APPENDIX A

<u>APPENDIX A – 1</u>

HEMPSTEAD

Fown approves Island Park condo complex

The project's next stop is

the Nassau County Planning

Commission for site plan ap-

proval

BY EDEN LAIKIN

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Developers can now move forward to replace an 11-acre contaminated site on Harbor Isle in Island Park with a 167-unit condo complex after approval by the Town of Hempstead last night.

The town board approved

We we stated our sell

Posillico Development Company's application to rezone the site along Island Parkway South from industrial to residential. The 11.56-acre site was contaminated by spillage from the previous tenant, Cipro Oil, and the company has already undertaken the massive, costly job of cleaning

feet of landscaping. Experts for the company testified that the environment and area traffic would not be worsened.

Posilico's November proposal to the town board included:
Il buildings with units up to housing complex after neighand a boar launch; parking spaces; 40,000 square feet of undeded and 25,000,square and a board and 25,000,square and a board a

has been using the land as an industrial site, generating truck

Company officials, who bought the site in 2000, have said that because there are now more units, they will be more affordable. According to Posillico attorney William Cohn, the units will range from \$300,000 to more than \$1 million.

<u>APPENDIX A – 2</u>

In early 1993 SI/EG evaluated site-wide soil conditions by digging and sampling forty five test pits to groundwater on a 100 by 100 foot grid. Soil samples from each pit were collected approximately 6-inches above the water table and, based on field screening results, 31 samples were selected for total petroleum hydrocarbon (TPH) analysis using Method 418.1. Five of the 31 samples were selected at random and further analyzed for semivolatile compounds (SVOCs) using Method 8270. An additional five samples collected near ASTs that stored gasoline were analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) using Method 8010. Data summary tables are included in Appendix A-2-1. Maps showing the sampling locations were not available in the SI/EG report.

TPH concentrations ranged from less than the laboratory reporting limit to 25,700 mg/kg, with the highest concentration in sample Z-3. Total SVOC concentrations in the samples selected for analysis (Z-1, H-4, E-5, B-5 and G-7) ranged from approximately 31.6 mg/kg to 407.2 mg/kg, with the highest concentration in sample B-5 (1 to 1.5 feet below grade). Total SVOC concentrations in all samples exceeded the NYSDEC soil cleanup criteria in effect at the time the work was done, but most of the detected constituents were Tentatively Identified Compounds (TICs) found by the analytical forward library search. In addition, the concentration of individual SVOC constituents in all samples except H-4 exceeded one or more of the Department's cleanup guidelines. Polychlorinated biphenyls (PCBs) were detected in the forward library scan of samples H-4 and G-7, with concentrations reported at approximately 4.2 mg/kg (H-4) and 0.9 mg/kg (G-7).

The total concentration of BTEX in the five samples collected near the ASTs ranged from less than the laboratory reporting limit to approximately 0.4 mg/kg, with the highest concentration is sample C-4 (2 feet below grade). Samples D-2 and C-4 contained toluene and total xylenes at concentrations exceeding the NYSDEC soil cleanup criteria.

Round 2 Soil Sampling – PCBs

Eight test pits were dug in and around the area of samples G-7 and H-4, near the southwest property boundary, to better characterize the extent of PCB residuals detected during the initial sampling round. Fifteen soil samples collected between 0.5 to 3.5 feet below grade and one sample of standing water in excavation H-4 were analyzed for PCBs using Method 8080 (soil) and Method 608 (water). Data summary tables are included in Appendix A-2-1.

In the H-4 area, total PCB concentrations ranged from less than the laboratory reporting limit to 0.071 mg/kg, with the highest concentration in the sample from H4D (3.5 feet below grade). In the G-7 area, total PCB concentrations ranged from less than the laboratory reporting limit to 5.4 mg/kg, with the highest concentration in the sample from G7A (0.5 feet below grade). Three samples from the G-7 area contained PCBs at concentrations exceeding the 1 mg/kg NYSDEC soil cleanup criteria in effect at the time the work was done. PCBs were not detected in the water sample from test pit H-4 at a concentration exceeding the laboratory reporting limit. The individual PCB Aroclors detected in the soil samples are not identified in SI/EG's report.

Round 2 Soil Sampling - SVOCs

Elevated concentrations of TPH were detected in the samples from test pits A-6, C-5 and D-2 during the initial round of sampling. Additional samples for SVOC analysis were collected to further characterize soil conditions at these locations. Data summary tables are included in Appendix A-2-1.

Total SVOC concentrations ranged from approximately 101.9 mg/kg to 256.9 mg/kg, with the highest concentration in the sample from C-5 (2 feet below grade). Each sample contained individual SVOC constituents at concentrations exceeding the NYSDEC soil

cleanup criteria in effect at the time the work was done. In addition, the total concentration of SVOCs in all samples exceeded the applicable NYSDEC cleanup criteria (most of the detected constituents were TICs).

Round 3 Soil Sampling - PCBs

In June 1994 SI/EG performed additional soil sampling near the southwest property boundary to further define the extent of PCB residuals. A grid with 30-foot spacing was used to guide the sampling and soil samples were collected at 6 to 12-inches below grade at each grid node. The samples were analyzed in the field for PCBs using immunoassay test kits. Data summary tables and available sample location maps are included in Appendix A-2-1.

Of the 20 samples collected, eight contained PCBs at concentrations estimated between 1 mg/kg to 4 mg/kg, and one sample contained PCBs at concentrations estimated between 0.5 and 1 mg/kg. PCB concentrations in the remaining 11 samples did not exceed the detection limit of the test kit. SI/EG indicated that one sample was submitted to a fixed laboratory for confirmation analysis, but the analytical results were not available at the time their report was issued. Based on the field screening sampling results, SI/EG concluded that the extent of PCB-impacted soil was approximately 45 feet by 60 feet.

Groundwater Sampling Program – 1989 through 1993

Twelve monitoring wells were installed at the facility in the late 1980s. According to SI/EG, soil from monitoring well boreholes W-5 through W-12 was analyzed for BTEX, dichlorobenzene and lead. Data summary tables and the well location map are included in Appendix A-2-2.

One or more individual BTEX constituents were detected in all samples, with total BTEX concentrations ranging from 0.097 mg/kg to approximately 2.2 mg/kg (W-7). Except for the sample from borehole W-11, the concentration of benzene, toluene and xylenes in all

samples exceeded the NYSDEC soil cleanup guideline in effect at the time the work was done. Lead was detected in the samples from W-10 and W-12 at low concentrations that did not exceed soil cleanup guidelines.

Three rounds of groundwater sampling were performed in April 1989, May 1991 and January 1992 by other parties. A fourth round by SI/EG was performed in April 1994. The laboratory results are summarized in the data summary tables in Appendix A-2-2.

The April 1989 data indicate that total BTEX concentrations ranged from 3.3 μ g/l to 197.5 μ g/l, with the highest concentration in the sample from well W-9, near Tank 11 on the northern end of the property. Wells W-1 through W-4 were not sampled during this round. Individual BTEX constituents were detected in all but one sample (W-5) at concentrations exceeding the groundwater standards in effect at the time the sampling was done. Groundwater samples from wells W-5 through W-10 were also analyzed for TPH. TPH was not detected in any sample at a concentration exceeding the laboratory reporting limit.

All 12 wells were sampled in May 1991 for BTEX. The laboratory data indicate total BTEX concentrations ranged from less than the laboratory reporting limit to 34.5 μ g/l, with the highest concentration in the sample from well W-1, near Tank 4 on the southeast portion of the property. Sample W-1 was the only sample that contained individual BTEX constituents at concentrations exceeding NYSDEC groundwater standards.

The entire monitoring well network was again sampled in January 1992 for BTEX and SVOCs. Samples from ten of the 12 monitoring wells did not contain BTEX constituents at concentrations exceeding the laboratory reporting limits. Total BTEX concentrations in the samples from the two remaining wells were 31.3 μ g/l (W-1) and 74.6 μ g/l (W-8). The concentration of ethylbenzene and total xylenes in both samples exceeded NYSDEC groundwater standards. Total SVOC concentrations ranged from less than the laboratory reporting limit to 188.4 μ g/l at W-4, near the northwest corner of the property. The

sample from W-4 was the only sample that contained individual SVOC constituents at concentrations exceeding NYSDEC groundwater standards.

Supplemental Groundwater Sampling Program – 1994

Based on the historical groundwater monitoring database, SI/EG installed six additional wells designated MW-1 through MW-6 to address gaps in the monitoring well network coverage. The six new wells and four existing wells (W-2, W-4, W-8 and W-11) were sampled in April 1994 for volatile organic compounds (VOCs) and SVOCs. MW-1 was also sampled for PCBs. The laboratory results are included in the data summary tables in Appendix A-2-2.

Total VOC concentrations ranged from 6 μ g/l to 759 μ g/l, with the highest concentration found in the sample from W-8 on the east side of Tank 10. Except for the samples from W-2 and W-8, the detected compounds were made up entirely of non-target constituents (i.e. tentatively identified compounds). Sample W-8 was the only sample that contained individual VOC compounds at concentrations exceeding NYSDEC groundwater standards. Total SVOC concentrations ranged from 54 μ g/l to 666 μ g/l (W-8). The sample from well W-11, at the north property boundary, had the highest concentration of target compounds (245 μ g/l) and contained one SVOC constituent at a concentration exceeding the NYSDEC groundwater standard. PCBs were not detected in the sample from MW-1 at a concentration exceeding the laboratory reporting limit.

<u>APPENDIX A – 2 – 1</u>

Table 4 Summary of Field Screening - Test Pits Former Cibro Petroleum Terminal Island Park, New York (May 27, 1993)

LOC	DEPTH	DEPTH Sample	OVM PPM	DESCRIPTION	REMARKS
A-5	2.0	1.5	6.8	Mixed fill	
A-6	3.0	2.5	16.0	gry fsd w/Grv	
A-7	2.5	2.0	5.0	mixed fill	stained soil at 2.0'
8-5	1.5	10	71.9	mixed fill	
B-6	1.5	1.0	2.6	it brn m sa w/crv	
B-7	2.5	2.0	45.0	brn silty m sd w/crv	Stained Soll at 3.0'
B-8	2.0	1.5	1.9	mixed fill	
C-1	2.5	2.0	6.6		Product in Soil Below CW
C-2	1.0	0.5	0.0	mixed fill	
C-3	2.0	1.5	5.3	brn silty m 5d w/Crv	
C-4	2.5	2.0	24.0	mixed fill	Petroleum Odor
C 5	3.0	2.5	31.0	mixed fill	Product in Soil Below CW
C-6	1.0	0.5	42.0	mixed fill	
C 7	1.0	0.5	43.0	mixed fill	
C-8	1.5	1.0	1.9	mixed fill	
D-1	•	2.0	5.5	It brn m sa w/crv	Petroleum Odor
0-2	2.0	1.5	16.0	mixed fill	Secretaria Secre
0-5	1.0	0.5	3.5	mixed fill	Petroleum Odor
0-7	1.5	1.0	37.0	brn silty m sd w/crv	Petroleum Odor
0-8	2.0	1.5	2.2	gry sity 5d	
E 1	2.5	2.0	0.1	tn m sd	
E-2	1.0	0.5	31.0	tn sity Cl w/org	
E 3	3.0	2.5	27.0	gry m Sd mixed fill	Oil Staining at Surface
E 5	1.5	1.0	65.0 3.7	gry m sd	Oil Stairing at Surface
E-6	1.0	0.5	2.7	mixed fill	
E-7	1.0	0.5 1.0	2.8	mixed fill	
E-8	1.5	1.5	1.4	mixed fill	
F-1	2.0	0.5	0.0	mixed fill	
F-2	1.0	0.5	0.0	mixed fill	
F-5	1.0	0.5	1.1	mixed fill	
F-6	0.7	0.2	2.4	gry m 5d	
G1	3.5	3.0	1.9	mixed fill	
G-2	3.0	2.5	6.3		Concrete at 3.0'
C-3	2.0	1.5	10.0		Petroleum Odor
C-4		2.0	0.3	brn silty m 5d w/Crv	
C-5	2.0	1.5	0.0	brn silty m 5d w/Grv	
G-6	1.5	1.0	0.0	orn silty m 5d w/Grv	
G-7	1.0	0.5	2.4	orn silty m 5d w/Grv	
H-4	1.0	0.5	0.0	brn slity m sa w/crv	•
H-5	1.0	0.5	0.0	mixed fill	
H-6	1.0	0.5	0.0	mixed fill	
21	2.5	2.0	50.8	mixed fill	
7.2	2.0	1.5	39.0	mixed fill	
Z-3	2.5	2.0	61.0	mixed fill	

Concrete Slab at 2.0' Below SurfaceGroundwater not observed. Note:

Table 5
Summary of First Round Sampling-Test Pits
Former Cibro Petroleum Terminal
Island Park, New York
(February 23-24, 1993

Sample ID:	D-2	C-2	C-4	E-3	0.5
Laboratory ID:	T302353-06	T302353-09	T302353-13	T302354-14	T302354-15
Date:	2/24/93	2/23/93	2/23/93	2/23/93	2/24/93
Depth:	1.5	0.5	2.0	2.5	0.5
		Results in	Parts Per Milli	on (mg/kg)	
TPH	16 400	43.70	8410	4580	8 6
		Results in	Parts Per Billi	on (ug/kg)	
Benzene	ND	ND	ND	ND	ND
Toluene	146	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	460	ND	ND
Total BTEX	146	ND	460	ND	ND

Note:

ND - Not Detected

Table 5 (Cont'd) Summary of First Round Sampling-Test Pits Former Cibro Petroleum Terminal Island Park, New York (February 23-24, 1993)

Sample ID:	E ∙5	8-5	G-7	Z-1	H-4
Laboratory ID:	T302354-02	T302354-04	T302353-01	T302353-01	T302353-11
Date:	2/24/93	2/23/93	2/24/93	2/24/93	2/24/93
Depth:	1.0-1.5	1.0-1.5	0.5-1.0	2.0-2.5	0.5-1.0
У		Results	in Parts Per Millio	n (mg/kg)	
TPH	6710	2440	64.1	8370	< 27.2
		Results	in Parts Per Billio	n (ug/kg)	
Semi-Volatile Orga	nics				
1,2-Dichlorobenze	ND	ND	112 J	ND	ND
1,2,4-Trichloroben	ND	ND	4 4 J	ND	ND
Naphthalen e	2023.00	ND	5 5 J	ND	ND
Acenapthene	ND	ND	128 J	ND	ND
Dibenzofuran	695 J	ND	50 J	ND	ND
Fluorene	1362 J	81 6 J	102 J	ND	ND
Phenanthrene	2624	118 3 J	9 80	ND	ND
Anthracene	ND	ND	211 J	ND	ND
Fluoranthene	ND	411 J	1629	ND	ND
Pyrene	82 3 J	371 J	1328	486 J	ND
ButylbenzylPhthal	ND	ND	301 J	ND	ND
Benzo(A)Anthrace	ND	ND	7 39	ND	ND
Chrysene	ND	ND	8 84	ND	ND
Bis(2-Ethylhexyl)-P	ND	ND	618	ND	ND
Benzo(B)Fluoranth	ND	ND	605	ND	ND
Benzo(K)Fluoranth	ND	ND	1245	ND	6 5 J
Benzo(A)Pyrene	ND	ND	6 80	ND	ND
Indeno(1,2,3-CD)Py	ND	ND	352 J	ND	ND
Dibenzo(A,H)Anthr	ND	ND	19 9 J	ND	ND
Benzo(G,H,I)Peryle	ND	ND	314 J	ND	ND
Total Targeted:	7,527	2,781	10,576	468	6 5
Total Non-Target	217,763	404,450	30,153	397,079	31,546
Totak	225,290	407,231	40,729	397,547	31,611

Notes:

ND - Not Detected

J - Compound detected but below the MDL.

Table 5 (Cont'd)
Summary of First Round Sampling-Test Pits
Former Cibro Petroleum Terminal
Island Park, New York
(February 23-24, 1993)

LOC	LAB ID NO:	DATE	TPH (mg/kg)
A-6	T302354-05	2/23/93	10.400
B-7	T302354-06	2/23/93	10,400
8-8	T302354-12	2/24/93	4,730
	· · · · · · · · · · · · · · · · · · ·		<27.3
C·1	T302353-03	2/23/93	2,240
C-3	T302354-17	2/23/93	216
C- 6	T302354-03	2/23/93	6 39
C-7	T302354-07	2/23/93	7,290
D-7	T302354-08	2/24/93	7,080
D-8	T302354-11	2/24/93	124
E-1	T302353-02	2/23/93	126
E-2	T302353-05	2/23/93	6,970
E-7	T302354-09	2/24/93	267
E-8	T302354-10	2/24/93	697
F-5	T302354-13	2/24/93	145
G-2	T302354-16	2/23/93	2,520
G-3	T302353-10	2/23/93	1,080
G-4	T302353-12	2/23/93	< 27.3
G- 6	T302354-01	2/24/93	< 27.5
H-5	T302353-14	2/24/93	. <27.2
Z-2	T302353-08	2/24/93	1,330
Z-3	T302353-09	2/24/93	25,700

TABLE 6 (CONT) SUMMARY OF SECOND ROUND SAMPLING-TEST PITS FORMER CIBRO PETROLEUM TERMINAL ISLAND PARK, NEW YORK (MAY 27, 1993)

Sample No.: Lab ID: Date: Depth: PCB (ug/kg)	G7A-0.5 T306022-01 5/27/93 0.5 5400	G7A-2.0 T306052-05 5/27/93 2.0 99	G7B-1 -06 5/27/93 1.0 3100	G7B-2.0 -07 5/27/93 2.0 ND	
Sample No.: Lab ID: Date: Depth: PCB (ug/kg)	G7C-1.5 -08 5/27/93 1.5 ND	G7D-2.0 T306052-09 5/27/93 2.0	G7D-3.0 -10 5/27/93 3.0 70	G7D-1 -11 5/27/93 1.0 2700	
Sample No.: Lab ID: Date: Depth:	H4A-0.5 T306022-02 5/27/93 0.5	H4A-3.5 T306052-12 5/27/93 3.5 ND	H4B-0.5 T306052-13 5/27/93 0.5 ND	H4B-2.5 -14 5/27/93 2.5 ND	
Sample No.: Lab ID: Date: Depth:	H4C-0.5 -15 5/27/93 0.5 ND	H4C-3.5 -16 5/27/93 3.5 ND	H4D-0.5 T306052-17 5/27/93 0.5	H4D-3.5 -18 5/27/93 3.5	

Sample No.: Lab ID:

H4GW

Date:

T306052-19 · 5/27/93

PCB (ug/kg)

ND

Note:

ND - Not Detected

TABLE 6 SUMMARY OF SECOND ROUND SAMPLING-TEST PITS FORMER CIBRO PETROLEUM TERMINAL ISLAND PARK, NEW YORK (MAY 27, 1993)

Sample No.: Lab ID: Date: Depth:	A6-4.0 T306052-01 5/27/93 4.0	C5-1.0 -02 5/27/93 1.0	C5-2.0 -03 5/27/93 2.0	D2-1.5 -04 5/27/93 -1.5	
	Results In 1	Parts Per Bill	ion (ug/kg)		
Semi-Volatile Organic Targeted Compounds:	S				
2-Methylnaphthalene	3 500	8000	19000	ND	
Dibenzofuran	ND	1700 J	3200	ND	
Flourene	6500	1900	2300	ND	
Phenanthrene	74 00	1400 J	1000	ND	
Anthracene	740 J	16000	1 0000	ND	
Flouranthene	460 J	ND	1400	ND	
Pyrene	3 60J	370 J	2 80J	3 40J	
Acenaphthene	ND	ND	2600	ND	
Chrysene	ND	ND	ND	3 80J	
Benzo (a) Pyrene	ND	ND	ND	3 30J	
Total Targeted:	18,960	29,370	39,780	1,050	
Total Non-Targeted:	143,300	159,100	217,200	100,900	

188,470

162,260

256,980

101,950

Notes:

Total:

ND - Not Detected
J - Detected but below MDL

TABLE 1 SUMMARY OF POLYCHLORINATED BIPHENYLS IN SOIL JUNE 2 AND 3, 1994 CIBRO ISLAND PARK, NEW YORK

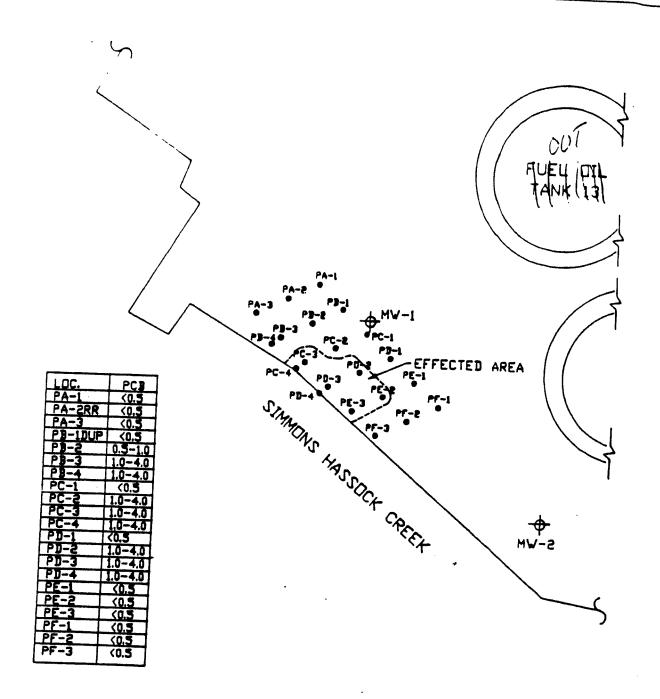
LOCATION	PCB CONCENTRATION
PA-1	<0.5
PA-2RR	<0.5
PA-3	<0.5
PB-10UP	<0.5
P B-2	0.5 - 1.0
P B-3	1.0 - 4.0
P B-4	1.0 - 4.0
PC-1	<0.5
PC-2	1.0 - 4.0
PC-3	1.0 - 4.0
PC-4	1.0 - 4.0
PD-1	<0.5
P D-2	1.0 - 4.0
P D-3	1.0 - 4.0
PD-4	1.0 - 4.0
PE-1	<0.5
PE-2	<0.5
PE-3	<0.5
PF-1	<0.5
PF-2	<0.5
P F-3	<0.5

NOTES:

All Results in Parts Per Million.

PA-2RR - Sample was re-run.

PB-10UP - A second sample was extracted from the subsurface and analyzed.



LEGEND

PE-2 - PCB SOIL SAMPLE LOCATION AND DESIGNATION

NOTE

ALL CONCENTRATIONS IN MILLIGRAM PER KILOGRAM

A DIVISION OF THE ENVIRONISION GROUP, INC.

331 Route 9V, Congers, NY 10980

Tel: (914) 268-6660 FAX: (914) 268-2065

PROJECT NAME CIBRO FORMER PETROLEUM TERMINAL

DRAVING TITLE PCB SOIL SAMPLE LOCATIONS

AND SCREENING RESULTS

APPENDIX A-2-2

During Monitoring Well Installation Former Cibro Petroleum Terminal Island Park, New York 4/13/89 **summary of Soil Sampling** Table 1

Sample ID:	W-5	9-8	W-7	W-8	6-M	W-10	W-10 W-11	W-12
		Resu	its in Parts Per	rts Per B	illion (UC	C/KC)		
Compound:								
Benzene	172	107	126.0	167.0	533.0	169	2	119
Toluene	323	251	416.0	228.0	284.0	263	97	506
Ethylbenzene	2	2	2	2	9	Q	9	9
Xviene	2	2	1732	2	998	791	S	2
Dichlorobenzene	2	2	2	2	S	299	Q	QN
Total	495	358	2274	282	1683	1522	87	325
read	Q	9	8	2	Q.	0.2	9	0.03

Note: ND - Not Detected

Table 2
Summary of Benzene, Toluene, Ethylbenzene and Xylene Analysis in Groundwater
Former Cibro Petroleum Terminal Island Park, New York

Results In Parts Per Billion (UC/L)

4/17/89

Sample ID:	۲-۸	W-2	W-3	W-4	W-5	9-M	W-7	8- 8	6-≯	W-10	W-11	W-12
Benzene	¥	ş	≨	₹	2	2	4.6	2.7	3.4	2	0.88	2.0
Tolnene	¥	ş	ş	ş	3.3	5.5	3.2	3.7	12.5	2	2.0	2.6
Ethylbenzene	ş	ş	Ž	Š	2	2	9	16.2	9.09	4.1	0.97	S
Xylene	ş	ş	¥	¥	2	2	2	63.0	121	13.5	4.7	2
PHC	¥	¥	AN	NA	QN	Q	S	9	S	Q	Y V	Y Z
Total	¥	≨	ş	ş	3.3	5.5	7.8	85.6	197.5	17.6	8.55	4.6
5/8/91												
Sample ID:	W-1	W-2	W-3	A-W	W-5	% -6	W-7	W-8	6-≯	W-10	W-11	W-12
Benzene	25.9	€	₽	2	2	2	2	2	2	Q	2	9
Toluene	3.5	5.6	4.1	2	1.2	2	2	3.1	2.0	9	2.2	2.2
Ethylbenzene	2.1	2	2	2	2	2	2	2.2	2	9	1.8	۲.
Xylene	3.0	4.8	2.0	9	1.1	2	2	7.2	2.2	Q	2.0	2.1
Total	34.5	7.4	6.1	9	2.3	2	2	12.5	4.2	9	6.0	5.4
1/31/82												

Sample ID:	. N-1	W-2	W-3	8 -8	W-5	9-M	W-7	8- %	6- M	W-10	W-11	W-12
Benzene	2	2	2	2	9	2	2	2	2	2	9	9
Tolinene	2		2	2	2	2	9	9	2	9	Q	9
Ethylbenzene	10.2		2	2	2	2	2	26.6	9	9	S	9
Xylene	21.1		2	2	2	2	2	48.0	9	S	Q	ON
Total	31.3		2	2	9	2	2	74.6	2	2	2	9

Notes: ND - Not Detected

NA - Not Analyzed

Summary of Base Neutral Compounds In Groundwater Former Cibro Petroleum Terminal Island Park, New York

Results in Parts Per Billion (UC/L)

1/31/92

Sample ID:	W-1	W-2	W-3	W-4	W-5	% -6	W-7	8- X	6- M	W-10	W-11	W-12
Acenanaphtylene	9	9	Q	Q	9	10.4	Q	9.6	12.0	S	23.2	g
Acenanaphthene	9	2	9	56.5	2	2	2	Q	9	9	2	9
Fiuorene	9	11.5	22.0	69.0	32.5	9.5	9.5	2	9	10.0	20.5	11.0
Phenanthrene	2	2	Q	2	9	2	2	9	2	2	9	29.5
Anthracene	9	17.5	2	62.9	2	14.5	14.5	16.0	2	2	9	9
Pyrene	Q	1.0	1.2	2	2	2	1.0	2	2	S	Q	11.0
Total	2	30.0	23.2	188.4	32.5	34.4	25.0	25.6	12.0	10.0	43.7	51.5

Note:

ND - Not Detected

TABLE 2
SUMMARY OF GROUNDWATER SAMPLING
CIBRO
ISLAND PARK, NEW YORK

Laboratory ID: Data Sampled:	MW-1 T405002-7A 4/29/94	MW-2 T405002-6A 4/29/94	MW-3 T405002-4A 4/29/94	MW-4 T05002-8A 4/29/94	MW-5 T40 5002 -10A 4/29/94	MW-8 T405002-1/ 4/28/94
		RESULTS IN M	ICROGRAMS PI	ER LITER (ug/l))	
VOLATILE COMPOUNDS						
Methylene Chloride	1J B	2J B	2J B	2JB	1JB	ИD
Trichloroethene	ND	ND	ND	ND	ND	ND
Benzane	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND
Total Targeted	1	2	2	2	1	NO
Total Non-Targeted	87	6	594	301	505	140
Total Volatiles	88	8	5 96	303	506	140
	NDS					
SEMI VOLATILE COMPOUI	6.1	ี่ย่	31	ĄĮ	5J	5J 24
SEMI VOLATILE COMPOUI Di-n-butylphthalate bis(2-Ethyhexyl) phthalate	6J 2J	2J	ND	ND	2J	21
SEMI VOLATILE COMPOUI Di-n-butylphthalate bis(2-Ethyhexyl) phthalate Acenaphthene	6J 2J ND	2J 4J	ND 7J	ND 5J	2J 6J	21 7J
SEM VOLATILE COMPOUI Di-n-butylphthalate bis(2-Ethyhexyl) phthalate Acenaphthene Dibenzofuran	6J 2J ND ND	2J 4J 1J	ND 7J 3J	ND 5J 4J	2J 6J 6J	21
SEMI VOLATILE COMPOUI Di-n-butylphthalate bis(2-Ethyhexyl) phthalate Acenaphthene Dibenzofuran Fluorene	6J 2J ND ND ND	2J 4J 1J ND	ND 7J 3J 7J	ND 5J	2J 6J	21 7J 3J
SEM VOLATILE COMPOUI Di-n-butylphthalate bis(2-Ethyhexyl) phthalate Acenaphthene Dibenzofuran Fluorene Naphthalene	6J 2J ND ND	2J 4J 1J	ND 7J 3J	ND 5J 4J 6J	2J 6J 7J	21 7J 3J ND ND
SEM VOLATILE COMPOUI Di-n-butylphthalate bis(2-Ethyhexyl) phthalate Acenaphthene Dibenzofuran Fluorene Naphthalene Phenanthrene	6J 2J ND ND ND	2J 4J 1J ND ND	ND 7J 3J 7J ND ND ND	ND 5J 4J 6J 10 4J ND	2J 6J 7J 32 7J ND	21 7J 3J ND ND 4J 1J
SEM VOLATILE COMPOUI Di-n-butylphthalate bis(2-Ethyhexyl) phthalate Acenaphthene Dibenzofuran Fluorene Naphthalene	8J 2J ND ND ND ND ND ND	2J 47 1J ND ND ND ND	ND 7J 3J 7J ND ND ND	ND 53 43 63 10 43 ND ND	2J 6J 7J 32 7J ND ND	21 7J 3J ND ND 4J 1J
SEM VOLATILE COMPOUI Di-n-butylphthalate bis(2-Ethyhexyl) phthalate Acenaphthene Dibenzofuran Fluorene Naphthalene Phenanthrene Pyrene Anthracene Flouranthene	8J 2J 2D 2D 2D 2D 2D 2D 2D 2D 2D	27 17 19 20 20 20 20 20	ND 7J 3J 7J ND ND ND ND	50 53 43 60 10 10 10 10 10 10	2J 6J 7J 32 7J ND ND	21 7J 3J ND ND 4J 1J ND
SEM VOLATILE COMPOUI Di-n-butylphthalate bis(2-Ethyhexyl) phthalate Acenaphthene Dibenzofuran Fluorene Naphthalene Phenanthrene Pyrene Anthracene	8J 2J ND ND ND ND ND ND	2J 47 1J ND ND ND ND	ND 7J 3J 7J ND ND ND	ND 53 43 63 10 43 ND ND	2J 6J 7J 32 7J ND ND	21 7J 3J ND ND 4J 1J
SEM VOLATILE COMPOUI Di-n-butylphthalate bis(2-Ethyhexyl) phthalate Acenaphthene Dibenzofuran Fluorene Naphthalene Phenanthrene Pyrene Anthracene Flouranthene	8J 2J 2D 2D 2D 2D 2D 2D 2D 2D 2D	27 17 19 20 20 20 20 20	ND 7J 3J 7J ND ND ND ND	50 53 43 60 10 10 10 10 10 10	2J 6J 7J 32 7J ND ND	21 7J 3J ND ND 4J 1J ND
SEM VOLATILE COMPOUI Di-n-butylphthalate bis(2-Ethyhexyl) phthalate Acenaphthene Dibenzofuran Fluorene Naphthalene Phenanthrene Pyrene Anthracene Flouranthene Total Targeted	6J 2J 2D 2D 2D 2D 2D 2D 2D 2D 2D 2D 2D 2D	2J 4J 1J ND ND ND ND ND	ND 7J 3J 7J ND ND ND ND	ND 53 43 63 10 43 ND ND ND	2J 6J 7J 32 7J ND ND ND	21 7J 3J ND ND 4J 1J ND ND

TABLE 2 (CONT) SUMMARY OF GROUNDWATER RESULTS CIBRO ISLAND PARK, NEW YORK

Sample ID:	W-2	W-4	₩-8	W-11	Field Blank	Trip Blank
Laboratory ID:	T405002-05A	T405002-09A	T405002-02A	T405002-03A	T405002-11A	T405002-12
Data Sampled:	4/29/94	4/29/94	4/28/94	4/28/94	4/28/94	4/28/94
		RESULTS IN M	ICROGRAMS P	ER LITER (ug/l)		
VOLATILE COMPOUNDS						
Methylene Chloride	ND	2J B	2J B	ND	2J B	2J 8
Trichloroethene	2J	ND	ND	ND	NO	NO
Benzene	ND	ND	2J	ND	ND	NO
Toluene	ND	ND	1J	NO	ND	ND
Ethylbenzene	ND	ND	34	ND	ND	ND
Total Targeted	2	2	39	ND	2	2
Total Non-Targeted	14	4	720	452	14	3
Total Volatiles	. 16	6	759	452	16	5
SEMI VOLATILE COMPOU	NDS					
Di-n-butyiphthalate	3,J	3,J	6J	43	2 J	NA
bis(2-Ethyhexyi) phthalate	1 J	NO	2J	ND	ND	NA
Acenaphthene	ND	ND	5J	82	ND	NA
Dibenzofuran	ND	ND	3 J	53	ND	NA
Fluorene	ND	ND	3 J	29	ND	NA
Naphthalene	ND	ND	52	20	ND	NA NA
Phenanthrene	ND	ND	NO	42	ND	NA.
Pyr ene	NO	ND	ND	31	ND	NA
Anthracene	ND	ND	ND	31	ND	NA
Flouranthene	NO	ND	NO	9.1	ND	NA NA
Total Targeted	4	3	71	245	2	NA.
Total Non Targeted	178	51	5 95	3 59	25	NA
Total Semi-Volatile	182	54	666	604	27	NA
PCB'\$	NA .	NA	NA	NA.	NA	NA

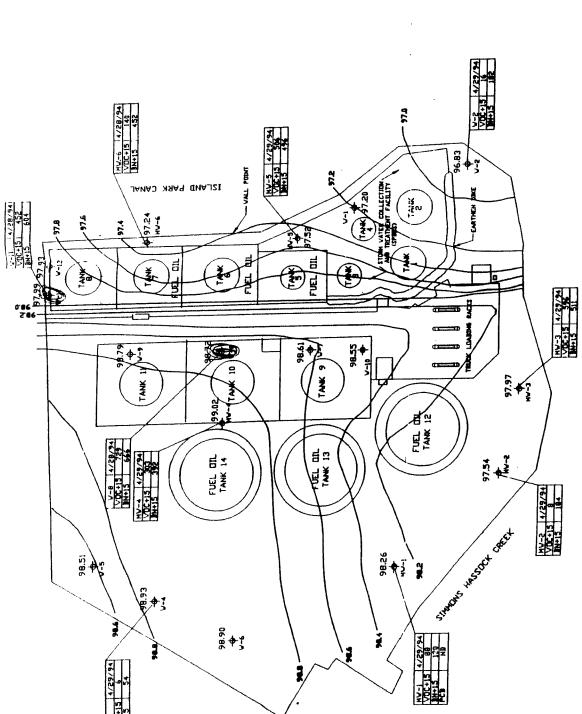
NOTES:

ND: Not detected above laboratory MDL

NA: Not analyzed

J: Detected, but below laboratory MDL

JB: Detected, but containment present due to laboratory preparation of sample.



LEGEND

+ V-2 - VELL LOCATION AND DESIGNATION
PREVIDUSLY ON-SITE
+ W-2- VELL LOCATION AND DESIGNATION
INSTALLED BY SUBSURFACE
INVESTIGATION
- GROUNDVATER CONTOUR LINE NOTES

VOC+15 - TOTAL VOLATILE ORGANIC
COMPOUNDS
BN+15 - TOTAL SEMI VOLATILE COMPOUN
PCB - POLYCHLORINATED BIPHENYLS

ALL RESULTS IN MICROGRAMS PER LITER (UG/L) CONTUOR MAP GENERATED FROM 4/28/94

FAX: (914) 268-2065 DRAVING TITLE GROUNDVATER CONTOUR MAP AND SAMPLING RESULTS A DIVISION OF THE ENVIROVISION GROUP, INC. 331 Route 9V, Congers, NY 10920 PROJECT NAME: CIBRO FORMER PETROLEUM TERM Jubsurface Investigations F16 DATE: 06-18-94 Tel: (914) 268-6660 SCALE: 1"=100"
DRAVN BY: MK
CHECKED BY: