analyzed: 03/18/98

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 339
Acenaphthene	ND< 339
Fluorene	ND< 339
Fluoranthene	ND< 339
Anthracene	ND< 339
Phenanthrene	ND< 339
Benzo (a) anthracene	ND< 339
Chrysene	ND< 339
Pyrene	ND< 339
Benzo (b) fluoranthene	ND< 339
Benzo (k) fluoranthene	ND< 339
Benzo (g,h,i) perylene	ND< 339
Benzo (a) pyrene	ND< 339
Dibenz (a,h) anthracene	ND< 339
Indeno (1,2,3-cd) pyrene	ND< 339

Analytical Method: EPA 8270 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

980355S1.XLS

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:	C&O Technologies, Inc.	**Lab Project No.:**	98-0355
		Lab Sample No.:	2203
Client Job Site:	485 Hague St.		
		Sample Type:	Soil Composite 3:1
Client Job No.:	N/A		
		Date Sampled:	03/11/98
Field Location:	B9, 7½'-8' , 8'-10', and 10'-12'	**Date Received:**	03/12/98
Field ID No.:	N/A	**Date Analyzed:**	03/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 88.9
Benzene	ND< 88.9
Toluene	ND< 88.9
Ethylbenzene	1249
m,p-Xylene	3665
o-Xylene	212
Isopropylbenzene	300
n-Propylbenzene	1702
1,3,5-Trimethylbenzene	3762
tert-Butylbenzene	1221
1,2,4-Trimethylbenzene	11206 E
sec-Butylbenzene	ND< 88.9
p-Isopropyltoluene	570
n-Butylbenzene	ND< 88.9
Naphthalene	1466

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

Comments: ND denotes not detected
E = estimated concentration.

Approved By: _____
Laboratory Director

980355V2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Solids (STARS List)

Client: C&O Technology, Inc.
Client Job Site: 485 Hague St.
Client Job No.: N/A
Field Location: B9; 7½'-8', 8'-10', 10'-12'
Field ID No.: N/A

Lab Project No. 98-0355
Lab Sample No 2203
Sample Type: Soil Composite 3:1
Date Sampled: 03/11/98
Date Received: 03/12/98
Date Analyzed: 03/18/98

COMPOUND	RESULT (ug/Kg)
Naphthalene	413
Acenaphthene	ND< 338
Fluorene	ND< 338
Fluoranthene	ND< 338
Anthracene	ND< 338
Phenanthrene	ND< 338
Benzo (a) anthracene	ND< 338
Chrysene	ND< 338
Pyrene	ND< 338
Benzo (b) fluoranthene	ND< 338
Benzo (k) fluoranthene	ND< 338
Benzo (g,h,i) perylene	ND< 338
Benzo (a) pyrene	ND< 338
Dibenz (a,h) anthracene	ND< 338
Indeno (1,2,3-cd) pyrene	ND< 338

Analytical Method: EPA 8270
NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

980355S2.XLS

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:	**C&O Technologies, Inc.**	**Lab Project No.:**	98-0355
		Lab Sample No.:	2204
Client Job Site:	485 Hague St.		
		Sample Type:	Soil
Client Job No.:	N/A		
		Date Sampled:	03/11/98
Field Location:	B10, 6'-9'	**Date Received:**	03/12/98
Field ID No.:	N/A	**Date Analyzed:**	03/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 3.5
Benzene	ND< 3.5
Toluene	ND< 3.5
Ethylbenzene	ND< 3.5
m,p-Xylene	ND< 3.5
o-Xylene	ND< 3.5
Isopropylbenzene	ND< 3.5
n-Propylbenzene	ND< 3.5
1,3,5-Trimethylbenzene	ND< 3.5
tert-Butylbenzene	ND< 3.5
1,2,4-Trimethylbenzene	ND< 3.5
sec-Butylbenzene	ND< 3.5
p-Isopropyltoluene	ND< 3.5
n-Butylbenzene	ND< 3.5
Naphthalene	ND< 8.7

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

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

980355V3.XLS

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:	**C&O Technologies, Inc.**	**Lab Project No.:**	98-0355
		Lab Sample No.:	2205
Client Job Site:	485 Hague St.		
		Sample Type:	Soil Composite 5:1
Client Job No.:	N/A		
		Date Sampled:	03/11/98
Field Location:	B4C, 4'-6', 6'-8' and B8 4'-6', 6'-8', 8'-9'	**Date Received:**	03/12/98
Field ID No.:	N/A	**Date Analyzed:**	03/13/98

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 33
Benzene	ND< 33
Toluene	ND< 33
Ethylbenzene	365
m,p-Xylene	1482
o-Xylene	197
Isopropylbenzene	70
n-Propylbenzene	369
1,3,5-Trimethylbenzene	912
tert-Butylbenzene	327
1,2,4-Trimethylbenzene	3043
sec-Butylbenzene	ND< 33
p-Isopropyltoluene	120
n-Butylbenzene	ND< 33
Naphthalene	475

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

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

980355V4.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Solids (STARS List)

Client: C&O Technology, Inc.
Client Job Site: 485 Hague St.
Client Job No.: N/A
Field Location: B4c; 4'-6', 6'-8' and B8; 4'-6', 6'-8', 8'9'
Field ID No.: N/A

Lab Project No. 98-0355
Lab Sample No 2205
Sample Type: Soil Composite 5:1
Date Sampled: 03/11/98
Date Received: 03/12/98
Date Analyzed: 03/18/98

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 372
Acenaphthene	ND< 372
Fluorene	ND< 372
Fluoranthene	854
Anthracene	ND< 372
Phenanthrene	1259
Benzo (a) anthracene	ND< 372
Chrysene	ND< 372
Pyrene	863
Benzo (b) fluoranthene	ND< 372
Benzo (k) fluoranthene	477
Benzo (g,h,i) perylene	ND< 372
Benzo (a) pyrene	ND< 372
Dibenz (a,h) anthracene	ND< 372
Indeno (1,2,3-cd) pyrene	ND< 372

Analytical Method: EPA 8270 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

980355S3.XLS

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	C & O Technologies Inc.	COMPANY	Same	98-0355
ADDRESS	1100 University Ave.	ADDRESS		
CITY / STATE / ZIP	Rochester / NY / 14607	CITY / STATE / ZIP		P.O. #
ATT.	T. Ruggieri; PHONE# 256-6211	ATT.	PHONE#	
	FAX# 256-6244	FAX#		☐ ADDENDUM

PROJECT NAME/SITE NAME: 485 Hague St

PROJECT #:

COMMENTS:

TURN AROUND TIME (WORKING DAYS): ☐ ONE ☐ THREE ☒ FIVE(STD) ☐ OTHER ______

REPRESENTATIVE:

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	STARS Vol.	STARS Semi-Vol	REMARKS	PARADIGM LAB SAMPLE NUMBER	ANALYTICAL COSTS
1	3/11/98		X		B7 0'-2' & 2'-4'	Soil	2	✓	✓	Composite	2202	
2	3/11/98		X		B9 7½'-8'; 8'-10'; 10'-12'	↓	3	✓	✓	"	2203	
3	3/11/98		X		B10 6'-9'	↓	1	✓	✓	≠	2204	
4	3/11/98		X		B4C 4'-6'; 6'-8'	↓	5	✓	✓	Composite	2205	
5					B8 4'-6'; 6'-8'; 8'-9'							
6												
7												
8												
9												
10												
11												
12												

Handwritten across requested analysis columns: + Cancel B10 ENCORES via client @ 3/12/98 (Only ENCORES) H22OY

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME	SAMPLE CONDITION	CHECK #	TOTAL COST
[signature]	3/12/98 3:05	[signature]	3/12/98 305			
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME	CARRIER COMPANY	AIR BILL NO.	P.I.F
RELINQUISHED BY:	DATE/TIME	RECEIVED @ LAB BY: [signature]	DATE/TIME	CARRIER PHONE #	DATE RESULTS REPORTED BY:	DATE/TIME

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