

SUBSURFACE INVESTIGATION AND PRELIMINARY
HYDROGEOLOGIC ANALYSIS
MATT PETROLEUM CORPORATION
WURZ AND LELAND AVENUE
UTICA, NEW YORK
NYSDEC SPILL NO. 93-02347

Prepared for: New York State Department
of Environmental Conservation
207 Genesee Street
Utica, New York 13501-2885

Prepared By: Atlantic Testing Laboratories, Limited
P.O. Box 29
Canton, New York 13617

ATL Report No. CD1343-1-11-93

November 30, 1993

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ATLANTIC TESTING LABORATORIES, Limited

~~NOV 30 1993~~
Please review

November 30, 1993

New York State Department of
Environmental Conservation
207 Genesee Street
Utica, New York 13503-2885

Attn. Mr. Neal F. Carrier
Environmental Engineering Technician 2

Re: Subsurface Investigation and Preliminary Hydrogeologic Analysis
Underground Storage Tank Removal
Matt Petroleum Corporation
Utica, New York
NYSDEC Petroleum Spill No. 88-09026
ATL Report No. CD1343-1-11-93

P.O. Box 29
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Canton, NY 13617
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Felts Mills, NY 13638-0091
Phone: (315) 773-5390
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Ladies/Gentlemen:

Enclosed is one (1) copy of our report for the Subsurface Investigation and Preliminary Hydrogeologic Analysis performed at the referenced property in the City of Utica, New York.

We would appreciate the opportunity to meet with you at your earliest convenience to discuss the findings of this investigation and to develop a specific work plan for further investigative and remediation site work.

Respectfully submitted,
ATLANTIC TESTING LABORATORIES, Limited

Richard L. Lucey, P.E.
Project Manager

ECF/RLL/kat

Enclosure



ATLANTIC TESTING LABORATORIES, Limited

SUBSURFACE INVESTIGATION AND PRELIMINARY
HYDROGEOLOGIC ANALYSIS
MATT PETROLEUM CORPORATION
WURZ AND LELAND AVENUE
UTICA, NEW YORK
NYSDEC SPILL NO. 93-02347

Introduction

In accordance with a request by the New York State Department of Environmental Conservation (NYSDEC), a subsurface exploration program, consisting of the advancement of five soil borings (B-5 through B-9) and the subsequent installation, of five monitor wells, was initiated at the subject property on November 1, 1993. A site sampling event consisting of developing and sampling the five wells installed during this investigation program as well as five existing wells at the subject site, was conducted on November 10, 1993. A subsequent hydrogeologic analysis of the site was performed utilizing the field and laboratory test data obtained during the investigation program.

The investigation was conducted as a result of apparent subsurface contamination observed by NYSDEC representatives during the removal of an approximately 2,000-gallon underground diesel fuel storage tank (UST) formerly located at the subject property.

The subject property is located on Leland Avenue in the City of Utica, and is intersected by 75°-12'-40" West Longitude and 43°-6'-30" North Latitude. The location of the site is depicted on the U.S.G.S. Map Quadrant entitled "Utica (East), New York", a portion of which is reproduced on the **Site Location Map** included in **Appendix I**.

A limited site survey was performed to develop a site plan. The survey included the location of new and existing monitor wells and the determination of grade elevations for development of a groundwater gradient and plume map. Prominent site physical features such as buildings, storage tanks, and obvious underground utilities were digitized from an existing site

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plan provided to ATL by the NYSDEC. The monitor wells were located in the field on October 25, 1993 by Edward C. Fournier, representative of ATL, and Mr. Neal Carrier of the NYSDEC, Region 6, Utica. The site survey was performed by representatives of Spencer F. Thew, P.E./L.S., using conventional survey techniques. The elevations were established using existing datum included on the aforementioned site plan provided by the NYSDEC. The **Site Plan and Groundwater Contour Map** is included in **Appendix II**

Site Description/Background Information

The subject property is located on the west side of Leland Avenue which traverses in a North/South direction on the northeast side of Utica, New York. The subject property and the surrounding properties are located in a heavily industrialized area that is topographically flat and level. At the time of our investigation, five monitor wells (MW-1 through MW-5) had been installed to the south and east of the area explored during this investigation program. The Mohawk River borders the north side of the site. The **Site Plan and Groundwater Contour Map** contained in **Appendix II** illustrates the location of all monitor wells, buildings, storage tanks, and other site specific features.

It is our understanding that an approximately 2,000-gallon diesel fuel underground storage tanks (UST) was removed from the subject property on March 16, 1989; and that petroleum products were visually observed within the excavated area by a representative of the NYSDEC. The UST was located immediately adjacent to the west side of the Main office and maintenance garage facility in the parking lot area. Three fill pipes, present along this side of the building and north of the former diesel UST's location, are suspected to lead to three more UST's of unknown size and content. The approximate location of the excavated UST and the suspected locations of

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the existing USTs are depicted on the **Site Plan and Groundwater Contour Map** in **Appendix II**.

Subsurface Investigation

The five soil borings were advanced during the period of November 1 to 3, 1993, to a depth of approximately 13 ft. below grade using 4 1/4"-inch I.D. hollow stem augers. Continuous soil samples were obtained and Standard Penetration Testing was performed using 2-inch O.D. split spoon samplers, in accordance with ASTM D-1586.

All soil samples were subsequently screened for the measurable presence of volatile organic compounds (VOC) by headspace analysis, using a portable photoionization detector (PID) equipped with a 10.2 eV lamp. The headspace analysis consisted of screening the airspace located above the soil sample, within the sample container. The results of the **PID headspace analyses**, summarized in **Appendix III**, indicate the presence of VOCs in most of the samples collected.

The soil samples were visually classified in the laboratory by an Engineering Technician using the Burmister Soil Classification System, in accordance with ASTM D-2488 (see "Classification of Material" on the **Soil Boring Logs** included in **Appendix IV**). The soil classifications are based on visual and manual observations.

Monitor wells were installed in the completed soil borings, and were constructed of 2" diameter PVC riser pipe and 10 ft. of No. 20-slot Schedule 40 PVC well screen. The sand pack surrounding the outside annular diameter between the screen and soil consisted of No. 2 washed silica sand. A bentonite seal, 12" in thickness, was installed above the sand pack to minimize interstrata or surface communication with the screened zone. Surface well security consists of

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steel flush-mounted protective curb boxes and locking caps. **Monitor Well Installation Details** are provided in **Appendix IV**.

The existing and new monitor wells were subsequently developed and sampled on November 10, 1993. Prior to sample collection in monitor well numbers MW-2 through MW-10, a minimum of three well volumes was evacuated from each well, using conventional hand-bailing techniques. Monitor Well MW-1 contained a free floating product layer, and per the request of the NYSDEC, only a sample of the petroleum product was obtained. All samples were obtained by representatives of Atlantic Testing Laboratories, Limited (ATL) and were transported to ATL's Waddington, New York, Environmental Laboratory for analysis of volatile organic compounds (VOC) by EPA Method 503.1 and petroleum products by DOH Method 310-13. The results of the **Laboratory Analyses and Chain-of-Custody Documentation** are included in **Appendix V**.

Subsurface Conditions

Subsurface conditions encountered during the advancement of the five (5) soil borings generally consist of loose silty-sands and sandy-silts containing varying amounts of gravel. This stratum is underlain by a clayey silt stratum ranging in consistency from moderately plastic to non-plastic. The clayey silt layer was encountered at depths ranging from 4.5ft. to 10.5ft. below grade.

Groundwater Conditions

The respective groundwater elevations in each of the monitor wells were determined on November 10, 1993 and are summarized as follows:

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GROUNDWATER ELEVATIONS

	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
GROUND SURFACE ELEVATION	409.33	410.39	406.49	409.78	409.25	409.46	408.80	408.55	409.76	409.16
TOP OF SCREEN ELEVATION	405.83	409.89		404.78	406.25	406.46	405.80	405.55	406.76	
REFERENCE ELEVATION (TOP OF PVC)	408.87	410.07	411.33	412.84	408.77	409.05	408.47	408.19	409.22	
DATE: 11/10/93	405.73	407.06	405.74	402.36	407.71	407.82	407.69	405.36	408.12	

The groundwater elevation data is graphically represented on the **Groundwater Contour Map in Appendix II**. The contours were developed to present a conceptual understanding of groundwater flow at the site and are based on straight line interpolation of the above water elevation data. The groundwater contours presented on the map indicate that groundwater at the site is currently migrating in southerly direction. The prevailing hydraulic gradient is approximately 1.7%, or approximately a 4.0 ft drop in 240 lineal feet horizontally. The groundwater contour map contained herein does not take into account the effects of the site slurry wall, building and tank foundations, or other buried utility lines which may have a significant impact on groundwater and subsurface contaminant migration of the site. Additionally, we anticipate that groundwater flow at the site is influenced by seasonal variations in the water level elevation of the adjacent Mohawk River.

Laboratory Analysis Results

The results of the laboratory analyses, included in Appendix IV, is summarized as follows:

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SUMMARY OF ANALYTICAL RESULTS

ANALYTICAL METHOD	SAMPLING DATE	MW-1	MW-2	MW-3	MW-4	MW-5
EPA 503.1	11/10/93	--	ND	1.1	ND	102.
DOH 310-13	11/10/93	--	ND	ND	ND	7.9
DOH 310.14	11/10/93	103,000	--	--	--	--

ANALYTICAL METHOD	SAMPLING DATE	MW-6	MW-7	MW-8	MW-9	MW-10
EPA 503.1	11/10/93	70.	719.	16.	27.	0.6
DOH 310-13	11/10/93	2.8	2.1	0.8	1.4	ND
DOH 310.14	11/10/93	--	--	--	--	--

NOTES:

ALL MEASUREMENTS ARE SUM TOTALS OF REPORTED VALUES IN ug/L FOR EPA 503.1 ANALYSIS AND uL/L FOR DOH 310-13 AND DOH 310-14 ANALYSES.
ND - NONE DETECTED
-- - NOT SAMPLED

The fuel oil detected in the DOH 310-13 analysis was quantified as diesel fuel. An exact fuel type could not be determined as the fuel has degraded and weathered

Conclusions/Recommendations

The findings of the preliminary subsurface/hydrogeologic investigation indicates that subsurface soil conditions at the site generally consist of a layer of silty-sands and sandy-silts underlain by a low permeability clayey silt stratum. Groundwater elevation data obtained at the site indicates a moderate hydraulic gradient currently exists across the area investigated with groundwater migrating in a southerly direction.

Based on observations recorded during the course of this preliminary subsurface hydrogeologic investigation and the laboratory data contained herein, it is apparent that subsurface and groundwater petroleum contamination exists at the site.

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Based on the information available it appears that two discrete areas of subsurface contamination have been identified.

The first area (which was the focus of this investigation) encompasses the northwest portion of the subject property between the office/maintenance building, and the #1 and #2 loading rack structures. Fuel oil contamination in excess of NYS groundwater standards was detected in 5 of the 6 wells in this area with the highest VOC concentrations detected upgradient of the suspected UST area. Excessive soil contamination was detected, to a depth of 6 to 12 feet below grade, in all 5 soil borings advanced during this investigation.

The second area of contamination confirmed during the groundwater sample event is the area in the vicinity of Monitor Well No. 1. Approximately 7 inches of free product was measured on top of the water table at this location using a sonic oil/water interface tape. The product was analyzed in the laboratory and determined to be fuel oil. A slight depression in the phreatic aquifer surface was recorded at this location which appears to be inconsistent with the groundwater elevation in the adjoining monitor wells.

Based on the severity and extent of contamination at the site, it is felt that soil excavation and removal/treatment in conjunction with groundwater pumping and treating will be required to remediate both areas of observed contamination at the site. Additional subsurface investigative work at both areas is recommended to further assist in determining the possible source(s) of contamination and to further define the boundaries of the observed contamination plume. Based on the relatively shallow groundwater table at the site, we feel that the additional investigative work could best be accomplished by shallow hand or machine excavated test pits. Based on field observations, permanent monitoring points could then be established in the excavations.

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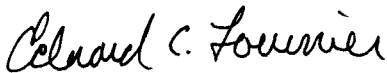
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We have prepared a proposed supplemental subsurface investigation location plan (Appendix VI) for your consideration.

Enclosed is a Site Location Map in Appendix I, a Site Plan and Groundwater Contour Map in Appendix II, five Soil Boring Logs and five Monitor Well Installation Details in Appendix IV, Laboratory Analysis Results and Chain of Custody documentation in Appendix V, and a Proposed Monitor Well Location Plan in Appendix VI.

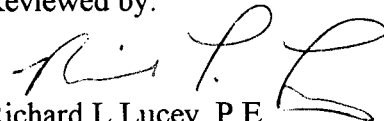
Respectfully submitted,
ATLANTIC TESTING LABORATORIES, Limited



Edward C. Fournier
Project Engineer

ECF/RLL/kat

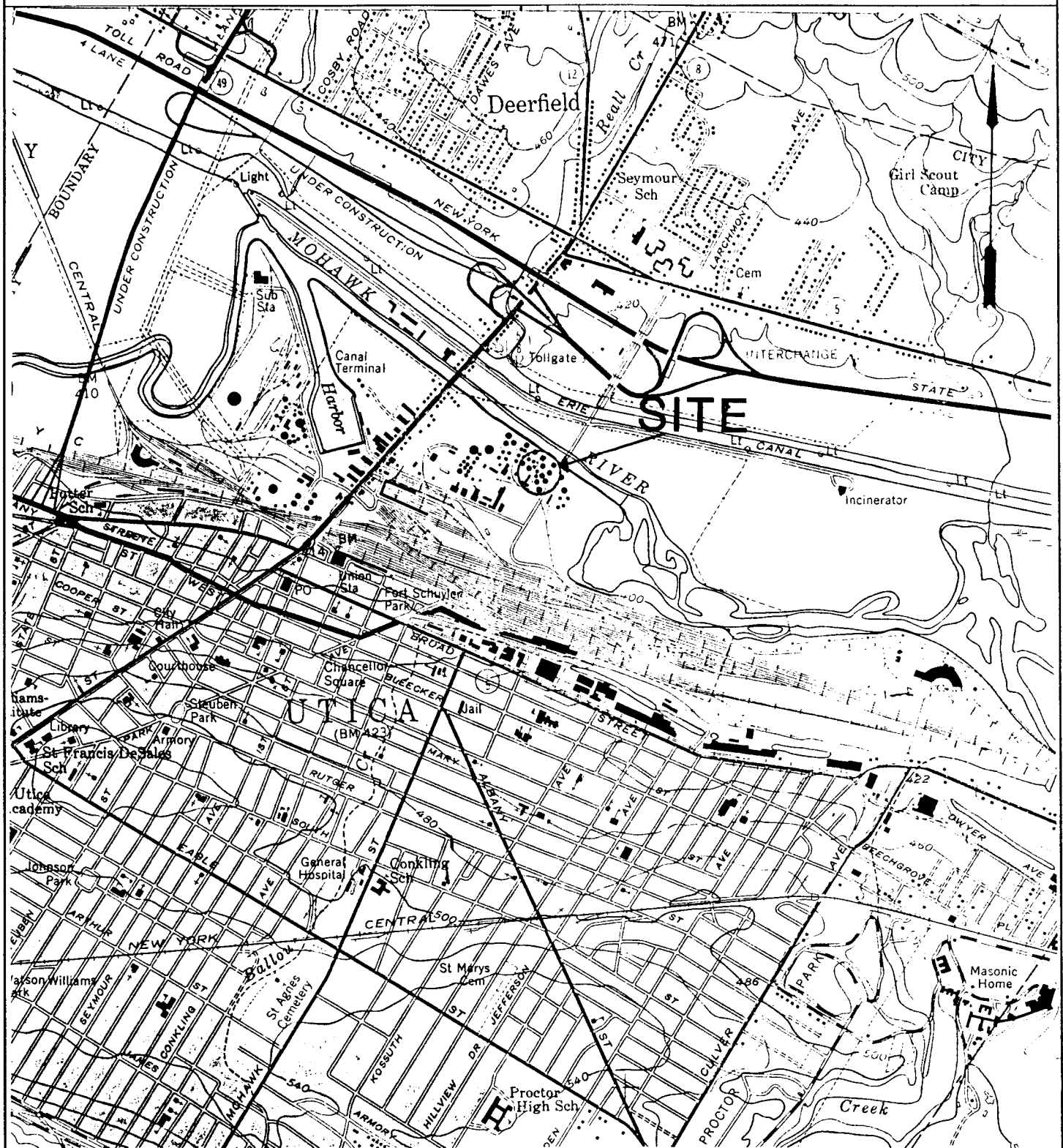
Reviewed by:



Richard L. Lucey, P.E.
Project Manager

APPENDIX I
SITE LOCATION MAP

SITE LOCATION MAP



PROJECT No.
CD1343-1-11-93

SCALE:
1:24,000

U.S.G.S QUADRANT
EAST UTICA, NEW YORK

APPENDIX II
SITE PLAN
AND
GROUNDWATER CONTOUR MAP

APPENDIX III
PID HEADSPACE ANALYSIS

Photoionization Detector Headspace Screening
Matt Petroleum
Utica, New York

Sample Depth (ft.)	Boring 5 (PPM)	Boring 6 (PPM)	Boring 7 (PPM)	Boring 8 (PPM)	Boring 9 (PPM)
0.5-2.5	28	44	141	28	28
2.5-4.5	79	68	218	26	216
4.5-6.5	30	40	157	18	164
6.5-8.5	42	19	120	4	127
8.5-10.5	26	16	93	0	19
10.5-12.5	6	18	77	0	91
12.5-14.5	6	-	-	-	-

APPENDIX IV
SOIL BORING LOGS
&
MONITOR WELL INSTALLATION DETAILS



SUBSURFACE INVESTIGATION

Report No. SECD1343-1-11-93CLIENT NYS Dept. of Environmental Conservation
Utica, NYLocation of Boring As Staked (See Plan)PROJECT S.I. - Matt's Petroleum
Utica, NYDate, Start 11/02/93 Finish 11/02/93Boring No. B-5 Sheet 1 of 1
(MW-5)

Ground Water Observations

Casing Hammer
Wt _____ lbs.
Fall _____ in.Sampler Hammer
Wt 140 lbs.
Fall 30 in.Ground Elev. 409.3Casing
H.S. Auger 4-1/4" I.D.

Date	Time	Depth	Casing at
11/2/93	6:15 am	3.7'	15.0'
11/10/93	PM	1.06'	13.0'

DEPTH	CASING BLOWS/FT.	SAMPLE NO.	DEPTH OF SAMPLE		TYPE SAMPLE	BLOWS ON SAMPLER PER 6" SAMPLER O.D. 2"				DEPTH OF CHANGE	GRAPHICS	CLASSIFICATION OF MATERIAL		RECOVERY (INCHES)
			FROM	TO								f - fine m - medium c - coarse	and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
1		1	0.0	0.5	SS	6	5	3	3	0.5		ASPHALT		10
2			0.5	2.5								Blackish-Grey mf SAND; little SILT; little mf GRAVEL; strong petroleum odor (saturated, non-plastic)		
3		2	2.5	4.5	SS	6	5	4	5			Blackish-Grey mf SAND; little SILT; strong petroleum odor (saturated, non-plastic)		10
4														
5		3	4.5	6.5	SS	5	4	6	4			Similar Soils; trace m GRAVEL; strong petroleum odor		3
6	A													
7	U	4	6.5	8.5	SS	2	2	2	1			Similar Soils; strong petroleum odor		1
8	G									8.5				
9	E	5	8.5	10.5	SS	2	3	3	4			Blackish-Grey cmf SAND; some SILT; little CLAY; strong petroleum odor (saturated, slightly plastic)		15
10	R													
11		6	10.5	12.5	SS	2	2	2	2	10.5		Blackish-Grey SILT; some CLAY; trace f SAND; petroleum odor (saturated, non-plastic)		15
12														
13		7	12.5	14.5	SS	3	3	3	2			Similar Soils; petroleum odor (saturated, non-plastic)		15
14														
15										15.0		Boring Terminated at 15.0' Monitor Well installed at 13.0'		
16														

SS — SPLIT SPOON SAMPLE
 NX — ROCK CORE
 SH — UNDIS SHELBY TUBE
 — STABILIZED GROUNDWATER

DRILLERS Mike Hawkins, Donny Hamilton



SUBSURFACE INVESTIGATION

Report No. SECD1343-1-11-93CLIENT NYS Dept. of Environmental Conservation
Utica, NYLocation of Boring As Staked (See Plan)PROJECT S.I. - Matt's Petroleum
Utica, NYDate, Start 11/02/93Finish 11/02/93Boring No. B-6 Sheet 1 of 1
(MW-6)

Casing Hammer

Sampler Hammer

Wt _____ lbs.

Wt 140 lbs.

Fall _____ in.

Fall 30 in.

Casing _____

Ground Elev. 409.5H.S. Auger 4-1/4" I.D.

Ground Water Observations

Date	Time	Depth	Casing at
<u>11/2/93</u>			<u>13.0'</u>
<u>11/10/93</u>	<u>PM</u>	<u>1.23'</u>	<u>13.0'</u>

DEPTH	CASING BLOWS/FT.	SAMPLE NO.	DEPTH OF SAMPLE		TYPE SAMPLE	BLOWS ON SAMPLER PER 6" SAMPLER O.D. 2"				DEPTH OF CHANGE	GRAPHICS	CLASSIFICATION OF MATERIAL		RECOVERY (INCHES)
			FROM	TO								f - fine m - medium c - coarse	and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
1		1	0.0	0.5	SS	9	8	5	5	0.5	x	ASPHALT		
2			0.5	2.5							x	Blackish-Grey cmf SAND; some SILT; trace mf GRAVEL; strong petroleum odor (wet, non-plastic)		
3		2	2.5	4.5	SS	7	5	6	9		x	Similar Soils		
4										4.5	x			
5		3	4.5	6.5	SS	5	5	8	11		x	Greyish-Brown mf SAND; trace SILT; strong petroleum odor (wet, non-plastic)		
6	A										x			
7	U	4	6.5	8.5	SS	8	4	5	4		x	Similar Soils; strong petroleum odor (wet, non-plastic)		
8	G										x			
9	E	5	8.5	10.5	SS	2	1	2	1		x	Similar Soils; little SILT; strong petroleum odor (saturated, non-plastic)		
10	R									10.5	x			
11		6	10.5	12.5	SS	2	2	2	2		x	Dark Brown SILT; some CLAY; little mf SAND; strong petroleum odor (saturated, non-plastic)		
12											x			
13										13.0	x	Boring Terminated at 13.0'		
14												Monitor Well installed at 13.0'		
15														
16														

SS — SPLIT SPOON SAMPLE
 NX — ROCK CORE
 SH — UNDIS SHELBY TUBE
 — STABILIZED GROUNDWATER

DRILLERS Mike Hawkins, Donny Hamilton



SUBSURFACE INVESTIGATION

Report No. SECD1343-1-11-93CLIENT NYS Dept. of Environmental Conservation
Utica, NYLocation of Boring As Staked (See Plan)PROJECT S.I. - Matt's Petroleum
Utica, NYDate, Start 11/02/93 Finish 11/02/93Boring No. B-7 Sheet 1 of 1
(MW-7)

Ground Water Observations

Casing Hammer
Wt _____ lbs.
Fall _____ in.Sampler Hammer
Wt 140 lbs.
Fall 30 in.Ground Elev. 408.8Casing _____
H.S. Auger 4-1/4" I.D.

Date	Time	Depth	Casing at
11/2/93			13.0'
11/10/93	PM	0.78'	13.0'

DEPTH	CASING BLOWS/FT.	SAMPLE NO.	DEPTH OF SAMPLE		TYPE SAMPLE	BLOWS ON SAMPLER PER 6" SAMPLER O.D. 2"				DEPTH OF CHANGE	GRAPHICS	CLASSIFICATION OF MATERIAL	RECOVERY (INCHES)
			FROM	TO									
1		1	0.0	0.5	SS	9	8	9	15	0.5		ASPHALT	18
2			0.5	2.5						1.5		Black cmf SAND; little SILT; petroleum odor (moist, non-plastic)	
3		2	2.5	4.5	SS	10	7	6	7	2.5		Brown SILT; little mf SAND; trace CLAY; petroleum odor (moist, very slightly plastic)	18
4												Dark Brown SILT; some mf + SAND; little CLAY; strong petroleum odor (wet, slightly plastic)	
5		3	4.5	6.5	SS	2	3	4	5			Similar Soils; and mf + SAND; strong petroleum odor (saturated, slightly plastic)	18
6	A												
7	U	4	6.5	8.5	SS	2	2	2	2			Similar Soils; strong petroleum odor (saturated, slightly plastic)	12
8	G												
9	E	5	8.5	10.5	SS	1	1	3	3	8.5		Grey SILT; some mf SAND; little CLAY; strong petroleum odor (saturated, slightly plastic)	5
10	R												
11		6	10.5	12.5	SS	2	1	1	2			Similar Soils; some CLAY; strong petroleum odor (saturated, moderately plastic)	7
12													
13										13.0		Boring Terminated at 13.0' Monitor Well installed at 13.0'	
14													
15													
16													

SS — SPLIT SPOON SAMPLE
 NX — ROCK CORE
 SH — UNDIS SHELBY TUBE
 — STABILIZED GROUNDWATER

DRILLERS Mike Hawkins, Donny Hamilton



SUBSURFACE INVESTIGATION

Report No. SECD1343-1-11-93CLIENT NYS Dept. of Environmental Conservation
Utica, NYLocation of Boring As Staked (See Plan)PROJECT S.I. - Matt's Petroleum
Utica, NYDate, Start 11/02/93Finish 11/02/93Boring No. B-8 Sheet 1 of 1
(MW-8)

Casing Hammer

Sampler Hammer

Wt _____ lbs.

Wt 140 lbs.

Fall _____ in.

Fall 30 in.Ground Elev. 408.6

Casing _____

H.S. Auger 4-1/4" I.D.

Ground Water Observations

Date	Time	Depth	Casing at
<u>11/2/93</u>			<u>13.0'</u>
<u>11/10/93</u>	<u>PM</u>	<u>2.83'</u>	<u>13.0'</u>

DEPTH	CASING BLOWS/FT.	SAMPLE NO.	DEPTH OF SAMPLE		TYPE SAMPLE	BLOWS ON SAMPLER PER 6" SAMPLER O.D. 2"				DEPTH OF CHANGE	GRAPHICS	CLASSIFICATION OF MATERIAL		RECOVERY (INCHES)
			FROM	TO								f - fine m - medium c - coarse	and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	
1		1	0.0	0.5	SS	8	8	7	4	0.5	x	ASPHALT		
2			0.5	2.5							x	Dark Brown SILT; some cmf SAND; little CLAY; little Pieces of Brick; little mf GRAVEL; petroleum odor (moist, slightly plastic)		
3		2	2.5	4.5	SS	4	4	7	7	2.5	x	Blackish-Grey SILT; some mf SAND; little CLAY; petroleum odor (wet, slightly plastic)		
4											x			
5		3	4.5	6.5	SS	6	10	9	7	4.5	x	Dark Grey SILT; little mf SAND; trace CLAY; petroleum odor (moist, very slightly plastic)		
6	A										x			
7	U	4	6.5	8.5	SS	6	4	4	4		x	Similar Soils; some CLAY; petroleum odor (wet, non-plastic)		
8	G										x			
9	E	5	8.5	10.5	SS	3	3	3	3		x	Similar Soils		
10	R										x			
11		6	10.5	12.5	SS	3	3	4	4		x	Similar Soils		
12											x			
13										13.0	x	Boring Terminated at 13.0' Monitor Well installed at 13.0'		
14														
15														
16														

SS — SPLIT SPOON SAMPLE
 NX — ROCK CORE
 SH — UNDIS SHELBY TUBE
 — STABILIZED GROUNDWATER

DRILLERS Mike Hawkins, Donny Hamilton



SUBSURFACE INVESTIGATION

Report No. **SECD1343-1-11-93**CLIENT **NYS Dept. of Environmental Conservation**
Utica, NYLocation of Boring **As Staked (See Plan)**PROJECT **S.I. - Matt's Petroleum**
Utica, NYDate, Start **11/03/93** Finish **11/03/93**Boring No. **B-9** Sheet **1** of **1**
(MW-9)

Ground Water Observations

Casing Hammer
Wt _____ lbs.
Fall _____ in.Sampler Hammer
Wt **140** lbs.
Fall **30** in.Ground Elev. **409.8**Casing _____
H.S. Auger **4-1/4" I.D.**

Date	Time	Depth	Casing at
11/3/93			13.0'
11/10/93	PM	1.10'	13.0'

DEPTH	CASING BLOWS/FT.	SAMPLE NO.	DEPTH OF SAMPLE		TYPE SAMPLE	BLOWS ON SAMPLER PER 6" SAMPLER O.D. 2"	DEPTH OF CHANGE	GRAPHICS	CLASSIFICATION OF MATERIAL	RECOVERY (INCHES)
			FROM	TO						
1		1	0.0	2.0	SS	12 8 8 8			Black cmf SAND; some c-mf GRAVEL; little SILT; strong petroleum odor (wet, non-plastic)	
2		2	2.0	4.0	SS	15 16 13 4				
3										
4		3	4.0	6.0	SS	3 4 3 5				
5									Similar Soils; some Pieces of Brick; strong petroleum odor	
6		4	6.0	8.0	SS	3 2 2 2				
7									Similar Soils; strong petroleum odor	
8							8.0			
9		5	8.0	10.0	SS	2 4 3 2			Blackish-Grey SILT; some CLAY; little mf + SAND; trace Brick Pieces; petroleum odor (saturated, moderately plastic)	
10										
11		6	10.0	12.0	SS	1 2 2 2			Similar Soils; petroleum odor	
12										
13							13.0		Boring Terminated at 13.0' Monitor Well installed at 13.0'	
14										
15										
16										

SS — SPLIT SPOON SAMPLE
 NX — ROCK CORE
 SH — UNDIS SHELBY TUBE
 — STABILIZED GROUNDWATER

DRILLERS **Mike Hawkins, Donny Hamilton**



ATLANTIC TESTING LABORATORIES, Limited

MONITOR WELL INSTALLATION DETAIL

PROJECT: S.I. - Matt's Petroleum,
Utica, NY

PROJECT NO. SECD1343-1-11-93

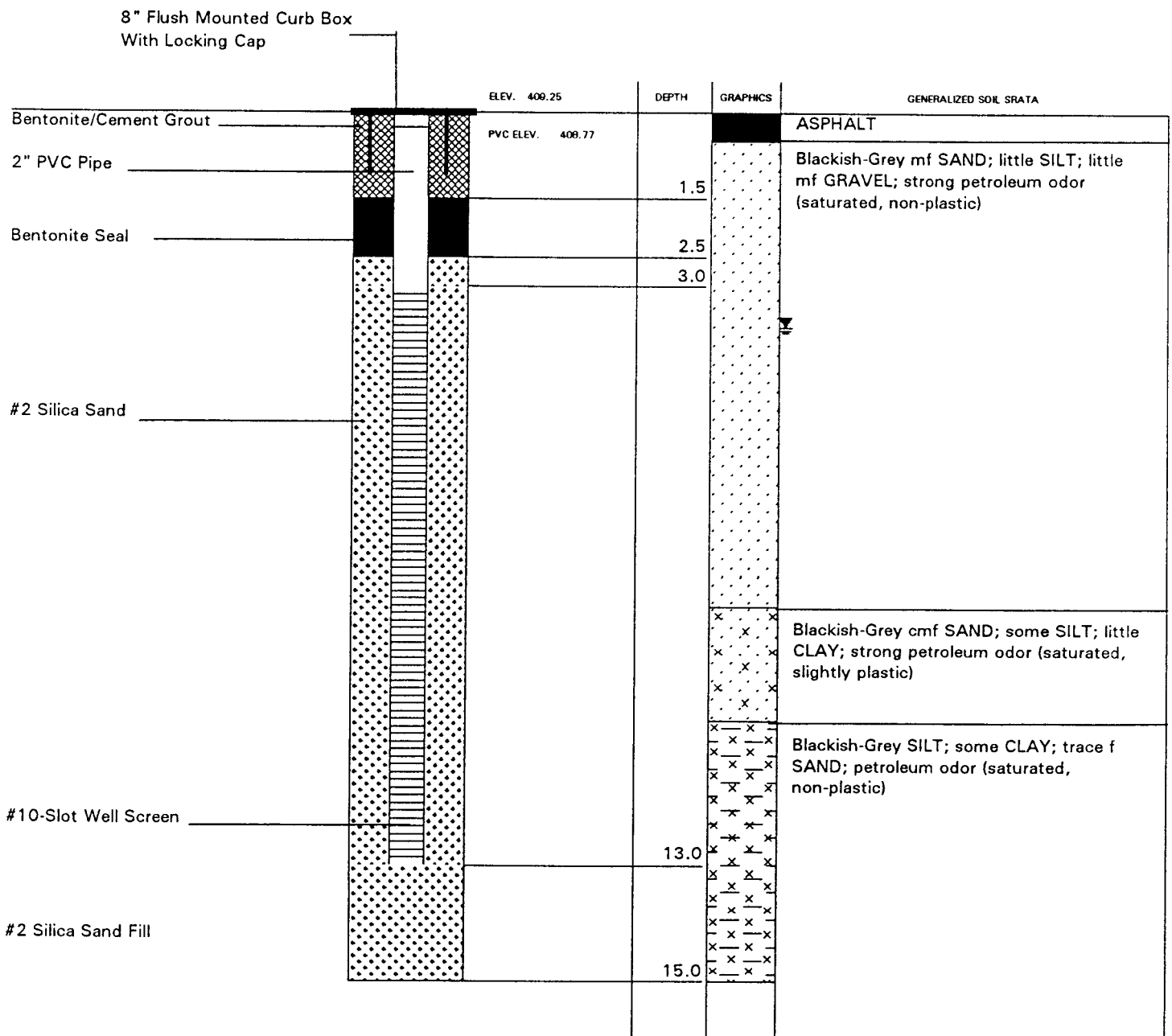
DATE: 11/02/93

CLIENT: NYS Dept. of Env. Cons.
Utica, NY

WELL NO. B-5 (MW-5)

DRILLER: Mike Hawkins, Donny Hamilton

INSPECTOR: Ed Fournier



MONITOR WELL INSTALLATION DETAIL

PROJECT: S.I. - Matt's Petroleum,
Utica, NY

PROJECT NO. SECD1343-1-11-93

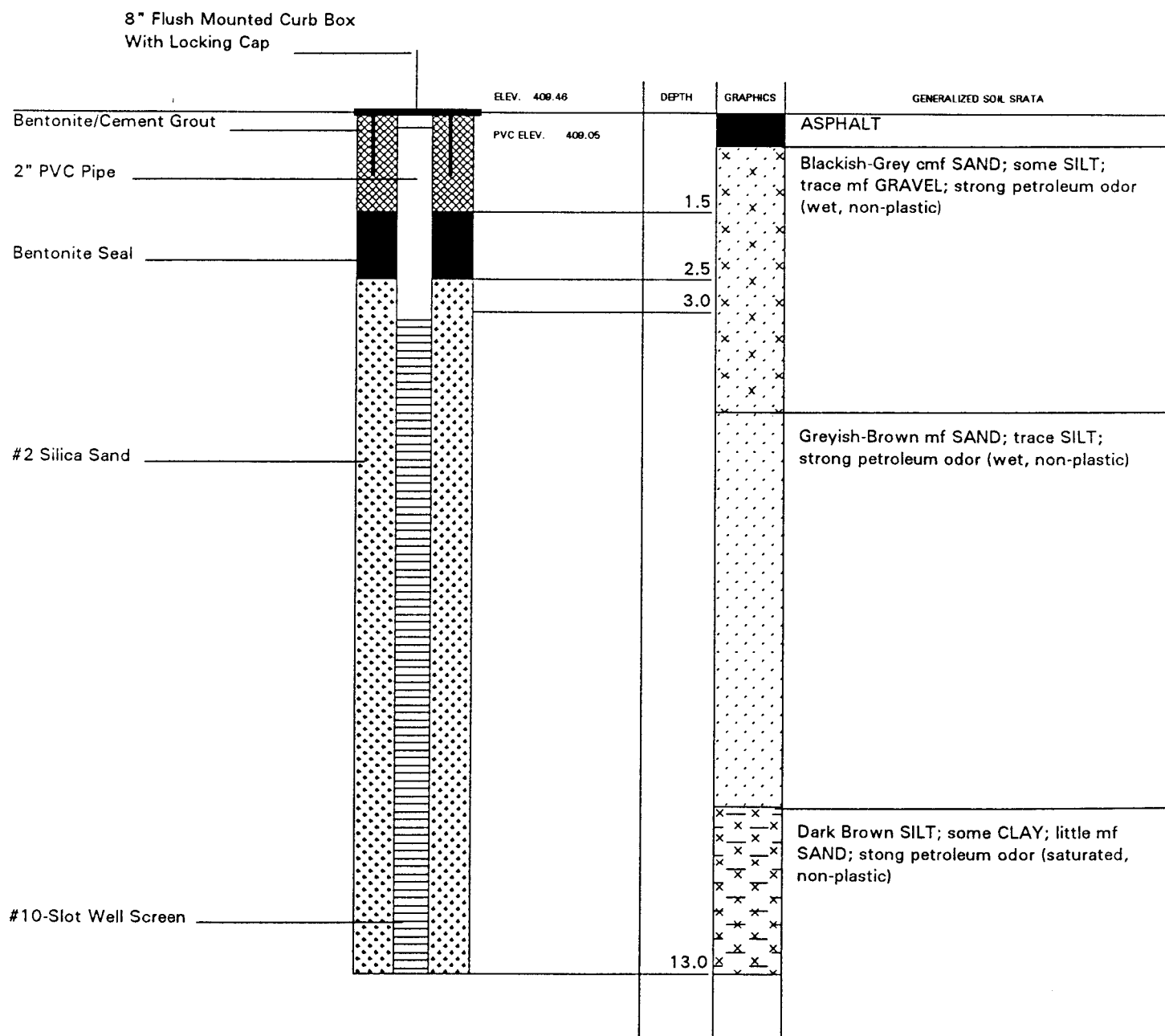
DATE: 11/02/93

CLIENT: NYS Dept. of Env. Cons.
Utica, NY

WELL NO. B-6 (MW-6)

DRILLER: Mike Hawkins, Donny Hamilton

INSPECTOR: Ed Fournier





ATLANTIC TESTING LABORATORIES, Limited

MONITOR WELL INSTALLATION DETAIL

PROJECT: S.I. - Matt's Petroleum,
Utica, NY

CLIENT: NYS Dept. of Env. Cons.
Utica, NY

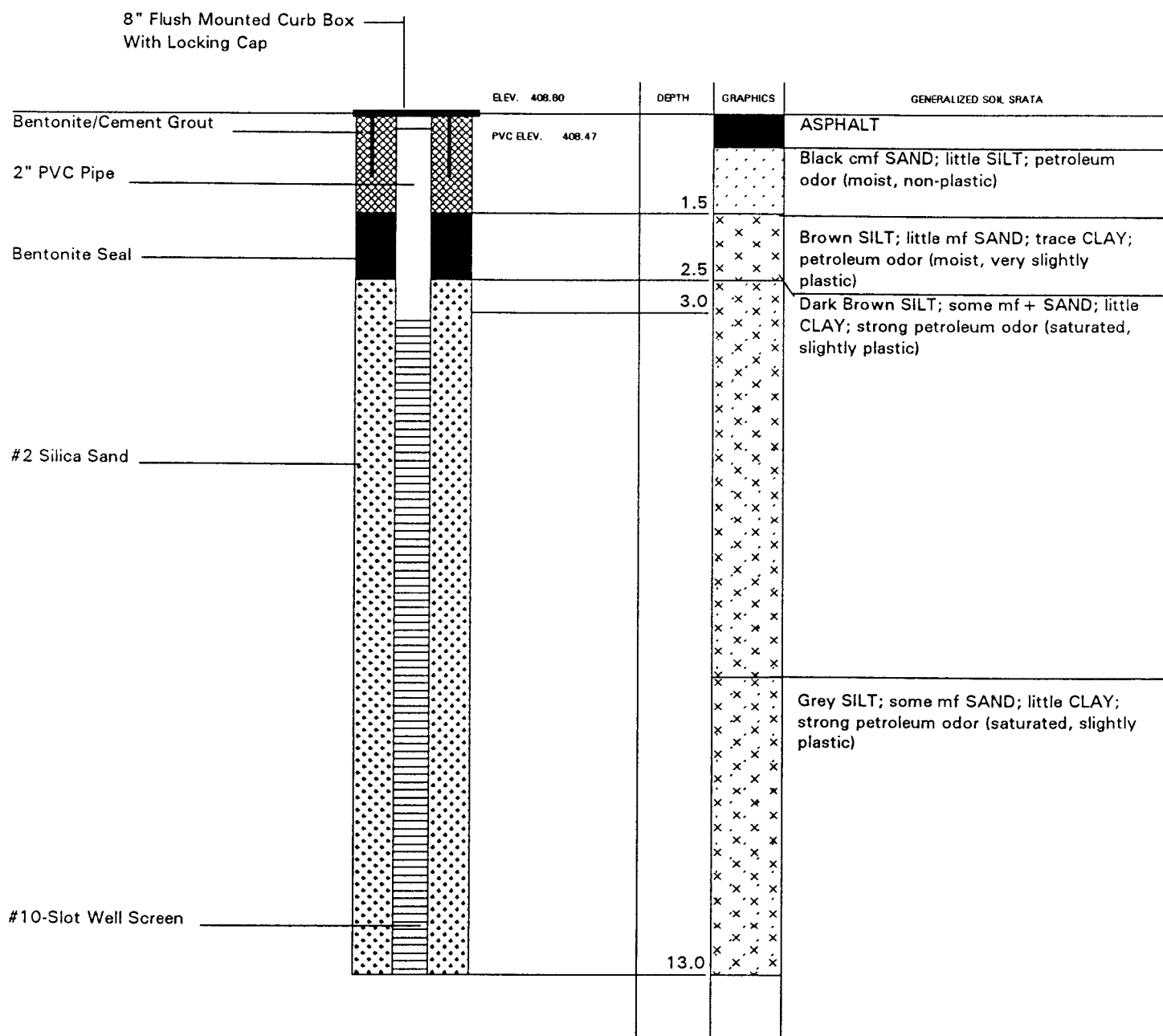
PROJECT NO. SECD1343-1-11-93

DATE: 11/02/93

WELL NO. B-7 (MW-7)

DRILLER: Mike Hawkins, Donny Hamilton

INSPECTOR: Ed Fournier





ATLANTIC TESTING LABORATORIES, Limited

MONITOR WELL INSTALLATION DETAIL

PROJECT: S.I. - Matt's Petroleum,
Utica, NY

PROJECT NO. SECD1343-1-11-93

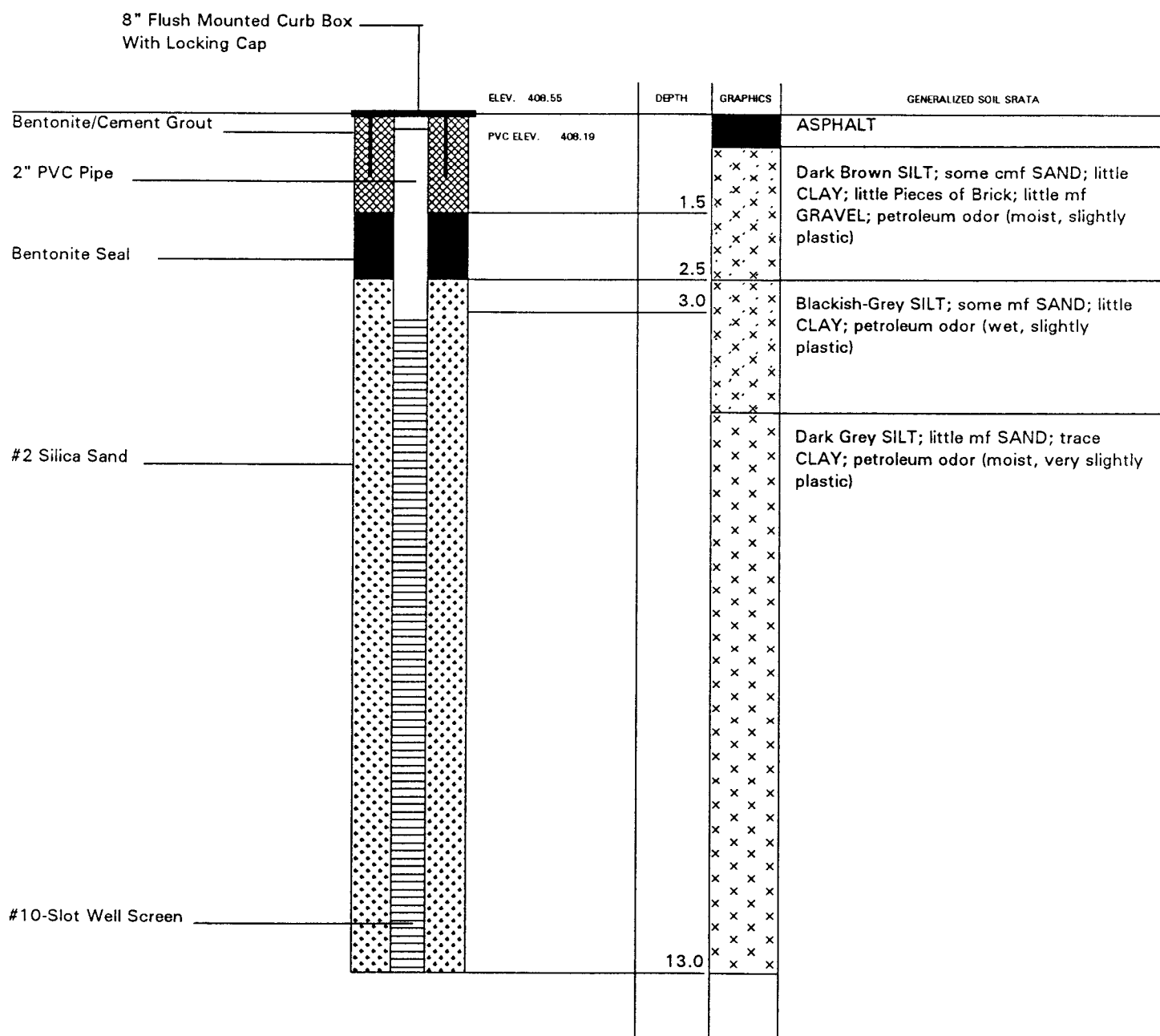
DATE: 11/02/93

CLIENT: NYS Dept. of Env. Cons.
Utica, NY

WELL NO. B-8 (MW-8)

DRILLER: Mike Hawkins, Donny Hamilton

INSPECTOR: Ed Fournier





ATLANTIC TESTING LABORATORIES, Limited

MONITOR WELL INSTALLATION DETAIL

PROJECT: S.I. - Matt's Petroleum,
Utica, NY

PROJECT NO. SECD1343-1-11-93

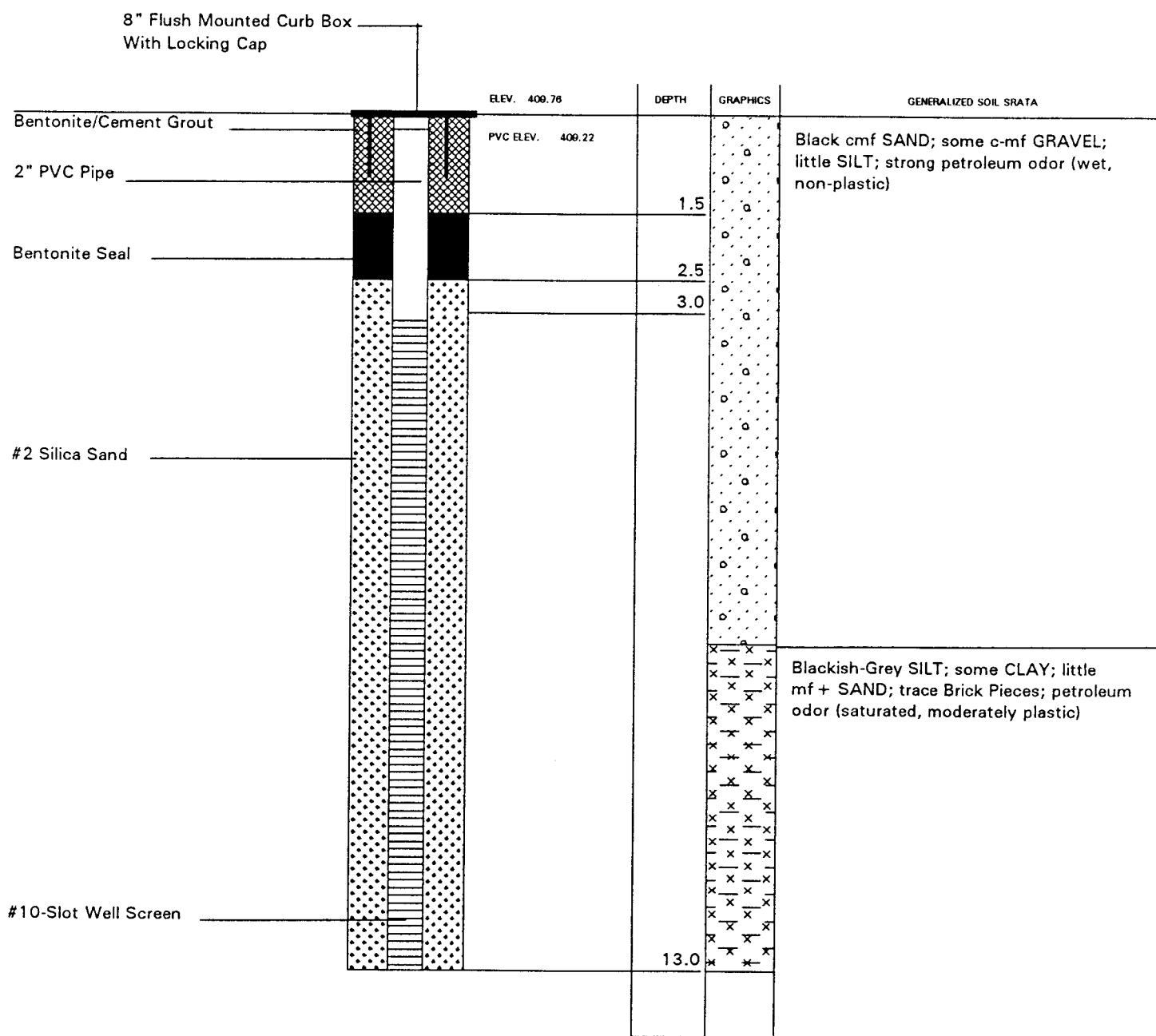
DATE: 11/03/93

CLIENT: NYS Dept. of Env. Cons.
Utica, NY

WELL NO. B-9 (MW-9)

DRILLER: Mike Hawkins, Donny Hamilton

INSPECTOR: Ed Fournier



APPENDIX V
LABORATORY RESULTS
&
CHAIN-OF-CUSTODY DOCUMENTATION

ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93

CLIENT: NYSDEC Region 6

PROJECT: Matt's Petroleum

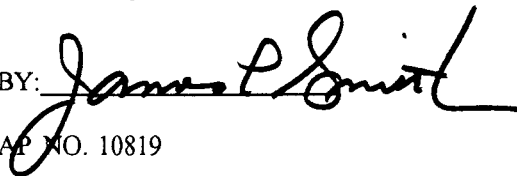
NYSDOH 310.14 Results

ATL Accession Number	Client's ID of Sample	Parameter	Result	Date Analyzed
93-6125	MW-1	Gasoline	ND	11/19/93
		Kerosene	ND	11/19/93
		Fuel Oils	10.3 % *	11/19/93
		Lubricating Oils	ND	11/19/93

ND = Not Detected

* Estimated value. This procedure does not include quantitative determinations.

APPROVED BY:



DATE: Dec. 3, '93

NYSDOH-ELAP NO. 10819

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ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93

CLIENT: NYSDEC Region 6

PROJECT: Matt's Petroleum

NYSDOH 310.13 Results

ATL Accession Number	Client's ID of Sample	Parameter	Result (ul/L)	Date Analyzed
93-6126	MW-2	Gasoline	ND	11/18/93
		Kerosene	<0.1	11/18/93
		Fuel Oils	<0.1	11/18/93
		Lubricating Oils	ND	11/18/93
93-6127	MW-3	Gasoline	ND	11/18/93
		Kerosene	<0.1	11/18/93
		Fuel Oils	<0.1	11/18/93
		Lubricating Oils	ND	11/18/93
93-6128	MW-4	Gasoline	ND	11/18/93
		Kerosene	<0.1	11/18/93
		Fuel Oils	<0.1	11/18/93
		Lubricating Oils	ND	11/18/93
93-6129	MW-5	Gasoline	ND	11/19/93
		Kerosene	<0.1	11/19/93
		Fuel Oils	7.9 **	11/19/93
		Lubricating Oils	ND	11/19/93

* ND = Not Detected

** Petroleum product detected was quantified as diesel fuel. Exact fuel type could not be determined due to apparent sample weathering.

APPROVED BY: 
NYSDOH-ELAP NO. 10819

DATE: Dec. 3, 93

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ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93

CLIENT: NYSDEC Region 6

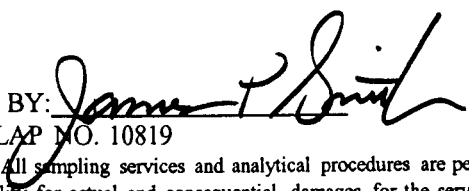
PROJECT: Matt's Petroleum

NYSDOH 310.13 Results

ATL Accession Number	Client's ID of Sample	Parameter	Result (ul/L)	Date Analyzed
93-6130	MW-6	Gasoline	ND	11/19/93
		Kerosene	<0.1	11/19/93
		Fuel Oils	2.8 **	11/19/93
		Lubricating Oils	ND	11/19/93
93-6131	MW-7	Gasoline	ND	11/19/93
		Kerosene	<0.1	11/19/93
		Fuel Oils	2.1 **	11/19/93
		Lubricating Oils	ND	11/19/93
93-6132	MW-8	Gasoline	ND	11/19/93
		Kerosene	<0.1	11/19/93
		Fuel Oils	0.8 **	11/19/93
		Lubricating Oils	ND	11/19/93
93-6133	MW-9	Gasoline	ND	11/19/93
		Kerosene	<0.1	11/19/93
		Fuel Oils	1.4 **	11/19/93
		Lubricating Oils	ND	11/19/93

* ND = Not Detected

** Petroleum product detected was quantified as diesel fuel. Exact fuel type could not be determined due to apparent sample weathering.

APPROVED BY: 
NYSDOH-ELAP NO. 10819

DATE: Dec. 3, '93

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ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93

CLIENT: NYSDEC Region 6

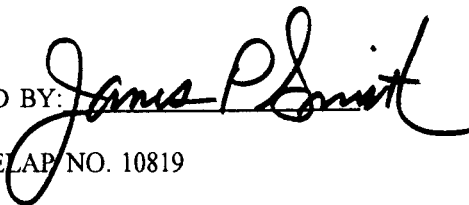
PROJECT: Matt's Petroleum

NYSDOH 310.13 Results

ATL Accession Number	Client's ID of Sample	Parameter	Result (u/L)	Date Analyzed
93-6134	MW-10	Gasoline	ND	11/19/93
		Kerosene	<0.1	11/19/93
		Fuel Oils	<0.1	11/19/93
		Lubricating Oils	ND	11/19/93

* ND = Not Detected

APPROVED BY:



NYSDOH-ELAP NO. 10819

DATE: Dec 3, '93

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ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93

CLIENT: NYSDEC Region 6

PROJECT: Matt's Petroleum

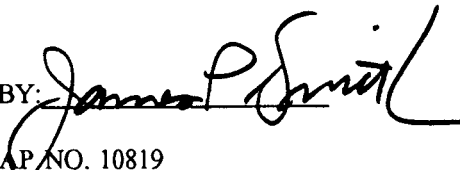
EPA 503.1 Results

DATE ANALYZED: 11/13/93

ATL Accession Number	Client's ID of Sample	Parameter	Result (ug/L)
93-6126	MW-2	Benzene	<0.5
		Toluene	<0.5
		Chlorobenzene	<0.5
		Ethylbenzene	<0.5
		m-Xylene	<0.5
		p-Xylene	<0.5
		o-Xylene	<0.5
		Styrene	<0.5
		Isopropylbenzene	<0.5
		Bromobenzene	<0.5
		n-Propylbenzene	<0.5
		o-Chlorotoluene	<0.5
		p-Chlorotoluene	<0.5
		1,3,5-Trimethylbenzene	<0.5
		t-Butylbenzene	<0.5
		1,2,4-Trimethylbenzene	<0.5
		1,3-Dichlorobenzene	<0.5
		sec-Butylbenzene	<0.5
		1,4-Dichlorobenzene	<0.5
		p-Isopropyltoluene	<0.5
		1,2-Dichlorobenzene	<0.5
		n-Butylbenzene	<0.5
		1,2,4-Trichlorobenzene	<0.5
		Naphthalene	<0.5
		Hexachlorobutadiene	<0.5
		1,2,3-Trichlorobenzene	<0.5
		*Trichloroethene	<0.5
		*Tetrachloroethene	<0.5

* Trichloroethene and Tetrachloroethene were identified and quantitated using an analytical method that is not approved by the NYSDOH.

APPROVED BY:



DATE: Dec. 3, '93

NYSDOH-ELAP NO. 10819

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ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93

CLIENT: NYSDEC Region 6

PROJECT: Matt's Petroleum

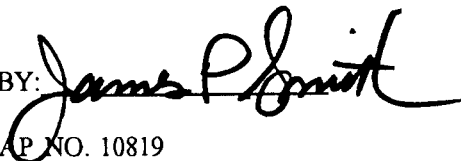
EPA 503.1 Results

DATE ANALYZED: 11/13/93

ATL Accession Number	Client's ID of Sample	Parameter	Result (ug/L)
93-6127	MW-3	Benzene	<0.5
		Toluene	<0.5
		Chlorobenzene	<0.5
		Ethylbenzene	0.5
		m-Xylene	<0.5
		p-Xylene	<0.5
		o-Xylene	<0.5
		Styrene	<0.5
		Isopropylbenzene	<0.5
		Bromobenzene	<0.5
		n-Propylbenzene	<0.5
		o-Chlorotoluene	<0.5
		p-Chlorotoluene	<0.5
		1,3,5-Trimethylbenzene	<0.5
		t-Butylbenzene	0.6
		1,2,4-Trimethylbenzene	<0.5
		1,3-Dichlorobenzene	<0.5
		sec-Butylbenzene	<0.5
		1,4-Dichlorobenzene	<0.5
		p-Isopropyltoluene	<0.5
		1,2-Dichlorobenzene	<0.5
		n-Butylbenzene	<0.5
		1,2,4-Trichlorobenzene	<0.5
		Naphthalene	<0.5
		Hexachlorobutadiene	<0.5
		1,2,3-Trichlorobenzene	<0.5
		*Trichloroethene	<0.5
		*Tetrachloroethene	<0.5

* Trichloroethene and Tetrachloroethene were identified and quantitated using an analytical method that is not approved by the NYSDOH.

APPROVED BY:



DATE:

Dec. 3, '93

NYSDOH-ELAP NO. 10819

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ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93

CLIENT: NYSDEC Region 6

PROJECT: Matt's Petroleum

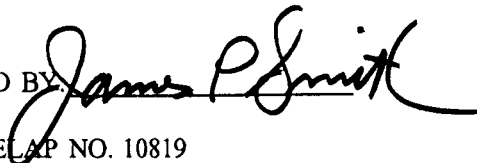
EPA 503.1 Results

DATE ANALYZED: 11/13/93

ATL Accession Number	Client's ID of Sample	Parameter	Result (ug/L)
93-6128	MW-4	Benzene	<0.5
		Toluene	<0.5
		Chlorobenzene	<0.5
		Ethylbenzene	<0.5
		m-Xylene	<0.5
		p-Xylene	<0.5
		o-Xylene	<0.5
		Styrene	<0.5
		Isopropylbenzene	<0.5
		Bromobenzene	<0.5
		n-Propylbenzene	<0.5
		o-Chlorotoluene	<0.5
		p-Chlorotoluene	<0.5
		1,3,5-Trimethylbenzene	<0.5
		t-Butylbenzene	<0.5
		1,2,4-Trimethylbenzene	<0.5
		1,3-Dichlorobenzene	<0.5
		sec-Butylbenzene	<0.5
		1,4-Dichlorobenzene	<0.5
		p-Isopropyltoluene	<0.5
		1,2-Dichlorobenzene	<0.5
		n-Butylbenzene	<0.5
		1,2,4-Trichlorobenzene	<0.5
		Naphthalene	<0.5
		Hexachlorobutadiene	<0.5
		1,2,3-Trichlorobenzene	<0.5
		*Trichloroethene	<0.5
		*Tetrachloroethene	<0.5

* Trichloroethene and Tetrachloroethene were identified and quantitated using an analytical method that is not approved by the NYSDOH.

APPROVED BY



DATE:

Dec 8, '93
gpb

NYSDOH-ELAP NO. 10819

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ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93
CLIENT: NYSDEC Region 6
PROJECT: Matt's Petroleum
EPA 503.1 Results

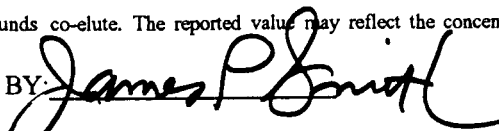
DATE ANALYZED: 11/24/93

ATL Accession Number	Client's ID of Sample	Parameter	Result (ug/L)
93-6129	MW-5	Benzene	18.2
		Toluene	4.4
		Chlorobenzene	<1.0
		Ethylbenzene	4.6
		m-Xylene	7.2 *
		p-Xylene	*
		o-Xylene	4.3
		Styrene	<1.0
		Isopropylbenzene	14.7
		Bromobenzene	<1.0
		n-Propylbenzene	19.0
		o-Chlorotoluene	<1.0
		p-Chlorotoluene	<1.0
		1,3,5-Trimethylbenzene	7.3
		t-Butylbenzene	5.0
		1,2,4-Trimethylbenzene	5.2
		1,3-Dichlorobenzene	<1.0
		sec-Butylbenzene	6.9
		1,4-Dichlorobenzene	<1.0
		p-Isopropyltoluene	<1.0
		1,2-Dichlorobenzene	<1.0
		n-Butylbenzene	<1.0
		1,2,4-Trichlorobenzene	5.3
		Naphthalene	<1.0
		Hexachlorobutadiene	<1.0
		1,2,3-Trichlorobenzene	<1.0
		*Trichloroethene	<1.0
		*Tetrachloroethene	<1.0

* Trichloroethene and Tetrachloroethene were identified and quantitated using an analytical method that is not approved by the NYSDOH.

** These compounds co-elute. The reported value may reflect the concentration of either of the components or a combination of both.

APPROVED BY:



DATE: Dec. 3, '93

NYSDOH-ELAP NO. 10819

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ATL-ENVIRONMENTAL LABORATORIES

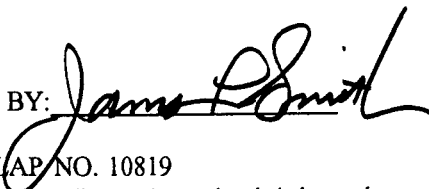
ATL PROJECT NO.: CD1343-11-93
CLIENT: NYSDEC Region 6
PROJECT: Matt's Petroleum
EPA 503.1 Results

DATE ANALYZED: 11/13/93

ATL Accession Number	Client's ID of Sample	Parameter	Result (ug/L)
93-6130	MW-6	Benzene	14.4
		Toluene	<2.5
		Chlorobenzene	<2.5
		Ethylbenzene	<2.5
		m-Xylene	<2.5
		p-Xylene	<2.5
		o-Xylene	23.6
		Styrene	<2.5
		Isopropylbenzene	7.2
		Bromobenzene	<2.5
		n-Propylbenzene	7.4
		o-Chlorotoluene	<2.5
		p-Chlorotoluene	<2.5
		1,3,5-Trimethylbenzene	2.6
		t-Butylbenzene	<2.5
		1,2,4-Trimethylbenzene	9.3
		1,3-Dichlorobenzene	<2.5
		sec-Butylbenzene	<2.5
		1,4-Dichlorobenzene	<2.5
		p-Isopropyltoluene	<2.5
		1,2-Dichlorobenzene	<2.5
		n-Butylbenzene	<2.5
		1,2,4-Trichlorobenzene	<2.5
		Naphthalene	5.5
		Hexachlorobutadiene	<2.5
		1,2,3-Trichlorobenzene	<2.5
		*Trichloroethene	<2.5
		*Tetrachloroethene	<2.5

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APPROVED BY:



DATE: Dec 3, 93

NYSDOH-ELAP NO. 10819

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ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93
CLIENT: NYSDEC Region 6
PROJECT: Matt's Petroleum
EPA 503.1 Results

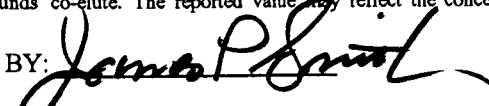
DATE ANALYZED: 11/23/93

ATL Accession Number	Client's ID of Sample	Parameter	Result (ug/L)
93-6131	MW-7	Benzene	674
		Toluene	8.6
		Chlorobenzene	<2.5
		Ethylbenzene	6.2
		m-Xylene	3.8 *
		p-Xylene	*
		o-Xylene	3.6
		Styrene	<2.5
		Isopropylbenzene	8.2
		Bromobenzene	<2.5
		n-Propylbenzene	14.3
		o-Chlorotoluene	<2.5
		p-Chlorotoluene	<2.5
		1,3,5-Trimethylbenzene	<2.5
		t-Butylbenzene	<2.5
		1,2,4-Trimethylbenzene	<2.5
		1,3-Dichlorobenzene	<2.5
		sec-Butylbenzene	<2.5
		1,4-Dichlorobenzene	<2.5
		p-Isopropyltoluene	<2.5
		1,2-Dichlorobenzene	<2.5
		n-Butylbenzene	<2.5
		1,2,4-Trichlorobenzene	<2.5
		Naphthalene	<2.5
		Hexachlorobutadiene	<2.5
		1,2,3-Trichlorobenzene	<2.5
		*Trichloroethene	<2.5
		*Tetrachloroethene	<2.5

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** These compounds co-elute. The reported value may reflect the concentration of either of the components or a combination of both.

APPROVED BY:



DATE: Dec. 3, 93

NYSDOH-ELAP NO. 10819

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ATL PROJECT NO.: CD1343-11-93

CLIENT: NYSDEC Region 6

PROJECT: Matt's Petroleum

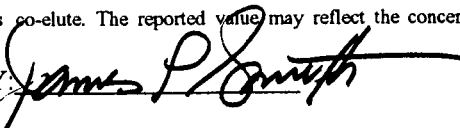
EPA 503.1 Results

DATE ANALYZED: 11/23/93

ATL Accession Number	Client's ID of Sample	Parameter	Result (ug/L)
93-6132	MW-8	Benzene	4.7
		Toluene	<0.5
		Chlorobenzene	<0.5
		Ethylbenzene	1.0
		m-Xylene	1.3 *
		p-Xylene	*
		o-Xylene	2.8
		Styrene	<0.5
		Isopropylbenzene	<0.5
		Bromobenzene	<0.5
		n-Propylbenzene	<0.5
		o-Chlorotoluene	<0.5
		p-Chlorotoluene	<0.5
		1,3,5-Trimethylbenzene	1.1
		t-Butylbenzene	<0.5
		1,2,4-Trimethylbenzene	0.8
		1,3-Dichlorobenzene	<0.5
		sec-Butylbenzene	<0.5
		1,4-Dichlorobenzene	<0.5
		p-Isopropyltoluene	<0.5
		1,2-Dichlorobenzene	<0.5
		n-Butylbenzene	<0.5
		1,2,4-Trichlorobenzene	<0.5
		Naphthalene	4.4
		Hexachlorobutadiene	<0.5
		1,2,3-Trichlorobenzene	<0.5
		*Trichloroethene	<0.5
		*Tetrachloroethene	<0.5

* Trichloroethene and Tetrachloroethene were identified and quantitated using an analytical method that is not approved by the NYSDOH.

** These compounds co-elute. The reported value may reflect the concentration of either of the components or a combination of both.

APPROVED BY: 

DATE: Dec. 3, '93

NYSDOH-ELAP NO. 10819

DISCLAIMER: All sampling services and analytical procedures are performed in accordance with recognized analytical methodologies. The full extent of any and all liability for actual and consequential damages for the services performed shall be limited to reperformance or cost of said work. ATL is not liable for data interpretation by others.

ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93
CLIENT: NYSDEC Region 6
PROJECT: Matt's Petroleum
EPA 503.1 Results

DATE ANALYZED: 11/23/93

ATL Accession Number	Client's ID of Sample	Parameter	Result (ug/L)
93-6133	MW-9	Benzene	19.6
		Toluene	3.6
		Chlorobenzene	<0.5
		Ethylbenzene	<0.5
		m-Xylene	<0.5
		p-Xylene	<0.5
		o-Xylene	<0.5
		Styrene	<0.5
		Isopropylbenzene	1.0
		Bromobenzene	<0.5
		n-Propylbenzene	1.2
		o-Chlorotoluene	<0.5
		p-Chlorotoluene	<0.5
		1,3,5-Trimethylbenzene	0.5
		t-Butylbenzene	<0.5
		1,2,4-Trimethylbenzene	1.1
		1,3-Dichlorobenzene	<0.5
		sec-Butylbenzene	<0.5
		1,4-Dichlorobenzene	<0.5
		p-Isopropyltoluene	<0.5
		1,2-Dichlorobenzene	<0.5
		n-Butylbenzene	<0.5
		1,2,4-Trichlorobenzene	<0.5
		Naphthalene	<0.5
		Hexachlorobutadiene	<0.5
		1,2,3-Trichlorobenzene	<0.5
		*Trichloroethene	<0.5
		*Tetrachloroethene	<0.5

* Trichloroethene and Tetrachloroethene were identified and quantitated using an analytical method that is not approved by the NYSDOH.

APPROVED BY:



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ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93

CLIENT: NYSDEC Region 6

PROJECT: Matt's Petroleum

EPA 503.1 Results

DATE ANALYZED: 11/23/93

ATL Accession Number	Client's ID of Sample	Parameter	Result (ug/L)
93-6134	MW-10	Benzene	0.6
		Toluene	<0.5
		Chlorobenzene	<0.5
		Ethylbenzene	<0.5
		m-Xylene	<0.5
		p-Xylene	<0.5
		o-Xylene	<0.5
		Styrene	<0.5
		Isopropylbenzene	<0.5
		Bromobenzene	<0.5
		n-Propylbenzene	<0.5
		o-Chlorotoluene	<0.5
		p-Chlorotoluene	<0.5
		1,3,5-Trimethylbenzene	<0.5
		t-Butylbenzene	<0.5
		1,2,4-Trimethylbenzene	<0.5
		1,3-Dichlorobenzene	<0.5
		sec-Butylbenzene	<0.5
		1,4-Dichlorobenzene	<0.5
		p-Isopropyltoluene	<0.5
		1,2-Dichlorobenzene	<0.5
		n-Butylbenzene	<0.5
		1,2,4-Trichlorobenzene	<0.5
		Naphthalene	<0.5
		Hexachlorobutadiene	<0.5
		1,2,3-Trichlorobenzene	<0.5
		*Trichloroethene	<0.5
		*Tetrachloroethene	<0.5

* Trichloroethene and Tetrachloroethene were identified and quantitated using an analytical method that is not approved by the NYSDOH.

APPROVED BY: 

DATE: Dec. 3, '93

NYSDOH-ELAP NO. 10819

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ATL-ENVIRONMENTAL LABORATORIES

ATL PROJECT NO.: CD1343-11-93

CLIENT: NYSDEC Region 6

PROJECT: Matt's Petroleum

EPA 503.1 Results

DATE ANALYZED: 11/23/93

ATL Accession Number	Client's ID of Sample	Parameter	Result (ug/L)
93-6135	Trip Blank	Benzene	<0.5
		Toluene	<0.5
		Chlorobenzene	<0.5
		Ethylbenzene	<0.5
		m-Xylene	<0.5
		p-Xylene	<0.5
		o-Xylene	<0.5
		Styrene	<0.5
		Isopropylbenzene	<0.5
		Bromobenzene	<0.5
		n-Propylbenzene	<0.5
		o-Chlorotoluene	<0.5
		p-Chlorotoluene	<0.5
		1,3,5-Trimethylbenzene	<0.5
		t-Butylbenzene	<0.5
		1,2,4-Trimethylbenzene	<0.5
		1,3-Dichlorobenzene	<0.5
		sec-Butylbenzene	<0.5
		1,4-Dichlorobenzene	<0.5
		p-Isopropyltoluene	<0.5
		1,2-Dichlorobenzene	<0.5
		n-Butylbenzene	<0.5
		1,2,4-Trichlorobenzene	<0.5
		Naphthalene	<0.5
		Hexachlorobutadiene	<0.5
		1,2,3-Trichlorobenzene	<0.5
		*Trichloroethene	<0.5
		*Tetrachloroethene	<0.5

* Trichloroethene and Tetrachloroethene were identified and quantitated using an analytical method that is not approved by the NYSDOH.

APPROVED BY:



DATE: Dec. 3, '93

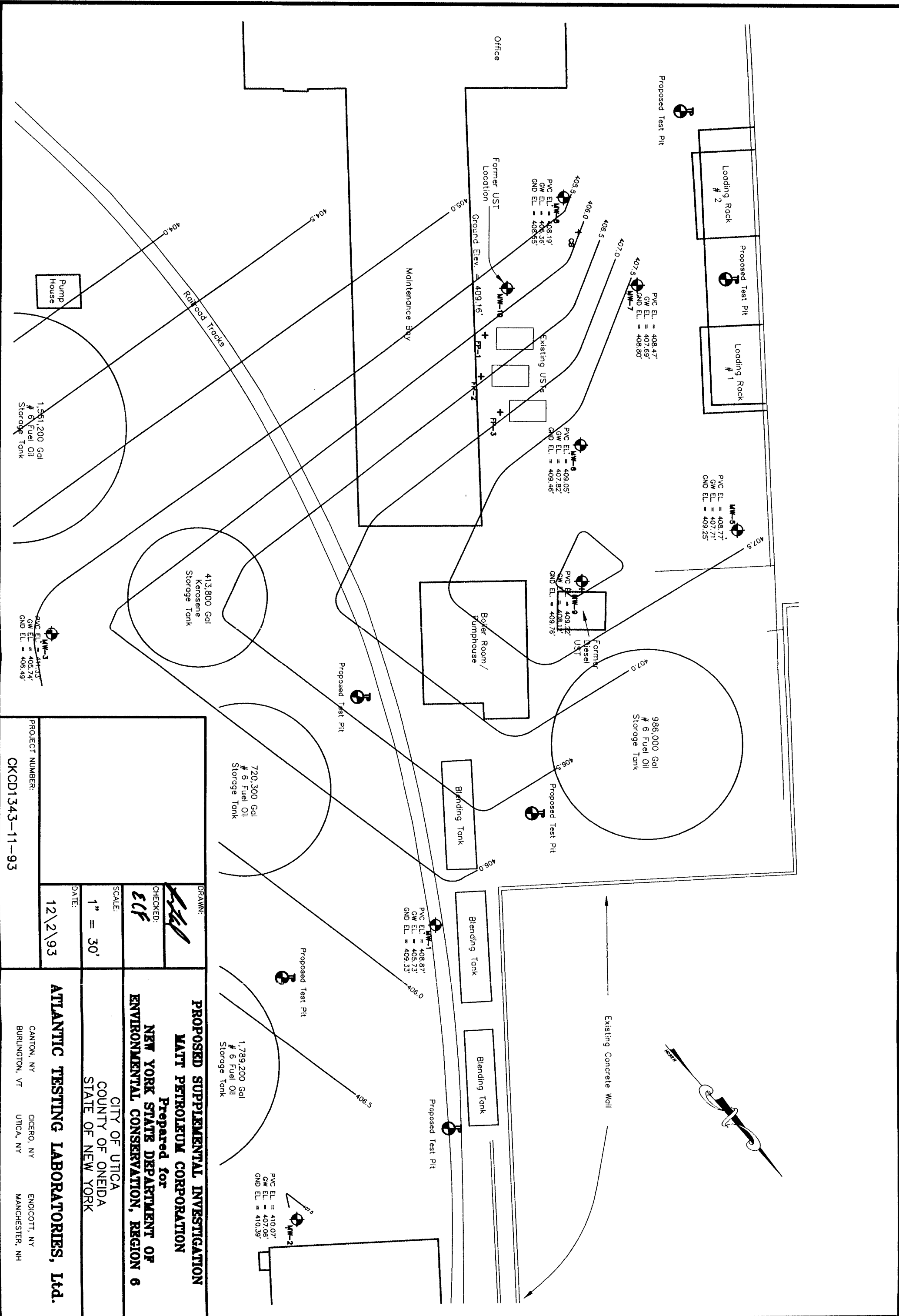
NYSDOH-ELAP NO. 10819

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ENVIRONMENTAL LABORATORY
48 LAGRASSE STREET
WADDINGTON, NEW YORK 13694
315-388-4452, FAX 315-388-5510

THINK QUALITY

APPENDIX VI
PROPOSED MONITOR WELL
LOCATION PLAN



DRAWN: <i>[Signature]</i>		PROPOSED SUPPLEMENTAL INVESTIGATION MATT PETROLEUM CORPORATION Prepared for NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, REGION 6 CITY OF UTICA COUNTY OF ONEIDA STATE OF NEW YORK
CHECKED: <i>ELF</i>	SCALE: 1" = 30'	
DATE: 12/2/93		
PROJECT NUMBER: CKCD1343-11-93		ATLANTIC TESTING LABORATORIES, Ltd. CANTON, NY CICERO, NY ENDCOTT, NY BURLINGTON, VT UTICA, NY MANCHESTER, NH