

Ultramar

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January 27, 1993

Ms. Eva Chu
Department of Environmental Health
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94612

**SUBJECT: BEACON STATION NO. 604, 1619 FIRST STREET, LIVERMORE,
CALIFORNIA**

Dear Ms. Chu:

Enclosed is a copy of the Tank Removal Report for the above-referenced Ultramar facility. Ultramar's consultant will develop a workplan for additional assessment at the site. It is anticipated that the workplan will be transmitted to you by the third week in February 1993.

Please call if you have any questions regarding this site.

Sincerely,

ULTRAMAR INC.



Terrence A. Fox
Senior Project Manager
Marketing Environmental Department



A Member of the Ultramar Group of Companies

BEACON
#1 Quality and Service

TANK REMOVAL REPORT

**BEACON SERVICE STATION NO. 604
1619 WEST FIRST STREET
LIVERMORE, CALIFORNIA
DELTA PROJECT NO. 40-89-095**

January 28, 1993

Prepared By

**DELTA ENVIRONMENTAL CONSULTANTS, INC.
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Rancho Cordova, California 95670
(916) 638-2085**

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TANK REMOVAL REPORT
BEACON SERVICE STATION NO. 604
1619 WEST FIRST STREET
LIVERMORE, CALIFORNIA
DELTA PROJECT NO. 40-89-095

EXECUTIVE SUMMARY

Delta Environmental Consultants, Inc. (Delta), has been authorized by Ultramar Inc. (Ultramar) to perform soil investigative activities at the Beacon service station located at 1619 West First Street, Livermore, California. The location of the site is shown in Figure 1, and a site map in Figure 2. This report presents Delta's observations during the removal of the underground storage tanks at the site, a description of soil sampling activities at the site, and the results of laboratory analyses of the soil samples.

During the week of November 9, 1992, a 10,000 gallon regular unleaded gasoline tank, an 8,000 gallon unleaded plus gasoline tank, and a 8,000 gallon premium unleaded gasoline tank were excavated and transported from the site. All product piping associated with these tanks were also excavated and removed. The three gasoline storage tanks were intact and had no visible holes when removed. After removal of the tanks and the product piping system, a Delta technician collected soil samples from the excavations, trenches, and soil stockpiles. The locations of the tanks prior to removal, and the tank and product line soil sampling locations, are shown in Figure 3.

A total of 9 soil samples from the tank excavation, collected from various depths, were submitted for laboratory analyses of benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons as gasoline (TPHg). Also, two of these soil samples were submitted for analysis of total lead and one sample, at the request of a representative of Alameda County Environmental Health, was submitted for analysis of semi-volatile organic priority pollutants (EPA method 8270), halogenated volatile organics (EPA method 8010), and for the measurement of pH. A total of 5 soil samples from the product line excavations were submitted for laboratory analyses of BTEX and TPHg. A total of 16 soil stockpile samples were submitted for laboratory analyses of BTEX, TPHg. Twelve of these samples were submitted for the analysis of total lead, and of these twelve samples, three samples were analyzed for the presence of organic lead, and Toxicity Characteristic Leaching Potential (TCLP) extracts were analyzed for TPHg and BTEX.

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Laboratory chemical analyses results indicated that petroleum hydrocarbons were present in soil beneath the west end of the regular unleaded gasoline tank and the west end of the unleaded plus gasoline tank. Petroleum hydrocarbons were either not present at detectable levels, or were present at relatively low concentrations in soil samples collected from product line trenches. Semi-volatile organic priority pollutants and halogenated volatile organic compounds were not detected in a sample collected from the tank excavation, with the exception of naphthalene (a component of gasoline) at a concentration of 13 parts per million (ppm). Concentrations of total lead were either not present above the laboratory method detection limit or were present in concentrations typical of native soil.

During the tank removal and replacement activities at the site, approximately 996 cubic yards of soil were transported to the Ultramar facility, in Hanford, California, for aeration. Approximately 90 cubic yards were transported to the Sacramento County Landfill in Sacramento, California, and 125 cubic yards were transported to the Redwood Landfill in Novato, California. The three former underground storage tanks at the site were replaced by two new underground storage tanks. The three former tanks were transported to Erickson's, Inc., in Stockton, California, for recycling.

1.0 INTRODUCTION

Delta is pleased to submit this Tank Removal Report for Beacon Service Station No. 604, located at 1619 West First Street, Livermore, California. This investigation was intended to evaluate the presence or absence of petroleum hydrocarbon constituents in the soil beneath the underground storage tanks and the product distribution piping system.

During the week of November 9, 1992, three underground gasoline storage tanks, and the product distribution piping system, were excavated and removed from the site. Soil samples collected by a Delta technician from the tank excavations, the product piping trenches, and the stockpiles of excavated soil, were submitted to a California Certified Analytical Laboratory for analysis of petroleum hydrocarbon concentrations.

The purpose of this report is to:

- ▲ Present observations made during the tank removal.
- ▲ Document the disposal of the tanks.
- ▲ Document the presence or absence of petroleum constituents in the soils underlying the former storage tanks and product distribution pipes.
- ▲ Document the disposal of excavated soils. *not included in this file*

2.0 SITE BACKGROUND INFORMATION

2.1 Site Description

The site is located at 1619 West First Street, Livermore, California, and is currently operated as a retail Beacon gasoline station (Figure 1). In the area surrounding the site are retail businesses, and residential buildings. The elevation of the site is approximately 480 feet above mean sea level. The site is located in an area of relatively flat topography.

Prior to the tank replacement activities, during the week of November 9, 1992, there were three underground storage tanks at the site: a 10,000 gallon regular unleaded gasoline tank, an 8,000 gallon unleaded plus gasoline tank, and an 8,000 gallon premium unleaded gasoline tank (Figure 2).

2.2 Summary of Previous Work

On March 12, 1990, a 550 gallon waste oil tank was removed from the site. Delta submitted a report entitled *Removal of Waste Oil Tank and Adjacent Soils* on July 2, 1990.

3.0 SITE OBSERVATIONS AND SOIL SAMPLING

3.1 Tank Conditions, Removal, Disposal, and Sampling

During the week of November 9, 1992, the three underground gasoline storage tanks were triple rinsed, purged with dry ice, and removed from the excavations by Walton Engineering. The product distribution piping system was also removed. The underground storage tanks were visually inspected as they were removed from the site. The three gasoline storage tanks were intact with no visible holes when removed. The tanks were transported by Erickson's, Inc., to their facility in Stockton, California, for recycling.

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Samples were collected from each end of each tank at a depth of approximately 14 feet. Laboratory results are included as Table 1.

3.2 Overexcavation

After the removal of the underground storage tanks at the site, the entire tank pit was excavated to a depth of 19 feet, in order to accommodate the new tanks. Additional samples were collected during overexcavation. Based upon field observations and laboratory results, the southwest corner of the pit was overexcavated to a depth of 27 feet, the practical limit of excavation.

3.3 Soil Sampling

3.3.1 Sampling Methods

Soil samples were collected by a Delta technician. All soil samples were collected in brass tubes which were then sealed with teflon tape and plastic caps. The soil samples were stored in an ice chest cooled to approximately 4° Celsius with ice until delivery to the analytical laboratory.

3.3.2 Sampling Locations

Nine soil samples were collected from the gasoline storage tank excavation at depths ranging from approximately 14 feet to 27 feet below grade (approximately 13 feet below the tank bottoms). Five soil samples were collected from the product piping system trenches at a depth of approximately 2.5 feet below grade (approximately 1 foot below the product distribution pipes). A total of sixty-four soil samples were collected from the stockpiles of excavated soil and composited by the laboratory into 16 samples prior to laboratory analysis. Tank excavation and product piping soil sampling locations are shown in Figure 3.

3.4 Stockpiled Soil Disposal

Approximately 1,211 cubic yards of soil were excavated and stockpiled on site during the tank removal activities. Approximately 996 cubic yards of this excavated soil were later transported to the Ultramar facility in Hanford, California, for aeration. Approximately 90 cubic yards were transported to the Sacramento County Landfill in Sacramento, California, and 125 cubic yards were transported to the Redwood Landfill in Novato, California, for disposal.

4.0 RESULTS OF LABORATORY ANALYSES

4.1 Analytical Methods

The soil samples were analyzed by a California-certified laboratory. All soil samples were analyzed for BTEX and TPHg using U.S. Environmental Protection Agency (EPA) Methods 8020 and 8015, respectively. Two of the soil samples from the tank excavation were also analyzed for the presence of total lead, and one sample, collected from a depth of 27 feet below grade at the southwest corner of the regular unleaded gasoline tank, was analyzed for the presence of semi-volatile organic priority pollutants (EPA method 8270), and halogenated volatile organic compounds (EPA method 8010); and the sample was also measured for pH. Twelve of the 16 composited soil stockpile samples were analyzed for the presence of total lead. Three of those twelve composited samples were analyzed for the presence of organic lead, and TCLP extracts were analyzed for TPHg and BTEX (EPA method 8015 Mod/8020 on TCLP extract).

4.2 Analytical Results

Results of the laboratory analyses for petroleum hydrocarbon constituents and total lead on the tank excavation and product line trench soil samples are summarized in Tables 1 and 2, respectively. Results of the laboratory analyses for semi-volatile organic priority pollutants and halogenated volatile organic compounds on the soil sample collected from the southwest corner of the regular unleaded tank at a depth of 27 feet, are summarized in Tables 3 and 4, respectively. Results of laboratory analyses for petroleum hydrocarbon constituents, total lead, organic lead, and TCLP extracts for TPHg and BTEX, are summarized in Tables 5 and 6.

The analytical test results indicate that petroleum hydrocarbons were present in detectable concentrations in the soil samples collected from the gasoline storage tank excavation, the product line trenches, and the soil stockpiles. The analytical test results on the soil sample collected at 27 feet from the tank excavation also indicate that halogenated volatile organic compounds were not present above laboratory detection limits and that semi-volatile organic priority pollutants were not present above the laboratory detection limits, except for the presence of 13 ppm of Naphthalene, a component of gasoline. The soil samples collected from between approximately two and five feet below the bottom of the tanks in the tank

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excavation indicated that concentrations of petroleum hydrocarbons ranged from below laboratory detection limits to 4,700 ppm as TPHg. Detectable concentrations of TPHg were present in product line soil samples Product Line #4 and Product Line #5 at 4.4 ppm and 2.7 ppm, respectively. Benzene was not present at detectable concentrations in any of the product line or tank excavation soil samples, except at a depth of 27 feet at the southwest corner of the regular unleaded gasoline tank, at a concentration of 1.4 ppm.

The soil sample collected from a depth of 14 feet below grade beneath the west end of the regular leaded gasoline tank contained total lead at a concentration of 6.5 ppm, and the soil sample collected from a depth of 14 feet below grade beneath the west end of the unleaded tank contained total lead at a concentration of 5.6 ppm.

Laboratory analyses of the soil stockpile samples indicated the presence of TPHg in concentrations ranging from below detection limits to 800 ppm and the presence of total lead in concentrations ranging from 8.1 ppm to 12 ppm. Organic lead was not found above laboratory detection limits. The TPHg and BTEX analyses of the TCLP extracts from three soil samples indicated only the presence of xylenes in one sample at a concentration of 0.013 ppm.

Certified laboratory analytical reports are presented in Appendix A.

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TABLE 1

TANK EXCAVATION
Soil Sample Analytical Results
Concentrations in parts per million

<u>Sample</u>	<u>Depth of Sample (ft)</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>	<u>TPH (gasoline)</u>	<u>Total Lead</u>	<u>pH</u>
Unleaded plus-East	14	<0.005	<0.005	<0.005	<0.005	<0.050	NA	NA
Unleaded plus-West	16	<0.50 <0.005	<0.50 <0.005	0.58 <0.005	17 0.0066	6.0 <0.50	6.5 NA	NA NA
Unleaded-East	14	<0.005	<0.005	<0.005	<0.005	<0.50	NA	NA
Unleaded-West		<0.50 <5.0	0.91 160	18 110	170 700		5.6 NA	NA NA
Unleaded-SW			22	9.3	70		NA	7.1
Premium Unleaded-East	14	<0.005	<0.005	<0.005	<0.005	<0.50	NA	NA
Premium Unleaded-West	14	<0.005	<0.005	<0.005	<0.005	<0.50	NA	NA

NA = Not analyzed.

TABLE 2
PRODUCT LINE
Soil Sample Analytical Results
Concentrations in parts per million

<u>Sample</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl- benzene</u>	<u>Xylenes</u>	<u>TPH(g)</u>
Product Line #1	<0.005	<0.005	<0.005	<0.005	<0.50
Product Line #2	<0.005	<0.005	<0.005	<0.005	<0.50
Product Line #3	<0.005	<0.005	<0.005	0.008	<0.50
Product Line #4	<0.005	0.029	0.041	1.2	4.4
Product Line #5	<0.005	<0.005	<0.005	0.10	2.7

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TABLE 3
SEMI-VOLATILE ORGANIC PRIORITY POLLUTANTS
EPA Method 8270
Soil Sample Analytical Results
Concentrations in parts per million (ppm)

Sample Location: Unleaded Tank SW
Depth of Sample: 27 Feet

<u>Parameter</u>	<u>Measured Value</u>
Acenaphthene	<0.10
Acenaphthylene	<0.10
Anthracene	<0.10
Benzo (a) anthracene	<0.10
Benzo (b) fluoranthene	<0.10
Benzo (k) fluoranthene	<0.10
Benzo (a) pyrene	<0.10
Benzo (ghi) perylene	<0.10
Benzyl butyl phthalate	<0.10
bis (2-chloroethyl) ether	<0.10
bis (2-chloroethoxy) methane	<0.10
bis (2-ethylhexyl) phthalate	<0.20
bis (2-chloroisopropyl) ether	<0.10
4-Bromophenyl phenyl ether	<0.10
2-Chloronaphthalene	<0.10
4-Chlorophenyl phenyl ether	<0.10
Chrysene	<0.10
Dibenzo (ah) anthracene	<0.10
Di-n-butyl phthalate	<0.10
Di-n-octyl phthalate	<0.10
1,3-Dichlorobenzene	<0.10
1,2-Dichlorobenzene	<0.10
1,4-Dichlorobenzene	<0.10
3,3-Dichlorobenzidine	<0.10
Diethyl phthalate	<0.10
Dimethyl phthalate	<0.10
2,4-Dinitrotoluene	<0.10
2,6-Dinitrotoluene	<0.10
Fluoranthene	<0.10
Fluorene	<0.10
Hexachlorobenzene	<0.10
Hexachlorobutadiene	<0.10
Hexachloroethane	<0.10
Indeno (123-cd) pyrene	<0.10
Isophorone	<0.10

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TABLE 3-Continued

SEMI-VOLATILE ORGANIC PRIORITY POLLUTANTS

EPA Method 8270

Soil Sample Analytical Results

Concentrations in parts per million (ppm)

Sample Location: Unleaded Tank SW

Depth of Sample: 27 Feet

<u>Parameter</u>	<u>Measured Value</u>
Naphthalene	13
Nitrobenzene	<0.10
n-Nitrosodi-n-propylamine	<0.10
Phenanthrene	<0.10
Pyrene	<0.10
1,2,4-Trichlorobenzene	<0.10
Benzidine	<0.10
Hexachlorocyclopentadiene	<0.10
n-Nitrosodimethylamine	<0.10
n-Nitrosodiphenylamine	<0.10
4-Chloro-3-methylphenol	<0.10
2-Chlorophenol	<0.10
2,4-Dichlorophenol	<0.10
2,4-Dimethylphenol	<0.10
2,4-Dinitrophenol	<0.10
2-Methyl-4,6-dinitrophenol	<0.10
2-Nitrophenol	<0.10
4-Nitrophenol	<0.10
Pentachlorophenol	<0.10
Phenol	<0.10
2,4,6-Trichlorophenol	<0.10

TABLE 4
HALOGENATED VOLATILE ORGANICS
EPA Method 8010
Soil Sample Analytical Results
Concentrations in parts per million (ppm)

Sample Location: Unleaded Tank SW
Depth of Sample: 27 Feet

<u>Parameter</u>	<u>Measured Value</u>
Chloromethane	<0.005
Chloroethane	<0.005
Vinyl Chloride	<0.005
Bromomethane	<0.005
Trichlorofluoromethane	<0.005
1,1-Dichloroethene	<0.001
Dichloromethane	<0.005
t-1,2-Dichloroethene	<0.001
1,1-Dichloroethane	<0.001
Chloroform	<0.001
1,1,1-Trichloroethane	<0.001
1,2-Dichloroethane	<0.001
Carbon Tetrachloride	<0.001
1,2-Dichloropropane	<0.001
Trichloroethene	<0.001
Bromodichloromethane	<0.001
c-1,2-Dichloroethene	<0.001
c-1,3-Dichloropropene	<0.001
t-1,3-Dichloropropene	<0.001
1,1,2-Trichloroethane	<0.001
Tetrachloroethene	<0.001
Dibromochloromethane	<0.001
Chlorobenzene	<0.001
Bromoform	<0.001
1,1,2,2-Tetrachloroethane	<0.001
1,4-Dichlorobenzene	<0.001
1,3-Dichlorobenzene	<0.001
1,2-Dichlorobenzene	<0.001

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TABLE 5
SOIL STOCKPILE
Analytical Results
Concentrations in parts per million (ppm)

<u>Sample</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl- benzene</u>	<u>Xylenes</u>	<u>TPH (gasoline)</u>	<u>Total Lead</u>
SS 1 (A-D)	<0.005	<0.005	<0.005	0.015	<0.50	NA
SS 2 (A-D)	<0.005	<0.005	<0.005	0.026	0.95	NA
SS 3 (A-D)	<0.005	<0.005	<0.005	0.13	2.1	NA
SS 4 (A-D)	<0.005	<0.005	<0.005	<0.005	<0.50	NA
SS 5 (A-D)	<0.50	10	12	94	[REDACTED]	8.1
SS 6 (A-D)	<0.50	<0.50	<0.50	4.2	[REDACTED]	9.1
SS 7 (A-D)	<0.50	<0.50	<0.50	4.7	[REDACTED]	9.5
SS 8 (A-D)	<0.50	<0.50	0.67	9.4	[REDACTED]	8.2
SS 9 (A-D)	<0.50	1.4	1.9	13	[REDACTED]	11.0
SS 10 (A-D)	<0.50	<0.50	<0.50	3.1	72	16.0
SS 11 (A-D)	<0.50	<0.50	0.59	5.1	79	8.4
SS 12 (A-D)	<0.005	0.0084	0.013	0.18	5.0	8.6
SS 13 (A-D)	<0.50	0.75	1.3	10	[REDACTED]	9.0

NA = Not analyzed.

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TABLE 6

SOIL STOCKPILE ANALYTICAL RESULTS

Concentrations in parts per million (ppm)

<u>Sample</u>	<u>Purgeable Hydrocarbons</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl- benzene</u>	<u>Xylenes</u>	<u>Total Lead</u>	<u>Organic Lead</u>
SS 14 (A-D)	1.4	<0.005	<0.005	<0.005	<0.005	9.8	<0.10
SS 15 (A-D)	2.1	<0.005	<0.005	<0.005	0.014	12	<0.10
SS 16 (A-D)	17	0.005	0.025	0.028	0.23	9.6	<0.10

TCLP Extract of Soil

<u>Sample</u>	<u>Purgeable Hydrocarbons</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl- benzene</u>	<u>Xylenes</u>
SS 14 (A-D)	<1.0	<0.010	<0.010	<0.010	<0.010
SS 15 (A-D)	<1.0	<0.010	<0.010	<0.010	<0.010
SS 16 (A-D)	<1.0	<0.010	<0.010	<0.010	0.013

5.0 CONCLUSIONS

Analytical results indicate that concentrations of petroleum hydrocarbons are present in the soils underlying the site in the vicinity of the southwest corner of tank excavation. Laboratory results also indicate the presence of petroleum hydrocarbons in very low concentrations in the product piping trenches. Due to the presence of petroleum hydrocarbons remaining in the soil after the completion of the overexcavation activities at the site, Delta recommends that further on-site investigation be conducted to determine the extent of petroleum hydrocarbons underlying the site.

6.0 REMARKS/SIGNATURES

The recommendations contained in this report represent our professional opinions, and are based in part on information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

DELTA ENVIRONMENTAL CONSULTANTS, INC.

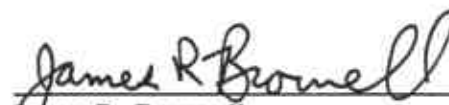
PREPARED BY:



Steven W. Gable
Project Manager

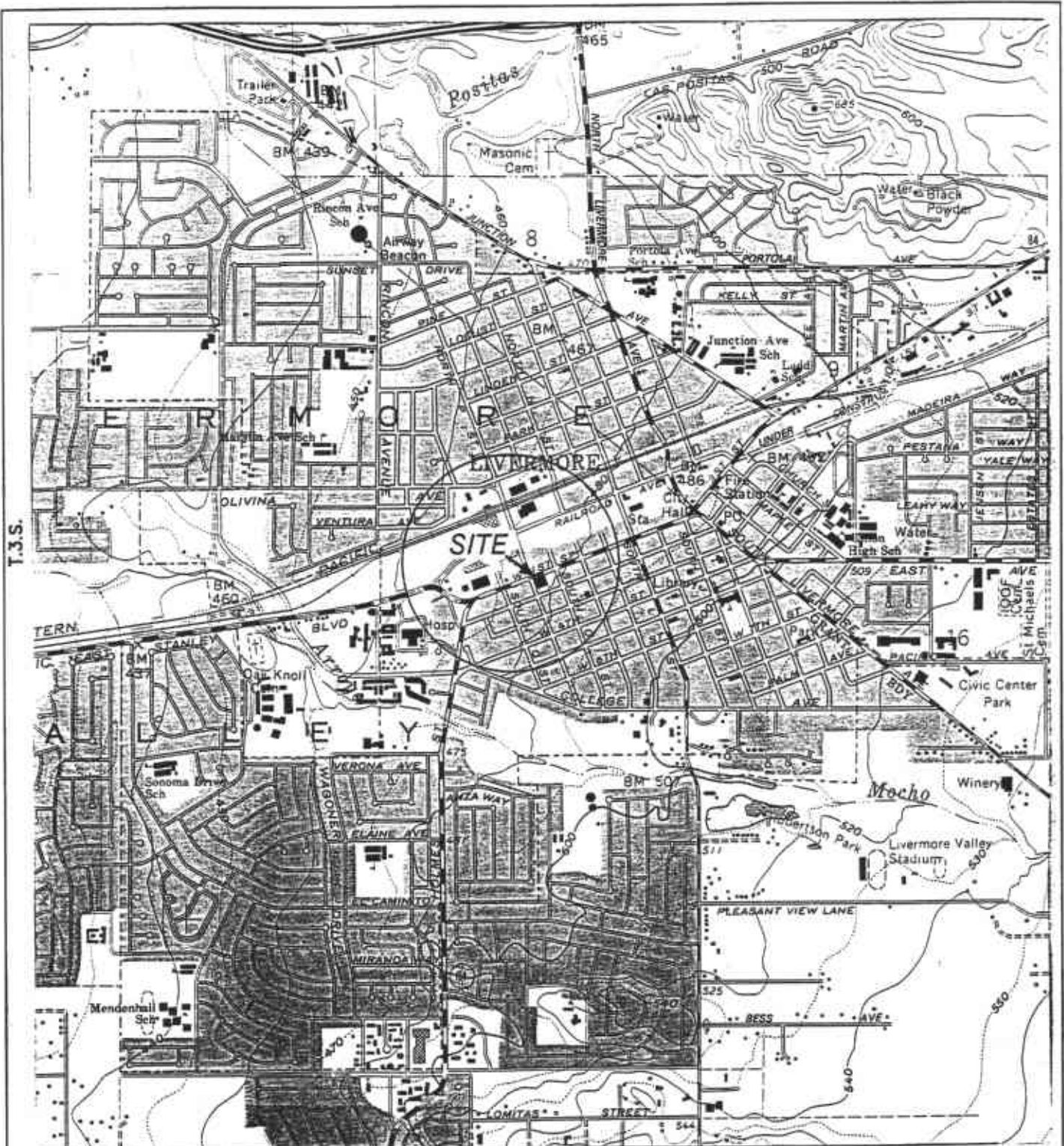
Date 20 Jun 93

The work performed in this report was done under the supervision of a California Registered Geologist:


James R. Brownell
California Registered Geologist No. 5078



1/28/93



GENERAL NOTES:
 BASE MAP FROM U.S.G.S.
 LIVERMORE, CA.
 7.5 MINUTE TOPOGRAPHIC
 PHOTOREVISED 1980
 CONTOUR INTERVAL = 20 FEET



R.2.E.

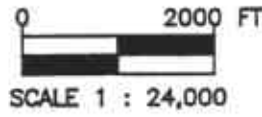


FIGURE 1
 SITE LOCATION MAP
 BEACON STATION NO. 604
 1619 WEST FIRST AVENUE
 LIVERMORE, CA.

PROJECT NO. 40-89-095	DRAWN BY SSG 4/27/90
FILE NO.	PREPARED BY MSB 4/27/90
REVISION NO. 1	REVIEWED BY



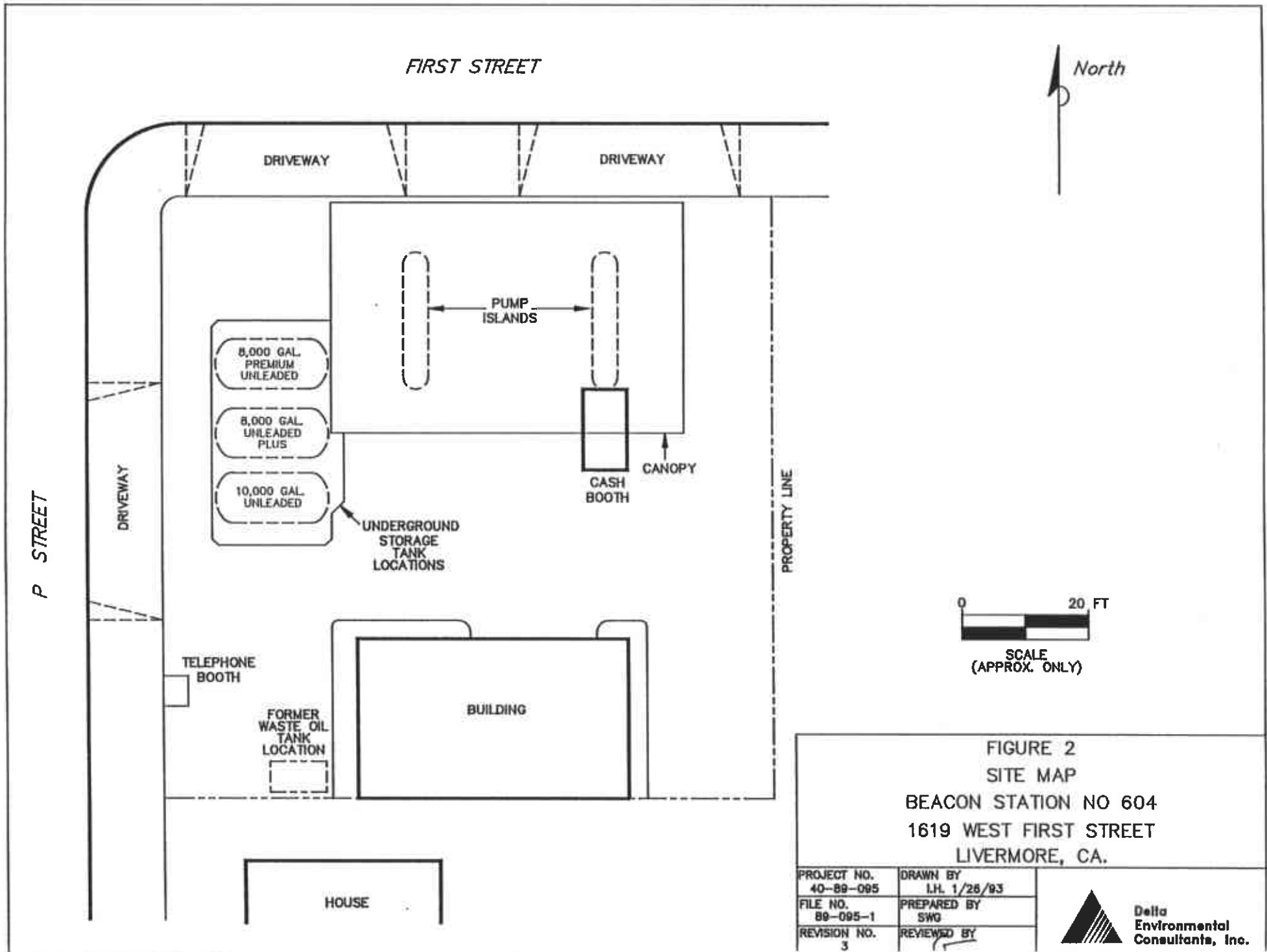
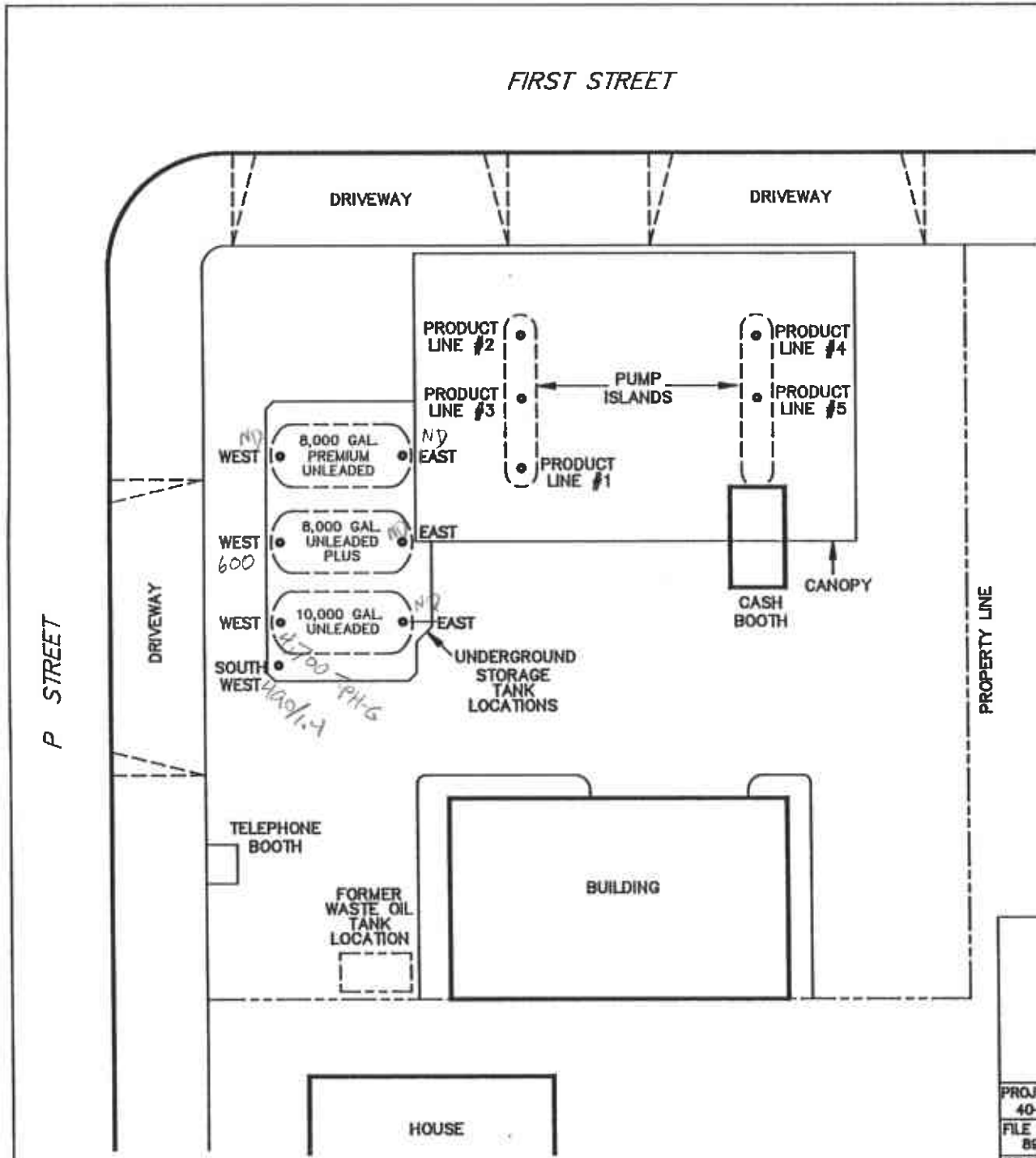


FIGURE 2
 SITE MAP
 BEACON STATION NO 604
 1619 WEST FIRST STREET
 LIVERMORE, CA.

PROJECT NO. 40-89-095	DRAWN BY L.H. 1/26/93
FILE NO. 89-095-1	PREPARED BY SWG
REVISION NO. 3	REVIEWED BY <i>[Signature]</i>





LEGEND:
 ● SOIL SAMPLE LOCATION

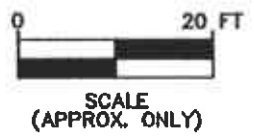


FIGURE 3
 SOIL SAMPLE LOCATION MAP
 BEACON STATION NO 604
 1619 WEST FIRST STREET
 LIVERMORE, CA.

PROJECT NO. 40-88-095	DRAWN BY L.H. 1/28/93
FILE NO. 89-095-1	PREPARED BY SWG
REVISION NO. 2	REVIEWED BY



APPENDIX A

Soil Sample Analytical Reports



Sample Log 5358
5358-1

Sample: Regular, E, 14'

From : Beacon 604 (Project # 40.89.095)

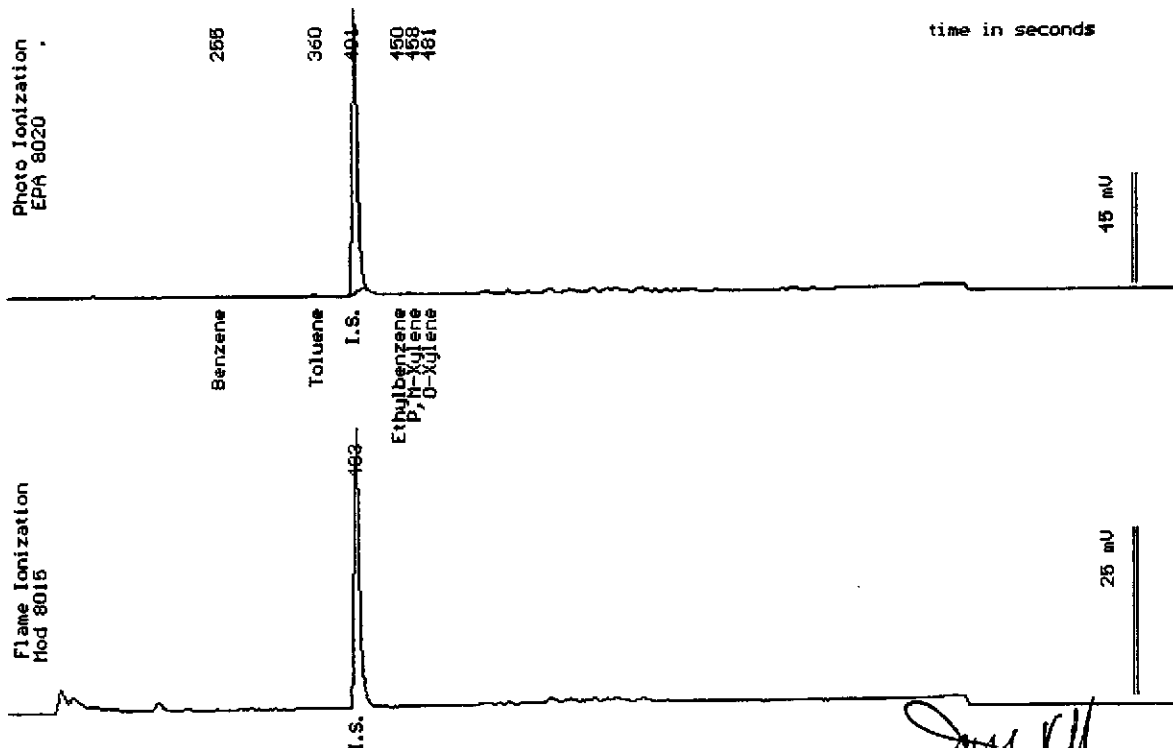
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 6076c

Matrix : Soil

Parameter	(MDL) <small>ng/kg</small>	Measured Value <small>ng/kg</small>
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(.50)	<.50



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&M Scientific)

Joel Kiff
Senior Chemist



Sample Log 5358

5358-2

Sample: Regular, W, 14'

From : Beacon 604 (Project # 40.89.095)

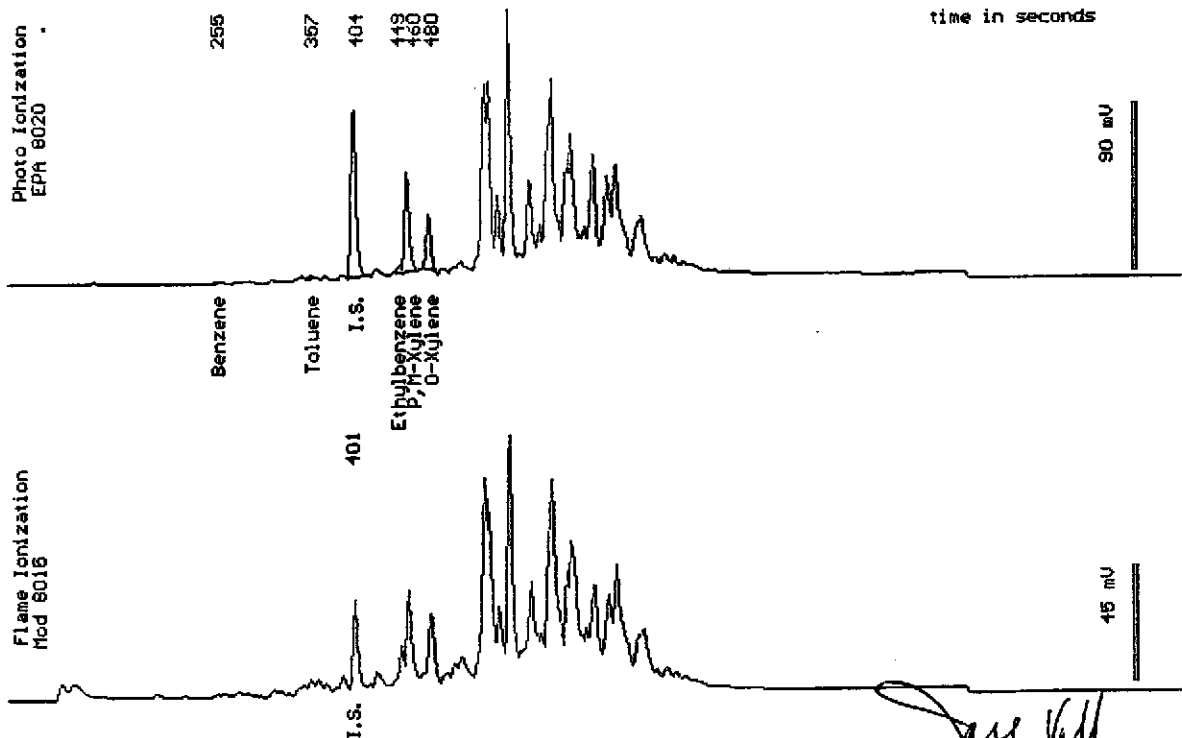
Sampled : 11/10/92

Dilution : 1:100

QC Batch : 6076c

Matrix : Soil

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	.58
Total Xylenes	(.50)	17
TPH as Gasoline	(50)	600



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist




November 13, 1992
Sample Log 5358

Sample: Regular, W, 14'

From : Beacon 604 (Project # 40.89.095)
Sampled : 11/10/92
Received : 11/10/92
Matrix : Soil

Parameter	(MDL) <small>ug/kg</small>	Measured Value <small>ug/kg</small>
Total Lead	(1.0)	6.5


Joe Kiff
Senior Chemist



Sample Log 5360

5360-2

Sample: Regular, W, 16'

From : Beacon 604 (Project # 40.89.095)

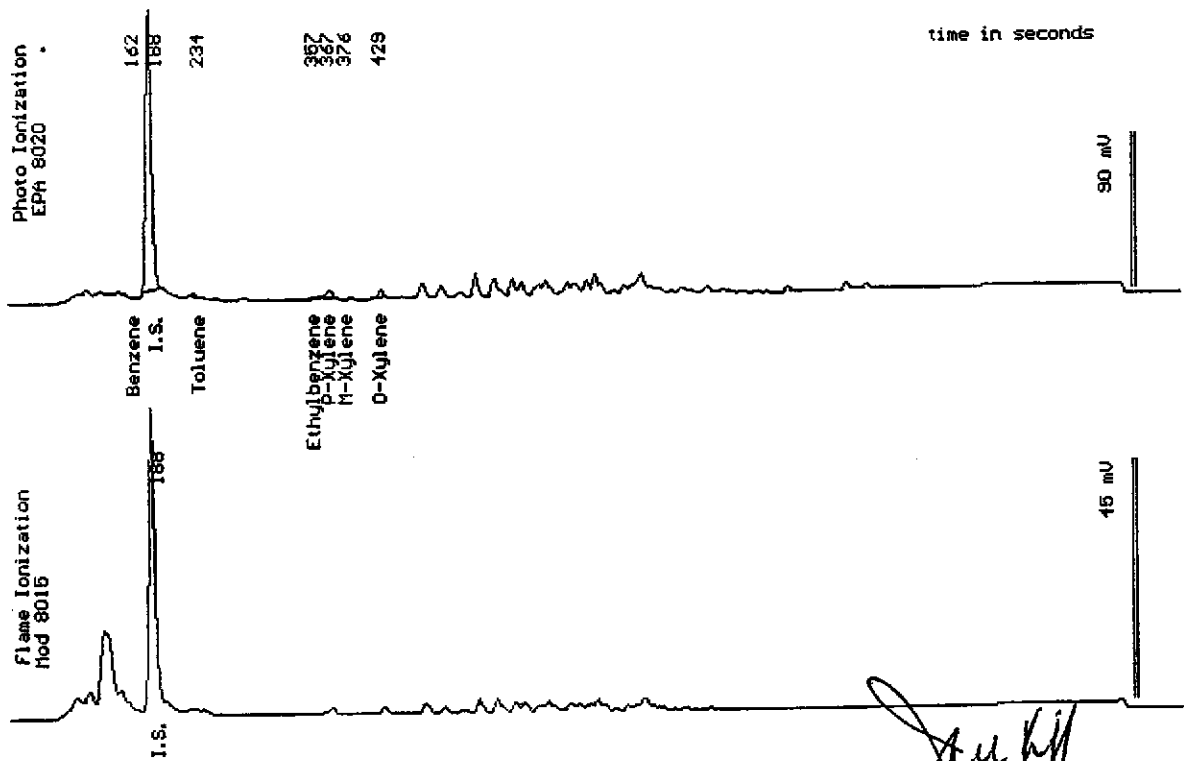
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 4064e

Matrix : Soil

Parameter	(MDL) <small>mg/kg</small>	Measured Value <small>mg/kg</small>
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	.0066
TPH as Gasoline	(.50)	<.50



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5358
5358-3

Sample: Unleaded, E, 14

From : Beacon 604 (Project # 40.89.095)

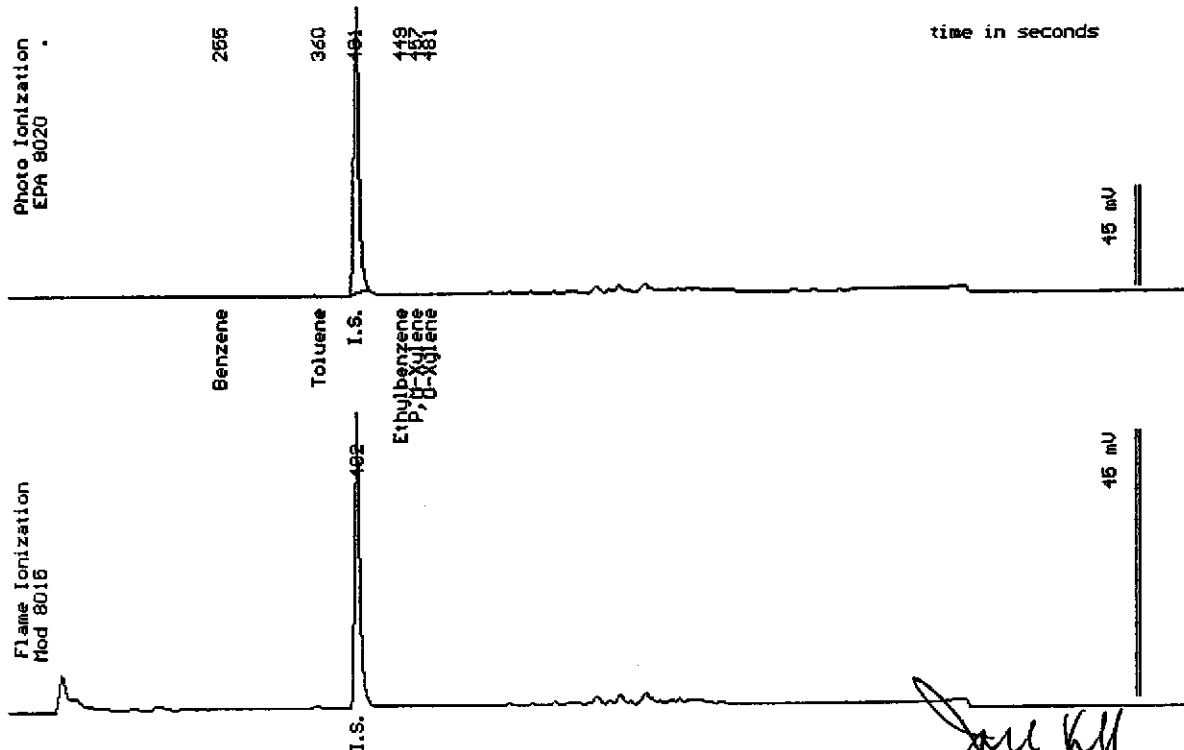
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 6076c

Matrix : Soil

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(.50)	<.50



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist



Sample: Unleaded, W, 14

From : Beacon 604 (Project # 40.89.095)

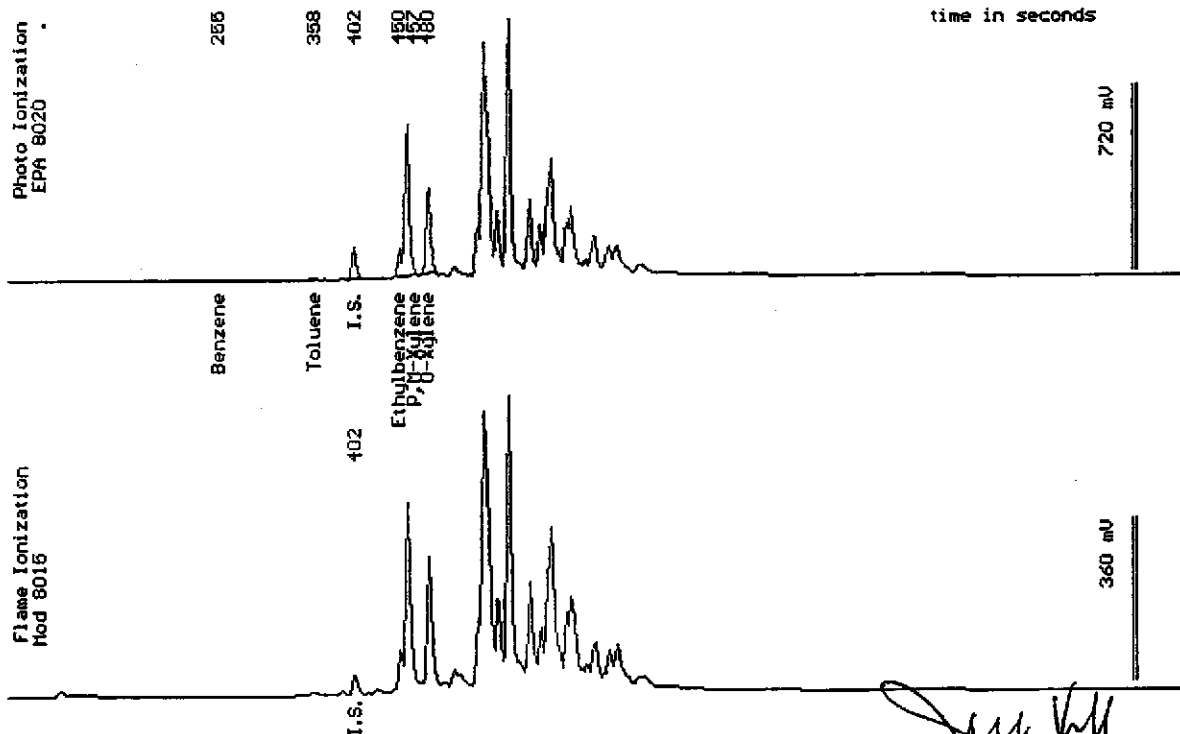
Sampled : 11/10/92

Dilution : 1:100

QC Batch : 6076c

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.50)	<.50
Toluene	(.50)	.91
Ethylbenzene	(.50)	18
Total Xylenes	(.50)	170
TPH as Gasoline	(50)	1800



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&M Scientific)

Joel Kiff
Senior Chemist

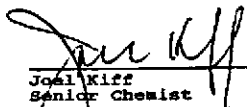


November 13, 1992
Sample Log 5358

Sample: Unleaded, W, 14

From : Beacon 604 (Project # 40.89.095)
Sampled : 11/10/92
Received : 11/10/92
Matrix : Soil

Parameter	(MDL) <small>mg/kg</small>	Measured Value <small>mg/kg</small>
Total Lead	(1.0)	5.6


Joel Kiff
Senior Chemist



Sample Log 5360

5360-4

Sample: Unleaded, W, 19

From : Beacon 604 (Project # 40.89.095)

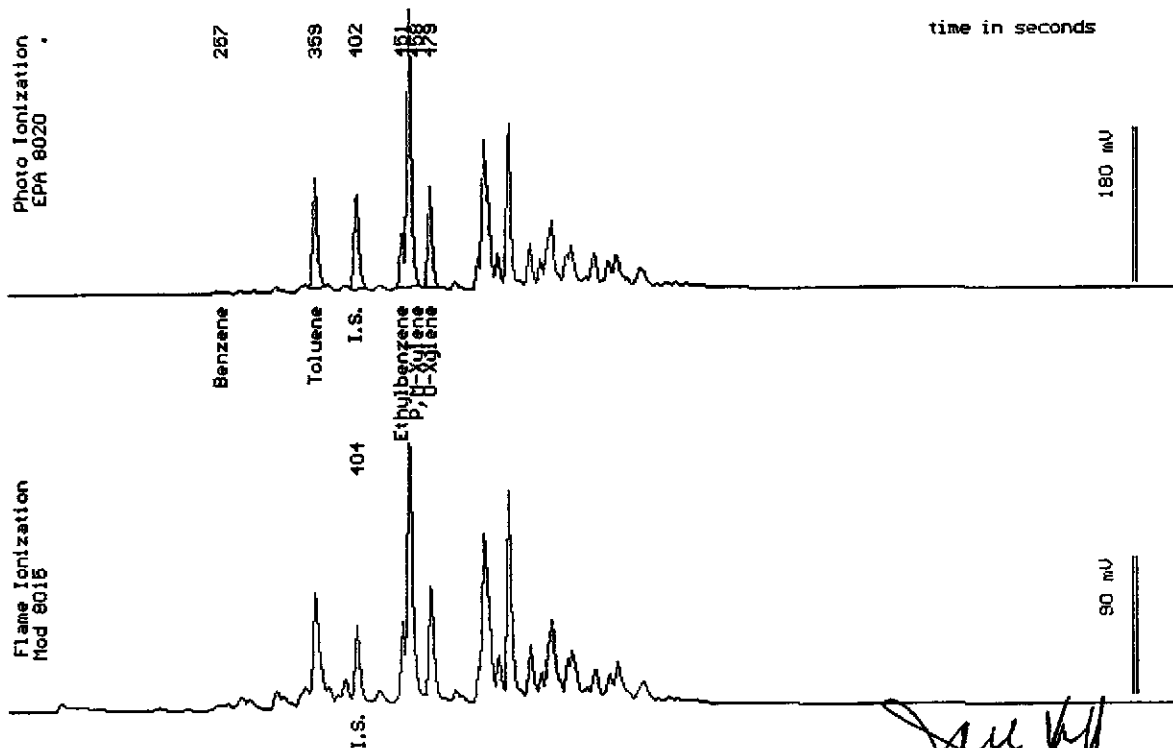
Sampled : 11/10/92

Dilution : 1:1000

QC Batch : 6076e

Matrix : Soil

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(5.0)	<5.0
Toluene	(5.0)	160
Ethylbenzene	(5.0)	110
Total Xylenes	(5.0)	700
TPH as Gasoline	(500)	4700



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5368

5368-1

Sample: Unlead SW 27'

From : Project # 40.89.95 (Beacon 604)

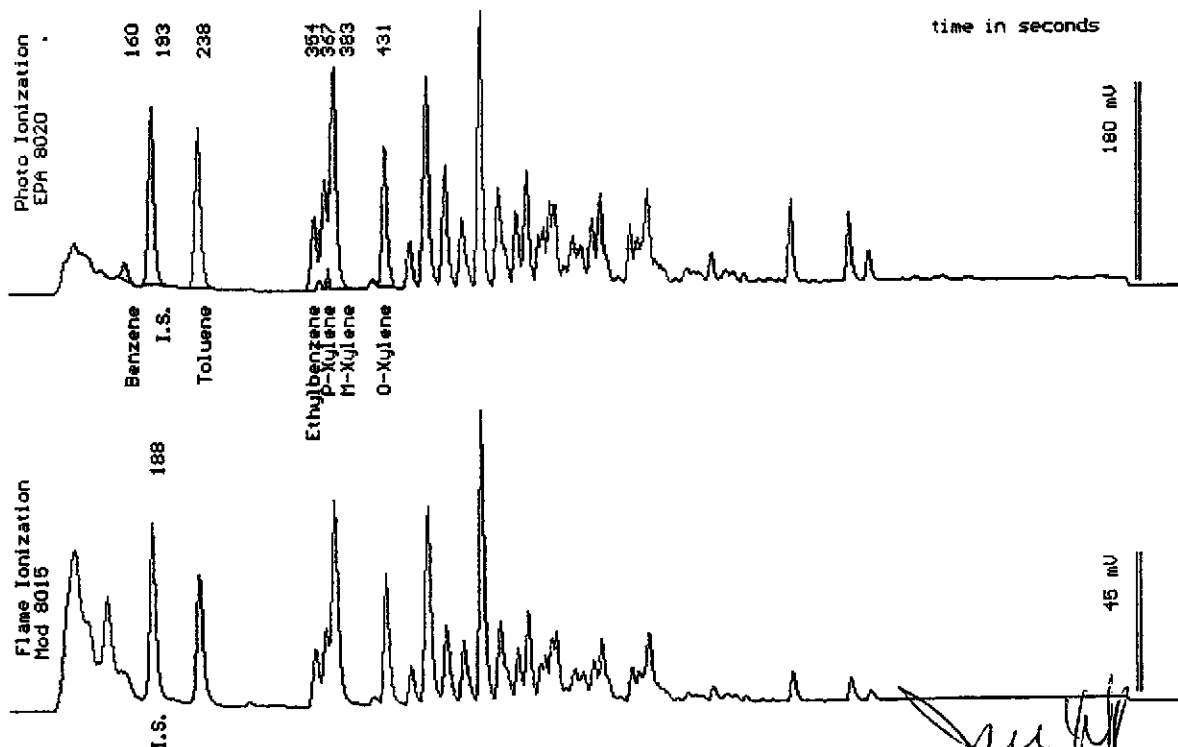
Sampled : 11/12/92

Dilution : 1:100

QC Batch : 4064i

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.50)	1.4
Toluene	(.50)	22
Ethylbenzene	(.50)	9.3
Total Xylenes	(.50)	70
TPH as Gasoline	(50)	490



Date Analyzed: 11-12-92
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

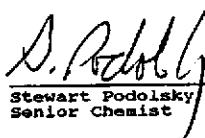


November 24, 1992
Sample Log 5368

Sample: Unlead SW 27'

From : Project # 40.89.95 (Beacon 604)
Sampled : 11/12/92
Received : 11/12/92
Matrix : Soil

Parameter	(MDL) <small>ng/kg</small>	Measured Value <small>ng/kg</small>
pH (EPA 9045)		7.1


Stewart Podolsky
Senior Chemist



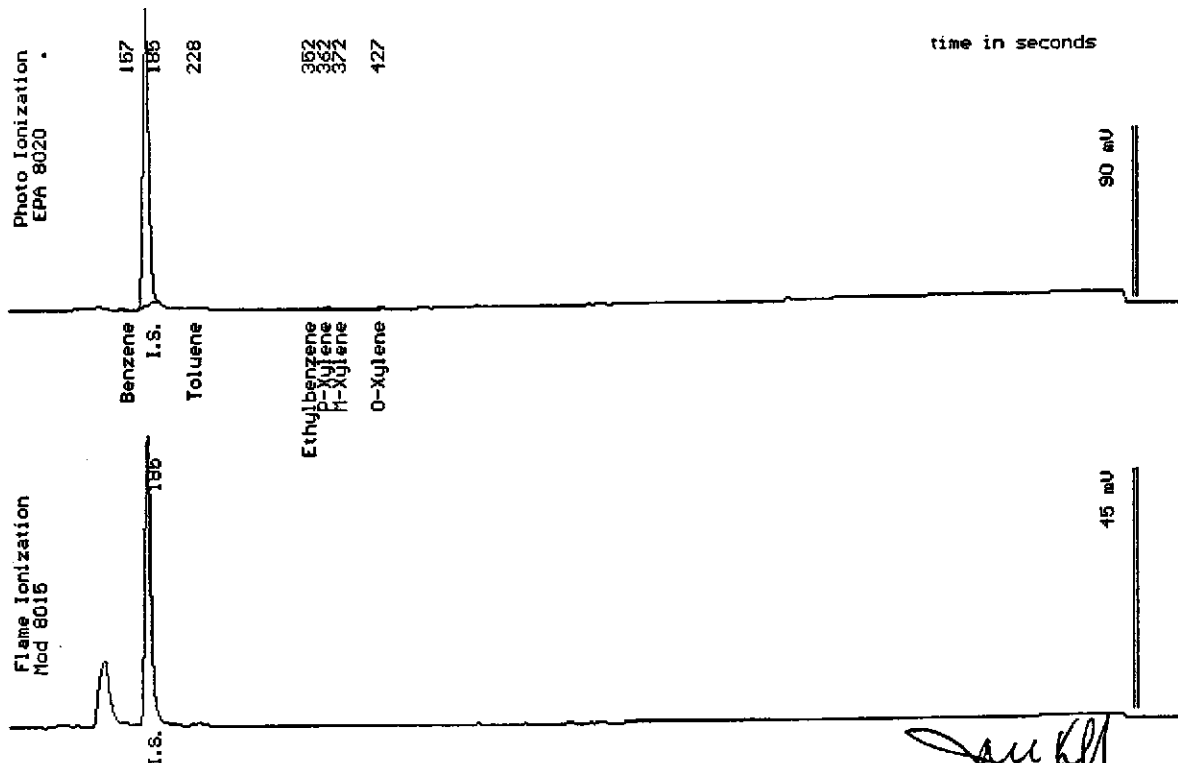
Sample Log 5358
5358-5

Sample: Premium, E, 14'

From : Beacon 604 (Project # 40.89.095)
Sampled : 11/10/92
Dilution : 1:1
Matrix : Soil

QC Batch : 4064d

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(.50)	<.50



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5358

5358-6

Sample: Premium, W, 14'

From : Beacon 604 (Project # 40.89.095)

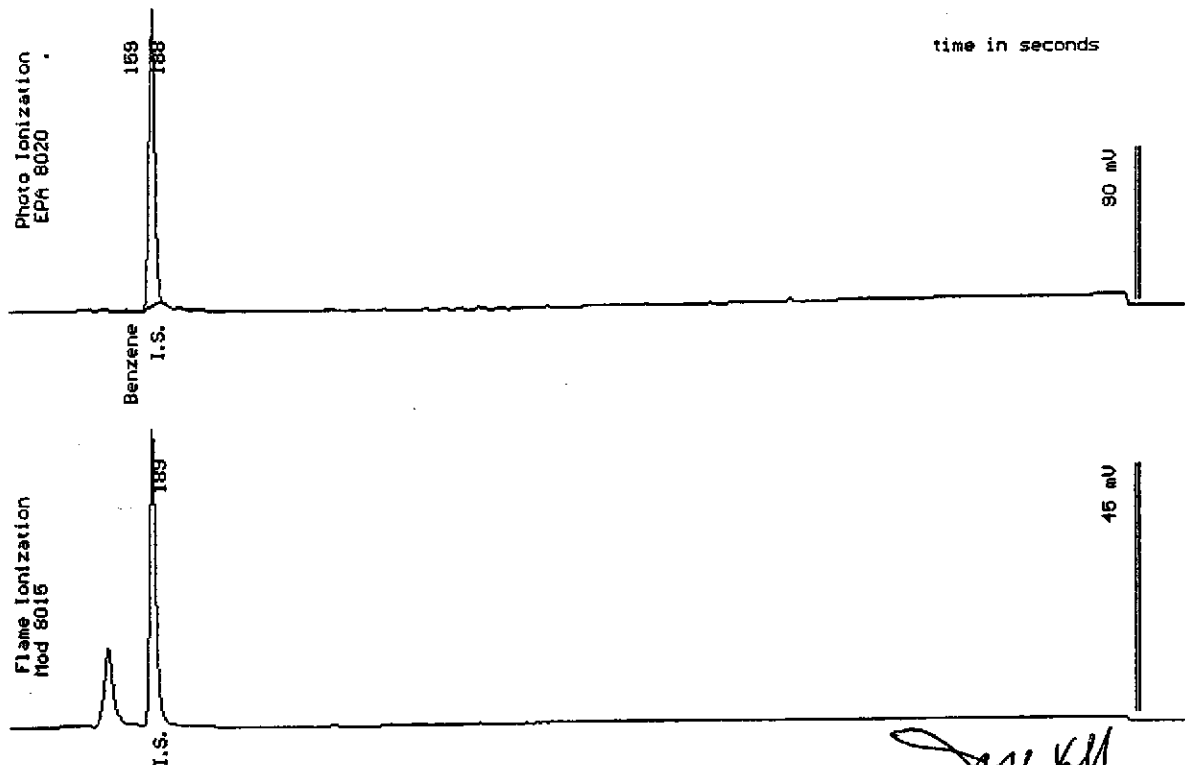
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 4064d

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(.50)	<.50



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5359
5359-1

Sample: Prod. Line # 1

From : Beacon 604 (Project # 40.89.095)

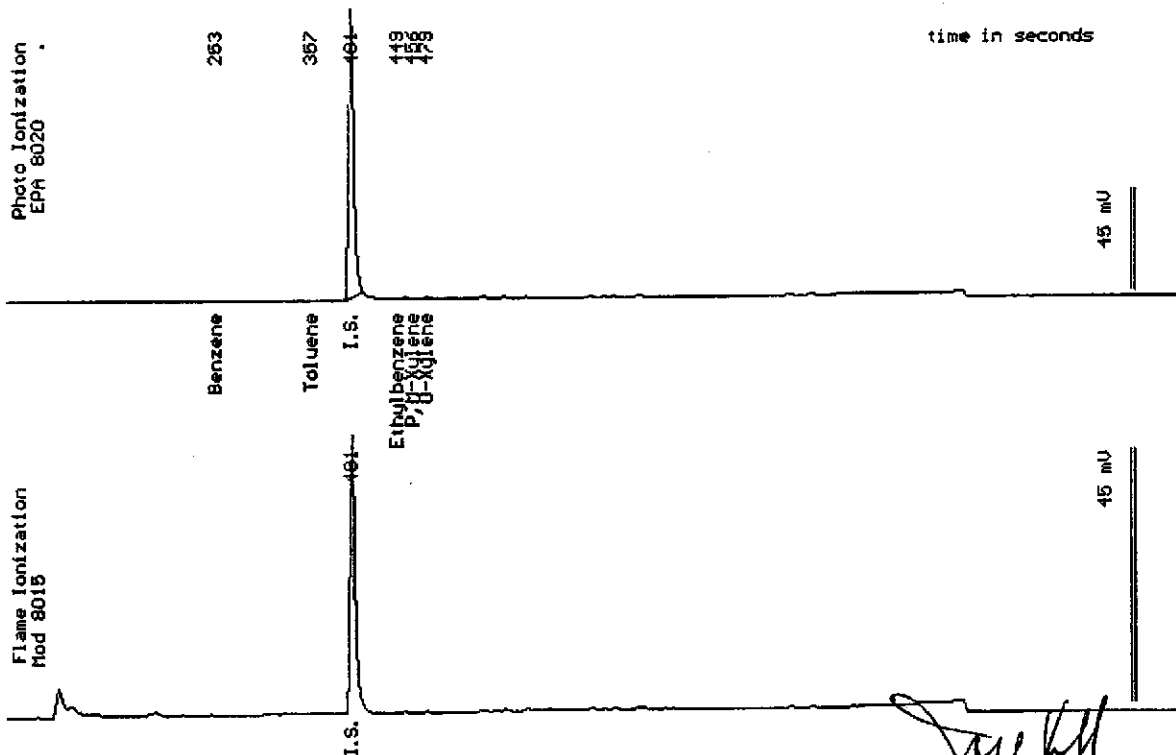
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 6076d

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(.50)	<.50



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5359

5359-2

Sample: Prod. Line # 2

From : Beacon 604 (Project # 40.89.095)

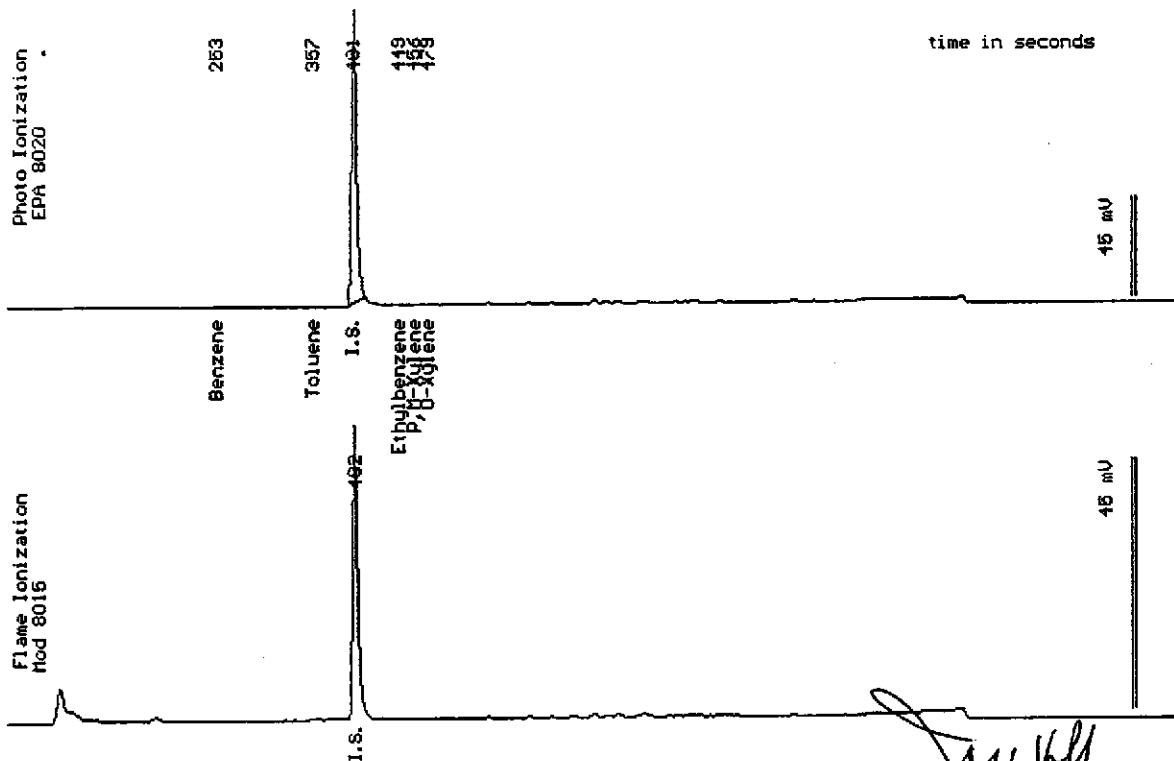
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 6076d

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(.50)	<.50



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joe Kiff
Senior Chemist



Sample Log 5359

5359-3

Sample: Prod. Line # 3

From : Beacon 604 (Project # 40.89.095)

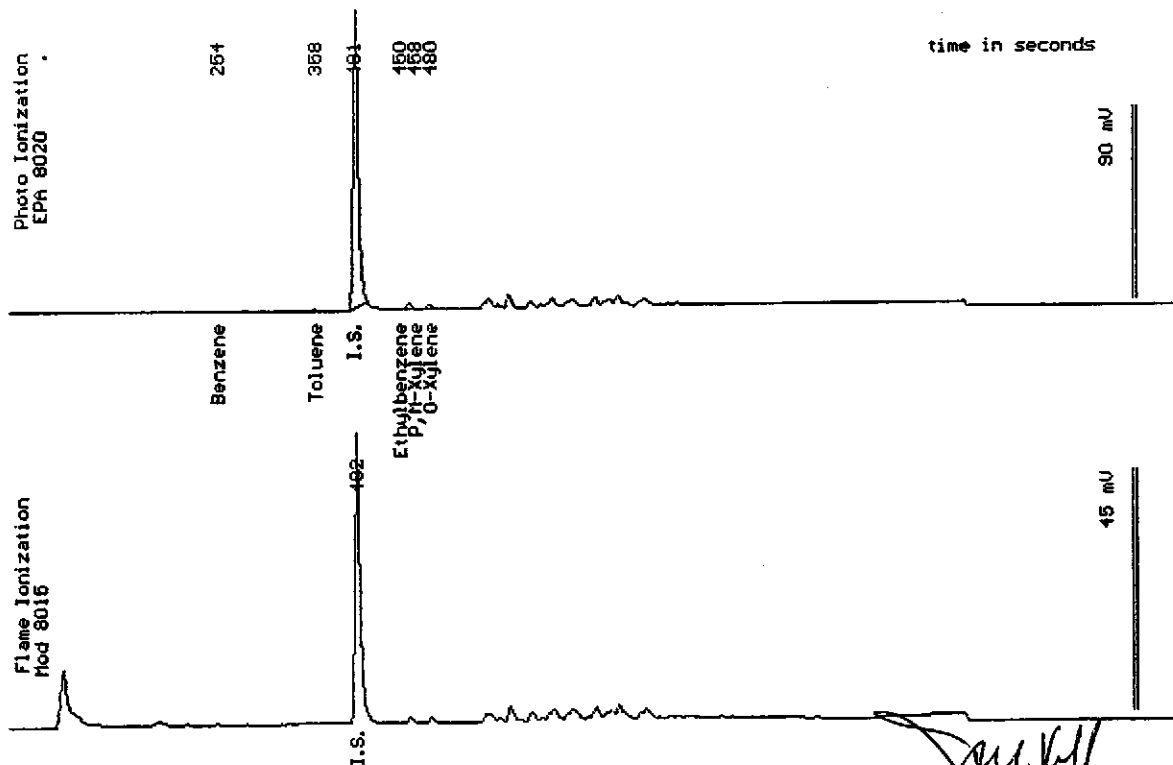
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 6076d

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	.0080
TPH as Gasoline	(.50)	<.50



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Joel Kiff
Senior Chemist



Sample Log 5359

5359-4

Sample: Prod. Line # 4

From : Beacon 604 (Project # 40.89.095)

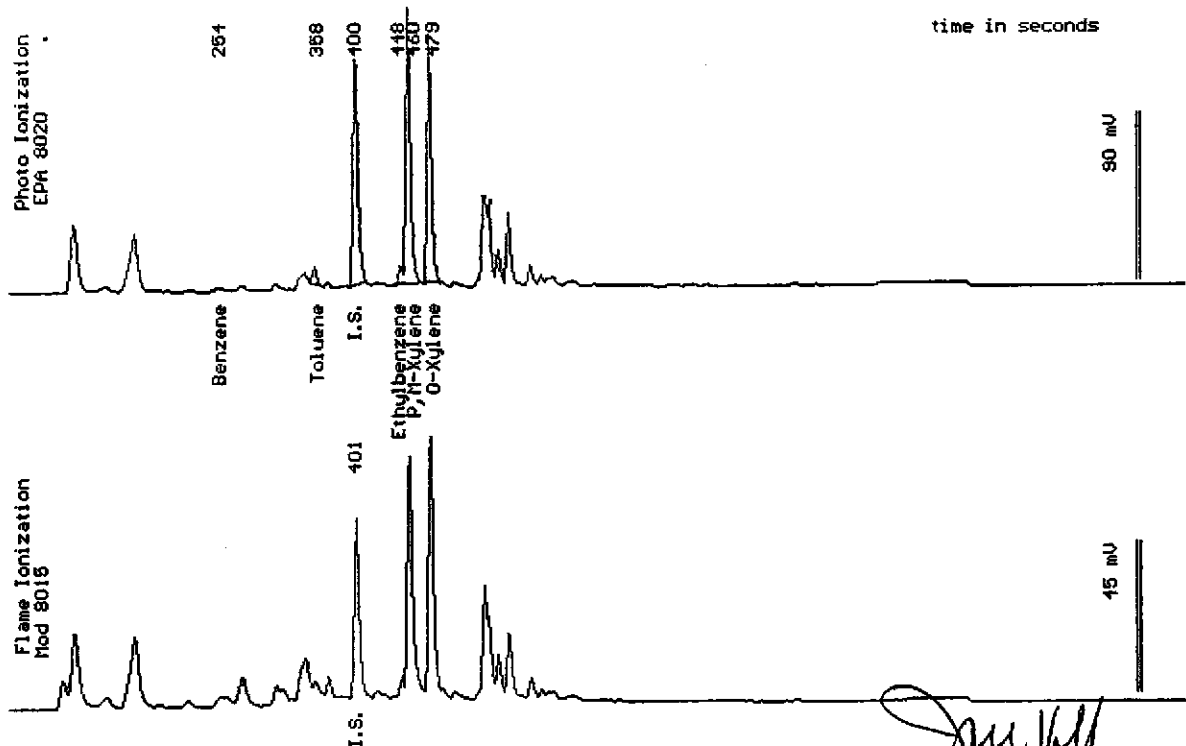
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 6076d

Matrix : Soil

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	.029
Ethylbenzene	(.0050)	.041
Total Xylenes	(.0050)	1.2
TPH as Gasoline	(.50)	4.4



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5359

5359-8

Sample: Prod. Line # 5

From : Beacon 604 (Project # 40.89.095)

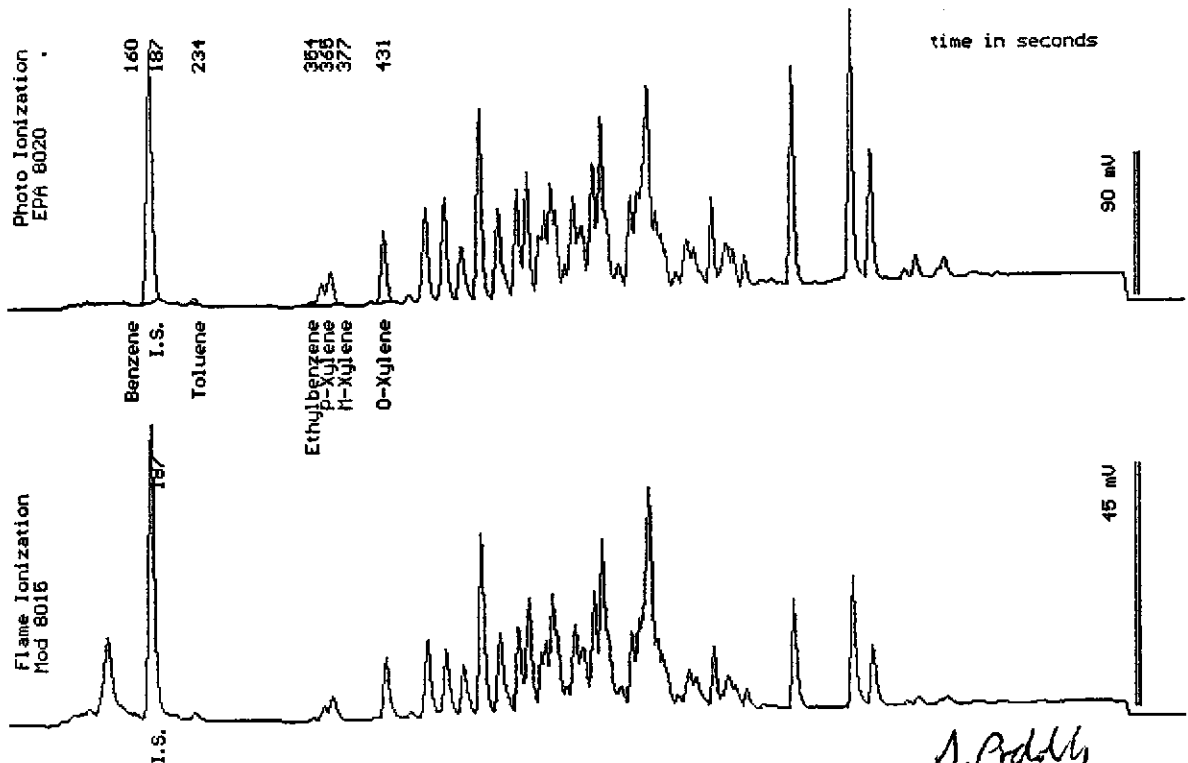
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 4064e

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	.10
TPH as Gasoline	(.50)	2.7



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

J. Proddy
Joel Kiff
Senior Chemist



November 24, 1992
Sample Log 5368

Sample: Unlead SW 27'

From : Project # 40.89.95 (Beacon 604)
Sampled : 11/12/92
Matrix : Soil
Extracted : 11/19/92

Received : 11/12/92
Analyzed : 11/21/92

8270 - Semi Volatile Organic Priority Pollutants

Parameter	(MDL) _{ng/kg}	Measured Value _{ng/kg}	Flag
Acenaphthene	(0.10)	<0.10	
Acenaphthylene	(0.10)	<0.10	
Anthracene	(0.10)	<0.10	
Benzo (a) anthracene	(0.10)	<0.10	
Benzo (b) fluoranthene	(0.10)	<0.10	
Benzo (k) fluoranthene	(0.10)	<0.10	
Benzo (a) pyrene	(0.10)	<0.10	
Benzo (ghi) perylene	(0.10)	<0.10	
Benzyl butyl phthalate	(0.10)	<0.10	
bis (2-chloroethyl) ether	(0.10)	<0.10	
bis (2-chloroethoxy) methane	(0.10)	<0.10	
bis (2-ethylhexyl) phthalate	(0.20)	<0.20	
bis (2-chloroisopropyl) ether	(0.10)	<0.10	
4-Bromophenyl phenyl ether	(0.10)	<0.10	
2-Chloronaphthalene	(0.10)	<0.10	
4-Chlorophenyl phenyl ether	(0.10)	<0.10	
Chrysene	(0.10)	<0.10	
Dibenzo (ah) anthracene	(0.10)	<0.10	
Di-n-butyl phthalate	(0.10)	<0.10	
Di-n-octyl phthalate	(0.10)	<0.10	
1,3-Dichlorobenzene	(0.10)	<0.10	
1,2-Dichlorobenzene	(0.10)	<0.10	
1,4-Dichlorobenzene	(0.10)	<0.10	
3,3-Dichlorobenzidine	(0.10)	<0.10	
Diethyl phthalate	(0.10)	<0.10	
Dimethyl phthalate	(0.10)	<0.10	
2,4-Dinitrotoluene	(0.10)	<0.10	


Stewart Podolsky
Senior Chemist



November 24, 1992
Sample Log 5368

Sample: Unlead SW 27'

From : Project # 40.89.95 (Beacon 604)
Sampled : 11/12/92
Matrix : Soil
Extracted : 11/19/92

Received : 11/12/92
Analyzed : 11/21/92

8270 - Semi Volatile Organic Priority Pollutants

Parameter	(MDL) _{ng/kg}	Measured Value _{ng/kg}	Flag
2,6-Dinitrotoluene	(0.10)	<0.10	
Fluoranthene	(0.10)	<0.10	
Fluorene	(0.10)	<0.10	
Hexachlorobenzene	(0.10)	<0.10	
Hexachlorobutadiene	(0.10)	<0.10	
Hexachloroethane	(0.10)	<0.10	
Indeno (123-cd) pyrene	(0.10)	<0.10	
Isophorone	(0.10)	<0.10	
Naphthalene	(0.10)	13	
Nitrobenzene	(0.10)	<0.10	
n-Nitrosodi-n-propylamine	(0.10)	<0.10	
Phenanthrene	(0.10)	<0.10	
Pyrene	(0.10)	<0.10	
1,2,4-Trichlorobenzene	(0.10)	<0.10	
Benzidine	(0.10)	<0.10	
Hexachlorocyclopentadiene	(0.10)	<0.10	
n-Nitrosodimethylamine	(0.10)	<0.10	
n-Nitrosodiphenylamine	(0.10)	<0.10	
4-Chloro-3-methylphenol	(0.10)	<0.10	
2-Chlorophenol	(0.10)	<0.10	
2,4-Dichlorophenol	(0.10)	<0.10	
2,4-Dimethylphenol	(0.10)	<0.10	
2,4-Dinitrophenol	(0.10)	<0.10	
2-Methyl-4,6-dinitrophenol	(0.10)	<0.10	
2-Nitrophenol	(0.10)	<0.10	
4-Nitrophenol	(0.10)	<0.10	
Pentachlorophenol	(0.10)	<0.10	
Phenol	(0.10)	<0.10	
2,4,6-Trichlorophenol	(0.10)	<0.10	


Stewart Podolsky
Senior Chemist



November 13, 1992

Sample Log 5368

5368-1

Sample: Unlead SW 27'

From : Project # 40.89.95 (Beacon 604)

Sampled : 11/12/92

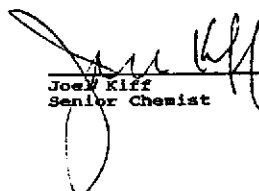
Matrix : Soil

Received : 11/12/92

Analyzed : 11/12/92

8010 - Halogenated Volatile Organics

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$	Flag
Chloromethane	(.005)	<.005	
Chloroethane	(.005)	<.005	
Vinyl Chloride	(.005)	<.005	
Bromomethane	(.005)	<.005	
Trichlorofluoromethane	(.005)	<.005	
1,1-Dichloroethene	(.001)	<.001	
Dichloromethane	(.005)	<.005	
t-1,2-Dichloroethene	(.001)	<.001	
1,1-Dichloroethane	(.001)	<.001	
Chloroform	(.001)	<.001	
1,1,1-Trichloroethane	(.001)	<.001	
1,2-Dichloroethane	(.001)	<.001	
Carbon Tetrachloride	(.001)	<.001	
1,2-Dichloropropane	(.001)	<.001	
Trichloroethene	(.001)	<.001	
Bromodichloromethane	(.001)	<.001	
c-1,2-Dichloroethene	(.001)	<.001	
c-1,3-Dichloropropene	(.001)	<.001	
t-1,3-Dichloropropene	(.001)	<.001	
1,1,2-Trichloroethane	(.001)	<.001	
Tetrachloroethene	(.001)	<.001	
Dibromochloromethane	(.001)	<.001	
Chlorobenzene	(.001)	<.001	
Bromoform	(.001)	<.001	
1,1,2,2-Tetrachloroethane	(.001)	<.001	
1,4-Dichlorobenzene	(.001)	<.001	
1,3-Dichlorobenzene	(.001)	<.001	
1,2-Dichlorobenzene	(.001)	<.001	


Joe W. Kiff
Senior Chemist



Sample Log 5357

5357-1

Sample: SS #1 A->D

From : Beacon 604 (Project # 40.89.095)

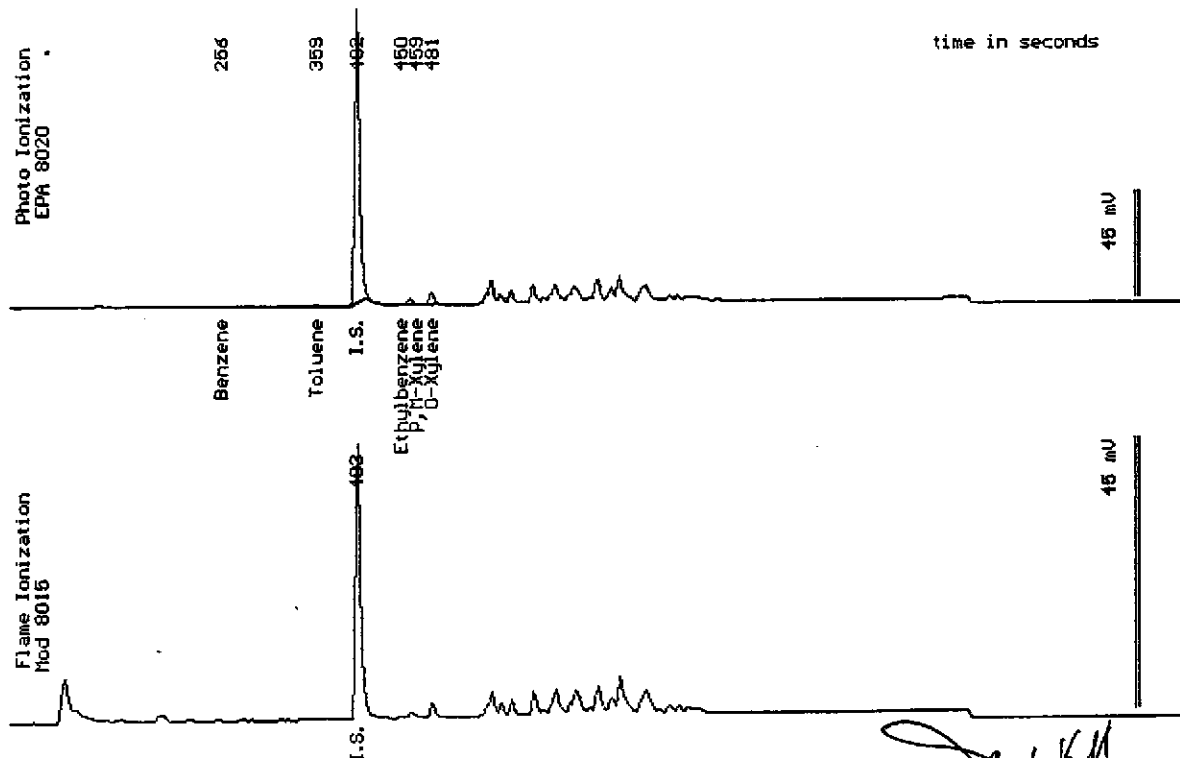
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 6076c

Matrix : Soil

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	.015
TPH as Gasoline	(.50)	<.50



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5357

5357-2

Sample: SS # 2 A->D

From : Beacon 604 (Project # 40.89.095)

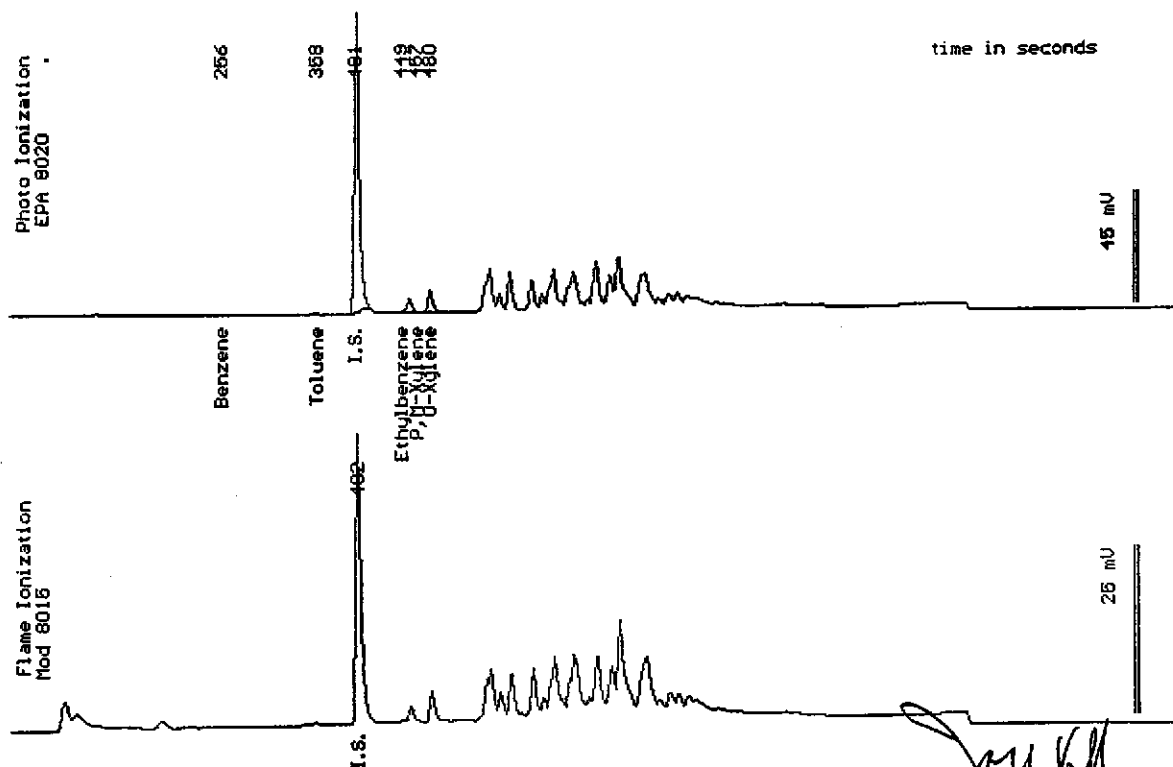
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 6076c

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	.026
TPH as Gasoline	(.50)	.95



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5357

5357-3

Sample: SS # 3 A->D

From : Beacon 604 (Project # 40.89.095)

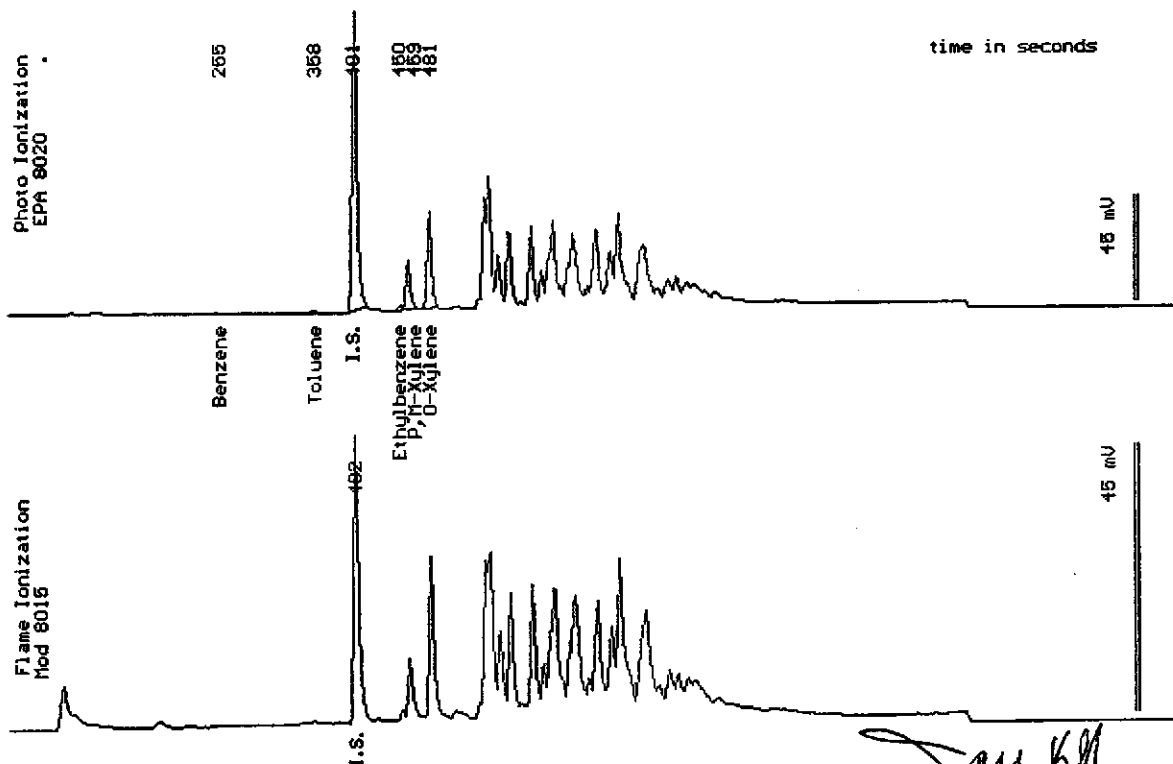
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 6076c

Matrix : Soil

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	.13
TPH as Gasoline	(.50)	2.1



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joe Kiff
Joe Kiff
Senior Chemist



Sample Log 5357

5357-4

Sample: SS # 4 A->D

From : Beacon 604 (Project # 40.89.095)

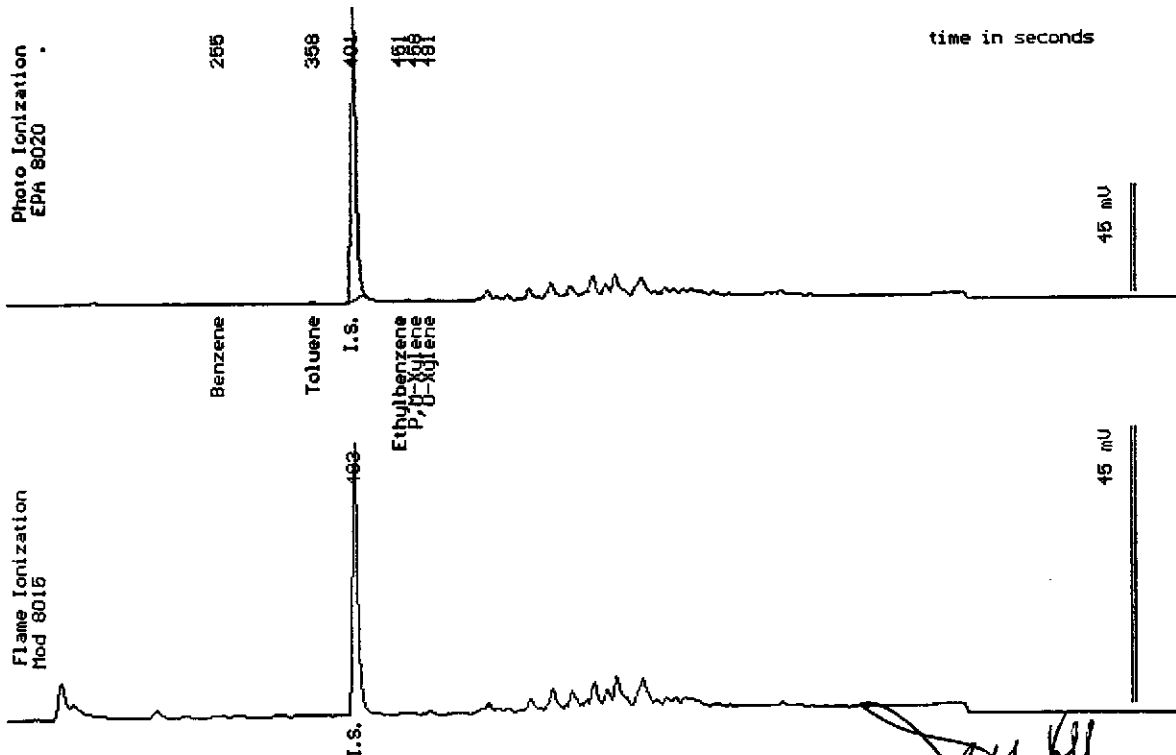
Sampled : 11/10/92

Dilution : 1:1

QC Batch : 6076c

Matrix : Soil

Parameter	(MDL) mg/kg	Measured Value ug/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(.50)	<.50



Date Analyzed: 11-11-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5372
5372-9

Sample: SS # 5A->5D

From : Beacon 604 (Project # 40.89.095)

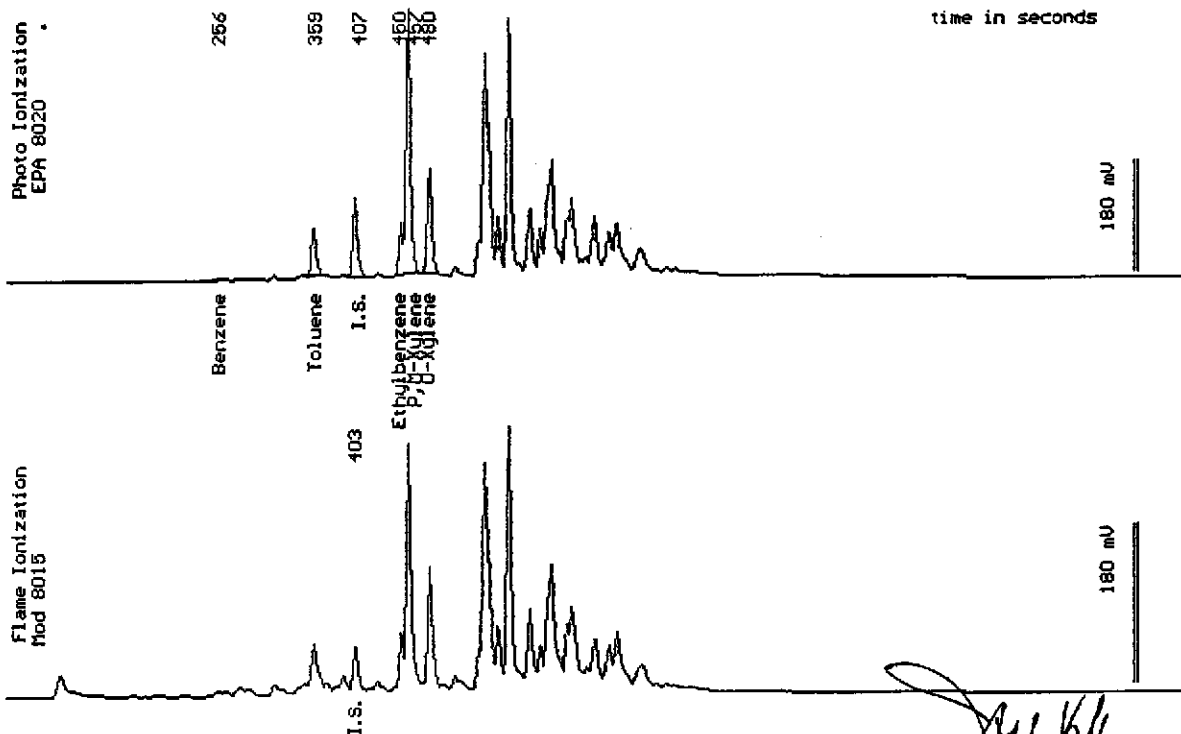
Sampled : 11/12/92

Dilution : 1:100

QC Batch : 6076h

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.50)	<.50
Toluene	(.50)	10
Ethylbenzene	(.50)	12
Total Xylenes	(.50)	94
TPH as Gasoline	(50)	800



Date Analyzed: 11-13-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Joel Kiff
Senior Chemist



Sample Log 5372
5372-8

Sample: SS # 6A->6D

From : Beacon 604 (Project # 40.89.095)

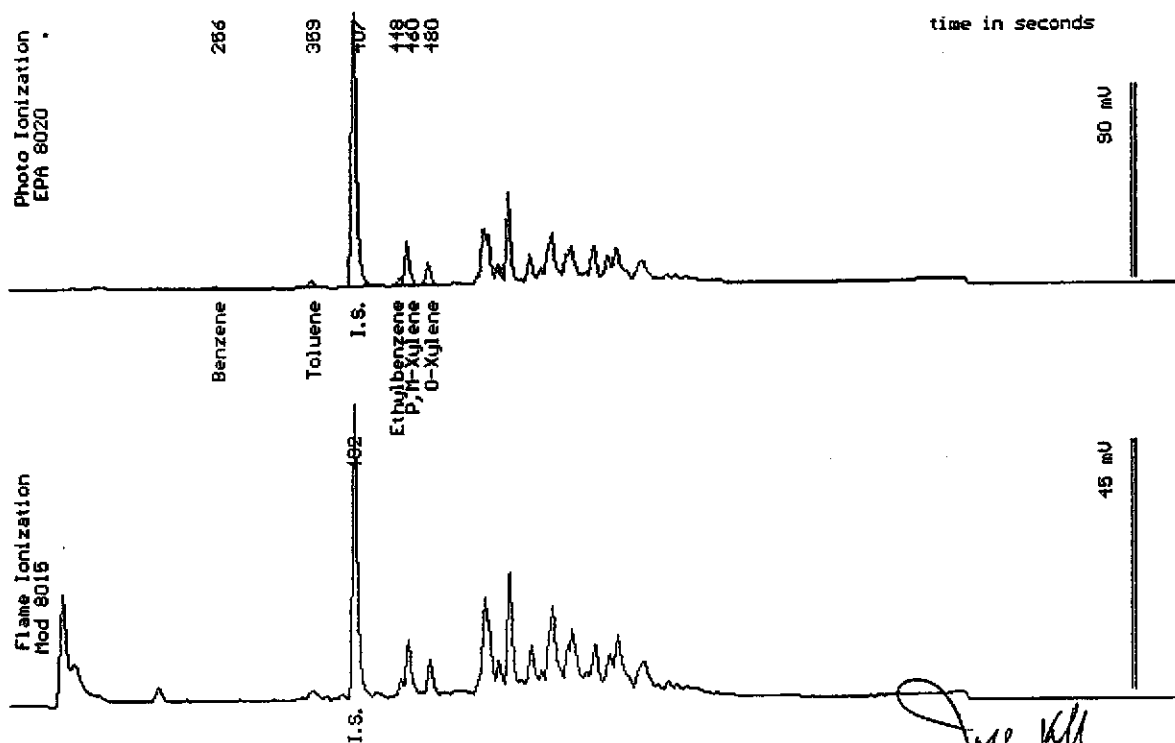
Sampled : 11/12/92

Dilution : 1:100

QC Batch : 6076h

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	4.2
TPH as Gasoline	(50)	110



Date Analyzed: 11-13-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5372

5372-1

Sample: SS # 7A->7D

From : Beacon 604 (Project # 40.89.095)

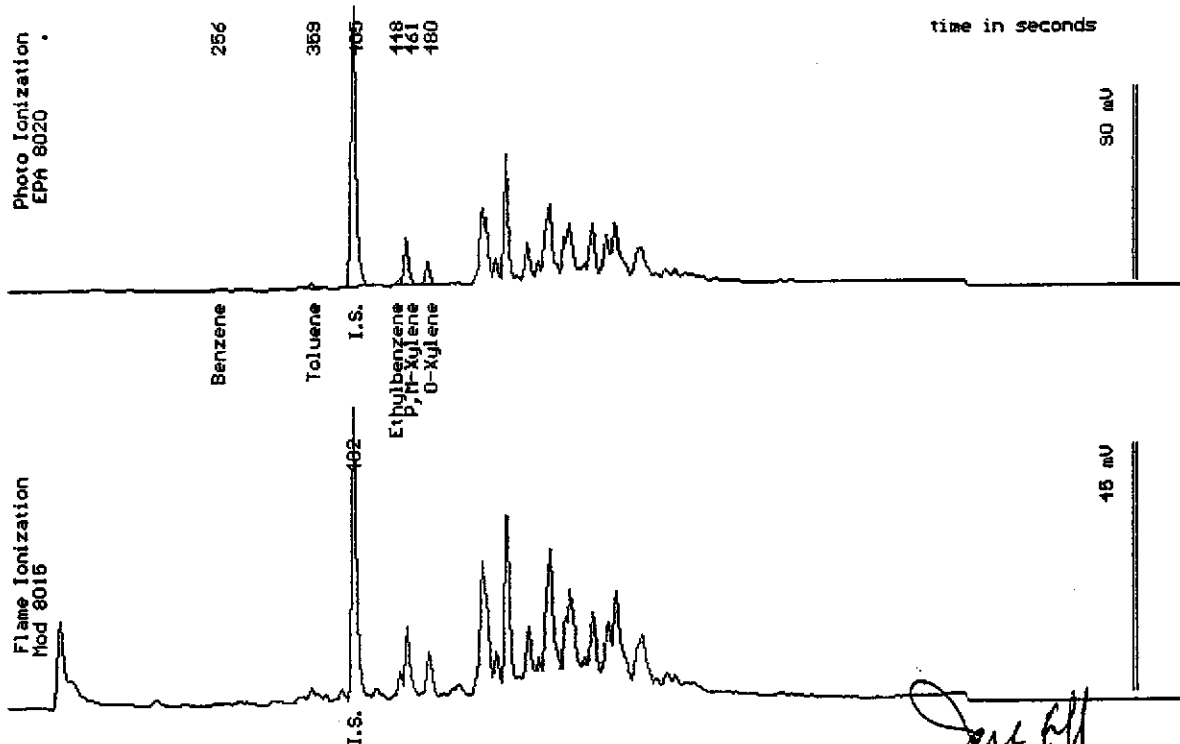
Sampled : 11/12/92

Dilution : 1:100

QC Batch : 6076g

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	4.7
TPH as Gasoline	(50)	150



Date Analyzed: 11-12-92
Column : 0.53mm ID X 30m DB5 (J&M Scientific)

Joel Kiff
Senior Chemist



Sample Log 5372

5372-2

Sample: SS # 8A->8D

From : Beacon 604 (Project # 40.89.095)

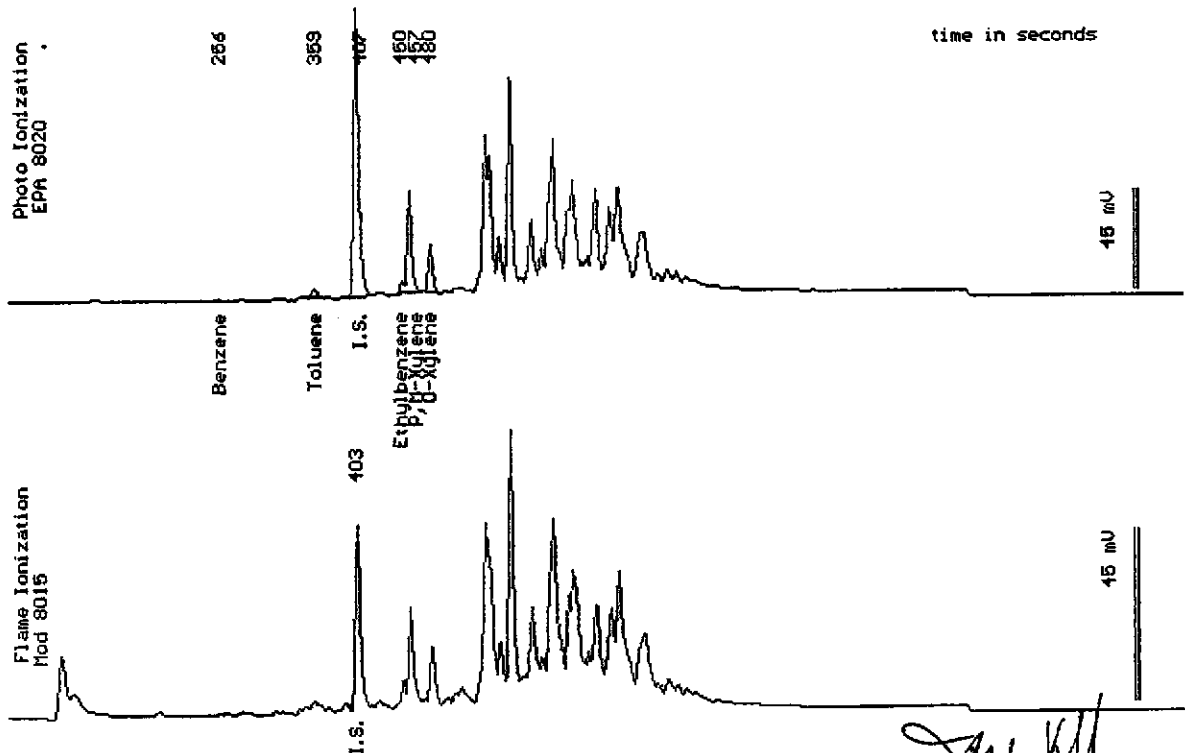
Sampled : 11/12/92

Dilution : 1:100

QC Batch : 6076g

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	.67
Total Xylenes	(.50)	9.4
TPH as Gasoline	(50)	250



Date Analyzed: 11-12-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5372

5372-3

Sample: SS # 9A->9D

From : Beacon 604 (Project # 40.89.095)

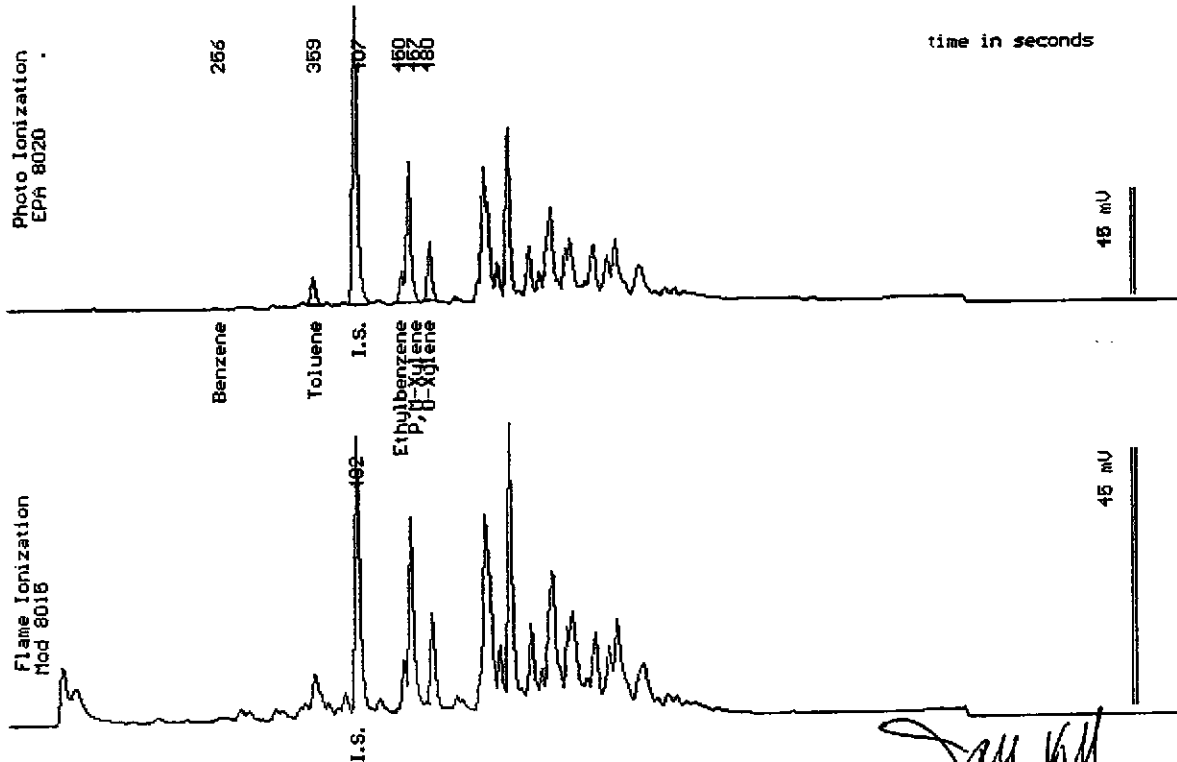
Sampled : 11/12/92

Dilution : 1:100

QC Batch : 6076h

Matrix : Soil

Parameter	(MDL) <small>mg/kg</small>	Measured Value <small>mg/kg</small>
Benzene	(.50)	<.50
Toluene	(.50)	1.4
Ethylbenzene	(.50)	1.9
Total Xylenes	(.50)	13
TPH as Gasoline	(50)	170



Date Analyzed: 11-12-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist



Sample Log 5372

5372-4

Sample: SS # 10A->10D

From : Beacon 604 (Project # 40.89.095)

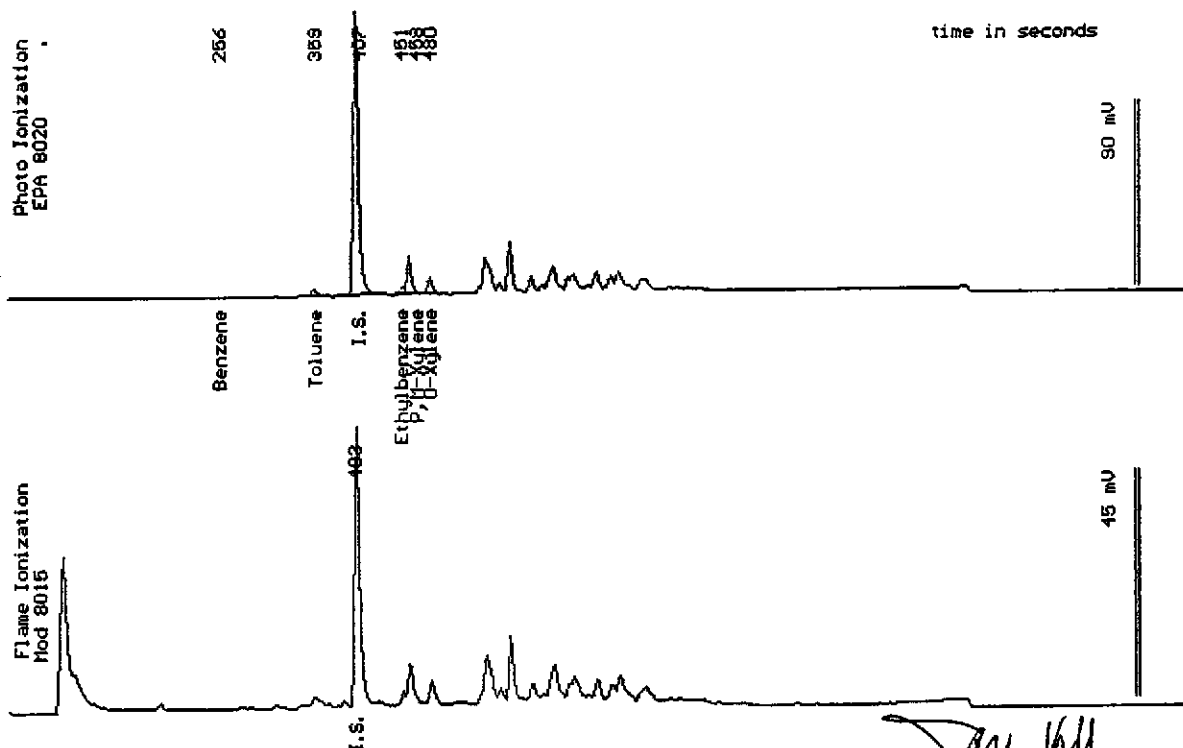
Sampled : 11/12/92

Dilution : 1:100

QC Batch : 6076h

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	3.1
TPH as Gasoline	(50)	72



Date Analyzed: 11-13-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joe Kiff
Senior Chemist



Sample Log 5372

5372-5

Sample: SS # 11A->11D

From : Beacon 604 (Project # 40.89.095)

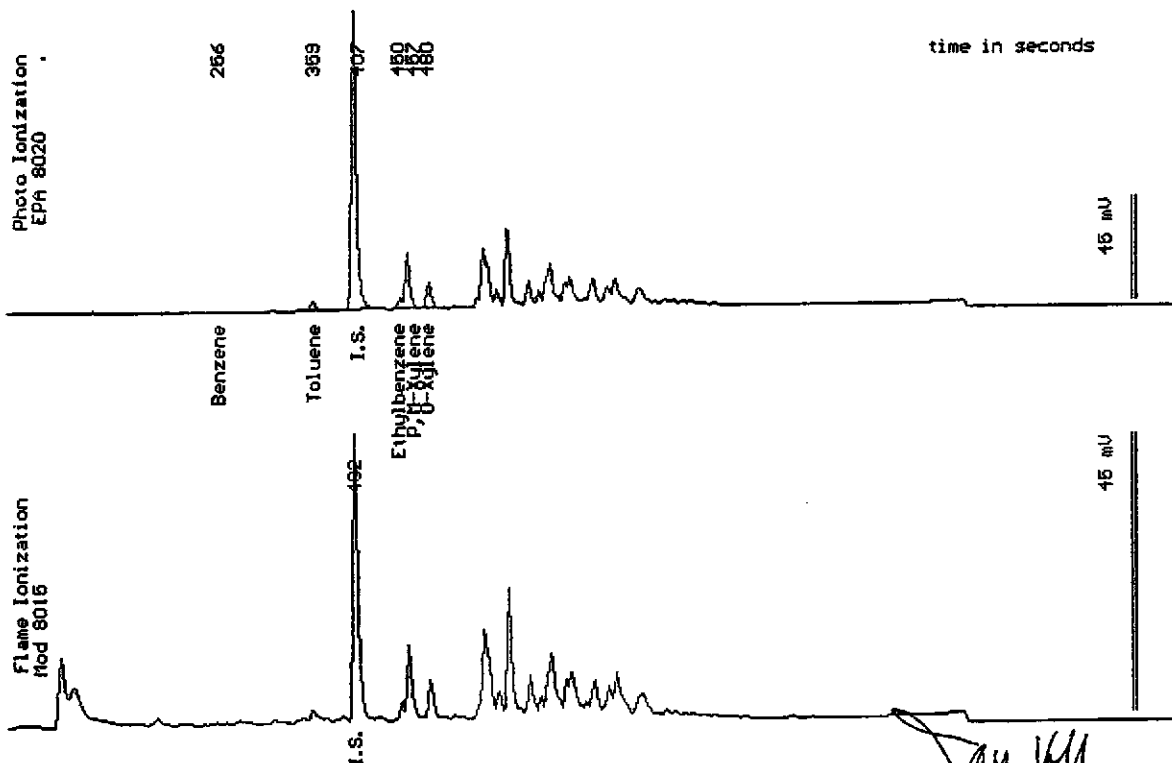
Sampled : 11/12/92

Dilution : 1:100

QC Batch : 6076h

Matrix : Soil

Parameter	(MDL) $\mu\text{g}/\text{kg}$	Measured Value $\mu\text{g}/\text{kg}$
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	.59
Total Xylenes	(.50)	5.1
TPH as Gasoline	(50)	79



Date Analyzed: 11-13-92
Column : 0.53mm ID X 30m DB5 (J&N Scientific)

Joe Kiff
Senior Chemist



Sample Log 5372

5372-6

Sample: SS # 12A->12D

From : Beacon 604 (Project # 40.89.095)

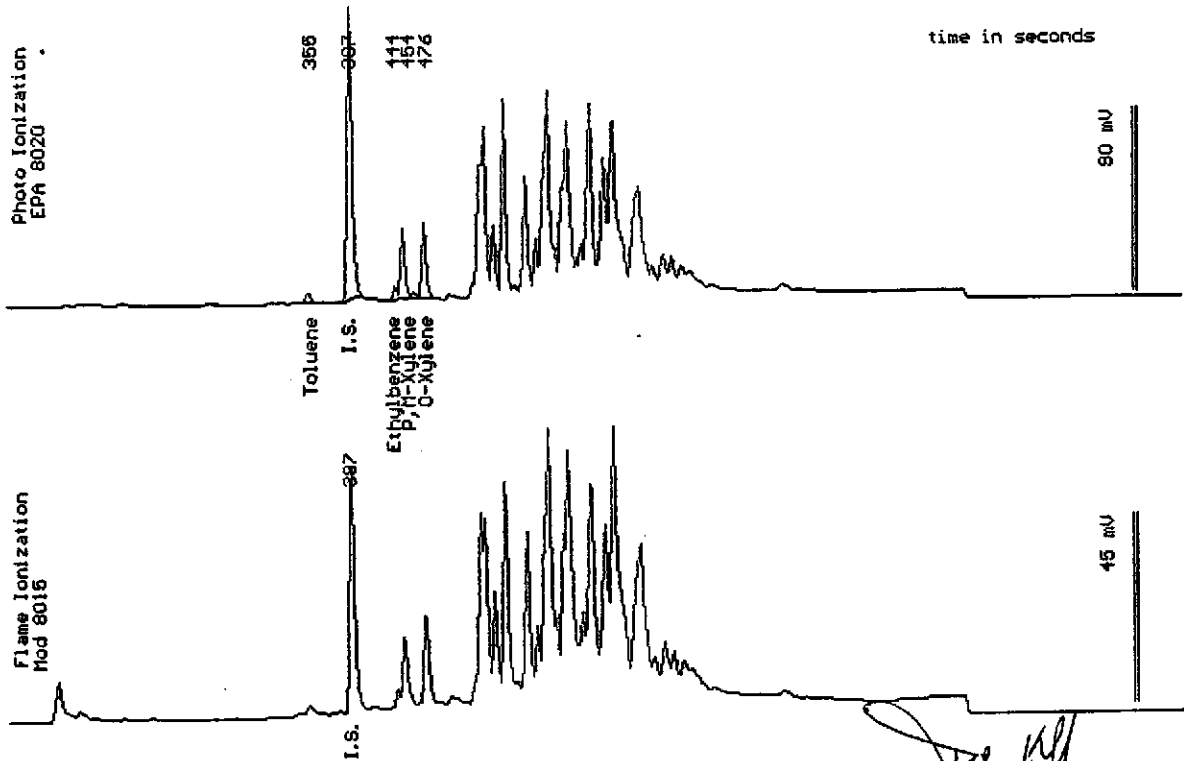
Sampled : 11/12/92

Dilution : 1:1

QC Batch : 6076i

Matrix : Soil

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	.0084
Ethylbenzene	(.0050)	.013
Total Xylenes	(.0050)	.18
TPH as Gasoline	(.50)	5.0



Date Analyzed: 11-13-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist



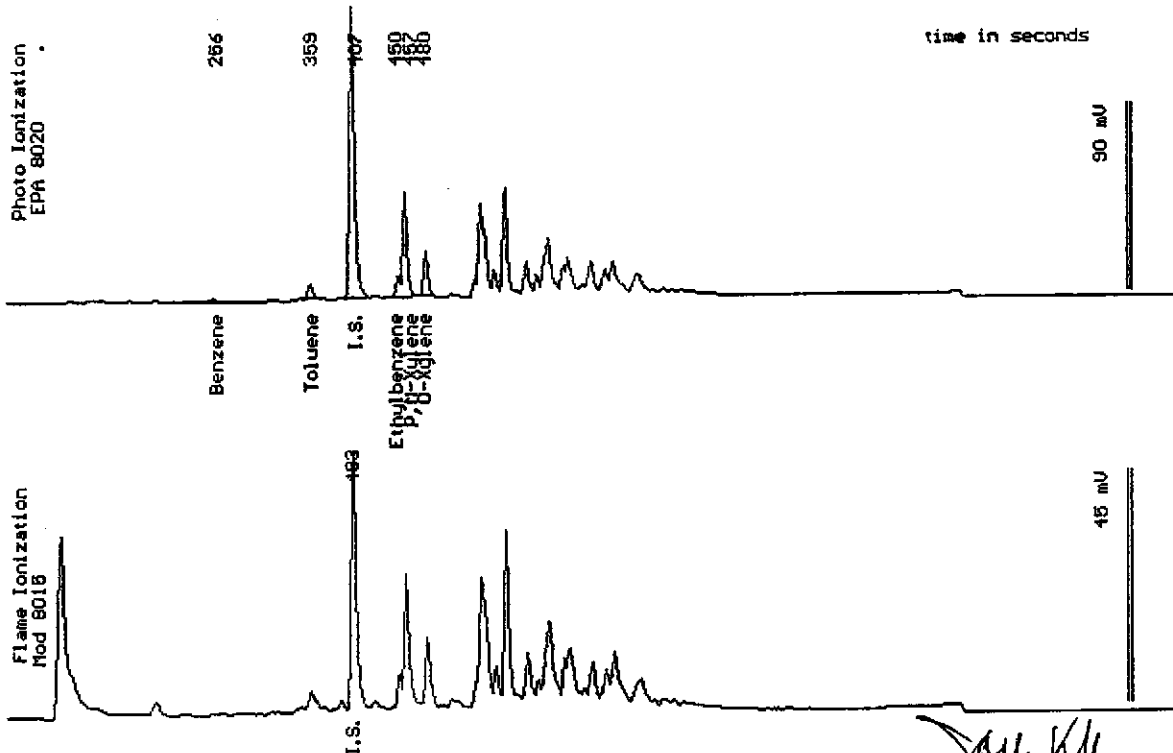
Sample Log 5372
5372-7

Sample: SS # 13A->13D

From : Beacon 604 (Project # 40.89.095)
Sampled : 11/12/92
Dilution : 1:100
Matrix : Soil

QC Batch : 6076h

Parameter	(MDL) mg/kg	Measured Value mg/kg
Benzene	(.50)	<.50
Toluene	(.50)	.75
Ethylbenzene	(.50)	1.3
Total Xylenes	(.50)	10
TPH as Gasoline	(50)	120



Date Analyzed: 11-13-92
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist

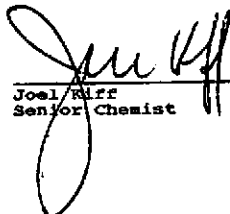


November 14, 1992
Sample Log 5372

Table 1: Total Lead Results for 9 Soil Sample(s)
From Beacon 604 (Project # 40.89.095)
Received 11/12/92

--all concentrations are units of mg/kg--

Sample	Total Lead
SS # 7A->7D	9.5
SS # 8A->8D	8.2
SS # 9A->9D	11
SS # 10A->10D	16
SS # 11A->11D	8.4
SS # 12A->12D	8.6
SS # 13A->13D	9.0
SS # 6A->6D	9.1
SS # 5A->5D	8.1
(Reporting Limit	1.0)


Joel Ruff
Senior Chemist



SEQUOIA ANALYTICAL

819 Striker Avenue, Suite 8 • Sacramento, CA 95834
(916) 921-9600 • FAX (916) 921-0100

Delta Environmental Consultants 3330 Data Drive, Suite 100 Rancho Cordova, CA 95670 Attention: Steve Gable	Client Project ID: #40-89-095, Beacon Station #604 Sample Matrix: Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 211-0427	Sampled: Nov 19, 1992 Received: Nov 19, 1992 Reported: Nov 20, 1992
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TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 211-0427 SS #14A-14D	Sample I.D. 211-0428 SS #15A-15D	Sample I.D. 211-0429 SS #16A-16D
Purgeable Hydrocarbons	1.0	1.4	2.1	17
Benzene	0.0050	N.D.	N.D.	0.0050
Toluene	0.0050	N.D.	N.D.	0.025
Ethyl Benzene	0.0050	N.D.	N.D.	0.028
Total Xylenes	0.0050	N.D.	0.014	0.23
Chromatogram Pattern:		MBP	MBP	MBP

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Analyzed:	11/19/92	11/19/92	11/19/92
Instrument Identification:	HP-1	HP-1	HP-1
Surrogate Recovery, %: (QC Limits = 70-130%)	94	96	86

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Michael R. Giles
Laboratory Director



SEQUOIA ANALYTICAL

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Delta Environmental Consultants 3330 Data Drive, Suite 100 Rancho Cordova, CA 95670 Attention: Steve Gable	Client Project ID: #40-89-095, Beacon Station #604 Sample Matrix: TCLP Extract of Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 211-0427	Sampled: Nov 19, 1992 Received: Nov 19, 1992 Reported: Nov 20, 1992
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TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/L	Sample I.D. 211-0427 SS #14A-14D	Sample I.D. 211-0428 SS #15A-15D	Sample I.D. 211-0429 SS #16A-16D
Purgeable Hydrocarbons	1.0	N.D.	N.D.	N.D.
Benzene	0.010	N.D.	N.D.	N.D.
Toluene	0.010	N.D.	N.D.	N.D.
Ethyl Benzene	0.010	N.D.	N.D.	N.D.
Total Xylenes	0.010	N.D.	N.D.	0.013
Chromatogram Pattern:		—	—	Gas

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Analyzed:	11/20/92	11/20/92	11/20/92
Instrument Identification:	HP-5	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	102	101	101

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL


Michael R. Giles
Laboratory Director



SEQUOIA ANALYTICAL

819 Striker Avenue, Suite 8 • Sacramento, CA 95834
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Delta Environmental Consultants	Client Project ID: #40-89-095, Beacon Station #604	Sampled: Nov 19, 1992
3330 Data Drive, Suite 100	Sample Descript: Soil	Received: Nov 19, 1992
Rancho Cordova, CA 95670	Analysis for: Lead	Extracted: Nov 20, 1992
Attention: Steve Gable	First Sample #: 211-0427	Analyzed: Nov 20, 1992
		Reported: Nov 20, 1992

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
211-0427	SS #14A-14D	2.5	9.8
211-0428	SS #15A-15D	2.5	12
211-0429	SS #16A-16D	2.5	9.6

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

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819 Striker Avenue, Suite 8 • Sacramento, CA 95834
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Delta Environmental Consultants 3330 Data Drive, Suite 100 Rancho Cordova, CA 95670 Attention: Steve Gable	Client Project ID: #40-89-095, Beacon Station #604 Sample Descript: Soil Analysis for: Organic Lead First Sample #: 211-0427	Sampled: Nov 19, 1992 Received: Nov 19, 1992 Extracted: Nov 20, 1992 Analyzed: Nov 20, 1992 Reported: Nov 20, 1992
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LABORATORY ANALYSIS FOR: Organic Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
211-0427	SS #14A-14D	0.10	N.D.
211-0428	SS #15A-15D	0.10	N.D.
211-0429	SS #16A-16D	0.10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Michael R. Giles
Laboratory Director