africance on the

TABLE 1
GROUNDWATER ELEVATION SURVEY DATA
BRA PARCEL P-3
December 1996

			December 5, 1996	ar 5, 1996	December 6, 1996	6, 1996	ember	12, 1996
Monitoring Well	Elevation Top of PVC (feet)	Elevation Ground Surface (feet)	Depth To Water (feet)	Groundwater Elevation (feet)	Depth To Water (faet)	Groundwater Elevation (feet)	Depth To Water (feat)	Groundwater Elevation (feet)
WS-1	92.49	93.42	7.80	84.69	7.63	84.86	7.50	84.99
WS-2	92.32	92.46	8.57	83.75	7.75	84.57	7,59	84.73
WS-3	93.88	92.61	8.49	85.39	8.43	85.45	8.20	85.68
48×	94.06	92.00	8.84	85.22	8,88	85.18	8.53	85,53
WS-5	98.27	96.39	14.19	84.08	14.17	64.10	13.70	84.57
WS-6	97.03	95.16	12.56	84.47	12.55	84.48	12.05	84.98
WS-7	98.12	96.34	13.60	84.52	13.58	84.54	13.07	85.05
WS-8	102.95	100.70	16.70	86.25	16.68	86.27	16.65	86.30
6-SW	102.70	100.52	17.43	85.27	16.75	85,95	16.69	86.01
WS-10	101.99	100.98	16.80	85.19	17.38	84.61	16.93	85.06
WS-11	103.88	101.90	19.20	84.68	19.18	84.70	18.66	85.22
WS-12	99.35	96.89	12.73	86.62	12.72	86,63	12.66	86.69

NOTES: Elevations nessured relative to on-site arbitrary 100.00-foot benchmark. Fire hydrart on Vernon St. used as benchmark. Depth to water measured from 100 of PVC riser. SCAMNED

TABLE 2 PID FIELD SCREENING RESULTS - TEST PIT & SOIL BORINGS **BRA Parcel P-3**

Boring	Sample	Sample Depth (feet)	PID Reading (ppm)
TP-1/WS-12	S-1	11.5 - 12 17 - 19	34 NS
TP-2/B-2	S-1 S-2 S-3 S-4 S-5 S-6 S-7	13.5 - 14 29 - 31 34 - 36 39 - 41 44 - 46 49 - 49.1 54 - 56 59 - 61	3.7 0.4 0.8 0.8 0.9 0.8 0.9
TP-3/B-1	S-1 S-2 S-3 S-4 S-5 S-6 S-7 S-8 S-9	15.5 - 16 19 - 21 24 - 26 29 - 31 34 - 36 39 - 41 44 - 46 49 - 51 54 - 56 59 - 61	2.6 1.6 2.6 2.3 2.7 1 1.9 1.7 1.2
TP-4/WS-9	S-1 S-2	18.5 - 19 19 - 21 23 - 25	5.5 1.2 0.5
TP-5/WS-8	S-1 S-2	17 - 17.5 18 - 20 23 - 25	2 ND 0.8
TP-6	S-1	15.5 - 16	1.1
TP-7/WS-10	S-1	17.5 - 18 19 - 21	0.5 4.4

PID = Photoionization Detector Photovac Microtip Model HL-2000.

ppm = parts per million.

ND = Not Detected or less than Background.

NS = Not Screened.

Background concentrations = ND - 0.2 ppm.

(--) indicates no sample recovered.

TABLE 2 - Continued

PID FIELD SCREENING RESULTS - SOIL BORINGS BRA Parcel P-3

Boring	Sample	Sample Depth (feet)	PID Reading (ppm)
WS-1	S-1 S-2 S-3 S-4 S-5 S-6 S-7	0 - 2 3.5 - 5.5 8.5 - 10.5 13.5 - 15.5 18.5 - 20.5 13.5 - 25.5 28 - 30	ND ND 1.4 ND ND ND
VVS-1	S-7 S-8 S-9 S-10 S-11 S-12 S-13	26 - 30 33 - 35 38 - 40 43 - 45 48 - 50 53 - 55 58 - 60	ND ND ND ND ND ND
WS-2	S-1	1 - 3	ND
	S-2	5 - 7	ND
	S-3	10 - 12	ND
	S-4	15 - 17	ND
WS-3	S-1	0 - 2	ND
	S-2	5 - 6	
	S-3	10 - 12	ND
	S-4	15 - 17	ND
WS-4	S-1	0 - 2	ND
	S-2	5 - 7	ND
	S-3	10 - 12	ND
	S-4	15 - 17	ND
WS-5	S-1	0 - 2	0.3
	S-2	5 - 7	0.6
	S-3	10 - 12	0.5
	S-4	15 - 17	0.6
WS-6	S-1	0 - 2	0.5
	S-2	5 - 7	ND
	S-3	10 - 12	0.8
	S-4	15 - 17	0.5
WS-7	S-1	0 - 2	ND
	S-2	5 - 7	ND
	S-3	10 - 12	0.7
	S-4	15 - 17	0.2
WS-11	S-1	0 - 2	1.2
	S-2	5 - 7	1
	S-3	10 - 12	1.6
	S-4	15 - 17	
	S-5	20 - 22	1.7

Notes:

C:\MYDOCU-1\PROJECTS\EDIC\P_3\REPORT\F\GSTABS\PI

PID = Photoionization Detector Photovac Microtip Model HL-2000.

ppm = parts per million.

ND = Not Detected or less than Background.

NS = Not Screened.

Background concentrations = ND - 0.2 ppm.

⁽⁻⁾ indicates no sample recovered.

TABLE 3

SOIL SAMPLING RESULTS BRA PARCEL P-3 Test Pit and Soil Boring Samples

		Method 1			15. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19					ie depth (f				
Units	Reportable	Cleanup	WS-1	WS-2	WS-3	WS-4	WS-5	WS-6	WS-7	WS-8	WS-9	WS-10	WS-11	WS-1
	Concs.	Standards		000000000000000000000000000000000000000					26 (0000)	TP-5	1P-4	TP-7		TP 1
(889/8866)	RCS-1	S3/GW-3**	8,5-10,5	10-12	15-17	10-12	10-12	10-12	10-12	17-17.5	18.5-19	17.5-18	20-22	11.5-1
OUNDS*														<u> </u>
ug/kg	10,000	200,000	ND	ND	ND	ND	ND	ND	ND	ND	87	NID	NID	ND
ug/kg	1,000,000	NS	ND	ND	ND									330
ug/kg	100,000	NS	ND	ND	ND	ND	ND		· · · · · · · · · · · · · · · · · · ·	+	 			760
ug/kg	500,000	1,000,000	ND	ND	ND	ND	ND	ND						32
ug/kg	NS	NS	ND	ND	ND	ND					 			36
ug/kg	NS	NS	ND	ND	ND	ND	ND	ND						270
ug/kg	NS	NS	ND	ND	ND I	ND	ND	ND	ND				• .	470
ug/kg	4,000	1,000,000	ND	ND	ND	ND	ND	ND	ND	150				160
ug/kg	1,000,000	NS	ND	ND	ND	ND	ND	ND	ND	· · · · · · · · · · · · · · · · · · ·				70
ug/kg	-	-	ND	ND	ND	ND	ND	ND	ND	+				32
ug/kg	-		ND	ND	ND	ND	ND	ND	ND					2,128
		-							·					1
CARBON:	S**													
mg/kg	-		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
mg/kg	<u> </u>		ND	ND	ND	ND	ND	ND	ND	ND	ND			ND
mg/kg		_ 1	ND	ND	ND	ND	ND	ND	ND	ND				ND
mg/kg	<u> </u>		ND	ND	ND	ND	ND	ND	ND	ND				8.400
mg/kg	<u> </u>		ND	ND	ND	ND	ND	ND	ND	ND				ND
mg/kg	1-		ND	ND	ND	ND	ND	ND	ND					ND
mg/kg	-		ND	ND	ND	ND	ND	ND	ND	500				ND
mg/kg	500	5,000	ND	ND	ND	ND	ND	ND	ND	500**				8,400
IYDROCA	RBONS ***												· · · · ·	i
ug/kg	4,000	1,000,000	NA	ΝD	ND	NA	NA	NA	NA	8,200	130	NA	ND	1,000
ug/kg	10,000	1,000,000	NA	ND	ND	NA	NA	NA	NA	4,300	60	NA		23,000
ug/kg	100,000	1,000,000	NA	ND	ND	NA	NA	NA	NA	2,000	ND	NA	ND	800
ug/kg	20,000	4,000,000	NA	ND	ND	NA	NA	NA	NA	12,000	180	NA	ND	3,400
ug/kg	400,000	4,000,000	NA	ND	ND	NA	NA	NA	NA	11,000	200	NA	ND	3,900
ug/kg	100,000	100,000	NA	ND	ND	NA	NA	NA	NA	93,000	1,500	NA	ND	11,000
ug/kg	1,000,000	5,000,000	NA	ND	ND	NA	NA	NA	NA	21,000	440	NA	ND	2,700
ug/kg	600,000	1,000,000	NA	ND	ND	NA	NA	NA	NA	92,000	1,600	NA	ND	4,100
ug/kg	500,000	5,000,000	NA	ND	ND "	NA	. NA	NA	NA	82,000	1,400	NA	ND	4,100
ug/kg	700	4,000	NA	ND	ND	NA	NA	NA	NA	38,000	630	NA	ND	1,500
ug/kg	7,000	40,000	NA	ND	ND	NA	NA	NA	NA	44,000	690	NA	ND	1,700
ug/kg	700	4,000	NA	ND	ND	NA	NA	NA	NA	34,000	560	NA.		1,200
ug/kg	7,000	40,000	NA	ND	ND	NA	NA	NA	NA	35,000	550	NA	ND	1.300
ug/kg			NA	ND	ND	NA	NA	NA	NA	39,000	610	NA	ND	1,400
ug/kg			NA	ND	ND	NA	NA	NA	NA	4,700	ND	NA	ND	ND
ug/kg	100,000	2,500,000	NA	ND	ND	NA	NA	NA ·	NA	13,000	190	NA	ND	ND
ug/kg	700	4,000	NA	ND	_ND	NA	NA	NA	NA	14,000	200	NA	ND	ND
	ļ													
mg/kg	30	30	NA	7.1	7.5	NA T	NA I	NA	NA	7.3	78	NA T	8.1	4,4
			NA.			,				_				72
														<u><3.3</u> 27
														120
mg/kg	10	60	NA NA	<0.033	0.059	NA NA	NA NA	- NA	NA NA	3.07	0.204	NA NA	<0.015	<0.02
			11/1			120	11/5	ואה	13/1	3.01	V.ZU4	NA I	~U.U10	<0.02
mg/kg	300	2.500	NA	<5.5	<4.2	NA Í	NA	NA Î	NA	<2.6	<2.7	NA !	<2.4	<3.3
	OUNDS* ug/kg	Concs. RCS-1 Ug/kg	Concs. Standards RCS-1 S3/GW-3**	Concs. Standards RCS-1 S3/GW-3** R.5-10.5	Concs. Standards RCS-1 S3/GW-3** 8.5-10.5 10-12	Concs. Standards RCS-1 S3/GW-3** 8.5-10.5 10-12 15-17	Concs. Standards RCS-1 S3/GW-3** 8.5-10.5 10-12 15-17 10-12 Ug/Rg	Concs Standards RCS-1 SJ/GW-3** 8.5-10.5 10-12 15-17 10-12 1	Concs. Standards RCS-1 S3/GW-3** 8.5-10.5 10-12 15-17 10-12	Concs	Concs. Standards RCS-1 StarGW-3** 8.5-10.5 10-12 15-17 10-12 10-12 10-12 10-12 10-12 17-17.5	Cones. Standards RCS-1 SuCW-3** 8,5-10.5 10-12 15-17 10-12 10-12 10-12 10-12 17-17.5 18,5-19	Concs. Standards RCS-1 SUGW-3** 8,5-10,5 10-12 15-17 10-12 10-12 10-12 10-12 10-12 17-17 18,5-19 17-6-18 17-7 18,5-19 17-6-18 19-7	Concs. Standards Reds. Reds. Standards Reds. Red

NO = Not detected

** PAHs present

Bold * Exceeds applicable reportable concentration

Bold/Shaded * Exceeds applicable Method 1 Cleanup Standard

soildt2b.wk4

Care Care

SOIL SAMPLING RESULTS
SOII Boring Samples

Parameter Units Standards Standard		8-102 8-102 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3	83	.81	B:103 S2	83		B-104 S2	S3
Sandawter Units Cleanup Standards Sandaw-3** 1-2.5			S	S	S2	8,	52		SS
Standards			S	S1	\$2	88,	S	52	S3
Satelline			3	<u></u>	7,	3 ?	70		,
PETROLEUM HYDROCARBONS SSIGW-3** 1-2.5 Soline Del Oil #2/Diesel Mg/kg						0.1			
Marke Mark			7-9	1.3	. 4- 6		1-3	4-6	7-9
Pacific									
Marcola Marc			Q	Q.	Q	2	Q	S	9
Marcolambe			S	Ş	ç	S	2	Q	2
National Politis			2	2	2	2	Ş	CZ	2
Intercept		-	2 5	2 2	2 2		2	2 2	2
Indicate		_	2	ON:	2	2 5	2 9		
Maintenante			2	2	Q	Q	2	Q.	2
NO			2	S S	2	2	2	2	2
NUCLEAR AROMATIC HYDROCARBONS — 500 NUCLEAR AROMATIC HYDROCARBONS — 500 Pothalene ug/kg 1,000,000 ND Pothalene ug/kg 1,000,000 ND Verlaphthalene ug/kg 1,000,000 ND Senaphthylene ug/kg 1,000,000 240 Loranthrene ug/kg 4,000,000 3,200 Intracene ug/kg 1,000,000 3,800 Increase ug/kg 1,000,000 3,800 Inracial anthracene ug/kg 4,000,000 3,800 Inracial anthracene ug/kg 4,000 1,300 Inracial privene ug/kg 4,000 1,300 Inracial privene ug/kg 4,000 1,300 Inracial privene ug/kg 2,500,000 1,800 Inracial privene ug/kg 2,500,000 1,800 Inracial britanthracene ug/kg 2,500,000 1,800 Inracial britanthracene ug/kg 4,000 1,300 I			560	160	270	120	320	240	490
NUCLEAR AROMATIC HYDROCARBONS 5,000 500 NUCLEAR AROMATIC HYDROCARBONS ND ND pothalene ug/kg 1,000,000 ND venaphthylene ug/kg 1,000,000 ND senaphthylene ug/kg 1,000,000 240 soranthrene ug/kg 4,000,000 3,200 uthracene ug/kg 1,000,000 3,800 noranthrene ug/kg 1,000,000 3,800 nrzolajanthracene ug/kg 4,000 1,800 nrzolajanthracene ug/kg 4,000 1,800 nrzolajiroranthene ug/kg 4,000 1,800 nrzolajiroranthene ug/kg 4,000 1,300 nrzolajirorene ug/kg 4,000 1,500 nrzolajirorene ug/kg 2,500,000 1,500 nrzolajirorene ug/kg 2,500,000 1,500 senciala, hjanthracene ug/kg 4,000 1,300 senciala, hjanthracene ug/kg 4,000 1,300		QN QN	QN	Q	2	9	Q	2	2
NUCLEAR AROMATIC HYDROCARBONS ppthalene ug/kg 1,000,000 ND Methylnaphthalene ug/kg 1,000,000 ND senaphthylene ug/kg 1,000,000 300 enaphthene ug/kg 4,000,000 240 Lorene ug/kg 4,000,000 3,200 Intraene ug/kg 1,000,000 3,800 Intraele ug/kg 1,000,000 3,800 Inrac[al]anthracene ug/kg 4,000 1,800 Inrac[b]fluoranthene ug/kg 2,500,000 1,800 Inrac[b]fluoranthene ug/kg 2,500,000 1,800 Inrac[b]fluoranthene ug/kg 2,500,000 1,800		440 380	560	160	270	120	320	240	490
pthraine pugkg 1,000,000 ND Methylnaphthalene ug/kg 1,000,000 ND Enaphthylene ug/kg 1,000,000 ND Enaphthylene ug/kg 1,000,000 300 Senaphthelene ug/kg 1,000,000 300 Senaphthelene ug/kg 4,000,000 3,200 Senaphthelene ug/kg 1,000,000 3,200 Senaphthalene ug/kg 1,000,000 3,800 Senaphthalene ug/kg 1,000,000 3,800 Senaphthalene ug/kg 1,000,000 3,800 Senaphthalene ug/kg 4,000 1,300 Senaphthalene ug/kg 4,000 1,300 Senaphthalene ug/kg 4,000 1,300 Senaphthalene ug/kg 2,000,000 1,300 Senaphthalene ug/kg 2,000 NA									
Wethylappithalene ug/kg 1,000,000 ND snaphthylene ug/kg 1,000,000 300 snaphthylene ug/kg 4,000,000 240 Lorene ug/kg 4,000,000 240 Lorene ug/kg 4,000,000 3,200 Intracene ug/kg 5,000,000 3,800 Inzolajanthracene ug/kg 4,000 1,800 Inzolajanthracene ug/kg 4,000 1,300 Inzolajhturanthene ug/kg 4,000 1,300 Inzolajhturacenthene ug/kg 4,000 1,300 Inzolajhyene ug/kg 7,00 1,300 Inzolajhyene ug/kg 2,500,000 1,800 Inzolajhyene ug/kg 2,500,000 1,500 Inzolajhyene ug/kg 2,500,000 1,500 Inzolajhyene ug/kg 2,500,000 1,300 Inzolajhyene ug/kg 4,000 1,300 Inzolajhyene ug/kg 2,500,000 1,300		550 280	250	61	190	48	200	51	610
Color Colo		ND 150	160	9	120	32	400	33	260
Comparison		96 QN	140	QN	QN	2	240	41	240
December			470	200	450	Q	1,000	140	1,100
Coloration			510	160	350	Q.	1,100	150	1,100
ithracene ug/kg 5,000,000 670 loranthene ug/kg 1,000,000 3,800 rene ug/kg 1,000,000 3,800 Inzo[a]anthracene ug/kg 4,000 1,800 Inzo[b]fluoranthene ug/kg 4,000 1,900 Inzo[b]fluoranthene ug/kg 4,000 1,300 Inzo[b]fluoranthene ug/kg 4,000 1,300 Inzo[a]pryene ug/kg 7,000 1,800 Inzo[a]pryene ug/kg 2,500,000 1,800 Inzo[a]h,i]perylene ug/kg 2,500,000 1,300		_	6,000	1,800	4,600	190	009'6	1,200	12,000
Description		-	1,200	400	810	30	2,000	360	2,300
rene nazical n			7,400	2,000	5,200	180	12,000	2,000	13,000
Inzolajanthracene ug/kg 4,000 1,800 1,800 Inzolajanthracene ug/kg 4,000 1,900 1,900 Inzolajituranthene ug/kg 4,000 1,300 Inzolajituranthene ug/kg 4,000 1,500 Inzolajituracene ug/kg 700 1,800 Inzolajituracene ug/kg 2,500,000 1,600 Inzolajituracene ug/kg 2,500,000 1,600 Inzolajituracene ug/kg 2,500,000 1,600 Inzolajituracene ug/kg 2,500,000 Inzolajituracene ug/kg 2,500,000 Inzolajituracene ug/kg 2,000 Inzolajituracene	!	-	5,800	2,100	4,200	160	10,000	1,900	13,000
Inyserial Investigation of the property of the			2,500	1,000	1,800	64	5,500	880	000'9
1,300		-	2,400	1,100	1,800	94	5,700	840	6,300
1,500 1,50			1,600	650	1,200	50	4,200	960	4,200
Inzolativene Ug/kg 700 1,800 1,800 1,800 1,800 1,800 1,800 1,800 1,800 1,200 1,200 1,300 1		2,900 1,300	1,600	680	1,300	39	4.500	1,000	5,000
benzola, hjantiracene ug/kg 800 480 inzolg, h, ilperylene ug/kg 2,500,000 1,600 fenol 1, 2,3-cdlpyrene ug/kg 4,000 1,300 Total PAHs 23,690 ug/kg 2,000 NA			2,300	980	1,700	46	5,600	890	5,900
1,2,3-cd pyrene ug/kg 2,500,000 1,600 1,300		1,100 500	570	250	400	Q	650	78	670
feno[1,2,3-cd]pyrene ug/kg 4,000 1,300 Total PAHs 23,690 ug/kg 2,000 NA			1,400	640	970	2	1,400	190	1,500
Total PAHs 23,690 NA Ug/kg 2,000 NA		3,200 1,300	1,400	620	086 80	Q	1,500	200	1,600
ug/kg 2,000 NA N	140 55	55,970 28,026	35,700	12,641	26,070	933	060'99	10,913	74,780
U	NA AN	NA	NA	NA	NA W	AA	30***	ΑΝ	AN
nic, Total mg/kg 30 NA		NA	Ϋ́	¥	ΑĀ	¥	AA	AN.	¥
tal mg/kg 80 NA			AA	¥	ΑA	Ą	¥	¥	Ψ.
M 5,000 NA			ΑĀ	¥	A A	A A	Α¥	ΑĀ	AN
ma/kg 600 210			200	170	110	57	270	270	98
/bm	NA	<0.20 0.27	<0.20	<0.20	0.28	Α	0.24	<0.20	¥
al mg/kg 60 NA			N V	Ϋ́	NA	NA	NA	NA	NA

NOTES:

ND = Not detected

NA = Not analyzed

NS = No standard

-- = Not applicable

mg/kg = miligrams per kilogram (parts per militon)

ug/kg = micrograms per kilogram (parts per billion)

* All S-1 samples except B-116 and B-117 compared to S2/GW-3 Method I Cleanup Standards
*** All S2 and S3 samples compared to S3/GW-3 Method I Cleanup Standards
**** PCB Identified as #1260
***** PCB Identified as #1242
Bold/Shaded - Exceeds S3/GW-3 cleanup Standard

***** RCRA Action Level

C:MYDOCU~1/PROJECTS\EDIC\P_3\REPORT\FIGSTABS\SOI

TABLE 4 - Continued

SOIL SAMPLING RESULTS
BRA PARCEL P-3
Soil Boring Samples

	L				AS SA	MPLE IDENT	IFICATION A	SAMPLE IDENTIFICATION AND SAMPLE DEPTH (FE	JEPTH (FEE	E				
		Method 1		B-105			B-106			B-107			B-108	
Parameter	Stind	Cleanup Standards	20	82	S3	S1	S2	S3	ŝ	\$2	S	18	\$2	53
		\$3/GW-3**		4-6	7-9	1-3	4-6	7-9	13	4-6	7-9	1.3	4-6	7-9
TOTAL PETROLEUM HYDROCARBONS	CARBONS													
Gasoline	mg/kg	1	QN	QN	Q	QN	Q	Q	QN	QN	Q	QN	QN	QN
Kerosene	-mg/kg-		QN	QN	QN	ON-	QN	QN.	QN	QN	ON	QN	QN	Q
Mineral Spirits	mg/kg		QN	QN	QN	QV	Q	2	S	Q	Q	S	2	2
Fuel Oil #2/Diesel	mg/kg	:	QN	QN	QN	QN	2	9	2	2	9	Q	QN	Q
Fuel Oil #4	mg/kg	•	Q	QN	QN	ON	QN	Q	9	2	QN	9	2	9
Fuel Oil #8	mg/kg	:	QV	QN	Q	QN	Q	Q	2	S	2	S	Q	S
Motor Oil/Hydraulic Oil	mg/kg	1	140	230	180	450	700	6,700	140	2,300	700	220	1,600	110
Unidentified Hydrocarbons	mg/kg	1	2	Q	Q	QN	QN	Q	Q	2	QN	QN	DN	Q.
Total TPHs	mg/kg	5,000	140	230	180	450	700	6,700	140	2,300	700	220	1,600	110
POLYNUCLEAR AROMATIC HYDROCARBONS	HYDROCA	RONS												
Napthalene	ng/kg	1,000,000	1,600	1,100	71	250	260	270	85	200	400	70	190	QN
2-Methylnaphthalene	ug/kg	1,000,000	820	510	QN	150	300	150	Q	140	290	2	96	Q
Acenaphthylene	ug/kg	1,000,000	350	QN	QN	110	160	110	Q	Q	120	Q	06	2
Acenaphthene	ug/kg	4,000,000	1,900	1,300	91	390	910	470	170	410	1,000	220	210	57
Fluorene	ug/kg	4,000,000	1,900	1,500	110	410	820	440	140	380	880	180	220	2
Phenanthrene	ug/kg	100,000	15,000	11,000	1,200	5,100	8,900	4,600	1,700	4,000	9,700	1,800	3,000	900
Anthracene	ug/kg	5,000,000	3,900	2,800	290	960	1,700	980	390	980	4,900	430	400	150
Fluoranthene	ug/kg	1,000,000	16,000	11,000	1.400	5,800	9,700	5,300	2,100	4,100	11,000	2,300	3,600	670
Pyrene	ug/kg	5,000,000	14,000	9,100	1,300	4,800	7,900	4,600	1,900	3,700	000'6	2,000	2,800	570
Benzo[a]anthracene	ug/kg	4,000	8,100	4,900	670	1,900	3,800	1,900	1,100	2,100	4,500	1,100	1,100	350
Chrysene	ng/kg	40,000	8,700	4,800	200	1,900	4,000	1,900	1,100	2,100	4,700	1,100	1,200	370
Benzo[b]fluoranthene	ug/kg	4,000	2,300	3,200	450	1,200	2,000	1,200	730	1,400	2,400	790	800	250
Benzolkjiluoranthene	ug/kg	40,000	5,500	3,300	230	1,300	2,100	1,300	740	1,500	2,500	780	820	270
Benzo[a]pryene	ug/kg	200	7,500	4,100	640	1,800	3,600	1,800	1,000	1,900	4,100	1,100	1,100	340
Dipenzola, njanimacene	ug/kg	00000	2,000	000,	040	410	640	340	210	330	099	200	190	9
benzolg,n,ljperylene	ug/kg	2,500,000	2,600	2,800	200	0/6	006,1	06/	480	99	1,500	470	140	110
allaliding, 2, 1, dilayin	RV/RD	200	7,000	4,300	2	200	1,300	200	OI C	010	UDQ'L	910	480	120
Total PAHS			103,170	64,910	8,502	28,430	20,090	26,950	12,355	24,780	59,250	13,050	16,436	3,857
PCBs		2.000	¥	ΑN	ΑN	ΑN	ΦN	ΑN	ΔN	ΔN	ΔN	ΔN	VIV.	VIV
METALS				-							<u> </u>	<u> </u>	<u> </u>	5
Arsenic, Total	mg/kg	30	7.8	6.2	2.6	NA	ΑN	AN	¥	¥	Ϋ́	¥	ΑN	ΑN
Cadmium, Total	mg/kg	80	2.4	<2.5	<2.5	Ą	NA	AA	¥	Α¥	Ϋ́	ž	¥	AA
Chromium, Total	mg/kg	5,000	38	90	14	¥	AN	ΑN	ΑN	¥	¥	NA A	NA A	ΑX
Lead, Total	mg/kg	009	940	330	49	150	330	350	280	290	190	450	190	110
Lead, TCLP	mg/l	2	0.65	0.27	Ϋ́	0.30	0.32	0.70	0.23	0.62	0.31	0.24	0.23	<0.20
Mercury, Total	mg/kg	90	0.321	0.475	0.332	ΑĀ	Ϋ́	NA	ΑN	NA	NA	NA	ΝA	Ϋ́

NOTES:

- ND = Not detected
 NA = Not analyzed
 NS = No standard
- -- = Not applicable
 ng/kg = milligrams per kilogram (parts per million)
 ug/kg = micrograms per kilogram (parts per billion)

- * All S-1 samples except B-116 and B-117 compared to S2/GW-3 Method I Cleanup Standards
 *** All S2 and S3 samples compared to S3/GW-3 Method I Cleanup Standards
 *** PCB Identified as #1260
 **** PCB Identified as #1242
 Bold/Shaded Exceeds S3/GW-3 cleanup Standard

C:MYDOCU-1PROJECTS\EDIC\P_3\REPORT\FIGSTABS\SOI

**** RCRA Action Level

TABLE 4- Continued

2 2

SOIL SAMPLING RESULTS
BRA PARCEL P-3
Soil Boring Samples

Unite Columnic State S		֡				しゅうしょうけい しゅうしゅうかい かんしゅう									
NE			- POIDAM										400000000000000000000000000000000000000		
NO	Parameter	S S	Cleanup	Į,	8	83	<u>د</u>	82	်	75	S	S3	S	82	S
ND			\$3/GW-3**	1:3	4-8	7.9	1-3	9	7.9	1:3	4-6	7.9	13	4-6	7.9
NO	L PETROLEUM HYDROC	ARBONS												9	9
NO	asolina	ma/ka	1	2	S	9	Q	Q	2	Q	ON	Q	2	2	2
ND	erosene	ma/ka	1	Q	9	QN	QN	Q	2	9	Q	2		Q C	2
ND	ineral Spirits	ma/ka	,	2	윤	9	2	QN	Q	Q	ON	2	Q.	a.	2
ND	Ol #2/Diesel	ma/ka	1	2	2	Q.	S	QN	QN	Q	Q	2	Q	Q	2
ND	ol Oil #4	mo/kg	:	Q	S	Q	S	QN	QN	ΟN	2	9	2	Q	2
230 330 170 170 140 1,100 180 200 1,300 500 ND ND ND ND 170 140 1,100 180 200 1,300 500 ND 330 170 170 170 170 170 170 170 170 170 150 500 000 280 280 320 110 110 ND ND A90 210 000 480 640 490 280 69 100 350 1,000 460 000 480 640 430 280 280 100 370 1,000 440 000 5400 6400 430 280 280 690 1,000 4,500 6,000 000 5400 4300 2,000 1,000 4,700 8,100 8,00 000 5,000 4,000 1,700 1,700 4,700	2	ma/ka	1	Q	Q	9	QN	QN	Q	9	9	2	2	2	2
ND	otor Oil/Hydraulic Oil	oy/ou	:	230	330	170	170	140	1,100	190	200	1,300	200	190	970
00 230 330 170 170 140 1,100 150 200 1,300 500 000 280 280 320 110 110 ND ND ND 170 000 8170 170 150 69 61 ND ND ND ND 180 210 000 8170 150 69 61 ND ND ND ND 180 210 000 880 640 430 280 280 100 350 100 460 1500 460 1700 460 1700 480 4	identified Hydrocarbons	mg/kg	,	2	QN	Q	2	Q.	Q	2	9	Q	QN	QN	Q
000 280 280 320 110 110 ND S5 ND ND ND 120 000 88 83 92 70 59 ND ND ND ND 120 000 480 640 440 290 190 630 100 480 460 460 460 460 460 460 460 460 470 280 190 1700 1700 480 660 4700 8100 5400 4700 8100 5400 460 460 460 460 460 4700 8100 5400 4700 8100 5400 5600 4700 4700 8100 5800 6800 6800 6800 6800 6800 8100 6800 6800 6800 6800 6800 8100 5800 6800 6800 6800 6800 6800 6800 6800 6800 6800 6800 6800 680	Total TPH	11_1	5,000	230	330	170	170	140	1,100	190	200	1,300	200	190	970
000 280 290 320 110 110 ND ND ND A50 ND 120 000 170 170 150 69 61 ND ND ND ND 120 000 180 170 150 69 61 ND ND ND ND 120 000 180 480 220 180 480 100 350 1,000 460 000 5400 670 480 2,000 1,200 3,700 8,100 6,200 000 5,000 6,000 1,200 2,800 6,600 1,700 8,200 6,400 6,200 000 5,000 6,400 4,200 2,600 2,600 1,700 4,100 8,200 6,200 000 5,000 1,700 1,700 1,700 1,700 4,100 8,200 6,200 00 1,300 1,800 1,700 1,200	NIICI SAR AROMATIC H	IYDROCAR	SNONS				,								
Vettivinaphthalene Light of the control o	onthelene	1,0/kg	1 000 000	280	290	320	110	110	Q	55	Ş	490	210	77	14,000
Columbia	Mathylpaphthalane	ng/kg	1 000,000	170	170	150	69	61	QN	ON	Q	Q	120	20	4,100
Control Cont	weary magnification	Jo/ko	1 000 000	88	83	92	20	29	Q	QN	Q	Q	82	42	770
Linear Light Lig	onaphthene	ua/ka	4 000 000	480	640	440	290	190	490	100	350	1,000	460	160	20,000
Light Ligh	Jorena	uo/ka	4,000,000	480	640	430	260	200	630	98	360	860	450	170	17,000
University Uni	enenthrene	rig/kg	100 000	5,400	6,700	4,900	2,400	2,300	5,000	1,200	3,700	8,100	5,400	1,300	110,000
1900 1900	thracene	ua/ka	5,000,000	1,100	1,300	1,000	670	460	1,200	290	910	1,700	880	400	290
Transe Light 5,000,000 6,300 6,400 4,200 2,500 6,500 4,100 8,200 5,900 Transcalalanthracene ug/kg 4,000 2,700 2,700 1,700 1,700 2,500 8,200 2,300 Inscalalanthracene ug/kg 4,000 2,000 1,800 1,700 1,200 2,700 4,000 2,300 Inscalalanthracene ug/kg 4,000 1,300 1,800 1,700 1,200 2,700 2,700 2,700 Inscalalanthracene ug/kg 4,000 2,500 2,100 1,700 1,200 2,500 6,700 2,700 Inscalalanthracene ug/kg 4,000 2,500 2,100 1,700 1,200 2,700 4,100 2,500 Inscalalanthracene ug/kg 4,000 2,600 2,700 2,700 2,700 3,700 2,500 Inscalalanthracene ug/kg 4,000 6,70 2,000 1,700 1,200 2,700 <td< td=""><td>Joranthene</td><td>ua/ka</td><td>1,000,000</td><td>6,000</td><td>8,000</td><td>2,600</td><td>4,500</td><td>3,100</td><td>5,300</td><td>1,900</td><td>4,700</td><td>9,300</td><td>6,200</td><td>2,100</td><td>96,000</td></td<>	Joranthene	ua/ka	1,000,000	6,000	8,000	2,600	4,500	3,100	5,300	1,900	4,700	9,300	6,200	2,100	96,000
Interview United	rene	ug/kg	5,000,000	5,000	6,300	5,400	4,200	2,800	6,600	1,700	100	8,200	2,900	2,200	80,000
LS LS LS 2,700 2,100 2,700 550 2,300 2,300 Inysene ug/kg 4,000 1,800 1,800 1,100 2,700	enzolalanthracene	ug/kg	4,000	2,000	2,700	1,900	1,700	1,100	2,500	940	2,000	4,000	2,200	040	000,85
Particle	Nsene	ug/kg	40,000	2,000	2,700	2,000	1,800	1,100	2,700	096	2,100	4,200	2,300	006	00000
Table Tabl	enzolbifluoranthene	ug/kg	4,000	1,300	1,900	1,800	1,800	1,200	2,500	650	1,500	2,700	2,200	020	000.62
Color Colo	enzo[k]fluoranthene	ug/kg	40,000	1,500	2,100	1,800	1,700	1,200	2,700	030	000	3,000	2 200	000	25,000
LS Total PAHs mg/kg 800 280 400 270 410 410 450 <th< td=""><td>enzo[a]pryene</td><td>ug/kg</td><td>200</td><td>1,900</td><td>2,500</td><td>2,000</td><td></td><td>7,20</td><td>2,000</td><td>- CEC</td><td>000</td><td>2000</td><td>250</td><td>Σ</td><td>3 000</td></th<>	enzo[a]pryene	ug/kg	200	1,900	2,500	2,000		7,20	2,000	- CEC	000	2000	250	Σ	3 000
Total Pale Mg/kg 5,000 NA NA NA NA NA NA NA	benzo[a,h]anthracene	ug/kg	800	290	400	250	210	120	ON S	230	1410	3 000	230	100	000
Total PAHs Tot	anzolg,h,ilperylene	ug/kg	2,500,000	280	800	250	430	2/0	070	06/	000	000.0	000	240	1000
Total PAHs 29,238 38,143 29,252 22,379 15,760 31,220 11,241 26,430 53,650 32,392	Jeno[1,2,3-cd]pyrene	ug/kg	4,000	670	920	620	470	290	280	nao	1,300	2,500	000	017	7,400
LS LS Senic, Total mg/kg 5,000 NA S 2 2 4 Inomium, Total mg/kg 6,000 NA NA NA NA NA NA NA NA S 200 230 1,400 ad, Total mg/kg 6,000 NA NA NA NA NA NA NA NA NA S 20 2 4 ad, Total mg/kg 6,000 NA NA NA NA NA NA NA S 20 20 230 1,400 ad, Total mg/kg 6,000 NA S 20 20 0.50 0.50 0.50 ad, Total mg/kg 6,000 190 130 280 240 220 87 0.20 0.50 0.50 0.50 0.50	Total PAHs			29,238	38,143	29,252	22,379	15,760	33,220	11,241	26,430	53,650	32,392	11,240	090,156
iic, Total mg/kg 30 NA NA NA NA NA NA NA S 6 6 6 in/um, Total mg/kg 5,000 NA NA NA NA NA 2 2 4 milum, Total mg/kg 5,000 NA NA NA NA NA 21 28 23 Total mg/kg 600 190 130 240 220 670 230 1,400 TCLP mg/l 5***** 0,22 <0,27		ug/kg	2,000	¥	NA	NA	NA NA	NA	¥	AN	NA	NA	ΑA	¥	ΑΝ
mg/kg 30 NA	ST									ų	•	ď	VIV.	Š	VIV
Ital mg/kg 80 NA NA NA NA NA 2 2 4 otal mg/kg 5,000 NA NA NA NA NA 21 28 23 mg/kg 600 190 130 280 240 220 230 230 1,400 mg/l 5**** 0,22 <0.20 0.35 0.37 <0.20 <0.20 0.25 0.60	senic. Total	mg/kg	8	¥ Z	Y Y	¥	¥Υ	¥	¥	n	۱	٥	₹:	ξ:	<u> </u>
otal mg/kg 5,000 NA NA NA NA NA 21 28 23 mg/kg 600 150 280 240 220 670 230 230 1,400 mg/l 5***** 0,22 <0.20 0.35 0.32 0.37 <0.20 0.25 0.60	admium. Total	mg/kg	80	¥	ΑN	ΨV	¥	¥	¥	7	2	4	¥.	ď.	¥.
mg/kg 600 190 130 280 240 220 670 230 1,400 mg/l 5***** 0,22 <0,20	Total	ma/ka	5,000	Ā	ΑN	¥	Α¥	ΑΝ	ΑĀ	21	28	23	ž	ξ.	ž
mg/l 5**** 0.22 <0.20 0.35 0.32 0.37 <0.20 0.25 0.60	ad Total	mo/kg	009	190	130	280	240	220	670	200	230	1,400	150		2,000
NA NA NA 0 355	TOI P) E	2*****	0.22	<0.20	0.35	0.32	0.37	<0.20	<0.20	0.25	0.60	<0.20	0.58	0.77
Sec. O Se	Court Total	ma/kn	80	ĄV	ž	¥	¥	ΑΝ	WA	0.206	0.549	0.355	NA	NA	ΑM

ND = Not detected
NA = Not analyzed
NS = No standard
--- = Not applicable
mg/kg = milligrams per kilogram (parts per million)
ug/kg = micrograms per kilogram (parts per billion)

**** RCRA Action Level

• All S-1 samples except B-116 and B-117 compared to S2/GW-3 Method I Cleanup Standards
••• All S2 and S3 samples compared to S3/GW-3 Method I Cleanup Standards
••• PCB Identified asn #1260
•••• PCB Identified as #1242
Bold/Shaded • Exceeds S3/GW-3 cleanup Standard

TABLE 4 - Continued

SOIL SAMPLING RESULTS BRA PARCEL P-3 Soil Boring Samples

		Method 1		B-113			9-114			8-15		8-16	B-117
Parameter	Units	Cleanup)
		Standards	<u>چ</u>	82	83	25	S2	83	જ	S2	જ	8	જ
		S3/GW-3**	1-3	4-6	7-9	15	4-6	7-9	1.3	4-6	7-9	1-3	1.3
TOTAL PETROLEUM HYDROCARBONS	SARBONS												
Gasoline	mg/kg	1	QN	QN	Q	QV	Q	ON	QN	QN	QN	QN	CN
-Kerosene	mg/kg		- QN	QN	ON-	QN	QN	ON-	QN	QN	QN_	S	CN
Mineral Spirits	mg/kg	:	9	QN	Q	2	S	2	2	S	Q	S	S
Fuel Oil #2/Diesel	mg/kg	1	2	QN.	2	2	Q	2	S	2	S	2	2
Fuel Oil #4	mg/kg	:	Q	QN	9	2	2	2	2	2	Q	Ç	2
Fuel Oil #6	mg/kg		9	Q	2	Q	Q	S	2	GN	S	2	2
Motor Oil/Hydraufic Oil	mg/kg	1	290	360	730	480	910	450	140	280	2.400	110	10
Unidentified Hydrocarbons	mg/kg	1	Q	Q	QN	QN	QN	QN	QN	9	QN	Q	2
Total TPHs	mg/kg	5,000	290	360	730	480	910	450	140	280	2,400	110	110
POLYNUCLEAR AROMATIC HYDROCARBONS	YDROCAR	BONS											
Napthalene	ug/kg	1,000,000	360	350	1,600	Q	4,300	3,000	QN	430	320	380	420
2-Methylnaphthalene	ug/kg	1,000,000	280	220	780	QN	2	1,600	Q	270	210	230	340
Acenaphthylene	ug/kg	1,000,000	290	470	360	QN	QN	700	Q	180	170	170	250
Acenaphthene	ug/kg	4,000,000	1,100	860	2,600	1,000	9,300	4,400	QN	1,100	510	790	1,200
Fluorene	ug/kg	4,000,000	1,000	820	2,100	820	6,400	4,400	ON	920	540	760	1,300
Phenanthrene	ug/kg	100,000	12,000	10,000	20,000	9,500	53,000	36,000	2,200	8,600	4,800	7,200	11,000
Anthracene	ug/kg	5,000,000	1,900	2,100	4,900	2,000	13,000	8,800	570	2,000	1,200	1,500	2,600
Fluoranthene	_	1,000,000	13,000	15,000	21,000	9,300	96,000	36,000	3,000	006'6	6,200	7,600	11,000
yrene	ug/kg	5,000,000	13,000	15,000	20,000	9,600	48,000	30,000	2,800	8,600	5,700	7,300	9,900
Benzo[a]anthracene	ug/kg	4,000	6,100	8,400	005'6	4,200	26,000	15,000	1,500	4,300	2,700	3,300	5,100
Chrysene	ug/kg	40,000	6,600	8,200	10,000	4,400	26,000	15,000	1,600	4,400	3,100	3,500	5,200
Benzo[b]fluoranthene	ug/kg	4,000	4,800	2,600	7,600	3,100	20,000	11,000	1,100	3,400	2,000	2,400	3,000
Benzolkjiluoranthene	ug/kg	40,000	5,000	6,600	8,500	3,200	21,000	10,000	1,100	3,800	2,300	2,700	3,700
Benzolalpryene	ug/kg	200	5,600	7,300	8,700	3,900	25,000	14,000	1,300	4,000	2,600	3,100	4,500
Dibenzo[a,h]anthracene	ng/kg	800	490	280	830	2	6,700	3,500	2	420	290	340	480
Benzo[g.h,i]perylene	ng/kg	2,500,000	1,100	1.400	1,800	2,100	16,000	10,000	Q	840	650	680	910
Indeno[1,2,3-cd]pyrene	ug/kg	4,000	1,100	1,600	2,100	1,800	15,000	8,900	Q	940	700	790	1,000
Total PAHs			73,720	84,620	122,430	54,950	354,700	212,300	15,170	54,100	33,990	42,740	61,900
PCBs	ug/kg	2,000	Ą	ΑN	NA	QN	ND	27****	NA	NA	ΑN	NA	¥
METALS													
Arsenic, Totał	mg/kg	30	Ϋ́	ΑN	¥	ΑΝ	ΑN	AA	Α×	¥	Ϋ́	¥	ĄN
Cadmium, Total	mg/kg	80	AN	¥	Α×	Ϋ́	AN	NA	¥	ΑN	ΑA	ΑX	Αχ
Chromium, Total	mg/kg	5,000	NA	ž	Ą	ΑĀ	NA	ΑA	ΑN	ΑΝ	ΑN	¥	Ą
Lead, Total	mg/kg	900	300	230	340	390	790	470	170	290	1,200	300	270
Lead, TCLP	mg/l	2	0.31	<0.20	<0.20	0.23	1.2	0.33	<0.20	0.24	0.29	0.22	0.45
200													

ND = Not detected NA = Not analyzed NS = No standard

-- ≖ Not applicable

mg/kg = milligrams per kilogram (parts per million) ug/kg = micrograms per kilogram (parts per billion)

Bold/Shaded - Exceeds \$3/GW-3 cleanup Standard

• All S-1 samples except B-116 and B-117 compared to S2/GW-3 Method I Cleanup Standards
•• All S2 and S3 samples compared to S3/GW-3 Method I Cleanup Standards
••• PCB Identified as #1260
•••• PCB Identified as #1242

**** RCRA Action Level

C:MYDOCU-11PROJECTS\EDIC\P_3\REPORT\FIGSTABS\SOI

ij

TABLE 5

1

GROUNDWATER SAMPLING RESULTS BRA PARCEL P-3 December 12, 1996

							Sampl	Sample Identification and sample depth (feet)	ation and	sample de	pth (feet)				
Parameter	Units	Reportable WS-1 Concs. RCGW-2	WS-1	WS-2	WS-3	WS-4	WS-5	WS-6	WS-7	WS-8	WS-9	WS-10	WS-11	WS-12	WS-12 (Dup)
FIELD PARAMETERS															
Temperature	O geb	1	11.0	13.0	10.5	6.6	13.5	13.5	12.2	12.3	11.5	12.2	13.2	10.8	-
Ho	1	1	6.7	6.9	7.0	6.6	6.6	6.8	6.5	9.9	6.6	7.3	6.1	6.7	1
Specific Conductivity	mS/cm	1	940	1,200	670	624	1,050	220	929	1,520	1,240	478	920	1,670	1
Dissolved Oxygen	l/gm	-	3.6	4.2	2.7	2.2	2.4	4.4	4.4	2.0	1.4	3.6	1.7	2.7	1
VOLATILE ORGANIC COMPOUNDS*	POUNDS*														
Chloroform	l/gu	400	2	9	2	2	9	9.1	2	S	QN	5.8	QN	QN	ND
Trichloroethene	l/gn	300	2	9	Q	윤	2.2	2	Q	QN	QN	QN	QN	QN	QN
4-Isopropyitoluene	l/bn	SN	9	QN	QN	Q	Q	Q	ON	ΩN	QN	QN	QN	2.8	2.6
TPH**	mg/l	;	Q	QN	QN	Q	QN	ND	ND	QΝ	QN	QN	QN	QN	QN
PAHS ***	l/Bn	1	¥	9	ΑN	AN	QN	NA	Ą	2	S	¥.	2	9	¥
A LA LA															
Arsenic, Total	l/gm	4.0	A A	<0.01	¥	¥	<0.01	¥	AN	<0.02	<0.01	Ą	<0.01	<0.01	AA
Barium, Total	l/gm	30	NA	<0.05	NA	VΝ	0.11	AA	ΑN	0.15	0.11	¥	<0.05	0.12	ΑĀ
Cadmium, Total	l/gm	0.01	NA	<0.005	NA	NA	<0.005	₹	ΑN	<0.005	<0.005	ΑN	<0.005	<0.005	Ą
Chromium, Total	mg/l	2	ΑA	<0.03	NA	¥	<0.03	¥	NA	<0.03	<0.03	NA	<0.03	<0.03	ΝΑ
Lead, Total	l/gm	0.03	ΑĀ	<0.005	NA	NA	<0.005	AA	NA	<0.010	<0.010	NA	<0.010	<0.005	AA
Mercury, Total	l/gm	0.001	A	<0.0002	N A	¥	<0.0002	¥	¥	<0.0002	<0.0002	AA	<0.0002	<0.0002	¥
Selenium, Total	l/gm	0.08	Ϋ́	<0.025	AA	¥	<0.025	¥	ΑA	<0.025	<0.025	ΑĀ	<0.005	<0.025	¥
Silver, Total	l/gm	200.0	NA	<0.007	AA	NA	<0.007	Ą	NA	<0.007	<0.007	ΑĀ	<0.007	<0.007	ΝA
NOTES:															

NOTES:

ND = Not detected

NA = Not analyzed

NS = No standard

- = Not applicable

mg/l = milligrams per liter (parts per million)

ug/l = micrograms per liter (parts per billion)

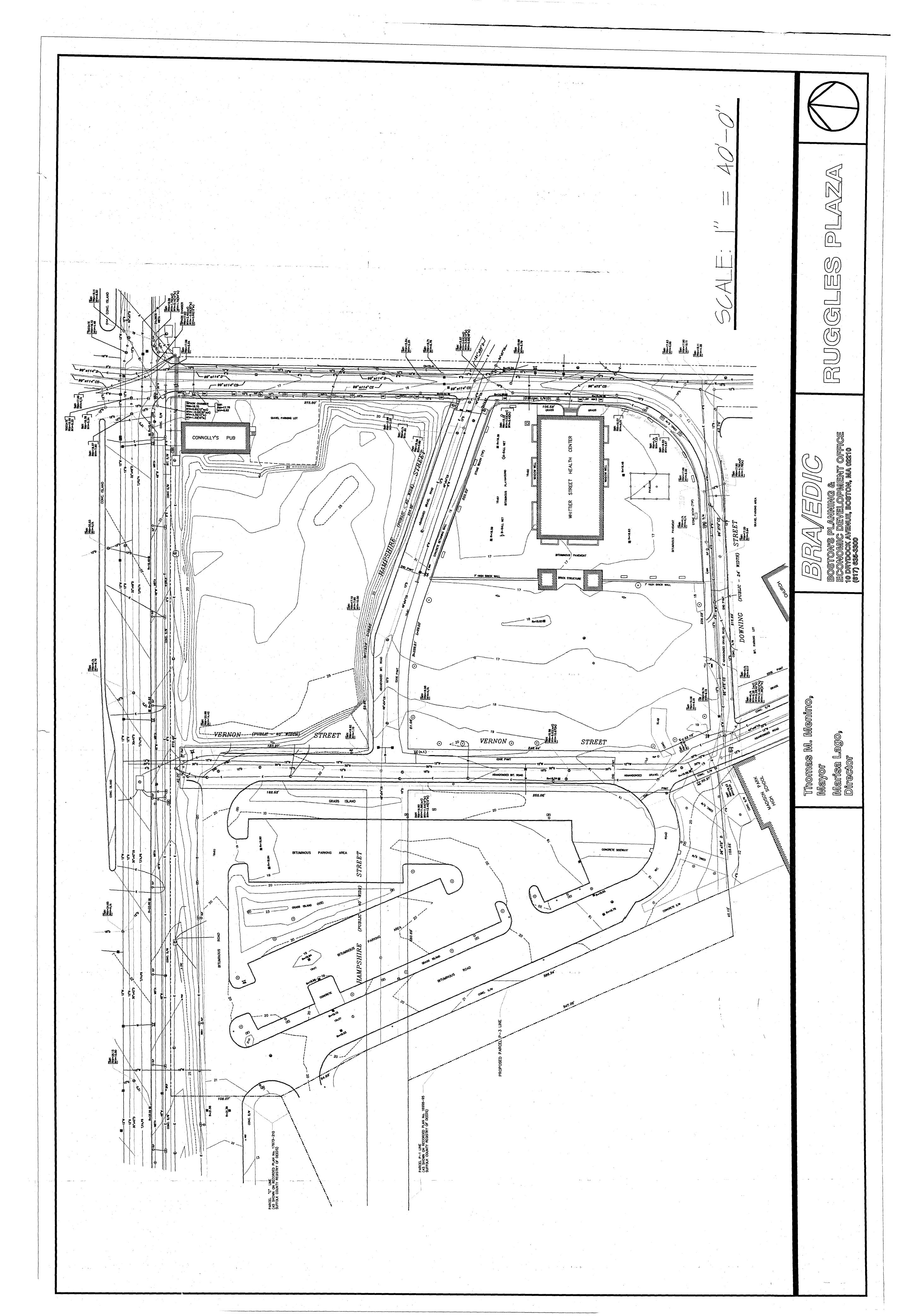
Volatile Organic Compounds by EPA Method 8260

Methylene chloride detected in VOC trip blank at concentrations of 2.8 ug/l TPH (Total Petroleum Hydrocarbons) by GC/FID TOTAL (Polynuclear Aromatic Hydrocarbons) by EPA Method 8100

f:\sutton\braedic\gwdat1.wk4

APPENDIX A

SITE PLANS



APPENDIX B

Û

DEP CORRESPONDENCE

96230.6 - BRA/EDI Rextury.P.



COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

METROPOLITAN BOSTON - NORTHEAST REGIONAL OFFICE

GON PKB

WILLIAM F. WELD Governor

ARGEO PAUL CELLUCCI

TRUDY COXE Secretary

DAVID B. STRUHS Commissioner

URGENT LEGAL MATTER: PROMPT ACTION NECESSARY
CERTIFIED MAIL: RETURN RECEIPT REQUESTED MAY 28 1997

Boston Redevelopment Authority 1 City Hall Plaza Boston, MA 02201-1007 RE: Boston/Roxbury Parcel P-3 Tremont & Whittier St. RTN #3-15009

NOTICE OF RESPONSIBILITY; M.G.L. c. 21E & 310 CMR 40.0000

Attention: Mr. Richard Mertens

Dear Mr. Mertens:

Information contained in a Release Notification Form (RNF) submitted to the Department of Environmental Protection (the Department or DEP) on April 14, 1997 and submitted by Boston Redevelopment Authority indicates that there is or has been a release of oil and/or hazardous material at the above-referenced property which exceeds a "120 day" reporting threshold (310 CMR 40.0315) and which requires one or more response actions.

Based on this information, the Department has reason to believe that the subject property or portion(s) thereof is a disposal site as defined in the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, M.G.L. c. 21E, and the Massachusetts Contingency Plan, 310 CMR 40.0000 (the MCP). The assessment and cleanup of disposal sites is governed by M.G.L. c. 21E and the MCP.

The purpose of this notice is to inform you of your legal responsibilities under state law for assessing and/or remediating the subject release. For purposes of this notice, the terms and phrases used herein shall have the meaning ascribed to them by the MCP unless the text clearly indicates otherwise.

STATUTORY LIABILITIES

The Department has reason to believe that you (as used in this letter, "you" refers to Boston Redevelopment Authority) are

a Potentially Responsible Party (a PRP) with liability under M.G.L. c. 21E, § 5, for response action costs. Section 5 makes the following parties liable to the Commonwealth of Massachusetts: current owners or operators of a site from or at which there is or has been a release/threat of release of oil or hazardous material; any person who owned or operated a site at the time hazardous material was stored or disposed of; any person who arranged for the transport, disposal, storage or treatment of hazardous material to or at a site; any person who transported hazardous material to a transport, disposal, storage or treatment site from which there is or has been a release/threat of release of such material; and any person who otherwise caused or is legally responsible for a release/threat of release of oil or hazardous material at a site.

This liability is "strict", meaning it is not based on fault, but solely on your status as an owner, operator, generator, transporter or disposer. It is also joint and several, meaning that you may be liable for all response action costs incurred at the site, regardless of the existence of any other liable parties.

The MCP requires responsible parties to take necessary response actions at properties where there is or has been a release or threat of release of oil and/or hazardous material. If you do not take the necessary response actions, or fail to perform them in an appropriate and timely manner, the Department is authorized by M.G.L. c. 21E to have the work performed by its contractors. By taking such actions, you can avoid liability for response action costs incurred by the Department and its contractors in performing these actions, and any sanctions which may be imposed for failure to perform response actions under the MCP.

You may be liable for up to three (3) times all response action costs incurred by the Department. Response action costs include, without limitation, the cost of direct hours spent by Department employees arranging for response actions or overseeing work performed by persons other than the Department or their contractors, expenses incurred by the Department in support of those direct hours, and payments to the Department's contractors. (For more detail on cost liability, see 310 CMR 40.1200.)

The Department may also assess interest on costs incurred at the rate of twelve percent (12%), compounded annually. To secure payment of this debt, the Commonwealth may place liens on all of your property in the Commonwealth. To recover the debt, the Commonwealth may foreclose on these liens or the Attorney General may bring legal action against you.

In addition to your liability for up to three (3) times all

Boston Redevelopment Authority Page 3

response action costs incurred by the Department, you may also be liable to the Commonwealth for damages to natural resources caused by the release. Civil and criminal liability may also be imposed under M.G.L. c. 21E, § 11, and civil administrative penalties may be imposed under M.G.L. c. 21A, § 16 for each violation of M.G.L. c. 21E, the MCP, or any order, permit or approval issued thereunder.

NECESSARY RESPONSE ACTIONS

The subject site shall not be deemed to have had all the necessary and required response actions taken unless and until all substantial hazards presented by the site have been eliminated and a level of No Significant Risk exists or has been achieved in compliance with M.G.L. c. 21E and the MCP. In addition, the MCP requires persons undertaking response actions at disposal sites to perform Immediate Response Actions (IRAs) in response to "sudden releases", Imminent Hazards and Substantial Release Migration. Such persons must continue to evaluate the need for IRAs and notify the Department immediately if such a need exists.

You must employ or engage a Licensed Site Professional (LSP) to manage, supervise or actually perform the necessary response actions at the subject site. In addition, the MCP requires persons undertaking response action at a disposal site to submit to the Department a Response Action Outcome Statement (RAO) prepared by an LSP in accordance with 310 CMR 40.1000 upon determining that a level of No Significant Risk already exists or has been achieved at a disposal site or portion thereof. [You may obtain a list of the names and addresses of these licensed professionals from the Board of Registration of Hazardous Waste Site Cleanup Professionals at (617) 556-1091].

The Department has determined that the following response actions are necessary at the subject site:

Initial site investigation activities in accordance with 310 CMR 40.0405 are necessary. In addition, unless an RAO is submitted earlier, a completed Tier Classification Submittal pursuant to 310 CMR 40.0510, and, if appropriate, a completed Tier I Permit Application pursuant to 310 CMR 40.0700, must be submitted to DEP within one year of the initial date notice of a release is provided to the Department pursuant to 310 CMR 40.0300 or from the date the Department issues a Notice of Responsibility (NOR), whichever occurs earlier.

It is important to note that you must dispose of any Remediation Waste generated at the subject location in accordance with 310 CMR 40.0030 including, without limitation, contaminated

soil and/or debris. Any Bill of Lading accompanying such waste must bear the seal and signature of an LSP or, if the response action is performed under the direct supervision of the Department, the signature of an authorized representative of the Department.

However, please be advised that if information is obtained after making a oral or written notification to indicate that the release or threat of release didn't occur, failed to meet the reporting criteria at 310 CMR 40.0311 through 40.0315, or is exempt from notification pursuant to 310 CMR 40.0317, a Notification Retraction must be submitted within 60 days of the initial notification pursuant to 310 CMR 40.0335.

The Department encourages parties with liabilities under M.G.L. c. 21E to take prompt action in response to releases and threats of release of oil and/or hazardous material. By taking prompt action, you may significantly lower your assessment and cleanup costs and avoid the imposition of, or reduce the amount of, certain permit and annual compliance fees for response actions payable under 310 CMR 4.00.

If you have any questions relative to this notice, you should contact Lilla Dick at the letterhead address or (617) 932-7600. All future communications regarding this release must reference the Release Tracking Number (RTN #3-15009) contained in the subject block of this letter.

Very truly yours,

Kingsley Ndi

Chief, Notification Branch

KN/LD

cc: Boston Board of Health Boston Fire Department

> Weston & Sampson Engineers, inc. 5 Centennial Drive Peabody, MA 01960 Attn: Mr. Prasanta K. Bhunia

DEP data base/file

Five Centennial Drive Peadody, Massachusetts 01960-7985 Tel: (508) 532-1900 Fax: (508) 977-0100

Environmental Consultants since 1899

Boston Redevelopment Authority WSE Job Number 96230.G

April 4, 1997

Bureau of Waste Site Cleanup
Department of Environmental Protection
10 Commerce Way
Woburn, Massachusetts 01801

Re: Release Notification Form

Parcel P-3

Tremont & Whittier Streets

To whom it may concern:

On behalf of our client, the Boston Redevelopment Authority (BRA), Weston & Sampson Engineers, Inc. (WSE) is pleased to submit the Release Notification Form (RNF) for the 120-day notification condition at the above referenced site.

Please note that the Licensed Site Professional will be Dr. Prasanta K. Bhunia, Ph.D., Weston & Sampson Engineers, Inc., 5 Centennial Drive, Peabody, Massachusetts 01960, L.S.P. Number 2999.

If you have any questions please do not hesitate to contact this office at (508) 532-1900.

Very truly yours,

WESTON & SAMPSON ENGINEERS, INC.

tomuna

Prasanta K. Bhunia, Ph.D., L.S.P.

Associate

Enclosures

cc: Mr. Paul Osborn, BRA/EDIC

File

PKB/GDN:gdn

H;\WP\CLIENT\BRA-EDIC\C\96230.G\040497-1.GDN



Massachusetts partment of Environmental Proteion Bureau of Waste Lite Cleanup

BWSC-103

RELEASE NOTIFICATION & NOTIFICATION RETRACTION

FORM

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart

If assigned by DEP

Release Tracking

<u>Number</u>

	Pulsualit to 5 to civil 40.0555 and 5 to 6	start to:sor (Cabpart 11 assigned by b2.
A. RELEASE OR THRE	T OF RELEASE LOCATION:	
Street: Parcel P-3,	Tremont and Whittier Streets	Location Aid: UTMs: 4688700 mN, 327800 mR
City/Town: Boston (Re	oxbury)	ZIP 02120-0000 Code:
B. THIS FORM IS BEING	G USED (check one)	
TO: √ Submit a Refease No	। httication (complete all sections of this form).	
this form). You MUST	attach the supporting documentation required by 310	
	CRIBING THE RELEASE OR THREAT OF RE	
Date:		Specify: AM P
The date you obtaine	d knowledge is always required. The time you ob Conditions.	btained knowledge is not required if reporting only 120 Day
IF KNOWN, record date an Date:	d time release or TOR occurred.	Time: Specify: AM P
Check here if you prev	iously provided an Oral Notification to DEP (2 Hour a	and 72 Hour Reporting Conditions only).
Provide date and time Date:	of Oral Notification.	Time: Specify: AM P
	holds that apply to the Release or Threat of Release:	(for more information see 310 CMR 40.0310 - 40.0315)
2 HOUR REPORTING	ONDITIONS 72 HOUR REPORTING CONDITION	ONS 120 DAY REPORTING CONDITIONS
Sudden Release	Subsurface Non-Aqueous Ph	
Threat of Sudden	Liquid (NAPL) Equal to or Gre Release than 1/2 Inch	Concentration(s)
Oil Sheen on Surfa	eœ Water Underground Storage Tank — (UST) Release	Release of Oil to Soil Exceeding Reportable Concentration(s) and Affecting More than 2 Cubic
Poses Imminent H	Zard Threat of UST Release	Yards
Could Pose Immir	ent Hazard	Release of C3 to Groundwater Exceeding Reportable Concentration(s)
Release Detected	in Private Well Release to Groundwater nea Water Supply	Subsurface Non-Aqueous Phase Liquid (NAPL)
Release to Storm	Drain Release to Groundwater nea	
Sanitary Sewer R (Imminent Hazard	elease .	
List below the Oils or Haza	ardous Materials that exceed their Reportable Concer	entration or Reportable Quantity by the greatest amount.
	of additional Oil and Hazardous Material substances s	Subject to reporting.
Name and Quantities of O Released:	ils (O) and Hazardous Materials (HM)	Reportable Concentrations
O or HM R	eleased O HM CAS # (check one) (if known)	Amount or Units Exceeded, if Applicable Concentration (RCS-1, RCS-2, RCGW-1, RCG)
PAHs (see Table	1)	RCS-1
TPH (see Table	<u> </u>	RCS-1
Lead (see Table	<u></u>	RCS-1
D. ADDITIONAL INVO	DLVED PARTIES:	
Check here if attach	ing names and addresses of owners of properties affe is Release Notification (required).	fected by the Release or Threat of Release, other than an owner
<u> </u>	ing Licensed Site Professional (LSP) name and address	ress (optional).
	You may write in names and addresses on the	·



Massachusett epartment of Environmental Pro Bureau of Waste Site Cleanup

tion BWSC-103

Rele Num	ease Tracking	
	-	

RELEASE NOTIFICATION & NOTIFICATION RETRACTION
Purport to 310 CMP 40 0325 and 310 CMP 40 0371 (Subpart C)

lelease Fracking	
lumber	
-	:
	<u></u> :
If assigned by DEP	

E. PERSON RE	QUIRED TO NOTI	Υ:					}
Name of	Boston Red	evelopment A	Authority				
Name of	Mr. Richard N	Mertens		Title: Envi	ronmental R	Review Office	· =
	Hall Plaza						
City/Town: Bos	ton			State: MA	ZIP Code	e: 02201-10 07	
Telephone: 617	-722-43)0		Ext.: 4283	FAX:	617-742-4	464	
F. RELATIONS	HIP OF PERSON F	REQUIRED TO NO	OTIFY TO RELE		AT OF RELEAS	E: (check one)	
T RP or PRP	Specify & Owne	r Operator C	Generator 🔵	Transporter Oth	her RP or PRP:		
Fiduciary, Se	cured Lender or Mun	icipality with Exemp	t Status (as define	d by M.G.L. c. 21	E, s. 2)		
Agency or Pu	ublic Utility on a Right	of Way (as defined	by M.G.L. c. 21E,	s. 5(j))			
Any Person (Otherwise Required to	Notify Specify					
		REQUIRED TO	NOTIFY:				
familiar with the in inquiry of those in my knowledge an responsible for thi	iformation contained i dividuals immediately d belief, true, accurat is submittal. I/the per	n this submittal, incl responsible for obt e and complete, and son or entity on who	luding any and all (aining the informal d (iii) that I am fully ose behalf this sub	locuments accomion, the material is authorized to ma mittal is made am	npanying this transi information contains ike this attestation i vis aware that them	mittal form, (ii) that, t ed in this submittal is on behalf of the entit e are significant peni	s, to the best of vilegally
		67/					
TOY:				Title: Dir	ector		
For Boston I	Redevelopment	Authority		Date:	1/9/97		
111	•			•			•
Enter address of	the person providing	certification, if differ	ent from address r	ecorded in Sectio	on E:		
Street:							
City/Town:				State:		fe:	
Telephone:			Ext	FAX:			
			ECTIONS OF THE	HIS FORM OR I FORM, YOU MA	DEP MAY RETUI		
	Dr. Prasa Weston & 5 Centenn	enta K. Ehun Sampson Eng	ia, Ph.D. ineers, Inc				
	Name of Organization: Name of Contact: Street: 1 City City/Town: Bos Telephone: 617 F. RELATIONS Telephone: 617 F. RELATIONS Telephone: 617 F. RELATIONS Telephone: 617 F. RELATIONS Telephone: 617 Any Person (Contact in the indiviry of those in the individual of the individua	Name of Organization: Name of Mr. Richard Mr. Relephone: 617-722-43)0 F. RELATIONSHIP OF PERSON F. RP or PRP Specify Owner Fiduciary, Secured Lender or Munich Agency or Public Utility on a Right Mr. Any Person Otherwise Required to Relationship: G. CERTIFICATION OF PERSON I. Thomas M. O'Brit familiar with the information contained in inquiry of those individuals immediately mry knowledge and belief, true, accurate responsible for this submittal. If the perincluding, but not limited to, possible fire (signature) For: Boston Redevelopment (print name of person or entity redefined mr. Redevelopment) Telephone: YOU MUST COMPLETE AI INCOMPLETE. IF You was a second was a secon	Organization: Name of Mr. Richard Mertens Contact: Street: 1 City Hall Plaza City/Town: Boston Telephone: 617-722-43)0 F. RELATIONSHIP OF PERSON REQUIRED TO N I RP or PRP Specify Owner Operator Agency or Public Utility on a Right of Way (as defined National Person Otherwise Required to Notify Specify Relationship: G. CERTIFICATION OF PERSON REQUIRED TO I Thomas N. O'Brien familiar with the information contained in this submittal, inclinquiry of those individuals immediately responsible for obtuny knowledge and belief, true, accurate and complete, and responsible for this submittal. If the person or entity on which including, but not limited to, possible fines and imprisonment including, but not limited to, possible fines and imprisonment including the person or entity recorded in Section E. Enter address of the person providing certification, if different including the person of the person or entity recorded in Section E. City/Town: Telephone: YOU MUST COMPLETE ALL RELEVANTS INCOMPLETE. IF YOU SUBMIT AN Licensed Site Profes Dr. Prasanta K. Bhum Weston & Sampson English of the person of the profess of the person of the per	Name of Crganization: Name of Mr. Richard Mertens Contact: Street: 1 City Hall Plaza City/Town: Boston Telephone: 617-722-4300 Ext: 4283 F. RELATIONSHIP OF PERSON REQUIRED TO NOTIFY TO RELE Telephone: 617-722-4300 Ext: 4283 F. RELATIONSHIP OF PERSON REQUIRED TO NOTIFY TO RELE Report of PRP Specify Owner Operator Generator Fiduciary, Secured Lender or Municipality with Exempt Status (as defined Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E.) Any Person Otherwise Required to Notify Specify Relationship: G. CERTIFICATION OF PERSON REQUIRED TO NOTIFY: Thomas N. O'Brien attest under the familiar with the information contained in this submittal, including any and all inquiry of those individuals immediately responsible for obtaining the information who whose behalf this submittal. In the person or entity on whose behalf this subincluding, but not limited to, possible fines and imprisonment, for willfully submitted to, possible fines and imprisonment, for willfully submitted to, possible fines and imprisonment, for willfully submitted to, possible fines and imprisonment. In the person of entity on whose behalf this submittal in the person of entity on whose behalf this submittal in the person of entity on whose behalf this submittal in the person of entity on whose behalf this submittal in the person of entity on whose behalf this submittal in the person of entity on whose behalf this submittal in the person of entity on whose behalf this submittal in the person of entity on whose behalf this submittal in the person of entity on whose behalf this submittal in the person of entity on whose behalf this submittal in the person of entity on whose behalf this submittal in the person of entity on whose behalf this submittal in the person of entity on whose behalf the form address in the person of entity on whose behalf the person of entity	Name of Crganization: Name of Mr. Richard Mertens Title: Env. Name of Mr. Richard Mertens Title: Env. Contact: Street: 1 City Hall Plaza City/Town: Boston State: MA Telephone: 617-722-43)0 Ext. 4283 FAX: (optional FA	Name of Organization: Name of Mr. Richard Mertens Title: Environmental F. City/Town: Boston State: MA ZiP Code F. RELATIONSHIP OF PERSON REQUIRED TO NOTIFY TO RELEASE OR THREAT OF RELEAS APPROPRE Specify Owner Operator Generator Transporter Other RP or PRP: Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2) Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j)) Any Person Otherwise Required to Notify Relationship: G. CERTIFICATION OF PERSON REQUIRED TO NOTIFY: Thomas N. O'Brien Any Expension of Person Required to Notify Relationship: G. CERTIFICATION of Person Required to robtaining the information, the material information containing with the information containing the information to the material information containing the information to the material information containing the information of this submittal. Inthe person of entity on whose behalf its submittal submitting false, inaccurate, or incomplete including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete For: Boston Redevelopment Authority (prini name of person or entity recorded in Section E: Street: Cay/Town: Telephone: Ext. FAX: (optional) YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETU INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZ A REQUIRED DEADLINE. Licensed Site Professional: Dr. Prasanta K. Ehumia, Ph.D. Weston & Sampson Engineers, Inc. 5 Centennial Drive	Name of Organization: Mr. Richard Mertens Title: Environmental Review Office Contact Name of Mr. Richard Mertens Title: Environmental Review Office Contact Street: 1 City Mall Plaza City/Town: Boston State: MA ZiP Code: 02201-1007 Telephone: 617-722-437)0 Ext. 4283 FAX Colional 617-742-4464 F. RELATIONSHIP OF PERSON REQUIRED TO NOTIFY TO RELEASE OR THREAT OF RELEASE: (check one) J. RP or PRP Specify D. Owner Operator Generator Transporter Other RP or PRP: Friduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2) Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j)) Any Person Otherwise Required to Notify Specify Relationship: G. CERTIFICATION OF PERSON REQUIRED TO NOTIFY: Thomag N. O'Brien attention of the medical preparation of the pains and penalties of perjury (i) that I have personally e familiar with the information contained in this submittal including any and all documents accompanying this transmittal form, (ii) that, it in my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attention on behalf of the entity in the person or entity on whose behalf this submittal information contained in this submittal in the person or entity on whose behalf this submittal information contained in this submittal in the person or entity on whose behalf this submittal information contained in this submittal in the person or entity on the person or entity recorded in Section E: Street: City/Town: State: ZIP Code: Title: Director For: Boston Redevelopment Authority Joint name of person or entity recorded in Section E: Street: City/Town: State: ZIP Code: For Boston Redevelopment Authority A REQUIRED DEADLINE. Title: Director For Boston Redevelopment Authority A REQUIRED DEADLINE. Licensed Site Professional: Dr. Prasanta K. Bhurnia, Ph.D. Weston & Sampson Engineers, Inc. 5 Centennial Drive For Engineers, Inc. 5 Centennial Drive

TABLE 1

SOIL HEADSPACE SCREENING AND SAMPLING RESULTS BRA/EDIC PARCEL P-3 Test Pit and Soll Boring Samples

·		i i				·s	ample ider	rtification	and sample	e depth (le	-eti			
Parameter	Unita	Reportable	WS-1	WS-2	WS-3	WS-4	WS-5	WS-6	WS-7	WS-8	WS-8	WS-10	WS-11	-: WS-12
	0.11	Concs.	11.5-1	113-2	113~	1134			1134	1P-6	TP-4	TP-7	11311	TP-1
		! !				40.40	40.47	40.13	40.47	17-17.5		1:-	i	
		RCS-1	8.5-10.5	10-12	15-17	10-12	10-12	10-12	10-12	11-11.5	18.5-19	17.5-13	20-22	11.5-12
VOLATILE ORGANIC COMP	SONOS.	<u> </u>					,			,				
Benzene	_ <u>vs/t3_</u>	10,000	NO !	NO !	ND	סא	ND	NO	<u>: DM</u>	NO	87	_ND	מא	מא
Isopropyibenzene	υρλες	1,000,000	NEO I	ַ מא	ND	ND	ND		- אס	NO	כא!	ND	I DN I	330
n-Propylbenzene	n2/c2	100,000	NED	סא	ND	ND	ND_		מא		טא ו	פא	! ND	760
Xylene (total)	_ <u>uç/tç</u> _	1 500,000 1	<u> 084 </u>	ַ מא ַ	ND	NO	i ND	ND	ND	C3/4	GN_I	QN C	I ND	32
tert-Butylbenzene	ويارون	! NS	NO .	ND 1	ND	סא	ND_		: DM :		<u>DN</u>	ND	I ND I	36
sec-Butlbenzene	uç/t∉	i NS i	ר כא	ND !	ND	סא	ND_	םא	סא	<u> </u>	: ND	GN	ND 1	270
n-Butylberizene	ug/tg	: NS	(54 <u></u>	NO _	סא	מא	ND ND	ND	: ND	L NO	1 ND	CN	DND	470
Napthalene	<u></u>	4,000	ND I	<u> </u>	סא	NO	I ND		. אס	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	i ND	150	ND !	160
1,2,4-Trimethylbenzene	بح∕دج	1,000,000	I ON I	I DN		מא	ND	םא	· ND	ND.	. ND	_ GN_	i no i	_70
Total BTEX	υρλο	: <u>-</u>	ן פא	ND 1	_ מא	שא	l ND	ND ND	, ND	םא י	87	NO.	I ND	32
Total VOCs	uska	1 -	_ כא <u> </u>	! סא	ND	ND	םא י	! ND	. NO	: 150	87	150	I ND I	2,125
		<u>-</u> -											i. ;	
TOTAL PETROLEUM HYDRO	CARBON	₹ \$**											 	
Gasoline	mete	: -	Cא	ND !	פא	' ND	ND	. ND		ND_	: ND	ND	I ND	ND
Kerosene	mo*c	<u>: </u>		! מא	ВD	מא	l ND	ND	ИD	1 110	: ND	DN	! NO !	ND
Mineral Spirits	merke		פא	ND i	סא	ן אם	ND	ND	DN	מא	: ND		i ND	NO
Fuel Oil #2/Diesel	mo/kç	-	פא	סא	ND	1 NO	ND	ND	NO	ND	: ND	15C*	ND	8,400
Fuel Oil #4	mç/tç		GM	ו כא	סא	םא :) NO	מא	ND	СМ	: ND	סא	, ND	ND
Fuel Oil #6	mo/ka	· · -	ו כא	מא	NO	: ND	ם או	ND	: ND	CN	· ND	םא ו	i ND	ND
Motor Oil/Hydraulic Oil	mç/tg	-	ם א ו	ND	מא	I NO	ND_	םא	NO	500	: ND	920	NO I	DN
Total TPH	mçAç	500	ַ מא !	NO	70	סא	i ND_	l NO	NO	500**	ND	11070***	I ND	6,400
POLYNUCLEAR AROMATIC	HYDROC	ARBONS -											<u> </u>	
Napthalene	ug/to	4,000	NA.	ND_	_ ND	NA.	i NA	i NA	· NA	8,200	: 130	NA.	ND.	1,000
2-Methylnaphthalene	υρκ	1 700	. NA	סא	סא	! NA	i NA	l NA	NA NA	4,300	. 60	N.A.	: ND	23,000
Acenaphthylene	l uc to	: 100,000	i NA	ND	ND	: NA	I NA	NA.	NA.	2,000	ND	N.A.	i ND	800
Acenaphthene	i usiks	20,000	l NA	CN	GM	NA .	. NA	NA.	RÄ	12,000	180	NA.	! ND	3,400
Fluorene	טיבינט י	400,000	' NA	ַ סא	ND .	. NA	l NA	NA .	NA.	11,000	290	N.	t #ND	3,500
Phenanthrene	ug/ks	100,000	, NA	D/D_	ON	. NA	I NA	NA.	NA	93,000	1,500	NA.	NO.	11,000
Anthracene	UQ'sç	1,000,000	. NA	מא	פא	! NA	NA_	I. NA	NA	21,000	; 440	NA.	ON	2,700
Fluoranthene	l ug/kg	600,000	NA.	l ND	_ אם	! NA	i NA	I NA	; NA	92,000	1,600	NA.	1 ND	4,100
Pyrene	ug/kg	500,000	l NA	i ND	NO	l NA	NA.	I NA	: NA	82,000	1,400	i NA	ND	4,100
Benzo(a)anthracene	ιυαλε	700	I NA _	סא	פאייו	i NA	I NA	l NA	NA.	.38,000	630	Í NA	I ND	1,500
Chrysene	υο/κο	7,000	. NA	СИ	ND	! NA	. NA	I NA	i NA	44,000	690	l NA	I ND	1,700
Benzo(b)fluoranthene	ן טס/גב	700	! NA	פא ו	סא 1	l NA	l NA	! NA	NA.	34,000	560	I NA	l ND	1,200
Senzo(k)/luoranthene	i ug/kç	7,000	NA.	CN	ND	i NA	! NA	i NA	NA.	35,000	: 550	: NA	, ND	1,300
Benzo(a)pryene	י טמלגי	700	NA.	. אס	פא	NA NA	i NA	! NA	NA.	39,000	510	: NA	. NO	1,400
Dibenzo(a,h)anthracene	ug/xg	700	NA .	! ND	ND	! NA	i NA	! NA	NA.	4,700	: ND	l NA	: ND	I NO
Benzo(g,h,i)perylene	l vot-	100,000	i NA	NO I	ND.	NA.	I NA	! NA	NA	13,000	190	NA.	ND	I NO
Indeno[1,2,3-cd]pyrene	UG/kg	700_	NA.	i ND	. ND	i na	i NA	: NA	NA.	14,000	: 200	. NA	1 × NO	םא ו
\													:	
METALS	1_												·	
Arsenic, Total	ma/k;	30	N.	7.1	7.5	I NA	NA.	! NA	NA.	1_ 7.3	. 7.8	NA.	8.1	4.4
Barium, Total	move	1,000	NA.	: 62	57	. NA	NA.	. NA	, NA	240	160	, NA	53	72
Cadmium, Total	mo/ka	30	NA.	<5.5	<4.2	l NA	l NA	l NA	i NA	4.5	<2.7	. NA	<2.4	<3.3
Chromium, Total) mg/rg	1,000	i NA	1 54	84	l na	I NA	l NA	. NA	23	1 14	: NA	1 11	27
Lead, Total	! mg/kg		NA .	1 13	S.3	NA.	NA.	l NA	1 10	520	980	NA.	51	1 120
Mercury, Total	m ₂ /k ₂		NA.	i <0.023	0.059	! NA	NA.	I NA	. NA	3.07	0.204	. NA	<0.015	<0.022
Selenium, Total	! ma/ka		Ī NA	1 <5.5	4.2	I NA	I NA	I NA	NA.	1 <2.6	<2.7	! NA	<2.4	□ ⊲.3
		 _						· -						
Silver, Total	mg/kg	100	NA.	<5.2	<4.1	! NA	NA.	! NA	NA.	< 2.8	<2.6	. NA	<2.4	1 <3.3

ND = Not detected

NA = Not analyzed

NS = No standard

ns = no standard

= no no standard

= no no standard

= no standa

** PAHs present

Boid/Shaded = Exceeds applicable recoracie concentration

Elsutton braedic/solict2, ---

APPENDIX C

-taxes

21.000

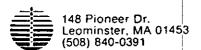
SOIL BORING LOGS AND FIELD NOTES

SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

Clièn			ampson Engir					ate 3/27/97	Job No. 97-0332
Loca			mont and Whi		r St			D ****	
BOR NO.	ING	B-101 Ground Elev.	Dat Sta		24/9	7 Date Comp	_{lete} 3/24/97	Drilling Foreman MC	Eng./Hydrol. Geologist
2	<u>L</u> _	Sam	ple Data				Soil and/	or bedrock strata descr	lptions
Quip T H	No	Sample Depth (ft.)	Blows 6" Penetration	Rec. Inches	Casing Blows Per ft.	Strata Change Depth	Vis	sual Identification of Soil	and/or Rock Strata
1	<u>tī</u>	1'0"-2'6"	8-9-35						
	<u></u>			├			Dry, dens	se to medium o	iense, fine to
	 	 		 _	 				some inorganic
5	2	4'6"-6'6"	3-6-7-9	 		1	1	ace fine to co	
3	1-					j	brick, gl Fill	Lass, coal, e	c.
) LTTT		
	3	7'0"-9'0"	7-4-9-9		 				
10	} -	 	 	╁╌╌	}	9'0"	 		
10]	·		
				<u> </u>]	Fud of he	oring at 9'0"	
	 	 	}	╂	├	1			upon completion.
1	├	 		 	 	1	ļ	•	
15	 	 							
]])		
			 	 	┼	-			
200		 	 	+	╆╌	1			
20		 	 	1	1	1			
]			
'	 	 	<u> </u>	╂	╂	┨			
25				 -		1			
25	† 		<u> </u>	1		1	Į.		
ŀ									
	∭	 			┼	4			
1	/-		 	+-	╂	-			
30	#		 	┪	1	1			
}}]	}		
`[1		4			
1 ~~	1		 	+-	+	-{ ·			
35	#-			1	1]			
								•	
	 -	_			 	4			
) 40	1	 -	 	+-	+	4	1		
	i				1	1	<u> </u>		
Tyr	oe of	Boring Casing Size:	Ho	llow Ste	m Auge	er Size:	4-1/4"		
,	i F	roportion Percentages		Gran	ular So	ils (blows per	ft.)	Cohesiv	e Soils (blows per ft.)
al –	i	Trace 0 to 10% Some 10 to 40%	0 to 4 Ve 4 to 10 t		e	30 to 50 t	Dense /ery Dense	0 to 2 Very Soft 2 to 4 Soft	6 to 15 Stiff 15 to 30 Very Stiff
]		And 40 to 50%	10 to 30		Dense			4 to 8 Medium Stiff	
,	il		Standard Blows are	per 6" 1	on test aken wi	(SPT) = 140# I th an 18" long	hammer falling 30" × 2" O.D. × 1 3/	8" I.D. split spoon sampl	er unless otherwise nated.
T	hr ter	ms and percentages used	to describe soil and o	r rock ar	e based	on visual identi	fication of the retrie	ved samples. Moisture	content indicated may be affected
~ b	y lime	of year and water added was taken. The stratif	during the drilling pro	cess. 🛛	Water I	evels indicated	may vary with seas	sonal fluctuation and the	degree of soil saturation when the

Sheet	#	of	
011000	11	 · ·	



SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

5 Monson Place Milford, NH 03055 (603) 672-2135

Client			ampson Engir				Date 3/27/97 Job No. 97-0332
BORI NO.		B-102 Ground Elev.	Dat Sta	€ 3/2	4/9		olete 3/24/97 Drilling MC Eng./Hydrol. Geologist
_		Samp	le Data			 -	Soil and/or bedrock strata descriptions
DHP-H	No.	Sample Depth (ft.)	Blows 6" Penetration	inches B	asing Blows Per ft.	Strata Change Depth	Visual Identification of Soil and/or Rock Strata
5 _	2	4'0"-6'0"	8-9-9-15 				Dry, medium dense, fine to coarse sand, trace to some inorganic silt, trace fine to coarse gravel, cobbles and boulders, brick, glass, coal. Fill.
10_	3	7'0"-9'0"	6-6-6-7			9'0"	
<u>-</u> ۷۰							End of boring at 9'0" No water encountered upon completion.
15 _							· · · · · · · · · · · · · · · · · · ·
20 _							
25							
30 _					-		1 91 1
							· · · · · · · · · · · · · · · · · · ·
35 _			 				
40 _							
Туре	of Bo	oring Casing Size:	Holl	ow Stem A	Auger	Size:	4-1/4"
	Pro	portion Percentages Trace 0 to 10% Some 10 to 40% And 40 to 50%	0 to 4 Very 4 to 10 Loc 10 to 30 M	Granular Loose ose edium De	r Soils	30 to 50 De Over 50 Ve	Cohesive Soils (blows per ft.) ense 0 to 2 Very Soft 8 to 15 Stiff ery Dense 2 to 4 Soft 15 to 30 Very Stiff 4 to 8 Medium Stiff Over 30 Hard
	terms	s and percentages used to	Blows are p	er 6" takei	n with	an 18" long x	ammer falling 30" x 2" O.D. x 1 3/8" I.D. split spoon sampler unless otherwise noted.

The terms and percentages used to describe soil and or rock are based on visual identification of the retrieved samples.

Moisture content indicated may be affected by time of year and water added during the drilling process.

Water levels indicated may vary with seasonal fluctuation and the degree of soil saturation when the boring was taken.

The stratification lines represent the approximate boundaries between soil types, the actual transitions may be gradual.

Sneet	#		of	
-------	---	--	----	--

SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

Clie										
BOFII NO:		B-103 Ground	Date Star	2	24/9		plete 3/24/97 Drilling MC Eng./Hydrol. Geologist			
	Γ		ple Data				Soil and/or bedrock strate descriptions			
DEP TH	No.	Sample Depth (ft.)	Blows 6" Penetration	Rec. Inches	Casing Blows Per ft.	Strata Change Depth	Visual Identification of Soil and/or Rock Strata			
	1	1'0"-3'0"	4-5-5-10							
5	2	4'0"-6'0"	6-6-9-7				Dry, medium dense to dense, fine to coarse sand, trace to some inorganic silt, trace fine to coarse gravel, cobbles and boulders, brick, glass,			
i I	3	7'0"-9'0"	24-20-19-27				coal, etc. Fill.			
10						9'0"				
1							End of boring at 9'0" No water encountered upon completion.			
15										
20										
25										
23							·			
30										
35						-				
						- - - -				
40				1		1				
Туг	e of E	Joring Casing Size:	Ho	llow Ste	m Auge	er Size:	4-1/4"			
	P	roportion Percentages Trace 0 to 10% Some 10 to 40% And 40 to 50%	0 to 4 Ve 4 to 10 Le 10 to 30	ry Loos oose	е					
			Standard p Blows are	enetrati per 6"	on test taken w	(SPT) = 140# I th an 18" long	hammer falling 30" g x 2" O.D. x 1 3/8" I.D. split spoon sampler unless otherwise noted.			
1 6	The terms and percentages used to describe soil and or rock are based on visual identification of the retrieved samples. Moisture content indicated may be affected by time of year and water added during the drilling process. Water levels indicated may vary with seasonal fluctuation and the degree of soil saturation when the boring was taken. The stratification lines represent the approximate boundaries between soil types, the actual transitions may be gradual.									

Sheet	#	óf	



SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

5 Monson Place Milford, NH 03055 (603) 672-2135

Client	1	Weston	& Samps	on Engir	eers	. In	ıc.	Da	te 3/27/97	Job No. 97-0332	2
Locat				and Whi	ttie	r St	reet, Ro	xbury, MA			
NO.	NG	B-104 Gro		Dat Sta		24/9	7 Date Comp	lete 3/24/97	Drilling Foreman MC	Eng./Hydrol. Geologist	
Ē			Sample Da					Soil and/o	r bedrock strata desc	riptions	<u> </u>
DE P	No.	Sample Depth (ft.)	6"	Blows Penetration	Rec. inches	Casing Blows Per ft.	Strata Change Depth	Vis	uat Identification of Soil	and/or Rock Strata	
	1	1'0"-3'0"	1/7-1	5-7-7			<u>:</u>				
					ļ					dense, fine to	
					_					rganic silt, gravel, cobble	
5 _	2	4'0"-6'0"	7-7	7-8-7	 					glass, coal, e	
7-1								Fi11	, , , , , , , , , , , , , , , , , , , ,	51000, 0001, 0	
											ļ
ŀ	3	7'0"-9'0"	35-2	21-24-19							
10				-,			9'0"				1
"-								End of bo	ring at 9'0"		,
							;			upon completio	on.
ļ		·	_				;			•	
	\dashv		1								# [*]
15	\dashv	•									İ
Ì											
ļ							•				
20				·							
ŀ		- · · · · · · · · · · · · · · · · · · ·									·
t											<u> </u>
25 _	_										<u>'</u> '
ŀ											.]
ŀ											· [
İ											
30	\Box										
}		<u> </u>									•
f	\dashv										
35			i				·				.
							ŀ				• •
			+								:
40			 								: ;
		_									' <u> </u>
Туре	of Bo	ring Casing Si	ze:	Hollo	w Stem	Auger	Size:	4-1/4"			
		portion Percentag Trace 0 to 10% Some 10 to 40% And 40 to 50%	jes	0 to 4 Very 4 to 10 Loo 10 to 30 Me	Loose se		(blows per ft. 30 to 50 De Over 50 Ver	nse	Cohesive 0 to 2 Very Soft 2 to 4 Soft 4 to 8 Medium Stiff	Soils (blows per ft.) 8 to 15 Stiff 15 to 30 Very Stiff Over 30 Hard	
				Standard per Blows are pe	etration r 6" tak	test (Si en with	PT) = 140# ha an 18" long x	mmer falling 30* 2" O.D. × 1 3/8" i	.D. split spoon sample	unless otherwise noted.	
The	terme	and percentance u	ead to docor	ho sail and as sa	al ara b						

The terms and percentages used to describe soil and or rock are based on visual identification of the retrieved samples.

Moisture content indicated may be affected by time of year and water added during the drilling process.

Water levels indicated may vary with seasonal fluctuation and the degree of soil saturation when the boring was taken.

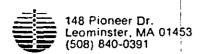
The stratification lines represent the approximate boundaries between soil types, the actual transitions may be gradual.

SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

Clier		Vactor C	Company Engin	~~~			Date 3/27/97 Job No. 97-0332			
Loca			Sampson Engin emont and Whi							
BOR NO.		B-105 Ground Elev.	Date Star	e 2/	24/9		plete 3/24/97 Drilling MC Eng./Hydrol. Geologist			
DHIP		San	nple Data				Soil and/or bedrock strata descriptions			
P	No.	Sample Depth (ft.)	Blows 6" Penetration	Rec. Inches	Casing Blows Per ft.	Strata Change Depth	Visual Identification of Soil and/or Rock Strata			
5		4'0"-6'0"	4-3-4-6				Dry, medium dense, fine to coarse sand, some inorganic silt, some fine to coarse gravel, cobbles and boulders, brick, glass, coal, wood. Fill.			
10	3	7'0"-9'0"	15-15-10-13			9'0"				
15							End of boring at 9'0" No water encountered upon completion.			
20										
25										
30										
35							·			
40						1				
Тур	e of B	loring Casing Size:	Hol	low Ste	m Auge	r Size:	4-1/4"			
	Pi	roportion Percentages Trace 0 to 10% Some 10 to 40% And 40 to 50%	0 to 4 Ver 4 to 10 Lo 10 to 30 I	y Loose Jose Medium	Dense	- ··	Dense U to 2 Very Soft 8 to 15 Stiff Very Dense 2 to 4 Soft 15 to 30 Very Stiff 4 to 8 Medium Stiff Over 30 Hard			
			Blows are	per 6" t	aken wi	th an 18" long	hammer falling 30" g x 2" O.D. x 1 3/8" I.D. split spoon sampler unless otherwise noted.			
i bi	The terms and percentages used to describe soil and or rock are based on visual identification of the retrieved samples. Moisture content indicated may be affected by time of year and water added during the drilling process. Water levels indicated may vary, with seasonal fluctuation and the degree of soil saturation when the boring was taken.									

Sheet	#	: of	
-------	---	------	--



SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

Client		Weston & S							ate 3/27/97		Job No. 97-0332	
Locat	on	Corner Tre	mont a	nd Whi	ttie	r St	reet, Ro	xbury, MA				
BORI NO.	NG	B-106 Ground Elev.		Date Star		24/9	7 Date Comp		i Oreman		Eng /Hydrol. Geologist	
₽		Samp	le Data					Soil and	or bedrock strata	descript	ions	
DH P H	No.	Sample Depth (ft.)	6" Pene		Rec. Inches	Casing Blows Per ft.	Strata Change Depth	V	isual Identification	of Soil an	d/or Rock Strata	1
	1	1'0"-3'0"	3-5-9	_9								
5 _	2	4'0"-6'0"	7-7-1	0–9				some ino coarse g	rganic sil	t, so bles	to coarse s me fine to and boulders 1.	
	3	7'0"-9'0"	7-8-8	<u>-7</u>								
10 _							9'0"					
									oring at 9 encounter		on completio	n.
15 _										-	-	
											•	
20											h	
								•				
25 _											:	
											н	
30 _		•										
										•		
35 _											1 M	:
40 _												
							1				· · · · · · · · · · · · · · · · · · ·	
Type	of Bo	oring Casing Size:		Holk	ow Sten	Auger	Size:	4-1/4"				<u> </u>
	Pro	Proportion Percentages Trace 0 to 10% Some 10 to 40% And 40 to 50%	1	0 to 4 Very 4 to 10 Loc 10 to 30 M	Loose se		s (blows per ft 30 to 50 De Over 50 Ve	ense	Co 0 to 2 Very Sc 2 to 4 Soft 4 to 8 Mediun	oft	bils (blows per ft.) 8 to 15 Stiff 15 to 30 Very Stiff Over 30 Hard	
			S	tandard pe lows are pe	netration er 6" ta	n test (S ken with	SPT) = 140# ha h an 18" long >	mmer falling 30" 2" O.D. × 1 3/6	3" I.D. split spoon s	sampler u	nless atherwise nated.	
by t	ime o	s and percentages used to f year and water added do as taken. The stratifica	uring the dr	rilling proce	ss. 🖫 V	Vater le	vels indicated m	ay vary with seas	onal fluctuation and	d the degr	ee of soil saturation wh	ffected en the

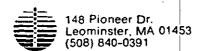
of

SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

Clie		Weston & S	ampson Engir	neers	. In	ıc.	Date 3/27/97 Joi	No. 97-0332
Loca			mont and Whi	ttie	r St	reet, Ro		
BOR NO.	NG -	B-107 Ground Elev.	Dati Sta		25/9	7 Date Comp	te 3/25/97 Drilling MC	Eng./Hydrol. Geologist
₽	<u></u>	Sam	ole Data				Soil and/or bedrock strata description	18
	No.	Sample Depth (ft.)	Blows 6" Penetration	Rec. Inches	Casing Blows Per ft.	Strata Change Depth	Visual Identification of Soil and/o	or Rock Strata
		1'0"-3'0"	5-9-12-12					
				ļ			Dry, medium dense, fine	to coarse sand,
}				 	<u> </u>		some inorganic silt, some	
5	2	4'0"-6'0"	4-4-4-5				coarse gravel, cobbles as	
1							brick, wood, glass, coal Fill	•
}				·			FIII	
	<u> 3</u>	7'0"-9'0"	9-12-15-15					
10	 			 		9'0"		· · · · · · · · · · · · · · · · · · ·
10		·	- 		 			•
1]	End of boring at 9'0" No water encountered upon	n completion
	<u> </u>			<u> </u>	ļ.——	}	no water encountered upo.	n completion.
15				 				
]		
				 	 	ł		
20		<u> </u>			 	ł		
20				 	<u> </u>			
İ								
				ļ		ļ		
25	 	 		┼				
25				 	 			
]		
1	 -			 	 	-		
30	\vdash			 	┼	1		
30 1				1	†	1		
	 	 -			ļ			
35	-	 	 	-				
331				1	 	1		
				<u> </u>]		
			·	 -	 			
40				 	┼─	{		
				1	 	1		
Тур	of B		Holl	ow Ster	n Auger	Size:	4-1/4"	
	Pr	oportion Percentages Trace 0 to 10%				s (blows per f	•	s (blows per ft.)
i		Some 10 to 40%	0 to 4 Ven 4 to 10 Lo	ose		30 to 50 D Over 50 Ve	Dense 2 to 4 Soft	& to 15 Stiff 15 to 30 Very Stiff
		And 40 to 50%	10 to 30 M				4 to 8 Medium Stiff	Over 30 Hard
			Blows are p	er 6" ta	ken wit	n an 18" long	nmer falling 30" 2" O.D. × 1 3/8" I.D. split spoon sampler unle	
Th	e term	s and percentages used to	to describe soil and or i	rock are	based o	on visual identifi	ation of the retrieved samples. Moisture conte	nt indicated may be affected
bo	ring w	as taken. The stratific	ation lines represent t	he appr	oximate	boundaries be	by vary with seasonal fluctuation and the degree seen soil types, the actual transitions may be g	or son saturation when the radual.

Sheet :	Ħ		of	
---------	---	--	----	--



SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

5 Monson Place Milford, NH 03055 (603) 672-2135

Client Weston & Sampson Engineers, Inc. Date 3/27/97 Job No. 97-0332 Location Corner Tremont and Whittier Street, Roxbury, MA									97-0332		
Locat			remont an		ttie	er S		oxbury, MA	0-00-		
NO.	NG	B-108 Ground Elev.		Date Start	3/	/25/	97 Comp	ete 3/25/97		Eng./l- Geolo	ydrol. gist
₽			iple Data					Soll and/or	bedrock strata de	scriptions	
OHIO T	No.	Sample Depth (ft.)	Blows 6" Penetral	ion In	nches	Casing Blows Per ft.	Strata Change Depth	Visu	al Identification of	Soil and/or Rock	Strata
	Ι	1'0"-3'0"	13-12-1	6-14				Dry, mediu	m donos f	ino to as	
			 					sand, some			
			-					inorganic			
5 _	2	4'0"-6'0"	5-5-6-7					brick, woo	d, glass,	coal.	
			<u> </u>					Fill.			i
	3	7'0"-9'0"	9-9-15-	20							:
		, 0 -5 0	10-0-13								
10 _							910"				: 1
			 					End of bor	ing of 010	rt .	
			 					No water e	-		pletion.
15			<u></u>								h
											j
			 	+							
											'
20 _			1								;
			 								, , , , , , , , , , , , , , , , , , ,
			 								р с 1.
											,
25			1:								
								1			
-		 	1		_						1
											. •
30 _											lic ,
			 								ļ. N
								:			
35 _			<u> </u>								
			 								
								!			
40_		 	1		1		}				Ï
Type	of Bo	oring Casing Size:	1	Hollow	v Stem	Auner	Size:	4-1/4"			
17 PC			<u> </u>						Caba	ing Calls /blass	nor ft 1
	rn	Trace 0 to 10% Some 10 to 40% And 40 to 50%	4 to	4 Very L 10 Loose 0 30 Med	.oose e		30 to 50 De Over 50 Ve	ense	0 to 2 Very Soft 2 to 4 Soft 4 to 8 Medium S		Stiff Very Stiff
			Stand Blow	lard pene s are per	tration 6" tak	test (S en with	SPT) = 140# ha an 18" long >	ammer falling 30" c 2" O.D. x 1 3/8" I	.D. split spoon san	npler unless othe	rwise noted.
The	term	s and percentages used If year and water added	to describe soil during the drilling	and or roc g process	kareb s. Down	ased o	n visual identificated m	cation of the retrieved	samples. D Moista al fluctuation and the	re content indicate degree of soil	led may be affected saturation when the

boring was taken.
The stratification lines represent the approximate boundaries between soil types, the actual transitions may be gradual.

Sheet	#	 of	

SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

!						·	
Clier			Sampson Engi				Date 3/27/97 Job No. 97-0332
BOR		R 100 Ground	Date		/25/	O.7 Date	3/25/97 Drilling MC Eng./Hydrol.
NO.	<u> </u>	Liev.	Star nple Data	1 ~	, 1	97 Comp	Soil and/or bedrock strata descriptions Geologist
Ĕ				<u></u>		<u> </u>	The second secon
DEPTH	No.	Sample Depth (ft.)	Blows 6" Penetration	Rec. Inches	Casing Blows Per ft.	Strata Change Depth	Visual Identification of Soil and/or Rock Strata
	1	1'0"-3'0"	7-9-9-14				
	<u> </u>		<u> </u>	<u> </u>	-		Dry, medium dense to dense, fine to
- 1		······································		ļ	 	}	coarse sand, some fine to coarse
5	2	4'0"-6'0"	4-7-8-9		╂╌╌	ļ	gravel, some inorganic silt, cobbles
<u>ا</u> د	 -	<u> </u>	1		1	1	and boulders.
]	
	3	7'0"-9'0"	10-17-20-20	ļ	ļ	1	
	-		 	ļ	 	9'0"	
10 !!	-		 	├	 	19 0	
	 		<u> </u>	╁	1-		End of boring at 9'0"
]	No water encountered upon completion.
				<u> </u>	<u> </u>		
15	+-		 	├ —	 	1	
	-		 	 	╂	-	
			†	†	1	1	
]	
20	1_		<u> </u>	↓	ļ	1	
			ļ	 	 	4	
				┼─	┼	-	
				 	+	1	
25						1	
	L				<u> </u>]	
				ļ	 	_	
	-			╂	 	-	
30	-		 	†—	+	1	
30						1	
]	
	<u> </u>	 		 	4	1	
	-			-			
35	+-		 	+	+-	1	
				†	1	1	
]	
				4_	1	1	
40	+		 	+	╂	4	
Tyr	e of B	loring Casing Size:	Ho	low Ste	m Auge	r Size:	4-1/4"
	Pr	roportion Percentages		Gran	ular Soi	ils (blows per i	ft.) Cohesive Soils (blows per ft.)
		Trace 0 to 10% Some 10 to 40%	0 to 4 Ver 4 to 10 Lo	y Loos		30 to 50 [Dense 0 to 2 Very Soft 8 to 15 Stiff
		And 40 to 50%	10 to 30 l		Dense	Vei 30 V	Very Dense 2 to 4 Soft 15 to 30 Very Stiff 4 to 8 Medium Stiff Over 30 Hard
			Standard p Blows are	enetrati per 6" t	on test i aken wi	(SPT) = 140# i th an 18" long	hammer falling 30" X 2" O.D. X 1 3/8" I.D. split spoon sampler unless otherwise noted.
1	ne term	ns and percentages use	d to describe soil and or	rock are	e based	on visual identit	ification of the retrieved samples. Moisture content indicated may be affected
וסו	/ ume (oi year and water added	during the drilling proc	ess. 🗆	Water le	evels indicated .	may vary with seasonal fluctuation and the degree of soil saturation when the between soil types, the actual transitions may be gradual.

SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

Client	Client Weston & Sampson Engineers, Inc. Date 3/27/97 Job No. 97-0332									
Locat	on	 	mont and Wh		er Si		oxbury, MA			
BORI NO.	NG ——	B-110 Ground Elev.	Date Star	3/	25/9	7 Date Comp		Toteman	Eng./Hydrol. Geologist	
β			le Data		,		Soil and	or bedrock strata descr	iptions	
OMP I	No.	Sample Depth (ft.)	Blows 6" Penetration	Rec. Inches	Casing Blows Per ft.	Strata Change Depth	. Vi	sual Identification of Soil	and/or Rock Strata	
	1	1'0"-3'0"	11-10-10-7			J				
5 _	2	4'0"-6'0"	4-7-7-10				sand, so	ium dense, fi me inorganic coarse gravel , brick, wood	silt. Trace , cobbles and	
ļ			i ·		_	}	Fill.	•	1	. [
	3	7'0"-9'0"	8-11-10-12						:	
10						9'0"			ř	
					ļ					
								oring at 9'0" encountered	upon completio	n.
.		1	1		-				-	: 1
15_										
20_									,	
										ļ
]				1
25_			,] 				l
			 			1				
30 _										
				<u> </u>		-				
										
0.0			<u> </u>							
35 _										
				 —	 					
		 			 	1				l
40 _				-						: :
Туре	of Bo	oring Casing Size:	Holle	w Ster	n Auger	Size:	4-1/4"			
	Pro	opertion Percentages Trace 0 to 10% Some 10 to 40% And 40 to 50%	4 to 10 Loc 10 to 30 M	Granular Soils (blows per ft.) 0 to 4 Very Loose 30 to 50 De 4 to 10 Loose Over 50 Ver 10 to 30 Medium Dense			ense ry Dense	Cohesive 0 to 2 Very Soft 2 to 4 Soft 4 to 8 Medium Stiff	Soils (blows per ft.) 8 to 15 Stiff 15 to 30 Very Stiff Over 30 Hard	
			Blows are pe	netratio er 6" ta	n test (S ken with	ori) = 140# ha n an 18" long o	mmer falling 30" 2" O.D. × 1 3/8	* I.D. split spoon sample	r unless otherwise noted.	:
by t	ime a	of year and water added di	uring the drilling proce	ss. 🍱 \	Nater le	vels indicated m	ay vary with seaso	ed samples. II Moisture on al fluctuation and the done actual transitions may	content indicated may be a egree of soil saturation wh be gradual. []	flected en the

Sheet	#	 ot	

SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

Client			ampson Engi				Date 3/27/97 Job No. 97-0332
Locat	on_	Corner Tre	mont and Wh	itti	er St	reet, Ro	
BORI NO.	NG	B-111 Ground Elev.	Dal Sta		/25/9	7 Date Comp	olete 3/25/97 Drilling MC Eng./Hydrol. Geologist
₽	<u></u>	Sam	ple Data				Soil and/or bedrock strata descriptions
DEPTH.	No.	Sample	8lows 6" Penetration	Rec. Inches	Casing Blows Per ft.	Strata Change Depth	Visual Identification of Soil and/or Rock Strata
Ī	1	1'0"-3'0"	10-10-9-10				
				 	 -		Dry, medium dense, fine to coarse
				 	 		sand, fine to coarse gravel, some
5 _	2	4'0"-6'0"	4-6-6-12	1			inorganic silt, cobbles and boulders,
3 +						<u>'</u>	brick, glass, coal, etc. Fill.
1							
ţ	3	7'0"-9'0"	5-9-3-10	 	 		Į.
40				 -	┼	9'0"	<u> </u>
10]				† · · ·	 	1	End of boring at 9'0".
							No water encountered upon completion.
İ	<u> </u>			ļ			No water encountered upon compressions
45	 			╁		{	
15 _	-						
]	
					ļ	<u> </u>	
	 -			-	-	1	
20 _	 			+	 	-	
]	•
	<u> </u>	ļ		<u> </u>	 	1	
	⊩–					-[
25 _	 			 	 	1	
]	
	<u> </u>					1	
	 -				 	<u> </u>	
30	 					-	
			 	 		1	
]	·
		ļ	 	+	 	4 .	
35	 		 	+	+	-	
			 	1-	+	1	
		 		-		_	
40	 		 		+-	-	
Тур	e of E	Soring Casing Size:	Ho	llow Ste	m Auge	r Size:	4-1/4"
	P	roportion Percentages		Gran	ular So	ils (blows per l	
		Trace 0 to 10% Some 10 to 40% And 40 to 50%	0 to 4 Ve 4 to 10 L 10 to 30	oose		30 to 50 (Over 50 V	Dense O to 2 Very Soft 8 to 15 Stiff Very Dense 2 to 4 Soft 15 to 30 Very Stiff 4 to 8 Medium Stiff Over 30 Hard
			Standard p Blows are	enetrati per 6" t	on test aken wi	(SPT) = 140# i th an 18" long	hammer falling 30" × 2" O.D. × 1 3/8" I.D. split spoon sampler unless otherwise noted.
Ţ	ie tern	ns and percentages used	to describe soil and or	rock are	e based	on visual identi	ification of the retrieved samples. Moisture content indicated may be affected
b	ring v	vas taken. 🏻 The stratifi	cation lines represent	the app	vvaler i roximati	eveis indicated e boundaries bi	may vary with seasonal fluctuation and the degree of soil saturation when the between soil types, the actual transitions may be gradual.

sheet	#	 of	
	••	 •	



SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

5 Monson Place Milford, NH 03055 (603) 672-2135

Client		Weston &							e <u>3/27/97</u>	Job No. 97-0332	
Locati					_		D-4-	xbury, MA	Daillian	E-alla A	
BORII NO.	NG	B-112 Ground Elev.	<u> </u>	Dat Sta		25/9	7 Date Comp		Drilling MC Foreman MC	Geologist	
₽			mple Data		T <u>-</u>			Soil and/or	bedrock strata des	scriptions	
DELP TH	No.	Sample Depth (ft.)	6"	Blows Penetration	Rec. Inches	Casing Blows Per ft.	Strata Change Depth	Visu	al Identification of S	oil and/or Rock Strata	
	1	1'0"-3'0"	3-4-	7-11	<u> </u>			Dry medi	ım densa f	ine to coarse	
}			 		 					oarse gravel,	
								some inorg	ganic silt,	cobbles and	1
5 _	2	4'0"-6'0"	9-7-	7-20				· ·	brick, gla	ss, coal, etc.	1
					 			Fill.		:	•
	3	7'0"-9'0"	6-4-	3-7						:	
			1				2.01		<u></u>		
10			 		 		9'0"			·	
									ring at 9'0		
							[No water (encountered	upon completion	n.
					╁—	ļ					
15_				 .	 						
1		<u> </u>	+		 						
20_		-	+		1						
"1											ŀ
-				 -	}	 -				!	}
		<u> </u>	1		-						-
25										:	
- {	{		 		[<u> </u>					
			+		 	 					
30_											1
			 		1	 					1
İ											
35_					┼─						
			1]				
			1.							1	'
			+		 	 -				;	
40_					<u> </u>	 					
Туре	of Bo	oring Casing Size:	1	Holl	ow Sten	Auger	Size:	4-1/4"		, a	
. <u> </u>	Pro	portion Percentages Trace 0 to 10% Some 10 to 40% And 40 to 50%		0 to 4 Very 4 to 10 Loc 10 to 30 M	Loose ose ledium (Dense_	30 to 50 Do Over 50 Ve	ense ry Dense	Cohesi 0 to 2 Very Soft 2 to 4 Soft 4 to 8 Medium Sti	ve Sails (blows per ft.) 8 to 15 Stiff 15 to 30 Very Stiff ff Over 30 Hard	
			 	Standard pe Blows are p	netration er 6" ta	n test (S ken with	SPT) = 140# ha an 18" long x	mmer falling 30" 2" O.D. x 1 3/8" i	.D. split spoon samp	oler unless otherwise noted.	

The terms and percentages used to describe soil and or rock are based on visual identification of the retrieved samples.

Moisture content indicated may be affected by time of year and water added during the drilling process.

Water levels indicated may vary with seasonal fluctuation and the degree of soil saturation when the boring was taken.

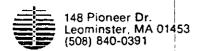
The stratification lines represent the approximate boundaries between soil types, the actual transitions may be gradual.

SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

	Clien Weston & Sampson Engineers. Inc. Date 3/27/97 Job No. 97-0332								
	Location Corner Tremont and Whittier Street, Roxbury, MA								
NO.	BORING B-113 Ground Date Start 3/25/97 Date Complete 3/25/97 Foreman MC Geologist Eng./Hydrol. Geologist								
Sample Data Soil and/or bedrock strata descriptions P Sample Blows Rec. Casing Strata							Soil and/or bedrock strata descriptions		
P T H	No.	Sample Depth (ft.)	Blows 6" Penetration	Rec. Inches	Casing Blows Per tt.	Strata Change Depth	Visual Identification of Soil and/or Rock Strata		
	1	1'0"-3'0"	2-3-4-4						
1				ļ	 		Dry, loose to medium dense, fine to		
5	-			 	-		coarse sand, some fine to coarse gravel,		
	2	4'0"-6'0"	9-10-10-12				some inorganic silt, cobbles and		
.]					ļ		boulders, brick, glass, coal, etc. Fill.		
	3	7'0"-9'0"	10-11-15-15	 			1111.		
, ,	۲-	7 0 - 5 0	10-11-15-15	1	1				
10 _						9'0"			
	<u> </u>	<u> </u>		-	 	1	End of boring at 9'0"		
İ		<u> </u>		 	 	1	No water encountered upon completion.		
İ				ļ					
15	<u> </u>		-		 				
		 		 		1			
1]			
	<u> </u>	 		 	} —				
20]	┝╌			1	┼	-			
]			
	 			ļ]			
25		<u> </u>		 	-	-			
23						1	·		
	 	<u> </u>]			
	 -			 	 	-			
30				†		1			
]			
		·		 	┼—	-			
]		 		+-	1	1			
35]			
	 -			╂	 	1			
	 	·		 	1	-			
]			
40	 				ļ	-			
Тур	of B	oring Casing Size:	i Hol	low Ster	m Auger	Size:	4-1/4"		
Proportion Percentages Granular Soils (blows per ft.) Cohesive Soils (blows per ft.)									
		Trace 0 to 10% Some 10 to 40% And 40 to 50%	4 to 10 Lo	0 to 4 Very Loose 4 to 10 Loose 10 to 30 Medium Dense			Dense 0 to 2 Very Soft 8 to 15 Stiff Very Dense 2 to 4 Soft 15 to 30 Very Stiff 4 to 8 Medium Stiff Over 30 Hard		
			Blows are p	Standard penetration test (SPT) = 140# hammer falling 30" Blows are per 6" taken with an 18" long x 2" O.D. x 1 3/8" I.D. split spoon sampler unless otherwise noted.					
,	The terms and percentages used to describe soil and or rock are based on visual identification of the retrieved samples. Moisture content indicated may be affected by time of year and water added during the drilling process. Water levels indicated may vary with seasonal fluctuation and the degree of soil saturation when the boiling was taken. The stratification lines represent the approximate boundaries between soil types, the actual transitions may be gradual.								

Sneet	Ħ	 OT	



SOIL EXPLORATION CORPORATION Geotechnical Drilling and Groundwater Monitor Wells

Client Weston & Sampson Engineers, Inc. Date 3/27/97 Job No. 97-0332								2		
Location Corner Tremont and Whittier Street, Roxbury, MA										
BORING B-114 Ground Date Start 3/25/97 Date 3/25/97 Drilling MC Geologist Eng./Hydrol. Geologist										
							riptions			
T-10mO	No.	Sample Depth (ft.)	Blows 6" Penetration	Rec. Inches	Casing Blows Per ft.	Strata Change Depth	· Vi	isual Identification of Soil	and/or Rock Strata	
	1	1'0"-3'0"	5-5-5 - 5				_			
_	2	4'0"-6'0"	7-12-14-18				sand, so	me fine to co rganic silt,	ne to coarse arse gravel, cobbles and glass, coal	.]
5 _	-		7 12 14 10	1	 		etc.	, 55250, 11554	, 6,	
							Fill.		:	
	3	7'0"-9'0"	6-6-9-7	╁						. 1
		<u> </u>	<u> </u>	 	 	9'0"			<u> </u>	
10 _				1		Ĵ			;	
			1	<u> </u>				oring at 9'0"		- 1
				┼			No water encountered upon con		upon completion	on.
45			<u>. </u>	-					h	1
15]			ii.	Į
				 	ļ					
			<u> </u>	╂	 -		·			,
20			!! !	+	 					
20]				
			<u> </u>						! !	4
			<u> </u>	 	 				•	
25				+-	 	ł				}
Zij										- 1
			· · · · · · · · · · · · · · · · · · ·		 	ļ				ļ
			1	-}	} —-	1			· ·	1
30				+	 -					•
30]				Į
	<u> </u>		<u> </u>	 	↓					· .
	-		i ·		 	} .				
35				 	 	· ·	{			
ب دن]				
			-	↓	 					i
	}—	 	1	+		}				<u> </u>
40				\perp	L^{-}	1				,
						<u> </u>				· ·
Type of Boring Casing Size: Hollow Stem Auger Size: 4-1/4"										
Proportion Percentages Trace 0 to 10% Some 10 to 40% And 40 to 50%			4 to 10 Lo 10 to 30 Standard p	Granular Soils 0 to 4 Very Loose 4 to 10 Loose 10 to 30 Medium Dense Standard penetration test (S			ense ery Dense ammer falling 30"	0 to 2 Very Soft 2 to 4 Soft 4 to 8 Medium Stiff		
Blows are per 6" taken with an 18" long x 2" O.D. x 1 3/8" I.D. split spoon sampler unless atherwise noted.										
by 1	The terms and percentages used to describe soil and or rock are based on visual identification of the retrieved samples. Moisture content indicated may be affected by time of year and water added during the drilling process. Water levels indicated may vary with seasonal fluctuation and the degree of soil saturation when the boring was taken. The stratification lines represent the approximate boundaries between soil types, the actual transitions may be gradual.									

Sheet	#	 of	
SHEEL	77	 O1	

148 Pioneer Dr. Leominster, MA 01453 (508) 840-0391

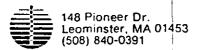
SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

5 Monson Place Milford, NH 03055 (603) 672-2135

Clien				Sampson Engi					ate 3/27/97	J	ob No. 97-0332
Loca		B-115	Ground	mont and Whi Da	te ,	-	Date		Drilling		Eng./Hydrol.
NO.	<u> </u>	D-113	Elev.	Stanple Data	irt 3/	26/9	/ Comp	lete 3/26/97	Foreman M or bedrock strata d	C	Geologist
DELO	┣	Sample		Blows	Rec.	Casing	Strata	OVII BIIG	or bedrock strata o	escripu) is
H	No.		th (fl.)	6" Penetration	Inches	Blows Per ft.	Change Depth	Vis	sual Identification of	Soil and	for Rock Strata
	1	1'0"-	3'0"	1-3-3-5				·			
İ					-		ļ				ise to loose,
									coarse sand		ne fine to rganic silt,
5	2	4'0"-	6'0"	6-7-3-3	 						rick, wood,
	 			 	 	╁┈┈		coal.		·	•
	3	7'0"-	9'0"	1-1-7-10				Fill.			
		<u> </u>			 	ļ	9'0"				<u> </u>
10 [] 									• • • • • • • • • • • • • •	O.IP	
					<u> </u>				oring at 9 [†] encountere		on completion.
		 				 	-		2	upt	comprectons
15							1				
		<u> </u>		-	┼—		-				
:	-	 			 	1					
]				
20	╫—				╂	-	}				
i						-]				
	 	ļ <u>.</u>	······································	ļ]				
25				<u> </u>	 		1				
					1		1				
!				 		 	-				
											• •
30	ļ]				
i		 			+	 -	-				•
							1				
<u>.</u>					╂	┼					
35[]	it-				1	 	1				
		ļ <u> </u>									
		 		 - 	+	+	-				
40							1				
	e of B		alas Of				1	/ 1//"			
iyp!	<u></u> -		sing Size:	Ho	llow Ste			4-1/4"			
	P	roportion Pe Trace 0 to Some 10 t And 40 to	0 10% 0 40%	0 to 4 Ve 4 to 10 L 10 to 30	ry Loose oose	•	Is (blows per f 30 to 50 C Over 50 V	ense	Cohe 0 to 2 Very Soft 2 to 4 Soft 4 to 8 Medium		ils (blows per ft.) 8 to 15 Stiff 15 to 30 Very Stiff Over 30 Hard
				Standard (enetration	on test (SPT) = 140# h h an 18" long	ammer falling 30" x 2" O.D. x 1 3/8			nless atherwise noted.
ן עס	rume i	or year and v	vaier added	I to describe soil and or during the drilling pro- lication lines represent	cess. D	Water le	evels indicated i	nav varv with seas	onal fluctuation and t	he dean	tent indicated may be affected se of soil saturation when the gradual. D

Sneet	#	 Of	



SOIL EXPLORATION CORPORATION Geotechnical Drilling and Groundwater Monitor Wells

5 Monson Place Milford, NH 03055 (603) 672-2135

Client			ampson Engir				nte 3/27/97	Jo	b No. 97-0332
Locat			mont and Whi						
BORI NO.	NG	B-116 Ground Elev.		e 3/26/97	7 Date Comp	lete 3/26/97	roreman	MC	Eng./Hydrol. Geologist
₽ 1		Samp	ole Data			Soil and/o	or bedrock strata	description	18
T-10mG	No.	Sample Depth (ft.)	Blows 6" Penetration	Rec. Casing Inches Blows Per It.	Strata Change Depth	Vis	ual Identification of	f Soil and/o	or Rock Strata
	1	1'0"-3'0"	9-9-13-20		3'0"	trace fin organic s coal. Fi	te to coars	se gra Les, b	to medium sand, vel, trace in- rick, wood, glas
5 _							ring at 3' encountere		n completion.
10 _						,			, ,
15 _									
20									
25									
30 _									
35									
40 _					1				
Туре	of Bo	oring Casing Size:	Holl	ow Stem Auger	Size:	4-1/4"			
		portion Percentages Trace 0 to 10% Some 10 to 40% And 40 to 50%	0 to 4 Very 4 to 10 Loc 10 to 30 M	Granular Soil Loose ose ledium Dense	1s (blows per fi 30 to 50 D Over 50 Ve SPT) = 140# h	ense eny Dense	0 to 2 Very Sof 2 to 4 Soft 4 to 8 Medium	tt Stiff	s (blows per ft.) 8 to 15 Stiff 15 to 30 Very Stiff Over 30 Hard
by t	ime o	s and percentages used to if year and water added do as taken.	o describe soil and or r	ock are based o	on visual identificated in	cation of the retrieve	ed samples. Mois	sture conte	nt indicated may be affected of soil saturation when the

148 Pioneer Dr. Leominster, MA 01453 (508) 840-0391

SOIL EXPLORATION CORPORATION

Geotechnical Drilling and Groundwater Monitor Wells

5 Monson Place Milford, NH 03055 (603) 672-2135

i							
Client			ampson Engir mont and Whi				Date 3/27/97 Job No. 97-0332
BORI		p 117 Ground		e 3/2		Date	Oritling Fng /Hydrol
NO.		LICY.	Sta ple Data	rt 3/4	.1191	Comp	Soil and/or bedrock strata descriptions
F ∥							Soli and/or bed/ock strata descriptions
DWPTH	No.	Sample Depth (ft.)	Blows 6" Penetration	Rec. Inches	Casing Blows Per ft.	Strata Change Depth	Visual Identification of Soil and/or Rock Strata
- i	1	1'0"-3'0"	3-4-79				Dry, medium dense, fine to medium sand,
i	∸⊣	<u> </u>	J. 4 12	1	ļ — —		Dry, medium dense, fine to medium sand, trace fine to coarse gravel, inorganic silt, cobbles, brick, wood, glass.
				 			silt, cobbles, brick, wood, glass.
		· · - · · · · · · · · · · · · · · · · ·		1	 	3'0"	LTTT
	\vdash			 		3 0	
5 🕹				 	-		End of boring at 3'0"
i				 	}		No water encountered upon completion.
Ì					ļ		
į				↓	<u> </u>		
ŀ				<u> </u>	<u> </u>		
10 <u>1</u>				<u> </u>	<u> </u>	<u> </u>	
Ī]	
i I i							
i Li						1	
15				1		1	
15 📗	一					1	
13 1	├-	· · · · · · · · · · · · · · · · · · ·		†	\vdash	1	<u> </u>
j.	 	<u> </u>	 	+		1	•
l'	 			+		ł	
i	} -		 	╁	 	ł	
i	<u> </u>			 	 	ļ	
20 📗	 		ļ	J	ļ	1	
İ	<u> </u>			 _	<u> </u>]	
i ()	<u>L_</u>				<u> </u>]	•
1	<u> </u>	<u> </u>					
			I	Ī]	
25]	
1	1	 			1	1	
						1	
İ			 	1	†	1	
i	 		 	+	1	1	
	 		 	- 	 	1	
30 📗	├		 	+	 	┨	
	1		 		 	4	
	-	 	 	 	 	4	
	 	<u> </u>	 	 	╁	-{	
	L		 		 		
35	 -		 	4	1	-	
	<u> </u>				_	1	
[<u> </u>		1			1	
	L_						
	L_		<u> </u>]	
40							
	1		<u> </u>			1	
Тур	of B	oring Casing Size:	Но	llow Ste	m Auge	r Size:	4-1/4"
	Pı	oportion Percentages		Grani	ılar Soi	ls (blows per f	ft.) Cohesive Soils (blows per ft.)
[Trace 0 to 10%	0 to 4 Ve			30 to 50 D	
		Some 10 to 40%	4 to 10 Li	oose			fery Dense 2 to 4 Soft 15 to 30 Very Stiff
		And 40 to 50%	10 to 30	Medium	Dense		4 to 8 Medium Stiff Over 30 Hard
J il			Standard p	enetratio	on test (SPT) = 140# h	nammer falling 30"
			Blows are	per 6" t	aken wit	h an 18" long	x 2" O.D. x 1 3/8" I.D. split spoon sampler unless otherwise noted.
Į Ţį	e tern	is and percentages used	to describe soil and or	rock are	based	on visual identif	fication of the retrieved samples. Moisture content indicated may be affected

The terms and percentages used to describe soil and or rock are based on visual identification of the retrieved samples.

Moisture content indicated may be affected by time of year and water added during the drilling process.

Water tevels indicated may vary with seasonal fluctuation and the degree of soil saturation when the beginning was taken.

The stratification lines represent the approximate boundaries between soil types, the actual transitions may be gradual.

•		
1		
w		
U		
. {		
· : []		4
1		•
; (ļ	
•	! !	
	! !	
•		
•	 	•
1		
•		•

MEASUREMENT CONVERSIONS

TO FIND	contimeters contimeters meters kilometers inches inches feet yards	grams kilograms ounces pounds	millitiers liters liters liters fluid ounces quarts gallons (U.S.)	,
MULTIPLY BY	2.540 30.480 0.914 0.039 0.339 0.393 0.621	28.350 0.453 0.035 2.204	29.573 0.473 0.948 0.033 1.056 0.264	-32) x .555 x 1.8) +32
IF YOU KNOW	inches feet yards yards miss millimeters centimeters meters klometers	ounces pounds grams kilograms VOLUME	fluid ounces pints quarts quarts gallons (U.S.) millillers liters liters EMPERATURE	*C = (*F - 32) × .554

,			÷
Mili- melers 1.5875 3.1750 4.7625 6.3500 7.9350	9.5250 12.700 15.875 19.050 22.225	25.400 50.800 76.200 101.60 127.00	152.40 177.80 203.20 228.80 254.00 279.40
Decimals of foot .0052 .0104 .0156 .0260	.0313 .0417 .0521 .0625 .0729	.0833 .1667 .2500 .3333	.5000 .5833 .8667 .7500 .8333
Joches 1/16 1/8 3/16 1/4 5/18	3/8 1/2 3/4 3/4	- សូខូ ។ - សូខូ ។ -	\$ 1. \$ \$ 5. I

2861

Name (1) eston + Sourprond
Address S Sentannel Drive

Address S Sentannel Drive

Phone (508) 533-1900

Project BRA (EDI C Pavel P-3

T6330, A

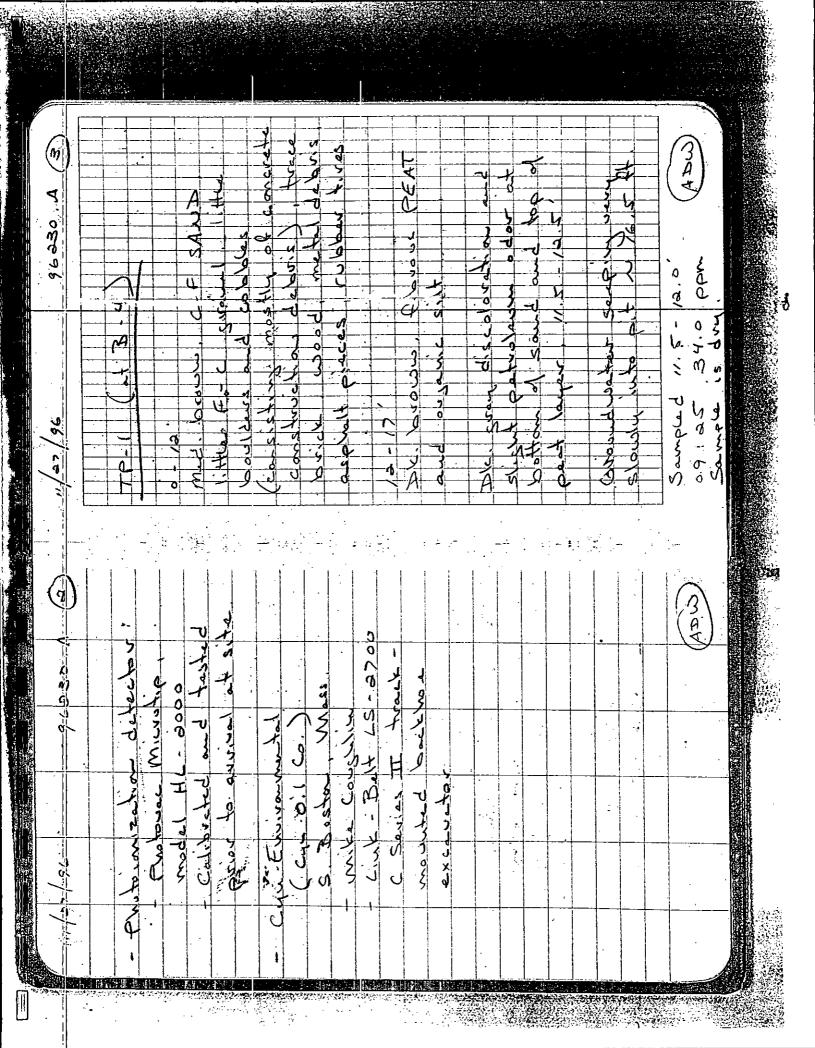
A Levi D C D C Pavel P-3

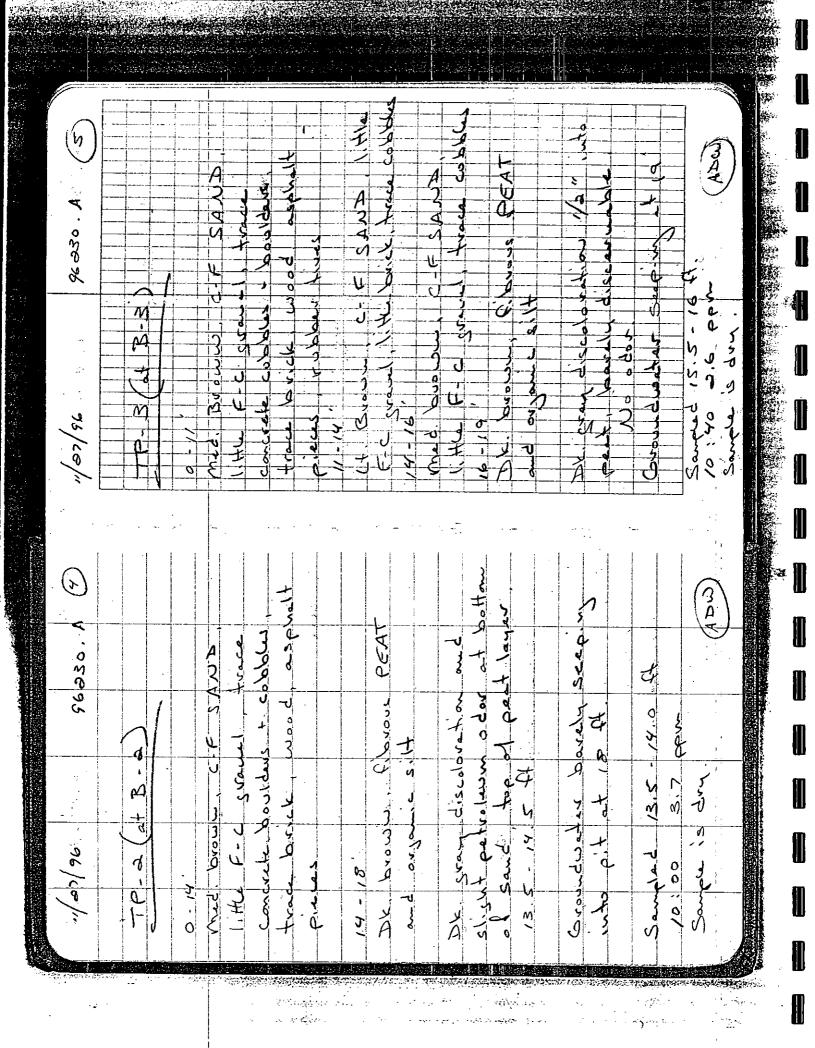
ALS SA TO TOSE # 145 | EDIC | SECOND | EDIC | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SECOND | SE

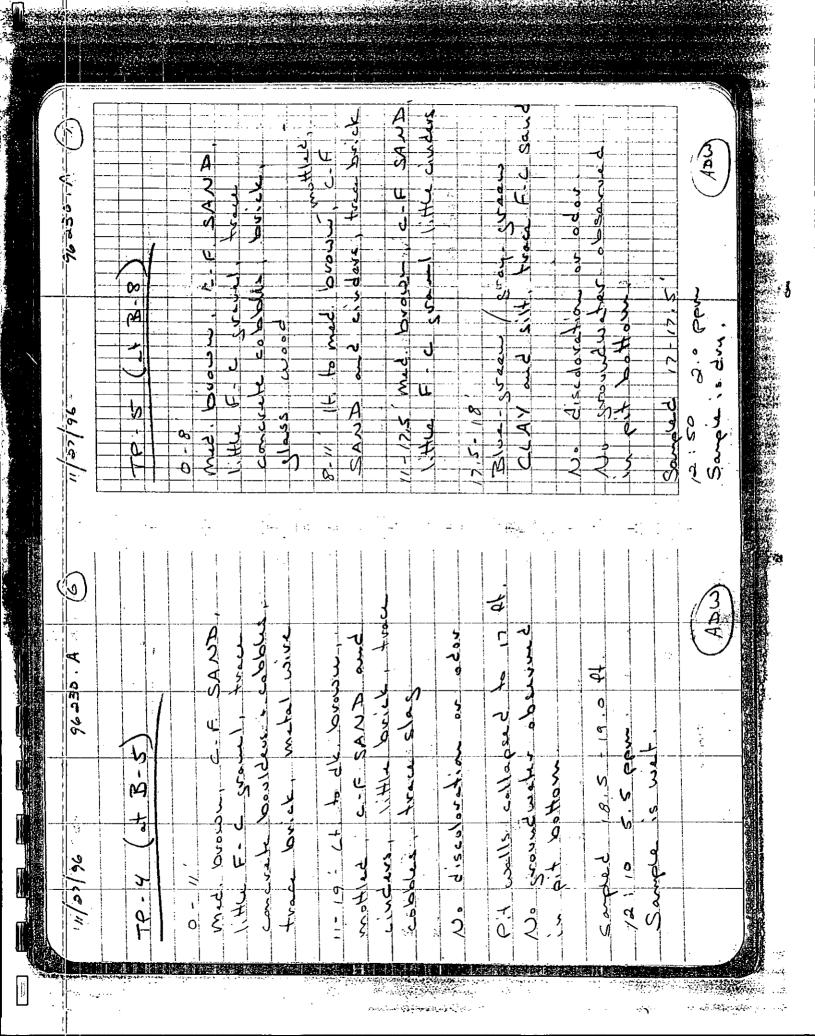
OIC (Boston - Part & (6/7) 635 - 3800

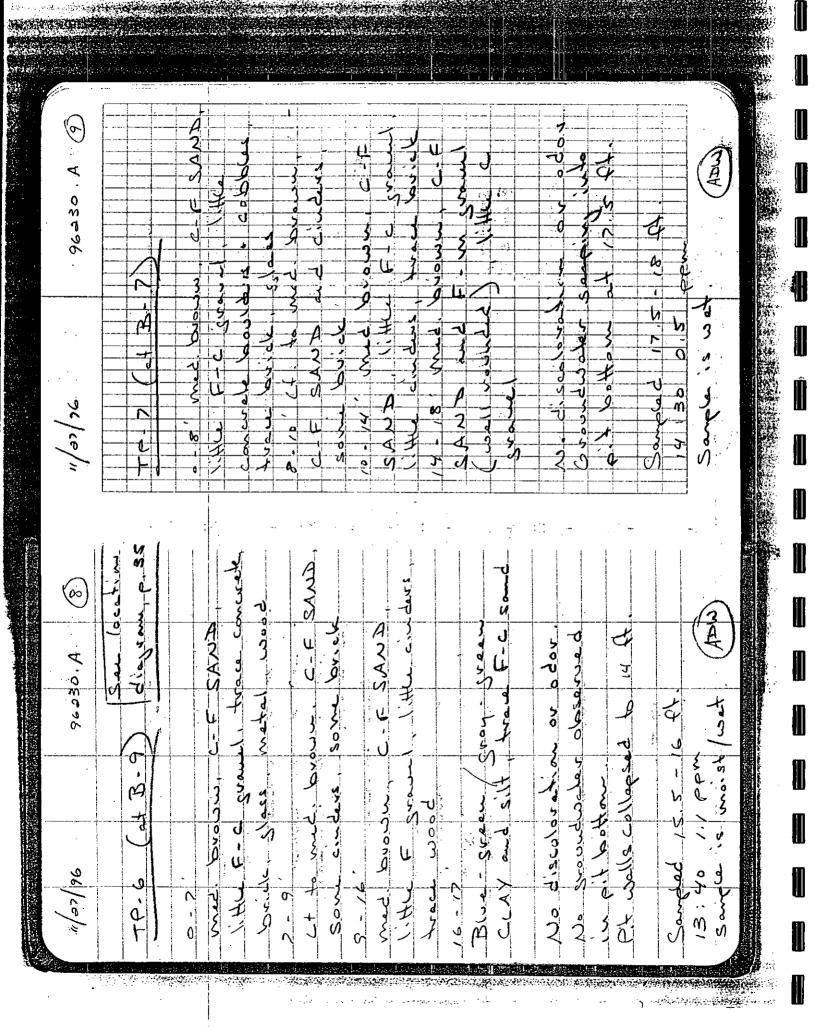
J. L. DARLING C IRPORATION TACOMA, WA 98 121-3696 USA

0 96030.A 1/02/16 Wedusday 0 3 88 XOCO 9 0 7 DATE (°) · 4. 96230. A 3 CONTENTS REFERENCE Tuesday ŧ くまるこ O M 71 71 000 198/11 PAGE

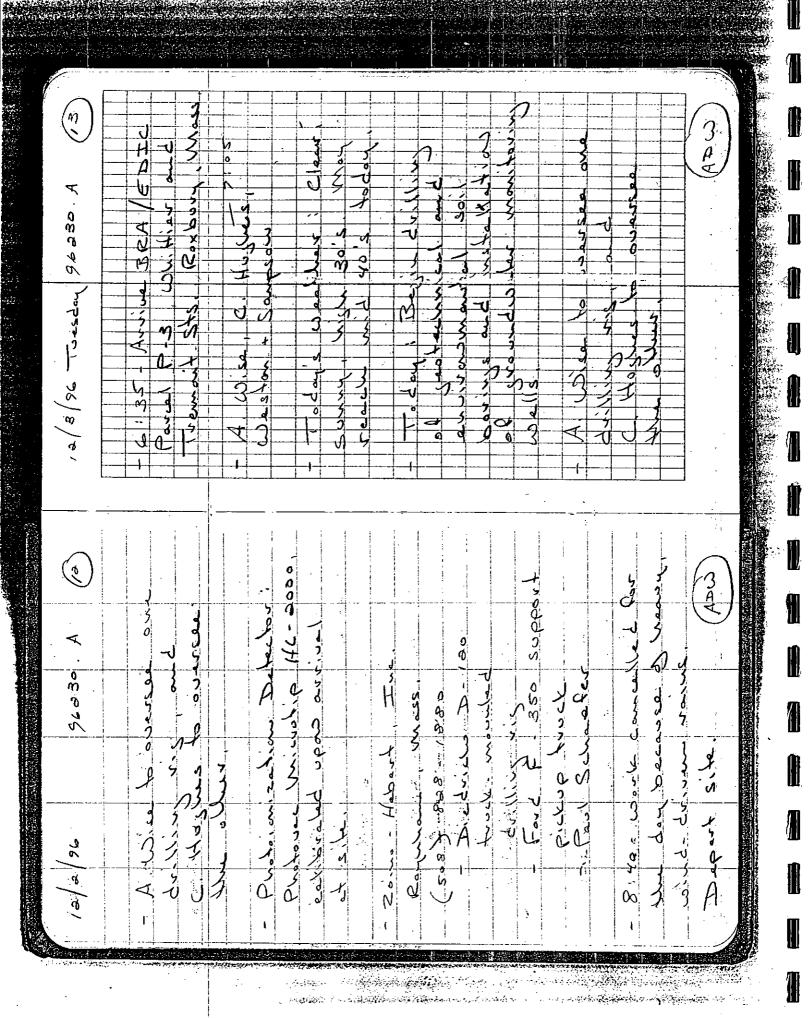




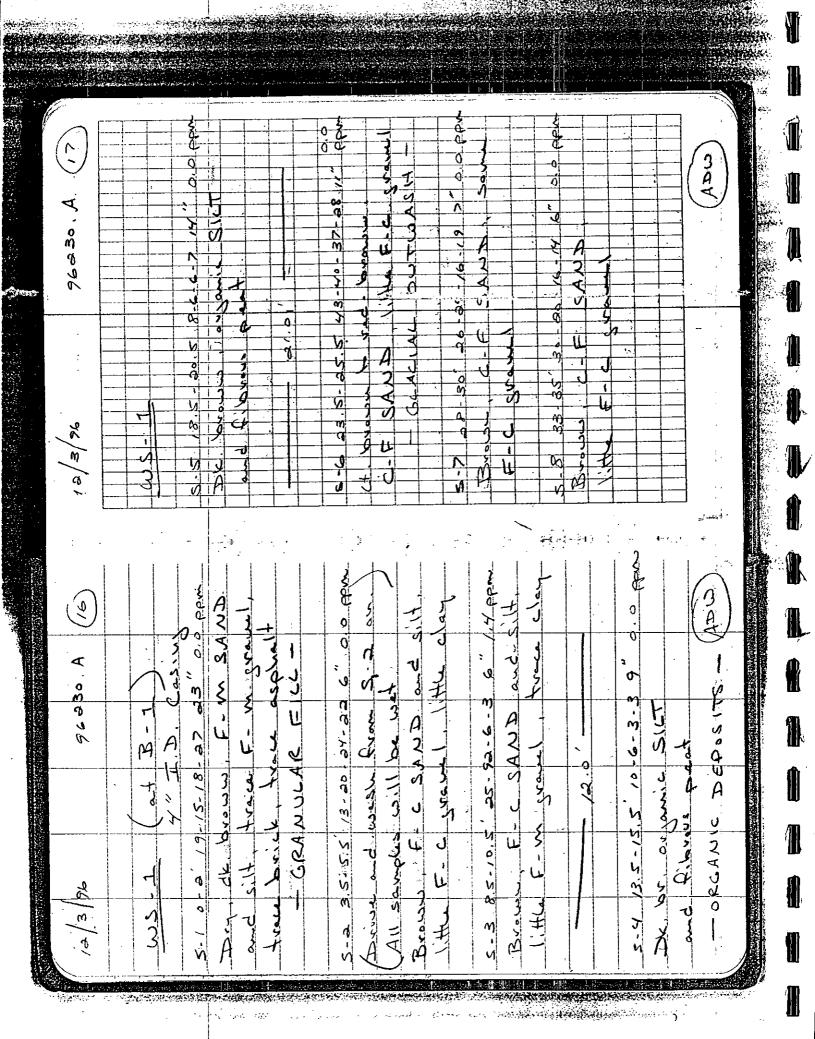


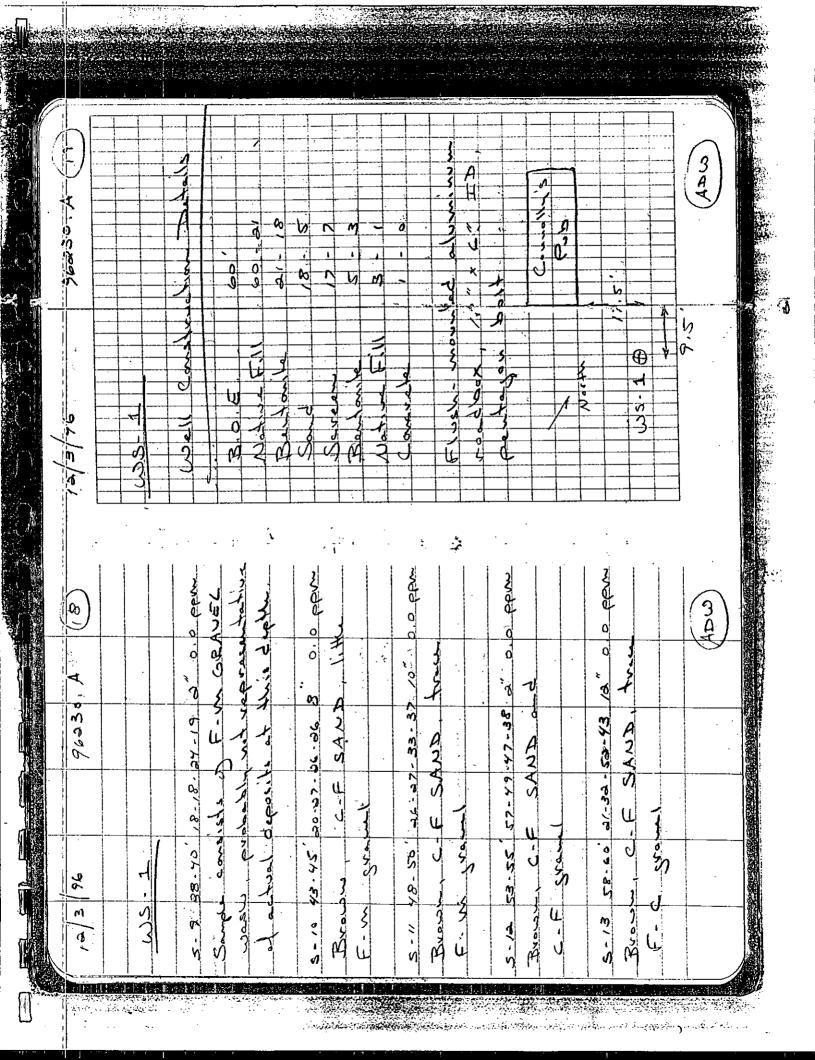


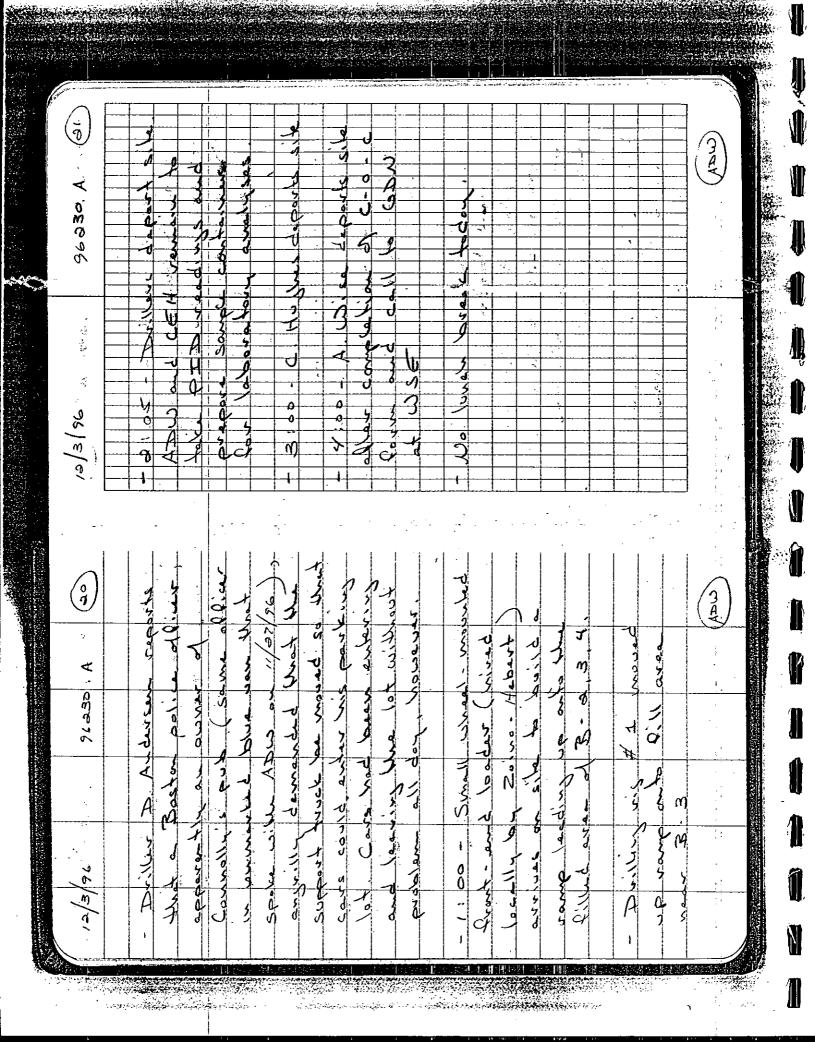
12/2/76 monday 96 230. A.			1					(3) A A
1/27/96.230.A (O)	2 :30 - Southing Completed	bock of open test pits	A to the reconstruction of the Complete	Course of Consolidate	3:55 - Somples picked up at site Por Ocliming to	4:00 Boston police thracter	Cyc sails that the trailer	4 15- A. Wile departe.



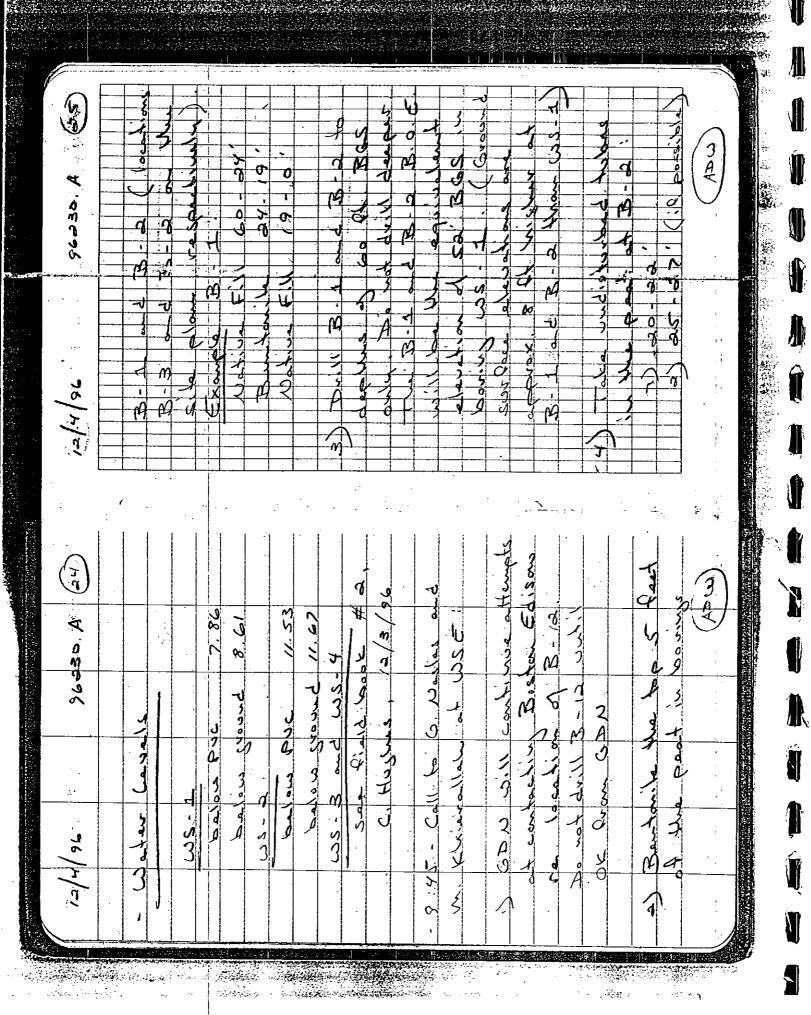
(S) W. 05638		3	2 2 2	7		φ	1 1 2	3		7	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(A-Da)
76/3/61					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3	0 0 0		0 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	\$ 10 mm					1 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
()-//-)	, ,	0000		•		0					- S 4		9		(S, €)
96230. A.		Jan Harlan	Jan arrive		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	0880	* # 4	A REAL SAN	H.,	3 3	1 2500 1 440	. #	1	Jan Hold +		
3/6/4		The boronizat	Calibrated 10	7,8 +8	Z 0,000 - 1/4.00	848 (805)	Davida Cuar	A Company	Z 30 A	NA CONTRACTOR	Support P		Drought Cosing	- 70 -		



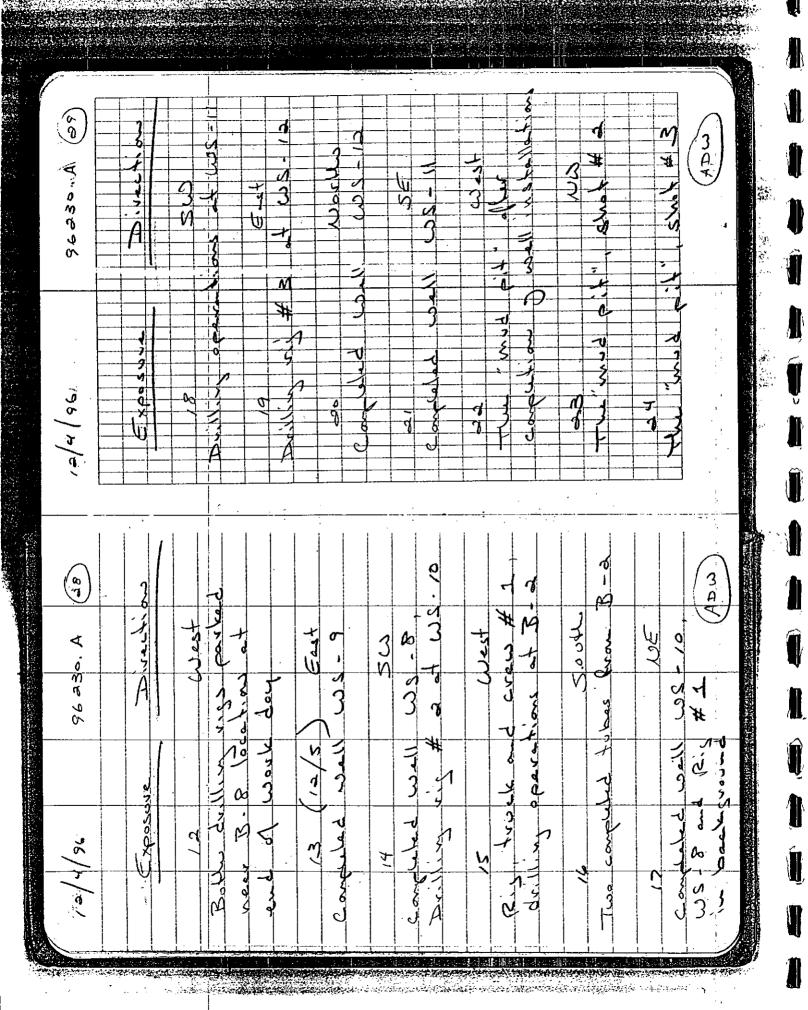




The second of th

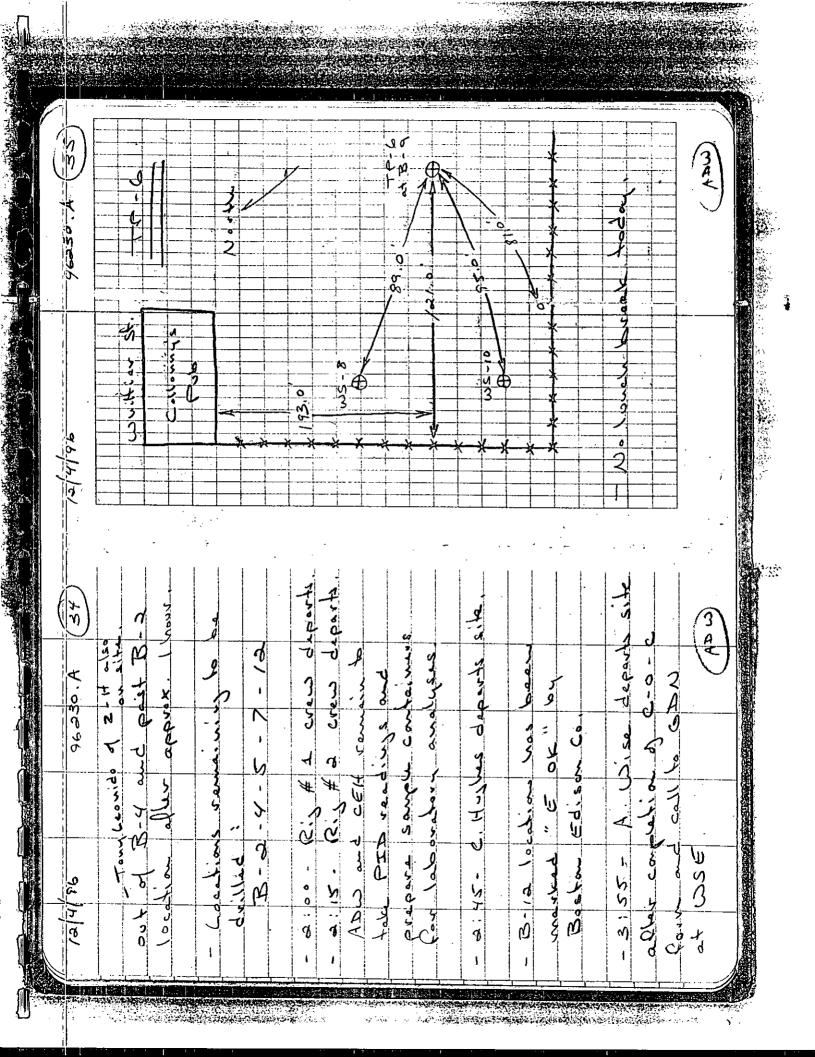


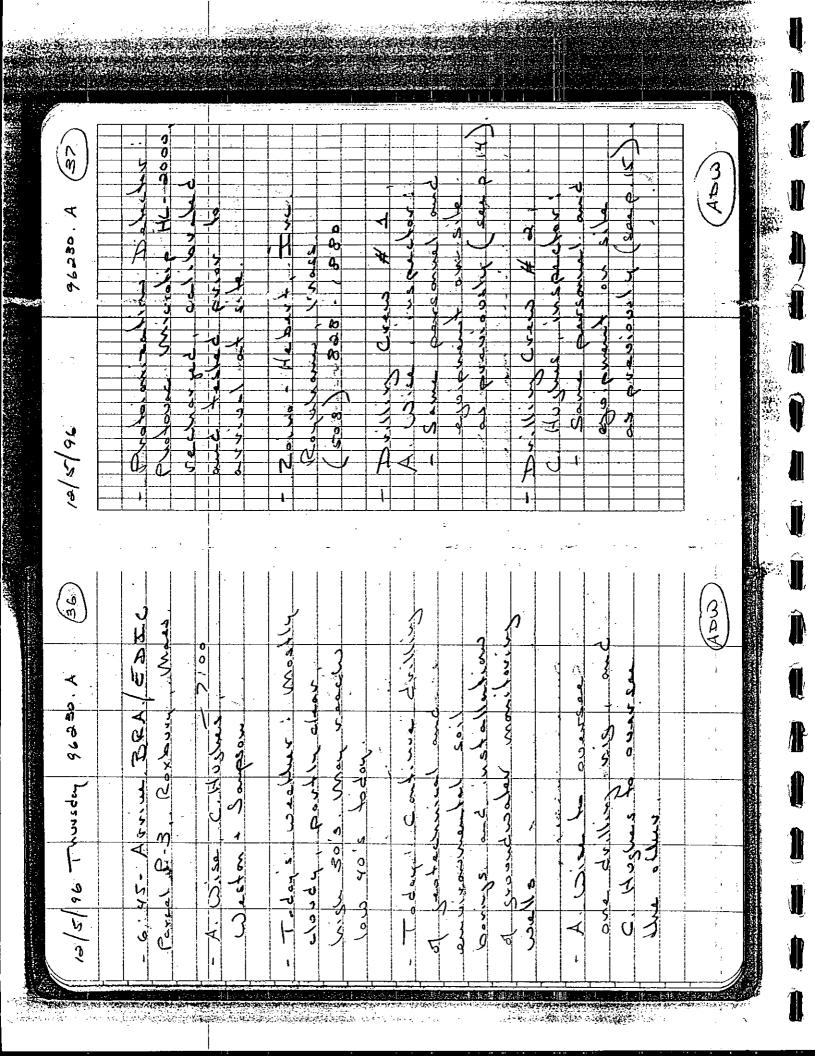
36230. 4 (27)	3	7 3		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	10 c	3 7		M W		
(a/4/96	() () () () () () () () () ()		31	9 3 3 19 7 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		+ 3 V			
96230. A (26)	TO SWE SWE	J. Vechion	11 ws - 2	4 · 8)	Haalth Cerler	5 - 2 113	4-30 ارام		3 - 8 3	(B)
76/1.	79	Exposox2	Computed St. 1	10 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Withiam St.	ر المعامد ع	ماماطسه	Accidental Sho	Compatate wall	

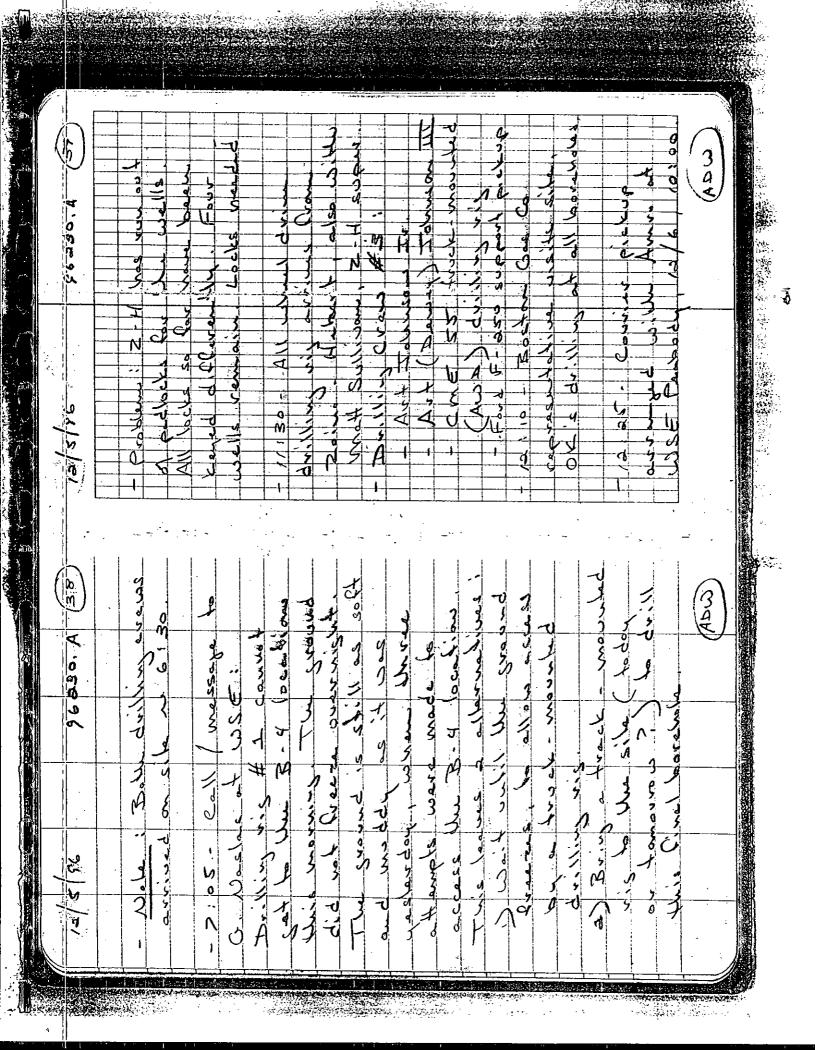


2 5 - 3 - 7 6 - 3 - 7 6 - 3 - 4 - 3 - 5 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6	96030.A ST	ì	\$ A A A A A A A A A A A A A A A A A A A	8 03. 55 34 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3 4	40 - 40 S C C C C C C C C C C C C C C C C C C	& A A S A S A S A S A S A S A S A S A S	(ADA)
L. brown C. S. 2. 2. 4.6 pm L. brown C. Deposit T. 2. 2. 2. 2. 4.6 pm L. brown C. Deposit T. 2. 2. 2. 2. 2. 2. 4.6 pm L. brown C. Deposit T. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.		P4	2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -		30. 30. 4.C. 30. 3. 4.C. 30. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	5 49. S/ 39. S		
2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	A	m o	W 0-7	9 7	1 + 3 5	1-	8 A J	
	6 230	M - A	11/60 test ort 50mp 1:0 0 4+	5 - 5 - 6 . 6 . 6 . 6 . 6 . 6 . 6 . 6 . 6 . 6	1 A J 1 C DE 18.3 + C Les 18.3.2.	P. Cooks PE	Sycam F C S. M. By Sycam F C S. A. M. By Sycam J. C. T. C. A. M. By Sycam J. C. T. C. A. M. By Sycam J. C. T. C. A. M. By Sycam J. C. T. C. A. M. By Sycam J. C. T. C. A. M. By Sycam J. C. T. C. A. M. By Sycam J. C. T. C. A. M. By Sycam J. C. T. C. A. M. By Sycam J. C. T. C. A. M. By Sycam J. C. T. C. C. T.	

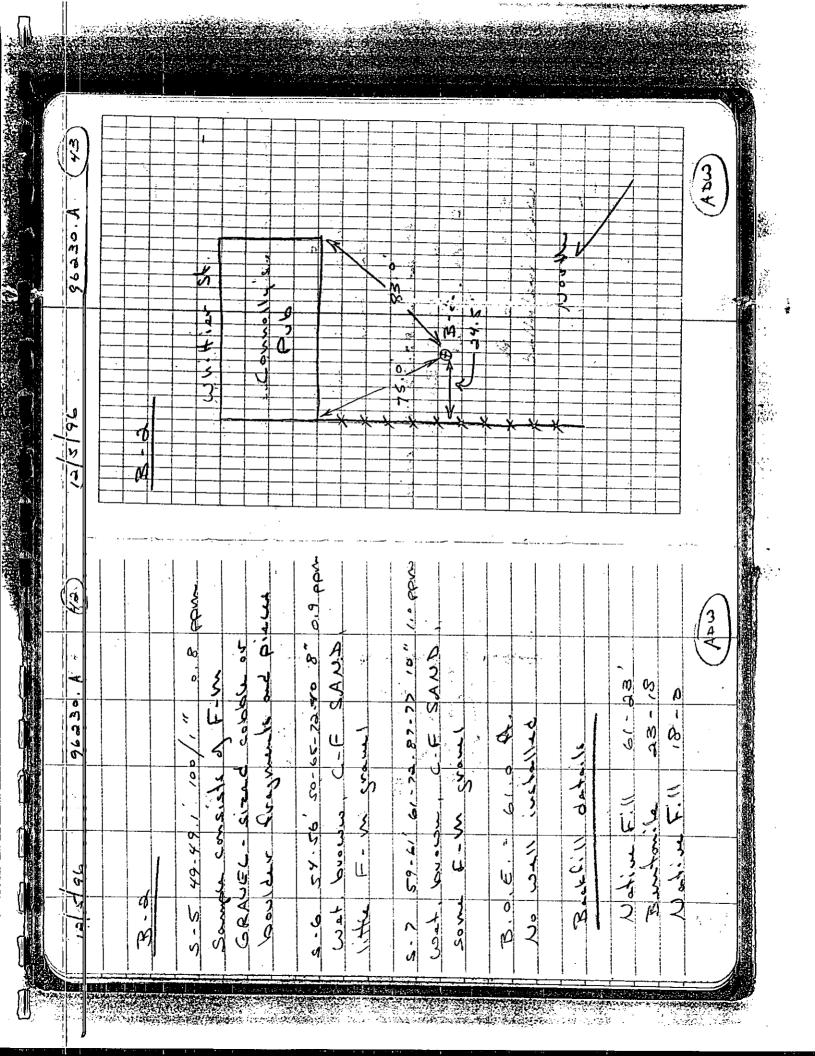
12/4/96, 96030.A (S3)	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7				2. 4 1 20 4 5 4 1 1 2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	Signature of the state of the s	を 1000mmの 1000mm 1000m
12/4/96 96235.A (32)	N - 1	S=9 59-61 65-48-01-00 4" 1.4 ppm	B.O. E. = 61.	Back Oil dehalls	B. 400, 14, 19.	1. S. 4 2. 3. 4 4. 5. 4	

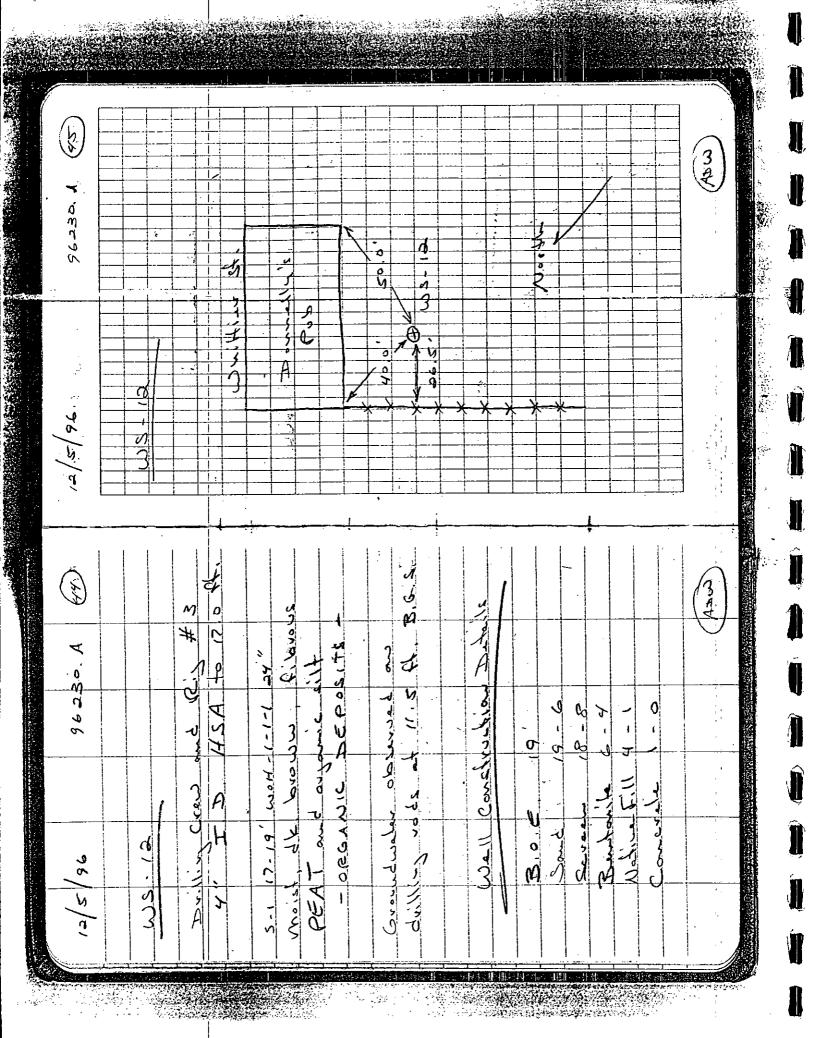




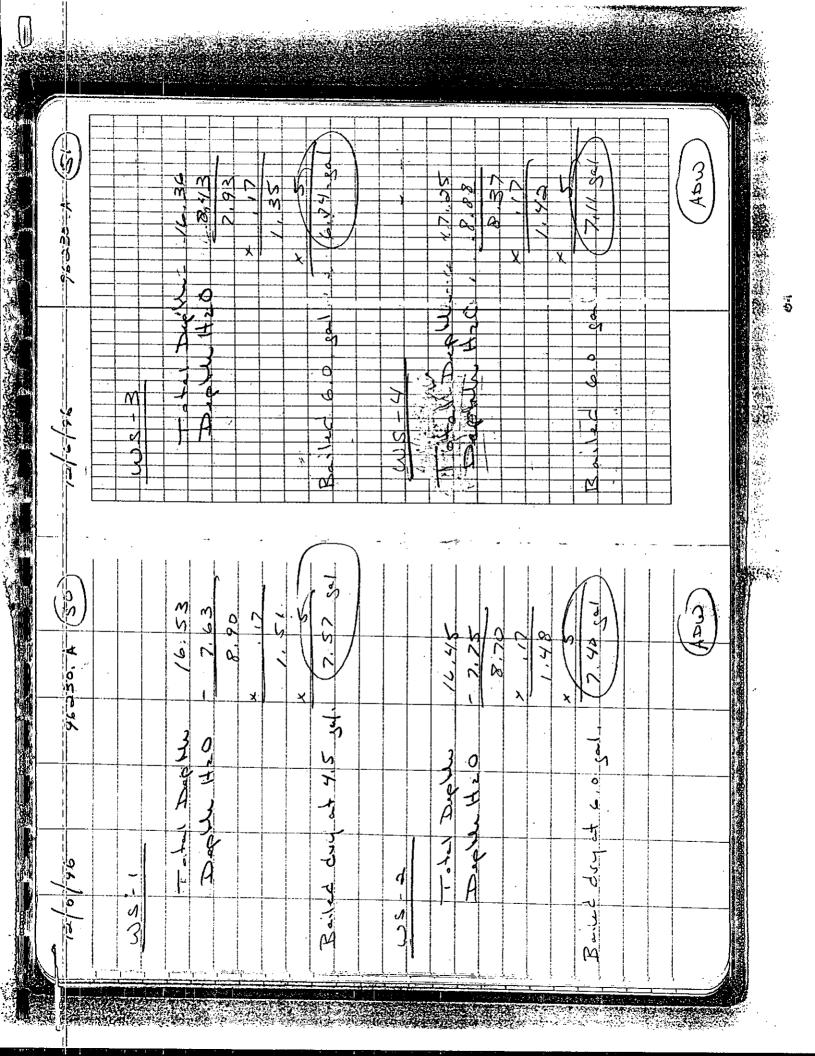


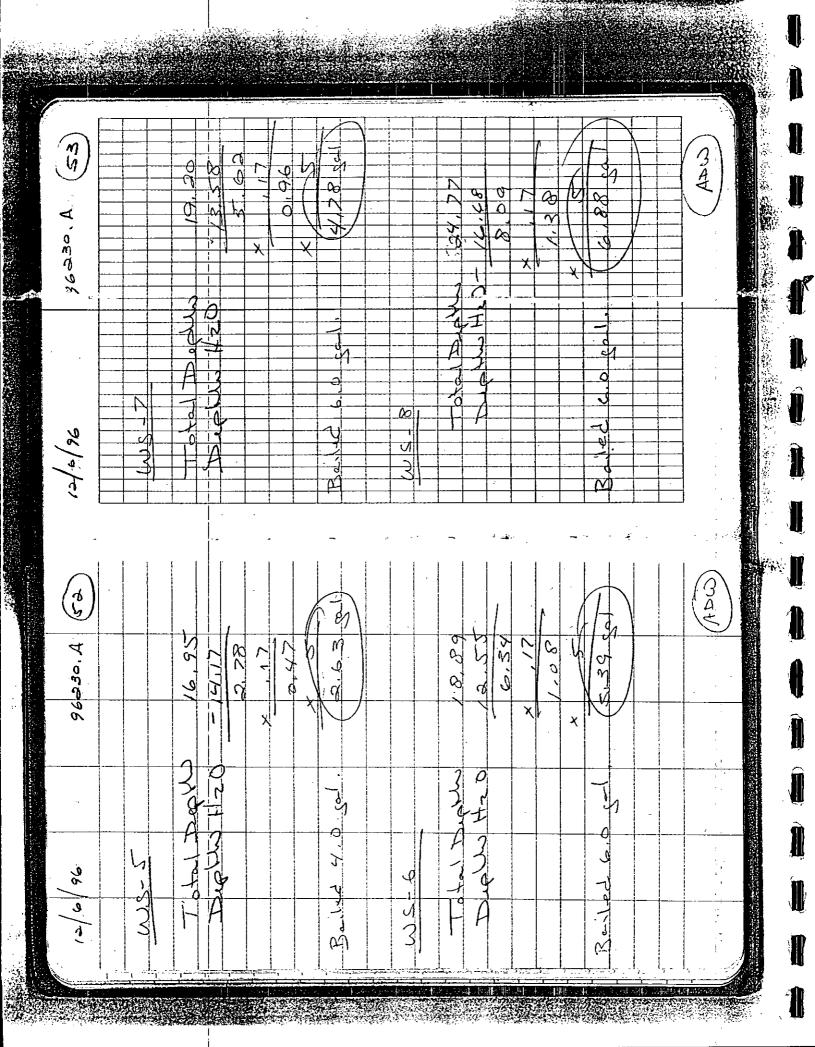
(2) S (4)			37-36 37-36		
96 230. A (40)	Washad to 20	1 turbed tube S.14 S.14 S.14 S.14	3 1 2 2 2 1 1 1 2 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 2 2 1 2 2 1 2 2 2 1 2	To to power x and a to to to to to to to to to to to to to	34
95/5/01	B-2 (at B-	("Gus tube") sent tratime " B	25 25 22 C	Bottom of the Edward Sout and grave	

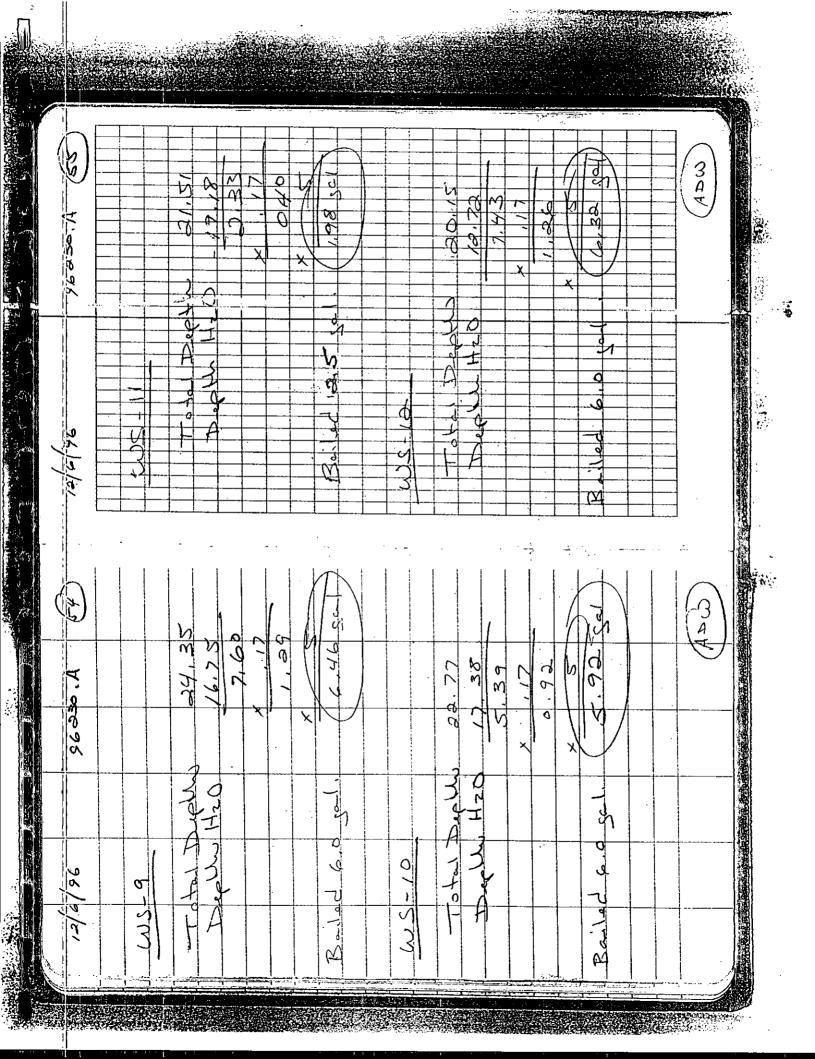


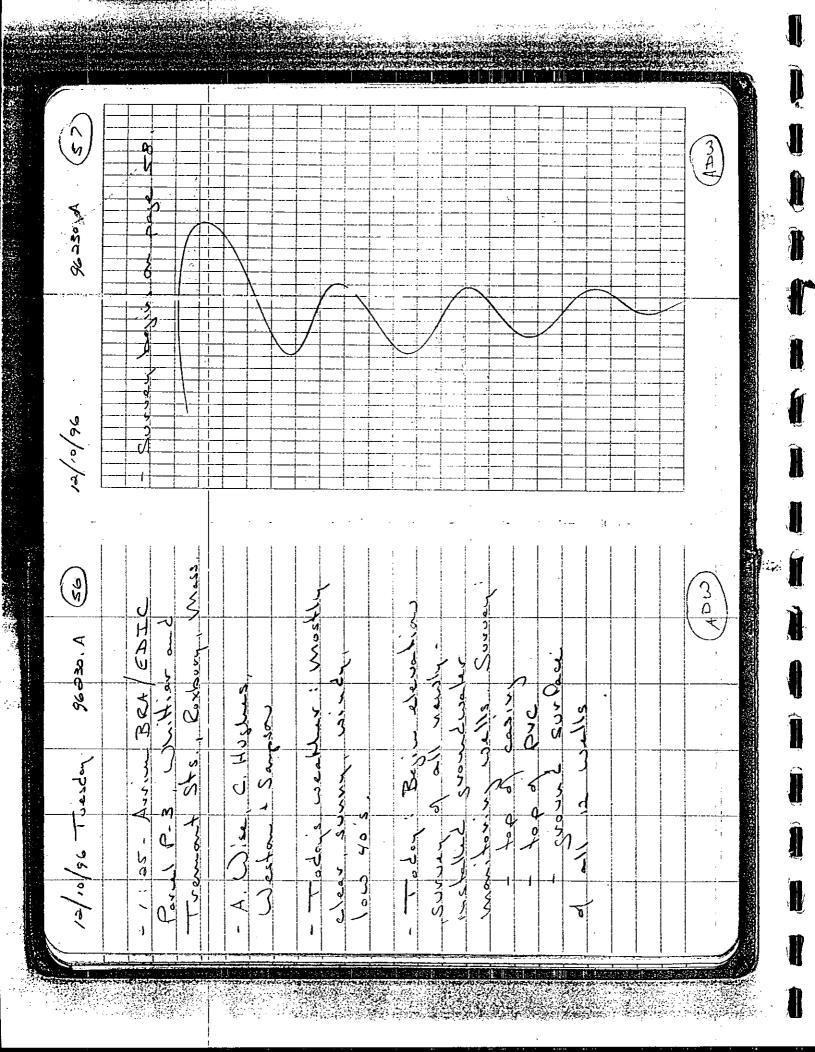


12/5/21 (84) A.05236 For day	96230. A (49)
1 1 1 0 1 1 1 0 0 1 3 1 0 0 1 3 1 0 0 0 1 1 0 0 0 0	7
Soldier Contraves for	1
San San San	3 3 5 -01
1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7500
Land deports site	-13 -13
TO SON THE STATE OF THE STATE O	Y
13,500	
Jed Somo Somo Somo Somo Somo Somo Somo Som	
James of 135- 12 and Pence.	8 3 4 3 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
1 100 - A: (2) 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 4 4
50 0 of (300)	
8 9 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
1	
3, CD, A 3, A 3, A 4, A 5	1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
(Nat)	1 DOA

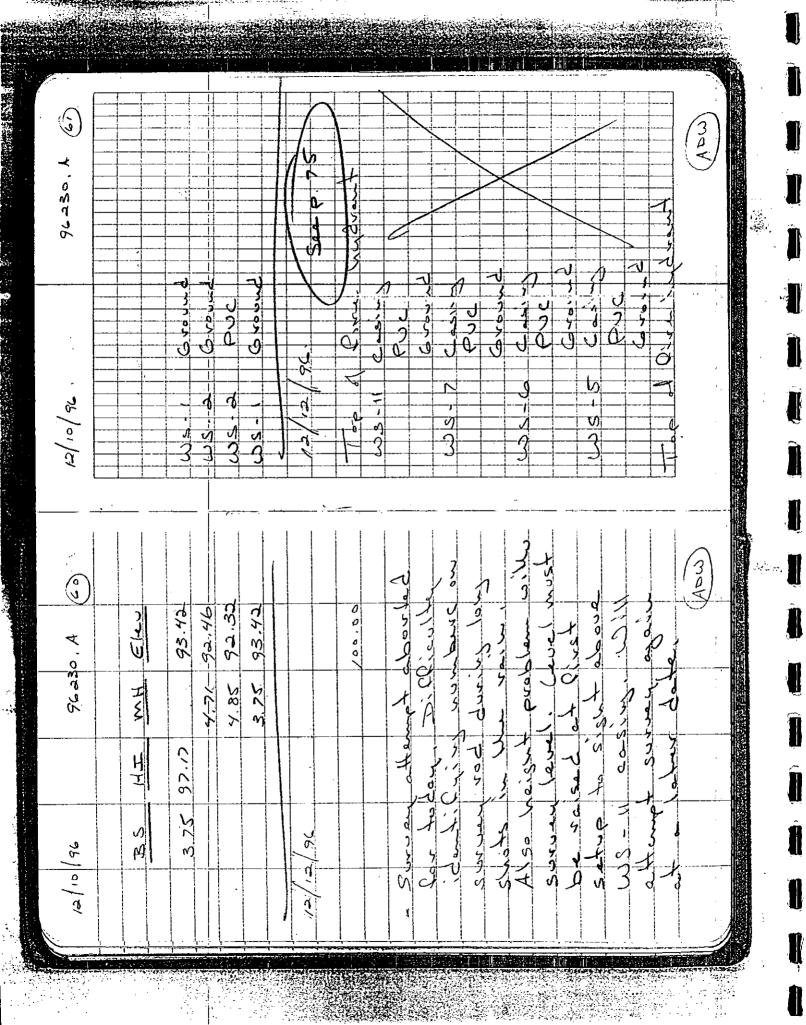


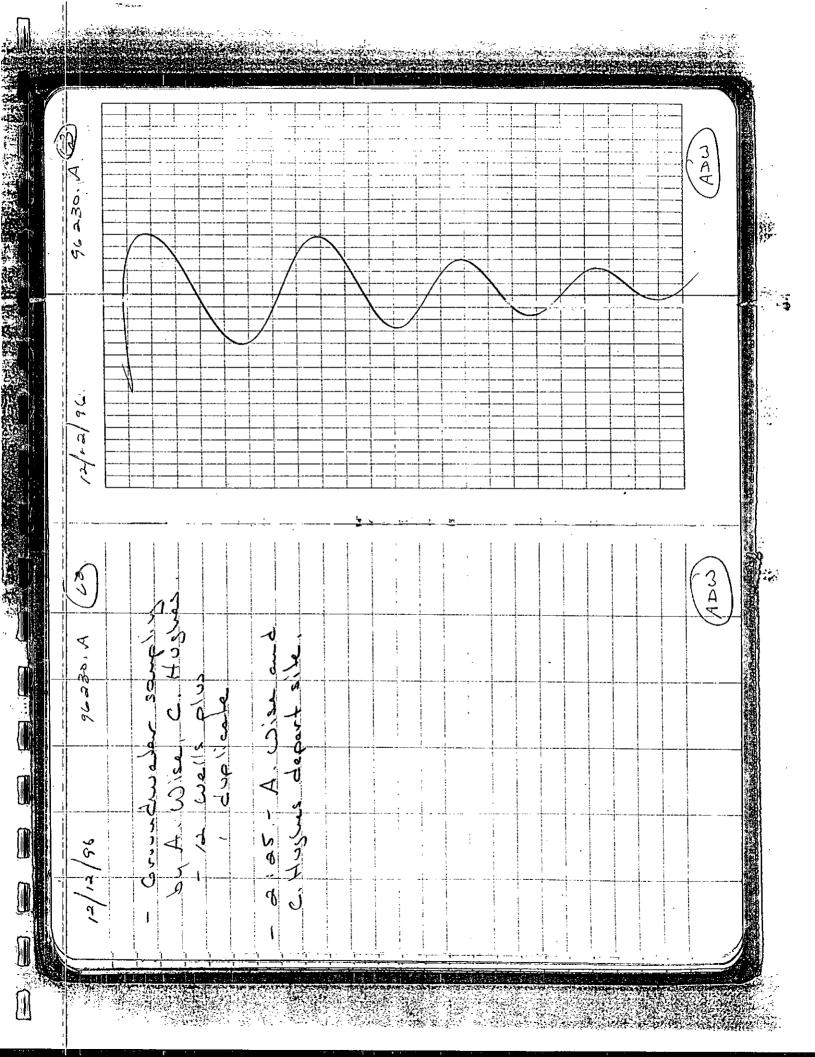




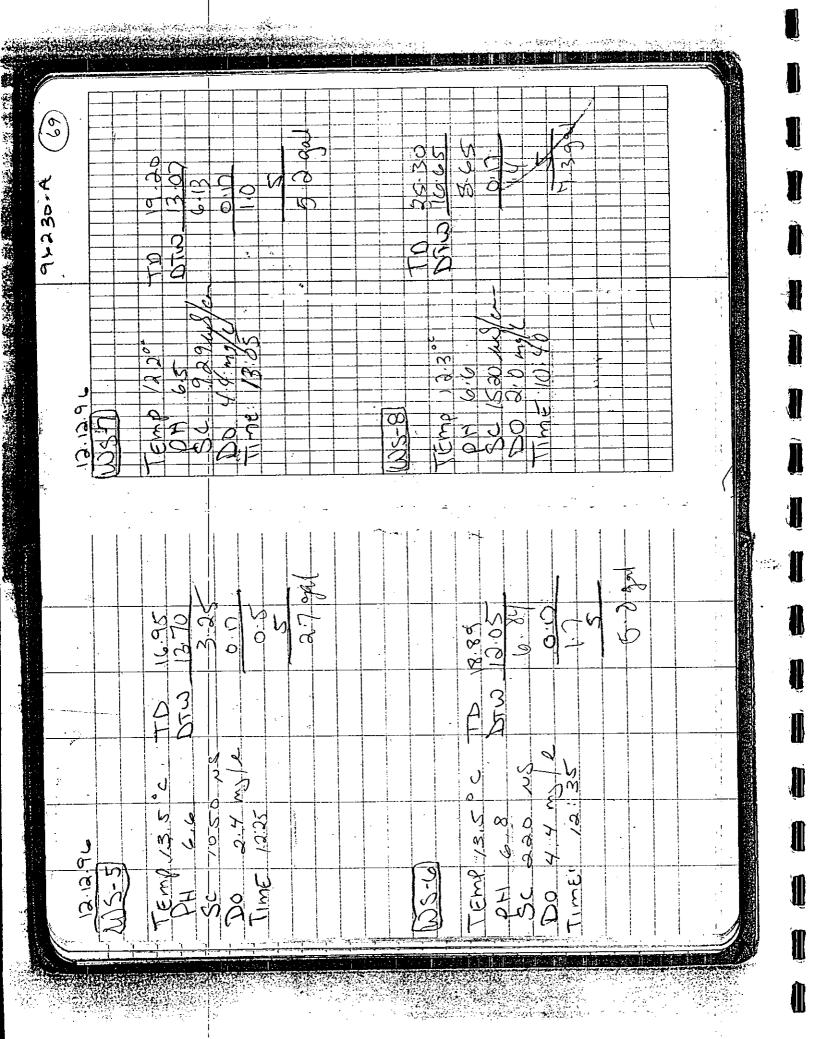


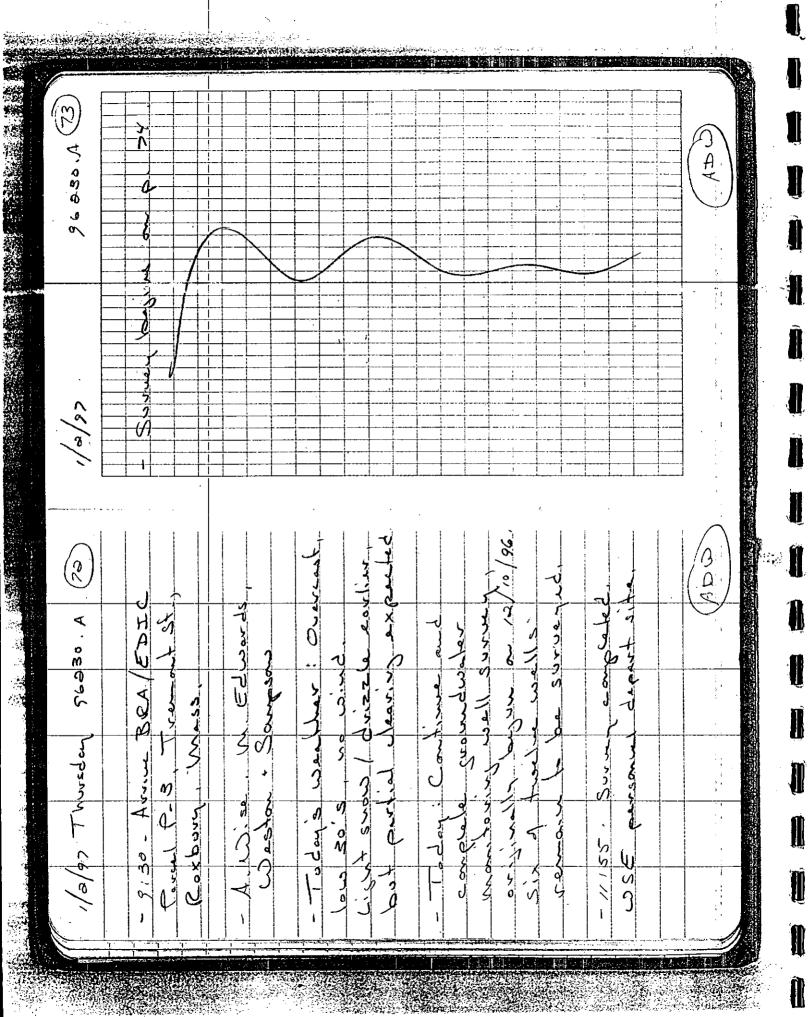
6						\					e es sário												
Y (S)				2	7																		(S) AV
S6 2 30				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \																- 1			
				5 1		-	1	1		,		3	; -		1 -J		j	7	-\ -\ 	1			<u>, </u>
					3			9	C		5	\$ - - - - - - - - - -	€ 2	_ 0	9	9 0	8	9	0 5 0	G C			
76/0/			0	- { - 5 - 6 - 6	2		0 1		00			<u> </u>			- 1		0-			\$ 4			
0					\forall	-	5					_3			3		3						
(R)																		·		(-		- 1
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		E 120	00.00				6	86.0	ر ا	2.9S	0,70	3.45	28,38	92.89	93.42	92,49	12.87	102,70	0.50	00,0		1	<u>\$</u>
96030		I				4	787	76	64 /0	- 0/	0/ 10	-29.99	5.39 9	85 92	11.32.9	8	1	2,0.4 10,	0 0	24.10			
			24.74	-		9	s d	(2)			4.	V 1	8	7	777	8	,,	8	4	5			
76	(N (Y	1, 74, 1														-						
) <u>o,/</u> (~/		711	7	-																			
		-3-7-																					





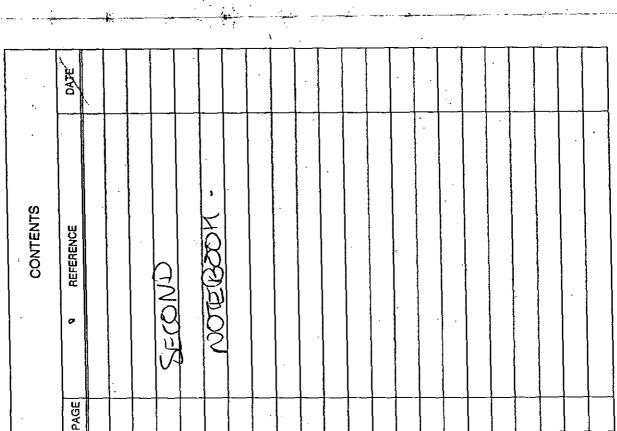
6230.A)	3 .20 .20	5.00	7 N - O - O - O - O - O - O - O - O - O -		SW C	C 00 15		
σ	المالي المالي	9 · · · · · · · · · · · · · · · · · · ·	2,7 mg/4			\$ 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)		
	90		20 E	30	3		2 &	36	
		45.01 at 2.	20.8 0.00 0.00	9.6 7.6		28.91 QT 2	50.0 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 gal. 7.83	
	18.50.61 1.25(1)	TEND 11.0		Barley d		temp 13:0	SC (200 DO 4.2 Time: 9:2	o Duf O	

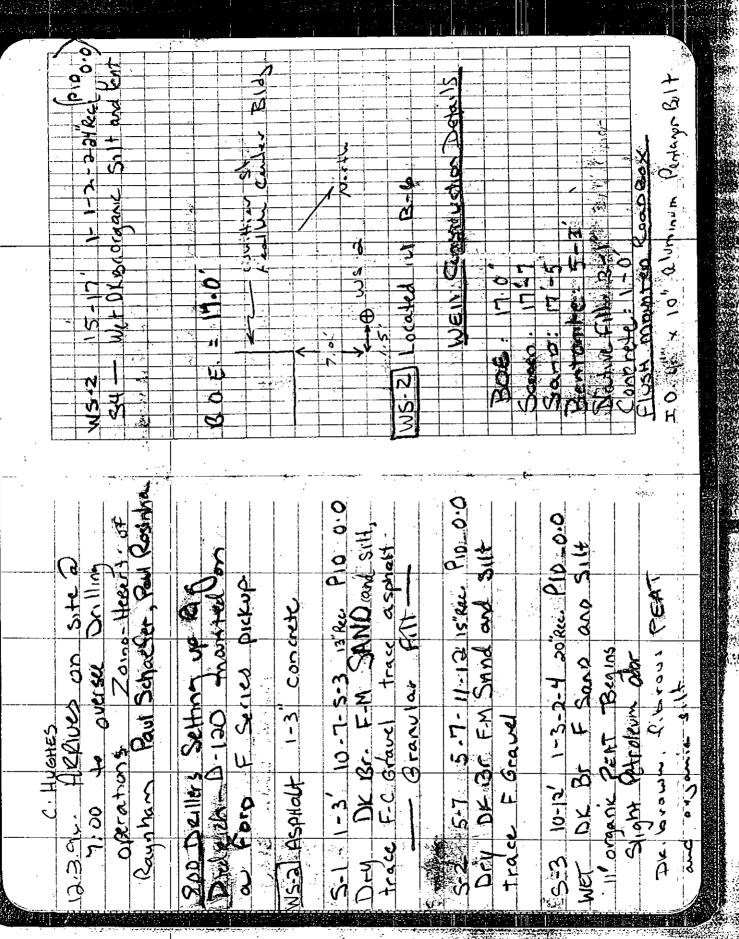


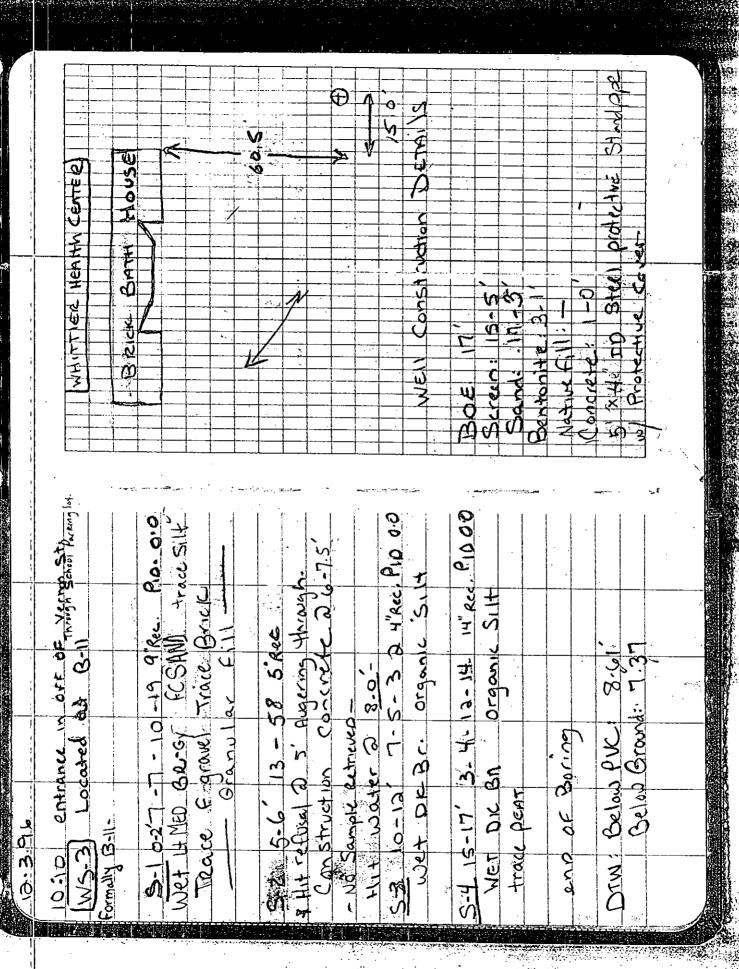


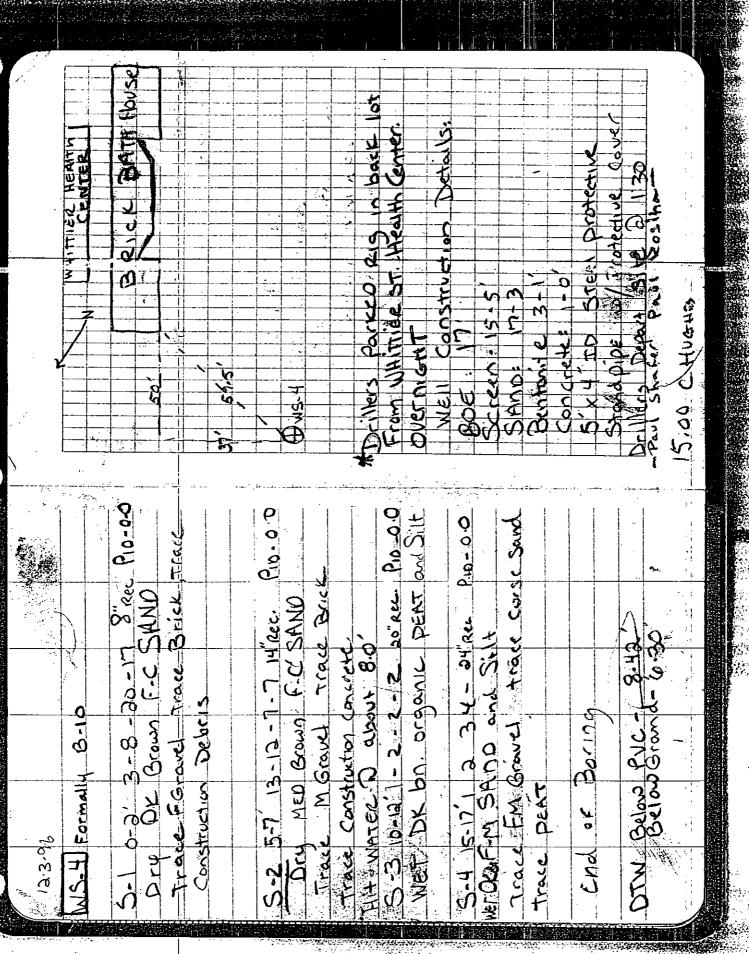
BS HE MH ELLY 3.09 11.36 2.09 11.36 2.09 12.30 2.00 12.30 2.00 12.30 2.00 12.30 2.00 12.30 2.00 12.30 2.00 12.30 2.0	(75)							1			<u>.</u>		-	·	i				30	
S HI MIH ELLU S A 136 92.00 9,00.36 7.30 94.05 7.30 94.05 7.30 94.05 7.30 94.05 8.75 93.58 8.75 93.69 98.07 Mah	30.												 			· · · · · · · · · · · · · · · · · · ·				
26 /01/36 MH E1LLU 2 /1/36 94.06 2 /2.30 94.				U 2 U (300		7)) 0	77050	J 2										STATE STATE OF STATE
25 HIT MIH EILLU 29 11.36 98.37 2.30 94.35 3.48 93.88 7.48 93.88 8.75 94.61 8.75 94.61				\ \ \ \ \	∀		M			<i>b</i>										
2 HI MIY E120 09 101.36 99.00 7.30 94.06 9.36 99.00 6.97 94.39 8.75 93.61 8.75 93.61 3.09 98.07	۴/،			3	3		3			3										
2. HT MIH E14 2.30 99.0 2.30 98.5 3.09 98.5 3.09 98.5 3.09 98.5	(2)							The state of the s				To the second of							3	
2 HT MI 8.7.36 9.3 9.3.0 3.0	6	E120		98.27	30.78	90.00	3		92.61	98.07	:						:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(3)	
28.76/ 60 28.76/ 60		71 W			8 c	9.36	26.9	7.48	Ŋ	0								A TABLE OF THE PARTY OF THE PAR		
500		H	l i	-1														1 10000		
		~	1	\dashv	-	-					 									
	3.2	RS Y					1		1	1		1		1 1					f 1	· **

Design All Control Con

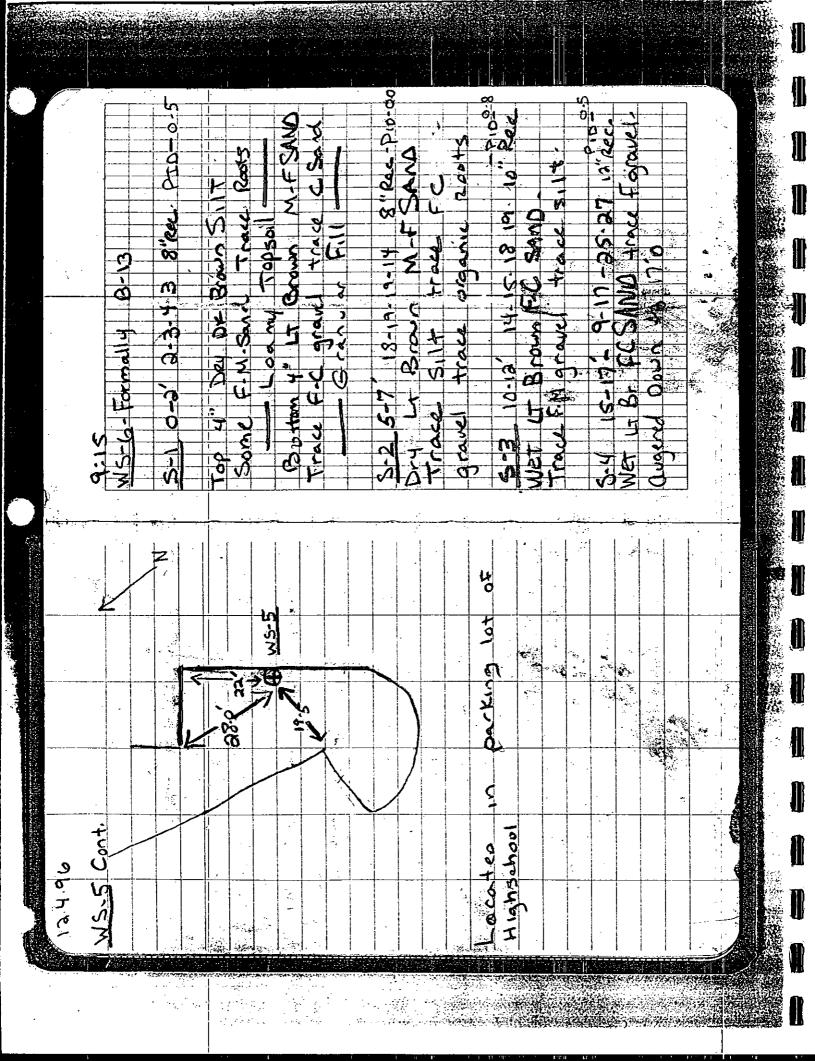




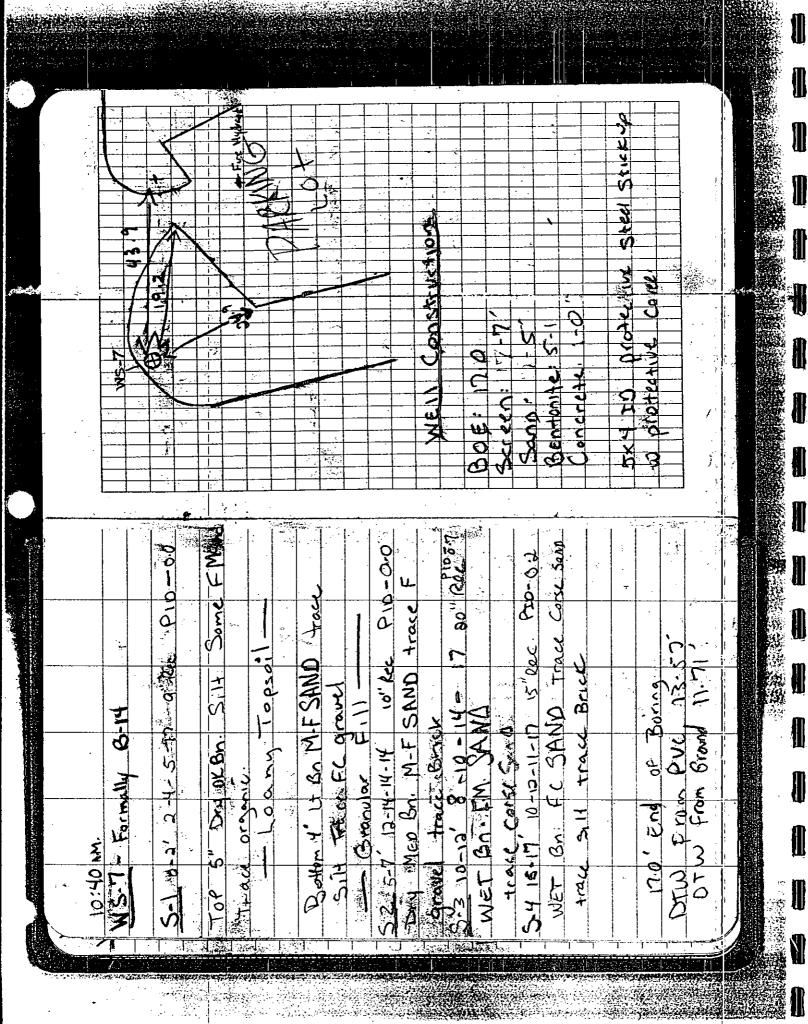




5.0 Ord	2 3 10-10 3 1 C C - 24 BC 20 20 20	LA Gra M-F SAW	trake foodwel trace of Smo	7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	S-4 15- 17" 15-7: W-25- 10" Rev Pro-	ET BROWN - FIC. SIAN	6	- C	A 16 6 60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CAND OF SORRS			- 1	S C	<u> </u>		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1 3	3.5		では、「「「「「「「」」という。 「「「「」」という。 「「「」」という。 「「「」」という。 「「「」」という。 「「」」という。 「「」」という。 「「「」」という。 「「「」」という。 「「」
「なったのこ	1	Site to Lessin	D.Ch14164.	\ <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	A W	3 3 50 7 m 3 12 ec.	P1D-0.3	C K	Control Solve 1 - Care Pare	11009	Ry Lan 6: 7 Bush	37.59		C said trace silk	- CAANULAR FILL	3.6120	F = 0		1000		

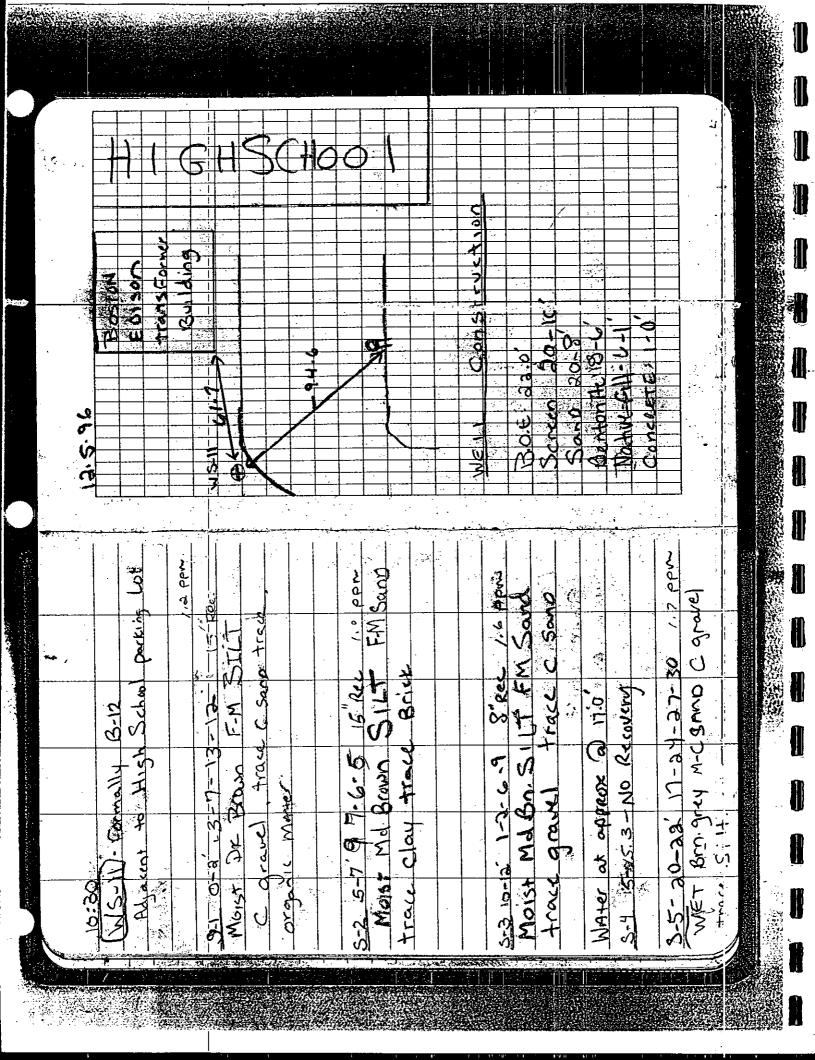


		ŀ	1		38	Ł		Z	NS+&	, e- .	**							
	Sec a color	.*			L Statup W				4 2			**************************************			7 ·			
\	WEN Cop			7	5 X 4 TO Programs		9				5			14		S F LE S' NUORAR !!		
					· S		4											
3	Fact that		DIE TAKEN		WEIN 13.				en maria de la colo de la colo de la colo de la colo de la colo de la colo de la colo de la colo de la colo de		The state of the s			\$ 1.00 m		· Accept		
	Servers at	3	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		IN STAIN JE W. EIL		10.6		41 mm		A CONTRACTOR OF THE CONTRACTOR					 4	•	
	Se Se	3	13-12	-	DIW COM		to Ground							. 7				



Berlin L. Openhar Strong Property 1888 Strong Stron	S % C						3	
19.5 96 2-2-13- 60 Renth -gay E.M EMO Chay -gay			85	1 m	25.0%	Serve fill to	4-10 Constitute steel	
10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	, c.	SS SPANIS	3-2-1-3- 6" -gay F.M SAM	DID I	Bro. Organic Silt a pent Pip o.	Cong a 35'		

A STORY 10 X 10 101 (2) (3) 21-0 は、人 <u>₹</u> 0-01-1365 3.5.96 25.0 Orone 1400 0.1 51-12-11-6-,18-501-1-5-13 Formally OF Boring End Sans Hrau 145-10 0:15



÷ .575 6.5	A (24.5 F)	ngan damas	75.0	EXX.30	. /							 						2	
	O TO	00 00	882	0.0	6,70		92.4	10.14	81 4	9	14.12	15.35		(+ 3 2 4 1 1 1 1 1 1 1 1 1	170	0			
	7 A A	9	29.51	υ γ	h8≤8		6/ 7/	12-56		o n	750	17.44			ह- ह-	12,73			A CONTRACT OF THE PARTY OF THE
	Who o	,0,	1 0	6	5.09 F		15 35	D		\ 	33.05	7.10			(4,2	18-15			
	一大	0	6		ئے آ			- X- B			14.2k	<i>y</i> u	~11	\$,0	\$.3	63.63			
0.3.6		7	7				VO.		3 3 3±		CC	<i>β</i>		6 2 -/1					A CAST AND A CAST AND
	3		3		3	4	3							4					
-		200	9	1	1	54.00				÷ 3,	y 3 m		2/1		1000				ž
	a		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		-						3 5 5 6 6 A -		7 G	N .				* 10	
	193	+ S. t.	रसा (र	3			30.							X .		,	, In the second		FOR STATE OF
	morto 11-45		1 (1) A			,	\$5.						40						を 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	- 11 whom	Mers Depart S	(1) V			,								-		-			を 認 見を行うした。からしては、中ででは、本地ない。
	ete well installation	Driller Depart S	August C. All C. J.																转通 随意的现在分词 医克尔特氏病 化异丙烯基甲基磺胺 人名
	Complete well installation	13:05 Drillers Depart S	August C. All C. J.																\$P\$ 1000 1000 1000 1000 1000 1000 1000 1

APPENDIX D

GROUNDWATER MONITORING WELL LOGS

GRO	UNDWATER MON	IITORING	WELL INSTA	LLATIO	N REPO	RT
PROJECT NAME/NO.	BRA/EDIC Parcel P-					RING WELL NO.
LOCATION	Roxbury, MA			_		WS -1
CLIENT	BRA/EDIC			ELE'	VATION	
CONTRACTOR	Zoino - Hebert, Inc.	DRILLER	Dave Andersen	ТОР	OF PVC	92.49
OBSERVED BY	Andrew Wise	DATE	Dec. 3, 1996	- DEP	TH TO GR	OUNDWATER FROM
CHECKED BY	Andrew Wise	DATE	Dec. 11, 1996	ТОР	OF PVC	7.80
GROUND ELEVATION 93.42 ' GENERAL SOIL CONDITIONS (NOT TO SCALE) 0.0 - 12.0 ft.: Fine to coarse SAND FILL 12.0 - 21.0 ft.: Organic SILT and PEAT 21.0 - 60.0 ft.: Coarse to Fine SAND/ GRAVEL GLACIAL OUTWASH		THICKNE TYPE OF TYPE OF ID OF SU DEPTH B TYPE OF TYPE OF DEPTH T TYPE OF SIZE OPE ID OF SO TYPE OF DEPTH B	OUNTED ROADBO SS OF SURFACE: SURFACE SEAL(S SURFACE CASING RFACE CASING OTTOM OF CASIN SER PIPE BACKFILL AROUN OP OF SEAL SEAL OTTOM OF SEAL OTTOM OF SEAL OTTOM OF SCREEN SCREEN ENINGS	SEAL(S) G G TOP OF SA ND SCREEN	ND COLUN	(GROUND SURFACE) 1.0 ° Concrete Aluminum Roadbox 6 ° 18 ° 2 ° Schedule 40 PVC Native Fill 3.0 ° Bentonite
		TYPE OF	BACKFILL BELOV	V SCREEN		Bentonite: 18 - 21 ' Native Fill: 21 - 60 '
		DIAMETE	R OF BOREHOLE			4 -
:	<		OTTOM OF BORE			60.0 '
NOTES:			To de contraction de la contra		MONITO	RING WELL NO.
Depth to groundwater measure	ed on December 5, 1996.					WS -1
Elevation relative to an arbitrar						N & SAMPSON NEERS, INC.

, and a

Ğ	ROL	JNDWATE	R MON	TORING	WELL INSTALL	ATION REPOR	T
PROJECT NAME/N	Ю.	BRA/EDIC F	Parcel P-3	/ Job No: 96	5230.A	MONITORI	NG WELL NO.
LOCATION		Roxbury, MA	٩			V	VS - 2
CLIENT		BRA/EDIC				ELEVATION	
CONTRACTOR		Zoino - Heb	ert, Inc.	DRILLER	Paul Schaefer	TOP OF PVC	92.32 '
OBSERVED BY		Christine Hu	ighes	DATE	Dec. 3, 1996	DEPTH TO GRO	OUNDWATER FROM
CHECKED BY		Andrew Wis	е	DATE	Dec. 11, 1996	TOP OF PVC	8.57 '
GROUND ELEVATION 92.4	46 '		-	FLUSH-M	OUNTED ROADBOX		(GROUND SURFACE)
GENERAL SOIL CONDIT	TIONS			ı			
(NOT TO SCALE)				THICKNE	SS OF SURFACE SEA	AL(S)	1.0'
			<	TYPE OF	SURFACE SEAL(S)		Concrete
0.0 - 0.3 ft. :				TYPE OF	SURFACE CASING		Aluminum Roadbox
ASPHALT			<	ID OF SU	RFACE CASING		<u>4 *</u>
0.3 - 11.0 ft. :				DEDTI LO	OTTOM OF CASINO		10 *
Fine to medium SA	ND		<	DELIHR	OTTOM OF CASING		10"
FILL		111		ID OF RIS	ER PIPE		2"
			<		RISER PIPE		Schedule 40 PVC
11.0 - 17.0 ft.				1			
PEAT and organic	silt		<	TYPE OF	BACKFILL AROUND I	RISER PIPE	Native Fill
				DEPTH TO	OP OF SEAL		3.0 '
			<	TYPE OF			Bentonite
-					OTTOM OF SEAL/TO	OF SAND COLUMN	5.0 '
		_	<	DEPTH TO	OP OF SCREEN		7.0 '
				TYPE OF	SCREEN		Machine-slotted PVC
			<	SIZE OPE	NINGS		0.010 *
				ID OF SC	REEN		2 - 1
			<	TYPE OF	BACKFILL AROUND	SCREEN	#1 Silica Sand
			<	DEPTH B	OTTOM OF SCREEN	. •	17.0
			<	DEPTH B	OTTOM OF SAND CO	DLUMN	17.0
			<	TYPE OF	BACKFILL BELOW S	CREEN	N/A
			<	DIAMETE	R OF BOREHOLE		8*
			<		OTTOM OF BOREHO	LE	17.0
					<u></u>		
NOTES: Depth to groundwater me	easure	d on December 5	5, 1996.	, 		11	ING WELL NO. WS - 2
Elevation relative to an a						i	& SAMPSON IEERS, INC.

PROJECT NAME/NO.	JNDWATER MONI BRA/EDIC Parcel P-3 /				IG WELL NO.
LOCATION	Roxbury, MA	000 110. 50	250.71		3 - 3
CLIENT	BRA/EDIC			ELEVATION	-
CONTRACTOR	Zoino - Hebert, Inc.	DRILLER	Paul Schaefer	TOP OF PVC	93.88
OBSERVED BY	Christine Hughes	DATE	Dec. 3, 1996		UNDWATER FROM
CHECKED BY	Andrew Wise	DATE	Dec. 11,1996	TOP OF PVC	8.49
- CONCORED BY	Allator Wiso				0.40
GROUND	√	LENGTH C	F CASING ABOVE GI	ROUND SURFACE	1.78 '
ELEVATION 92.61 '		LENGTH C	F RISER PIPE ABOVI	E GROUND SURFAC	1.27 '
GENERAL SOIL CONDITIONS					
(NOT TO SCALE)		THICKNES	S OF SURFACE SEA	L(S)	1.0 '
		TYPE OF S	SURFACE SEAL(S)		Concrete
		•			
0.0 - 8.5 ft. :		TYPE OF S	SURFACE CASING		Steel
Fine to coarse SAND.		ID OF SUF	RFACE CASING		4"
Concrete					
FILL		DEPTH BO	OTTOM OF CASING		3.24 '
		1			
8.5 - 17.0 ft. :		ID OF RIS	ER PIPE		2*
Organic SILT and PEAT		TYPE OF	RISER PIPE		Schedule 40 PVC
				NOTE DIDE	D
		TYPE OF	BACKFILL AROUND F	RISER PIPE	Bentonite
		DEPTH TO	OP OF SEAL		1.0 '
		TYPE OF	SEAL		Bentonite
		DEPTH BO	OTTOM OF SEAL/TOP	OF SAND COLUMN	3.0 '
		DEPTH TO	OP OF SCREEN		5.0 '
		l			
		TYPE OF			Machine-slotted PV
	-	SIZE OPE			0.010 *
		ID OF SCI	REEN	•	2*
		TYPE OF	BACKFILL AROUND S	SCREEN	#1 Silica Sand
			OTTOM OF OCC.		-
		DEPTH B	OTTOM OF SCREEN		15.0 *
		DEPTH B	OTTOM OF SAND CO	LUMN	17.0
		TYPE OF	BACKFILL BELOW S	CREEN	#1 Silica Sand
	<		R OF BOREHOLE		8 -
	└ ──	DEPTH B	OTTOM OF BOREHO	LE	17.0
NOTES:				MONITOR	ING WELL NO.
	neasured on December	5. 1996		14	/S - 3
	arbitrary 100.00 foot dat				I & SAMPSON
				li li	EERS, INC.
				1	

	UNDWATER MONI				
PROJECT NAME/NO	BRA/EDIC Parcel P-3 /	Job No: 96	6230.A	·	NG WELL NO.
LOCATION	Roxbury, MA			·	S - 4
CLIENT	BRA/EDIC			ELEVATION	
CONTRACTOR	Zoino - Hebert, Inc.	DRILLER	Paul Schaefer	TOP OF PVC	94.06
OBSERVED BY	Christine Hughes	DATE	Dec. 3, 1996	DEPTH TO GRO	UNDWATER IFROM
CHECKED BY	Andrew Wise	DATE	Dec. 11,1996	TOP OF PVC	8.84
					
GROUND	■	LENGTH (OF CASING ABOVE O	ROUND SURFACE	2.15 *
ELEVATION 92.00		LENGTH (OF RISER PIPE ABOY	/E GROUND SURFAC	2.06 '
GENERAL SOIL CONDITIONS					
(NOT TO SCALE)		THICKNES	SS OF SURFACE SE	AL(S)	1.0 1
(NOT TO GOALLY			SURFACE SEAL(S)	` '	Concrete
		201			
0.0 - 8.5 ft. :		TYPE OF	SURFACE CASING		Steel
Fine to coarse SAND			RFACE CASING		4 "
FILL			.,,,,,,,,,		; <u>-</u>
		DEPTH BO	OTTOM OF CASING		2.85
8.5 - 13.5 ft. :	7 [" `				
PEAT and organic silt		ID OF RIS	ER PIPE		2 *
			RISER PIPE		Schedule 40 PVC
13.5 - 17.0 ft. :					
Fine to medium SAND		TYPE OF	BACKFILL AROUND	RISER PIPE	Bentonite
GLACIAL OUTWASH					
		DEPTH TO	OP OF SEAL		1.0
		TYPE OF	SEAL		Bentonite
		DEPTH B	OTTOM OF SEAL/TO	P OF SAND COLUMN	3.0 '
		'			-
		DEPTH TO	OP OF SCREEN		5.0
					. !
		TYPE OF	SCREEN		Machine-slotted PVC
		SIZE OPE	NINGS		0.010 *
		ID OF SC	REEN	-	2*
	│	TYPE OF	BACKFILL AROUND	SCREEN	#1 Silica Sand
	<u>.</u>				: ,
	│	DEPTH B	OTTOM OF SCREEN	1	15.0
					• •
	▼	DEPTH 8	OTTOM OF SAND C	OLUMN	17.0 •
	•	TYPE OF	BACKFILL BELOW	SCREEN	#1 Silica Sland
		A			8 "
	-		ER OF BOREHOLE	31 E	17.0
		DEPTHE	SOTTOM OF BOREH	JLC	17.0
NOTEC				MONITOR	ING WELL NO.
NOTES:	negerrad on December	5 1006		i)	NS - 4
	neasured on December				N & SAMPSON
Elevation relative to an	arbitrary 100.00 foot dat	uifi.		II.	IEERS, INC.
				ENGIN	ielito, nov.
<u></u>					

PROJECT NAME/NO.	BRAVEDIC Parce	el P-3 / Job No:	96230.A	MONITORII	NG WELL NO.
LOCATION	Roxbury, MA			W	S - 5
CLIENT	BRAVEDIC			ELEVATION	
CONTRACTOR	Zoino - Hebert, I	nc. DRILLE	R Paul Schaefer	TOP OF PVC	98.27 '
OBSERVED BY	Christine Hughe	s DATE	Dec. 4, 1996	DEPTH TO GRO	UNDWATER FROM
CHECKED BY	Andrew Wise	DATE	Dec. 11,1996	TOP OF PVC	14.191
GROUND	<	1 LENGTH	OF CASING ABOVE G	ROUND SURFACE	2.04 '
ELEVATION 96.39 '	<		OF RISER PIPE ABO	· · · · · · · · · · · · · · · · · · ·	
GENERAL SOIL CONDITIONS					
(NOT TO SCALE)		THICKN	ESS OF SURFACE SEA	AL(S)	1.0 '
,			F SURFACE SEAL(S)	-(0)	Concrete
		1 20			
0.0 - 0.5 ft. :		TYPE O	F SURFACE CASING		Steel
SILT and sand		· ·	URFACE CASING		4"
TOPSOIL		, , 10010	J. 1. /102 0/101110	-	
		3— ∩ ЕРТЫ	BOTTOM OF CASING		2.96 '
0.5 - 3.5 ft. :	4 1 1 1	, OLI III	DIRECT OF CASING		2.30
Medium to fine SAND		IDOER	ISER PIPE		2"
FILL		_	F RISER PIPE		Schedule 40 PVC
		4 11720	FRISERFIFE	-	Schedule 40 PVC
3.5 - 8.5 ft. :		1 TVDE 0	F BACKFILL AROUND	DISCD DIDC	Bentonite
Silt and clay	1111	4 11720	F BACKFILL AROUND	RISER PIPE	Demonite
•		L	TOD OF 6541		401
FILL			TOP OF SEAL		1.0 '
05 470%		1	OF SEAL		Bentonite
8.5 - 17.0 ft. :		DEPIH	BOTTOM OF SEAL/TO	P OF SAND COLUMN	3.0 '
Fine to coarse SAND		4			
FILL	- - ^	7- DEPIH	TOP OF SCREEN		5.0 '
		1			
		i i	F SCREEN		Machine-slotted PV
	11-41-1-3	ļ.	PENINGS		0.010 "
		ID OF S	CREEN	-	2"
		→ TYPE C	F BACKFILL AROUND	SCREEN	#1 Silica Sand
•		1 proru	BOTTOM OF SCREEN		45.01
		7 DEPIH	BOTTOM OF SCREEN		15.0 '
	-	√—— DEPTH	BOTTOM OF SAND CO	OLUMN	17.0 °
			OF BACKFILL BELOW S	CREEN	#1 Silica Sand
	1	_	TER OF BOREHOLE	· •	8 *
	⁻	< DEPTH	BOTTOM OF BOREHO	DLE	17.0 '
NOTES:				MONITOR	ING WELL NO.
Depth to groundwater m	easured on Dece		11	VS - 5	
Elevation relative to an a				& SAMPSON	
	-			1 1:	EERS, INC.

100 mg

1

GRO	UNDWATER MON	TORING WELL INSTALL	ATION REPOR	<u> </u>
PROJECT NAME/NO	BRA/EDIC Parcel P-3	/ Job No: 96230.A		IG WELL NO.
LOCATION	Roxbury, MA			S - 6
CLIENT	BRA/EDIC		ELEVATION	
CONTRACTOR	Zoino - Hebert, Inc.	DRILLER Paul Schaefer	TOP OF PVC	97.03
OBSERVED BY	Christine Hughes	DATE Dec. 4, 1996		UNDWATER FROM
CHECKED BY	Andrew Wise	DATE <u>Dec. 11, 1996</u>	TOP OF PVC	12.56
				2.10
GROUND		LENGTH OF CASING ABOVE GR		1.87
ELEVATION 96.15		LENGTH OF RISER PIPE ABOVE	GROUND SURFAC	
GENERAL SOIL CONDITIONS		!		1.0
(NOT TO SCALE)		THICKNESS OF SURFACE SEAL	.(S)	
		TYPE OF SURFACE SEAL(S)		Concrete
0.0 - 0.5 ft.:		TYPE OF SURFACE CASING		Steel
SILT and sand		ID OF SURFACE CASING		4"
TOPSOIL		I ID OF SOM AGE GAGING		:
TOFSOIL		DEPTH BOTTOM OF CASING		2.90 '
0.5 - 8.5 ft.:	7117	1		2*
Medium to fine SAND		ID OF RISER PIPE		Schedule 40 PVC
FILL		TYPE OF RISER PIPE		Schedule 40 FVC
8.5 - 17.0 ft. :		TYPE OF BACKFILL AROUND R	ISER PIPE	Native Fill
Fine to coarse SAND		1		
GLACIAL OUTWASH		DEPTH TOP OF SEAL		3.0
		TYPE OF SEAL		Bentonite
		DEPTH BOTTOM OF SEAL/TOP	OF SAND COLUMN	5.0 **
		DEPTH TOP OF SCREEN		7.0 *
		TYPE OF SCREEN		Machine-slotted PVC
		SIZE OPENINGS		0.010 "
		ID OF SCREEN	•	2 "
		TYPE OF BACKFILL AROUND S	CREEN	#1 Silica Sand
		DEPTH BOTTOM OF SCREEN		17.0
	▲	DEPTH BOTTOM OF SAND COL	LUMN	17.0
		TYPE OF BACKFILL BELOW SC	REEN	N/A
		- DIAMETER OF BOREHOLE		8*
		DEPTH BOTTOM OF BOREHOL	.E	17.0 '
			MONITOR	ING WELL NO.
NOTES:		5 400G	i i	VS - 6
= -	neasured on December		<u> </u>	I & SAMPSON
Elevation relative to an	arbitrary 100.00 foot dat	tum.	R	
			ENGIN	EERS, INC.

GROU	JNDWATER MON	NITORING	WELL INSTALL	ATION REPOR	T
PROJECT NAME/NO.	BRA/EDIC Parcel P-3 / Job No: 96230.A			MONITORING WELL NO.	
LOCATION	Roxbury, MA			W	S - 7
CLIENT	BRA/EDIC			ELEVATION	
CONTRACTOR	Zoino - Hebert, Inc. DRILLER Paul Schaefer			TOP OF PVC 98.12'	
OBSERVED BY	Christine Hughes	ristine Hughes DATE Dec. 4, 1996			UNDWATER FROM
CHECKED BY	Andrew Wise	DATE	Dec. 11,1996	13.60'	
GROUND ELEVATION 96.34 ' GENERAL SOIL CONDITIONS (NOT TO SCALE) 0.0 - 0.5 ft.: SILT and sand TOPSOIL 0.5 - 17.0 ft.: Fine to coarse SAND GLACIAL OUTWASH		LENGTH C LENGTH C LENGTH C THICKNES TYPE OF S ID OF SUR DEPTH BC TYPE OF F TYPE OF F TYPE OF S DEPTH TC TYPE OF S DEPTH TC TYPE OF S TYPE OF S TYPE OF S TYPE OF S TYPE OF S TYPE OF S TYPE OF S TYPE OF S	F CASING ABOVE GREEN SIDE CASING ABOVE SEAL SURFACE CASING FACE CASING FACE CASING FACE CASING FACE CASING FACE CASING FACE CASING FACE CASING FACE CASING FACE CASING FACE CASING FACE CASING FACE CASING FACE CASING FACE CASING FACE FACE FACE FACE FACE FACE FACE FACE	EGROUND SURFAC L(S) SER PIPE OF SAND COLUMN	1.86 ' 1.78 ' 1.0 ' Concrete Steel 4 " 3.14 ' 2 " Schedule 40 PVC Native Fill 3.0 ' Bentonite 5.0 ' 7.0 ' Machine-stotted PVC 0.010 " 2 " #1 Silica Sand 17.0 '
	4	TYPE OF	TYPE OF BACKFILL BELOW SCREEN		N/A
				·	
	⊲−		R OF BOREHOLE		8 *
		- DEPTH BO	OTTOM OF BOREHOL	E	17.0 '
NOTES: Depth to groundwater me	easured on December	· 5, 1996.		i.i	NG WELL NO.
Elevation relative to an a		•		WESTON	& SAMPSON EERS, INC.

1

1

I day and the second

Comment for a

to state the state of the state

Manual C

		TORING WELL INSTALL		
PROJECT NAME/NO.	BRA/EDIC Parcel P-3 /	Job No: 96230.A	MONITORING WELL NO.	
LOCATION	Roxbury, MA			S-8
CLIENT	BRA/EDIC		ELEVATION	
CONTRACTOR	Zoino - Hebert, Inc.	DRILLER Paul Schaefer	TOP OF PVC	102.95
OBSERVED BY	Christine Hughes	DATE Dec. 4, 1996	DEPTH TO GRO	UNDWATER FROM
CHECKED BY	Andrew Wise	DATE Dec. 11, 1996	TOP OF PVC	16.70
GROUND		LENGTH OF CASING ABOVE GR	ROUND SURFACE	2.40 *
ELEVATION 100.70		LENGTH OF RISER PIPE ABOVE	GROUND SURFAC	2.25 '
GENERAL SOIL CONDITIONS				-
(NOT TO SCALE)		THICKNESS OF SURFACE SEAL	_(S)	1.0
(NOT TO CONEL)		TYPE OF SURFACE SEAL(S)	•	Concrete
		THE OF CONTROL CONTROL		1
0.0 - 17.5 ft. :		TYPE OF SURFACE CASING		Steel
Coarse to fine SAND		ID OF SURFACE CASING	•	4 "
FILL				
		DEPTH BOTTOM OF CASING		2.60
17.5 - 21.5 ft. : Clay and silt		ID OF RISER PIPE		2
Olay and one		TYPE OF RISER PIPE		Schedule 40 PVC
24 5 25 0 # 1		TIPE OF RISER FIFE		F F F F F F F F F F F F F F F F F F F
21.5 - 25.0 ft. : Organic SILT and PEAT		TYPE OF BACKFILL AROUND R	ISER PIPE	Native Fill
		DEPTH TOP OF SEAL		9.0
	4—	TYPE OF SEAL		Bentonite
		DEPTH BOTTOM OF SEAL/TOP	OF SAND COLUMN	11.0 '
		DEPTH BOTTOM OF SEADTOF	OF SAME COLUMN	11.0
		DEPTH TOP OF SCREEN		13.0
		l		AALine planted PAG
		TYPE OF SCREEN		Machine slotted PVC
		SIZE OPENINGS		0.010 "
·		ID OF SCREEN	•	2*
		TYPE OF BACKFILL AROUND S	CREEN	#1 Silica Sand
		DEPTH BOTTOM OF SCREEN		23.0 '
	■ ■	DEPTH BOTTOM OF SAND CO	LUMN	25.0
		TYPE OF BACKFILL BELOW SO	CREEN	#1 Silica Sand
				·
	◀─	DIAMETER OF BOREHOLE	_	8 ***
·		DEPTH BOTTOM OF BOREHOL	E	25.0 '
NOTES:			MONITOR	ING WELL NO.
Depth to groundwater r	measured on December :	5, 1996.		VS - 8
I	arbitrary 100.00 foot date		WESTON	I & SAMPSON
			ENGIN	IEERS, INC.

PROJECT NAME/NO. LOCATION	BRA/EDIC Parcel P-3 / Job No: 96230.A Roxbury, MA			MONITORING WELL NO. WS - 9	
CLIENT	BRA/EDIC			ELEVATION	
CONTRACTOR	Zoino - Hebert, Inc. DRILLER Paul Schaefer Christine Hughes DATE Dec. 5, 1996			TOP OF PVC 102.701	
OBSERVED BY				DEPTH TO GRO	UNDWATER FROM
CHECKED BY			Dec. 11, 1996	TOP OF PVC	17.43
<u> </u>					
GROUND		- LENGTH	OF CASING ABOVE G	ROUND SURFACE	2.35 *
ELEVATION 100.25 '		LENGTH	OF RISER PIPE ABOV	E GROUND SURFAC	2.18 '
GENERAL SOIL CONDITIONS					
(NOT TO SCALE)		THICKNE	SS OF SURFACE SEA	L(S)	1.01
•		TYPE OF	SURFACE SEAL(S)	• •	Concrete
		•	.,		
0.0 - 19.0 ft. :		TYPE OF	SURFACE CASING		Ste el
Coarse to fine SAND			RFACE CASING		4"
FILL		1 10 01 00	IN ACE CACING		_
V5		DERTUR	OTTOM OF CARING		2651
19.0 - 22.0 ft. :	4117	DEPINE	OTTOM OF CASING		2.65 '
Clay and silt		l in or nic			2*
olay and olic		1	ID OF RISER PIPE		
22.0 25.0 8.		TYPE OF	RISER PIPE		Schedule 40 PVC
22.0 - 25.0 ft. :					
Organic SILT and PEAT		TYPE OF	BACKFILL AROUND F	RISER PIPE	Native Fill
		1		•	
		DEPTH T	OP OF SEAL		8.0 '
		TYPE OF	SEAL		Bentonite
		DEPTH B	OTTOM OF SEAL/TOP	OF SAND COLUMN	10.0 '
		— DEPTH T	OP OF SCREEN		12.0 '
	- 1	TYPE OF	SCREEN		Machine-slotted PV
,		SIZE OPE	ENINGS		0.010 "
		ID OF SC		_	2"
		1 .2 5. 55	· · · · · · · · · · · · · · · · · · ·	•	
		TYPE OF	BACKFILL AROUND	COPERI	#1 Silica Sand
,		THEOR	DAONI ILE ANOUND	BORELIN	#1 Sliga Salai
		— DEDTUR	OTTON OF SORES		22.01
		DEPINE	OTTOM OF SCREEN		22.01
		DEPTH B	OTTOM OF SAND CO	LUMN	25.0
	^	TYPE OF	BACKFILL BELOW S	CREEN	#1 Silica Sand
		·			
		- DIAMETE	ER OF BOREHOLE	•	8*
		DEPTH 8	BOTTOM OF BOREHO	LE	25.0 '
NOTES:				1}	NG WELL NO.
Depth to groundwater m				\ 	<u>IS - 9</u>
Elevation relative to an a	arbitrary 100.00 foo	t datum.		WESTON	& SAMPSOM
				ENGIN	EERS, INC.
				N	

A production of the second of

10,740

GRO	UNDWATER MONI	TORING WELL INSTALLA	ATION REPOR	Τ
PROJECT NAME/NO.	BRA/EDIC Parcel P-3 /	Job No: 96230.A	MONITORING WELL NO.	
LOCATION	Roxbury, MA		WS - 10	
CLIENT	BRA/EDIC		ELEVATION	
CONTRACTOR	Zoino - Hebert, Inc.	DRILLER Paul Schaefer	TOP OF PVC	101.99
OBSERVED BY	Christine Hughes	DATE Dec. 5, 1996	DEPTH TO GRO	UNDWATER FROM
CHECKED BY	Andrew Wise	DATE Dec. 11, 1996	TOP OF PVC	16.80
GROUND		LENGTH OF CASING ABOVE GR	OUND SURFACE	1.53
ELEVATION 100.98		LENGTH OF RISER PIPE ABOVE	GROUND SURFAC	1.01
GENERAL SOIL CONDITIONS				
(NOT TO SCALE)		THICKNESS OF SURFACE SEAL	(S)	1.0 '
		TYPE OF SURFACE SEAL(S)		Concrete
0.0 - 14.4 ft. :		TYPE OF SURFACE CASING		Steel
Coarse to fine SAND		ID OF SURFACE CASING		4*
FILL		,		
14.0 - 25.0 ft. :		DEPTH BOTTOM OF CASING		3.47
		ID OF RISER PIPE		2*
Coarse to fine SAND		TYPE OF RISER PIPE		Schedule 40 PVC
		THEORIGENTILE		
		TYPE OF BACKFILL AROUND RI	SER PIPE	Native Fill
		DEPTH TOP OF SEAL		8.0 '
	■ TYPE OF SEAL			Bentonite
		DEPTH BOTTOM OF SEAL/TOP	OF SAND COLUMN	10.0 '
		DEPTH TOP OF SCREEN		12.0
		TYPE OF SCREEN	•	Machine-slotted PVC
		SIZE OPENINGS		0.010 *
		ID OF SCREEN	-	2*
		TYPE OF BACKFILL AROUND SO	CREEN	#1 Silica Sand
		THE OF BACKLELAKOONS OF		
		DEPTH BOTTOM OF SCREEN		22.0
	■	DEPTH BOTTOM OF SAND COLUMN		25.0 '
	■	TYPE OF BACKFILL BELOW SCREEN		#1 Silica Sand
				o * '
		DIAMETER OF BOREHOLE		<u>8*</u> 25.0 '
	——	DEPTH BOTTOM OF BOREHOLI	-	25.0
NOTES:			MONITOR	ING WELL NO.
Depth to groundwater r	neasured on December 5	5, 1996.		S - 10
Elevation relative to an	arbitrary 100.00 foot date	um.	R	I & SAMPSON
	•		ENGIN	EERS, INC.
			<u> </u>	:

į

	UNDWATER MONI			ATION REPOR	Т
PROJECT NAME/NO.	BRA/EDIC Parcel P-3 / Job No: 96230.A			MONITORING WELL NO.	
LOCATION	Roxbury, MA			WS - 11	
CLIENT	BRA/EDIC			ELEVATION	
CONTRACTOR	Zoino - Hebert, Inc. DRILLER Paul Schaefer			TOP OF PVC	103.88
OBSERVED BY	Christine Hughes DATE Dec. 5, 1996			DEPTH TO GRO	UNDWATER FROM
CHECKED BY	Andrew Wise DATE Dec. 11 1996			TOP OF PVC	19.20 '
GROUND		LENCTHO	CASING ABOVE GR		0.55
ELEVATION 101.90					2.15'
GENERAL SOIL CONDITIONS		LENGTH OF	RISER PIPE ABOVE	GROUND SURFAC	1.98 '
1					
(NOT TO SCALE)			OF SURFACE SEAL	(S)	1.0
,		TYPE OF SI	JRFACE SEAL(S)		Concrete
0.0 - 13.5 ft. :		•			
SILT and sand			JRFACE CASING		Steel
		ID OF SURF	ACE CASING		4*
FILL					
40.5.00.00	Ц	DEPTH BOT	TOM OF CASING		2.85
13.5 - 22.0 ft. :					
Medium to coarse SAND		ID OF RISE	RPIPE		2*
GLACIAL OUTWASH		TYPE OF RI	SER PIPE		Schedule 40 PVC
		TYPE OF BA	ACKFILL AROUND RI	SER PIPE	Native Fill
		DEPTH TOP	OF SEAL		6.0 '
		TYPE OF SI	EAL	•	Bentonite
		DEPTH BOT	TOM OF SEAL/TOP	OF SAND COLUMN	8.0 '
		DEPTH TOP	OF SCREEN		10.0 '
		TYPE OF SO	CREEN		Machine-slotted PVC
		SIZE OPEN	INGS		0.010 "
·		ID OF SCRE			2 "
	-	12 01 00110		•	
		TYPE OF B	ACKFILL AROUND SO	PEEN	Silica Sand
		1112010	TORU ILL ANODINO DE	JINC.LI¶	Silica Saliu
		DERTH BOT	TOM OF SCREEN	,	20.01
		DEFINEO	TOW OF SCREEN		20.0 '
ŀ		DEDTURO	TOU OF CAMP COL		00.01
		DEP IN BU	ITOM OF SAND COL	UMN	22.0 '
		TYPE OF P	4 OKEII 1 DEL OM 601		#4.0°F 0
]		TYPE OF B	ACKFILL BELOW SC	KEEN	#1 Silica Sand
		OLANICZE-	OF BORESS =		
			OF BOREHOLE	_	8*
		DEPINBO	ITOM OF BOREHOLE	=	22.0 '
NOTES:				14011170	10 14 15
	annum den Dere de de	4000		1	NG WELL NO.
	Depth to groundwater measured on December 5, 1996.			WS - 11	
Elevation relative to an a	Elevation relative to an arbitrary 100.00 foot datum.			WESTON & SAMPSON	
				ENGINI	EERS, INC.
L			· · · · · · · · · · · · · · · · · · ·	·	

The second secon

- Cartering Control of the Control o

- (Nichoo)

A Common of the

- Andrews

. GRC		TORING WELL INSTALL	<u> </u>		
PROJECT NAME/NO.	BRAVEDIC Parcel P-3	/ Job No: 96230.A	MONITORING WELL NO.		
LOCATION	Roxbury, MA		WS - 12		
CLIENT	BRA/EDIC		ELEVATION		
CONTRACTOR	Zoino - Hebert, Inc.	DRILLER Art Johnson	TOP OF PVC	99.35 '	
OBSERVED BY	Andrew Wise	DATE Dec. 5, 1996	DEPTH TO GRO	UNDWATER FROM	
CHECKED BY	Andrew Wise	DATE Dec. 11, 1996	DATE Dec. 11, 1996 TOP OF PVC		
GROUND		LENGTH OF CASING ABOVE G	ROUND SURFACE	2 .56 '	
ELEVATION 96 89		LENGTH OF RISER PIPE ABOVE			
GENERAL SOIL CONDITION		LENGTH OF RIGER FILE ADDVI		2.40	
(NOT TO SCALE)		THICKNESS OF SURFACE SEA	1/9/	· 1.0 •	
(NOTTO SCALE)			L(3)	Concrete	
•		TYPE OF SURFACE SEAL(S)		Concrete	
0.0 - 12.0 ft. :		TYPE OF SURFACE CASING		Steel	
Coarse to fine SAND		ID OF SURFACE CASING		4"	
FILL		•			
		DEPTH BOTTOM OF CASING		2.44	
12.0 - 19.0 ft. : PEAT and organic silt		ID OF RISER PIPE	•	2 "	
r Er er and organio one		TYPE OF RISER PIPE		Schedule 40 PVC	
		TIPE OF RISER FIFE		Scriedule 40 PVC	
		TYPE OF BACKFILL AROUND R	ISER PIPE	Native Fill	
		DEPTH TOP OF SEAL		4.0 *	
	4 —	TYPE OF SEAL		Bentonite	
		DEPTH BOTTOM OF SEAL/TOP	OF SAND COLUMN	6.0 '	
		DEPTH TOP OF SCREEN		8.0 *	
				į.	
		TYPE OF SCREEN		Machine-slotted PVC	
		SIZE OPENINGS		0.010 *	
		ID OF SCREEN		2 "	
			•		
		TYPE OF BACKFILL AROUND S	CREEN	#1 Silica Sand	
		DEPTH BOTTOM OF SCREEN		18.0 •	
	▼	DEPTH BOTTOM OF SAND COL	LUMN	19.0	
		TYPE OF BACKFILL BELOW SO	REEN	#1 Silica Sand	
		DIAMETER OF BOREHOLE		8 -	
		DEPTH BOTTOM OF BOREHOL	E	19.0 '	
NOTES:		,	MONITORI	NG WELL NO.	
	measured on December 5	i, 1996.	WS - 12		
Elevation relative to an arbitrary 100.00 foot datum.			WESTON & SAMPSON		
			ENGIN	EERS, INC.	
				;	

APPENDIX E

LABORATORY REPORTS

Î

Environmental Laboratories Corporation



111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 · FAX: (603) 429-8496

May 07, 1997

Mr. George Naslas Weston & Sampson Engineers 5 Centennial Drive Peabody, MA 01960

RE Your project: 96230.A BRA/EDIC-Parcel P-3

Dear George:

Enclosed please find the results for the additional analysis requested on April 24, 1997 for the above-referenced project, received on March 26, 1997. AMRO operates a Quality Control frogram which meets or exceeds EPA and state requirements. A copy of the appropriate State Certificate is attached. No quality control deviations were noted during the analyses associated with this project. This project was assigned AMRO Project Number 15806. If you have any questions regarding this project in the future, please refer to this number.

Please be advised that any unused sample volume and sample extracts will be stored for a period of thirty (30) days from this report date. After this time, AMRO will properly dispose of the remaining sample. If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This letter is an integral part of your data report.

Please do not hesitate to call if you have any questions.

Sincerely,

Nancy Stewart

Laboratory Director

Encl.



AMRO Environmental Laboratory Report

:lient:

Weston & Sampson Engineers

5 Centennial Drive

Peabody, MA 01960

Client Designation: 96230.A BRA/EDIC-Parcel P-3 Roxbury, MA

Attn: Mr. George Naslas

Samples Qty/Type:

7/Solid

AMRO Designation: 15806*

Date Sampled: 03/24&25/97 Date Rec'vd: 03/26/97

Date Complete: 05/06/97

COC #: 14863, 14867, 16994

		<u> </u>						
Sample Identity	AMRO Identity	Test Parameter	Results	Units	Date of Analysis	Run by	EPA Method	
	, — — ————,							
B-114 S-2 4-6'	15806-01	TCLP Extraction Lead, TCLP	1.2	mg/L	04/29/97 05/06/97	RK EL	1311 6010	
B-114 S-3 7-9'	15806-02	TCLP Extraction Lead, TCLP	0.33	mg/L	04/29/97 05/06/97	RK EL	1311 6010	
B-105 S-1 1-3'	15806-03	TCLP Extraction Lead, TCLP	0.65	mg/L	04/29/97 05/06/97	RK EL	1311 6010	
B-105 S-2 4-6'	15806-04	TCLP Extraction Lead, TCLP	0.27	mg/L	04/29/97 05/06/97	RK EL	1311 6010	
B-111 S-1 1-3'	15806-05	TCLP Extraction Lead, TCLP	<0.20	mg/L	04/29/97 05/06/97	RK EL	1311 6010	
B-111 S-2 4-6'	15806-06	TCLP Extraction Lead, TCLP	0.25	mg/L	04/29/97 05/06/97	RK EL	1311 6010	
B-111 S-3 7-9'	15806-07	TCLP Extraction Lead, TCLP	0.60	mg/L	04/29/97 05/06/97	RK EL	1311 6010	
	'							1

All analyses performed in accordance with:

USEPA Methods of Chemical Analysis for Water & Waste.

Standard Methods for the Examination of Water and Wastewater, 18th
Edition, 1992. and USEPA SW846 Manual, 3rd. ed.

The following standard abbreviations and conventions apply throughout

all sections:

< = 'Less than' followed by the detection limit.</pre>

> = 'Greater than'

^{* =} Additional analysis requested 04/24/97, formerly Amro #15550.

Environmental Laboratories Corporation



111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 · FAX: (603) 429-8496

May 07, 1997

Mr. George Naslas Weston & Sampson Engineers 5 Centennial Drive Peabody, MA 01960

RE Your project: 96230.A BRA/EDIC-Parcel P-3 Roxbury, MA

Dear George:

Enclosed please find the results for the additional analysis requested on April 24, 1997 for the above-referenced project, received on March 26, 1997. AMRO operates a Quality Control Program which meets or exceeds EPA and state requirements. A copy of the appropriate State Certificate is attached. No quality control deviations were noted during the analyses associated with this project. This project was assigned AMRO Project Number 15805. If you have any questions regarding this project in the future, please refer to this number.

Please be advised that any unused sample volume and sample extracts will be stored for a period of thirty (30) days from this report date. After this time, AMRO will properly dispose of the remaining sample. If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This letter is an integral part of your data report.

Please do not hesitate to call if you have any questions.

Sincerely,

Nancy Stewart

Laboratory Director

Encl.

AMRO Environmental Laboratory Report

Client:

Weston & Sampson Engineers 5 Centennial Drive

01960 Peabody, ΜA

Client Designation: 96230.A BRA/EDIC-Parcel P-3 Roxbury, MA

Attn: Mr. George Naslas

Samples Qty/Type:

9/Solid

AMRO Designation: 15805*

Date Sampled: 03/24-26/97 Date Rec'vd: 03/26/97 Date Complete: 05/06/97

COC #: 14862, 16994, 16995

Sample Identity	AMRO Identity	Test Parameter	Results	Units	Date of Analysis	Run by	EPA Method
B-113 S-3	15805-01	TCLP Extraction Lead, TCLP	<0.20	mg/L	04/28/97 05/06/97	RK EL	1311 6010
B-115 S-1 1-3'	15805-02	TCLP Extraction Lead, TCLP	<0.20	mg/L	04/28/97 05/06/97	RK EL	1311 6010
B-115-S-2 4-6'	15805-03	TCLP Extraction Lead, TCLP	0.24	mg/L	04/28/97 05/06/97	RK EL	1311 6010
B-115 S-3 7-9'	15805-04	TCLP Extraction Lead, TCLP	0.29	mg/L	04/28/97 05/06/97	RK EL	1311 6010
B-116 S-1 1-3'	15805-05	TCLP Extraction Lead, TCLP	0.22	mg/L	04/28/97 05/06/97	RK EL	1311 6010
B-117 S-1 1-3'	15805-06	TCLP Extraction Lead, TCLP	0.45	mg/L	04/28/97 05/06/97	RK EL	1311 6010
B-104 S-1 1-3'	15805-07	TCLP Extraction Lead, TCLP	0.24	mg/L	04/28/97 05/06/97	RK EL	1311 6010
B-104 S-2 4-6'	15805-08	TCLP Extraction Lead, TCLP	<0.20	mg/L	04/28/97 05/06/97	RK EL	1311 6010
B-114 S-1 1-3'	15805-09	TCLP Extraction Lead, TCLP	0.23	mg/L	04/28/97 05/06/97	RK EL	1311 6010

All analyses performed in accordance with:

USEPA Methods of Chemical Analysis for Water & Waste.

Standard Methods for the Examination of Water and Wastewater, 18th USEPA SW846 Manual, 3rd. ed. Edition, 1992. and

The following standard abbreviations and conventions apply throughout all sections:

< = 'Less than' followed by the detection limit.

> = 'Greater than'

^{* =} Additional analysis requested 04/24/97, formerly Amro #15550.

Environmental Laboratories Corporation



111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 - FAX: (603) 429-8496

May 07, 1997

Mr. George Naslas Weston & Sampson Engineers 5 Centennial Drive Peabody, MA 01960

RE Your project: 96230.A BRA/EDIC-Parcel P-3 Roxbury, MA

Dear George:

İ

Enclosed please find the results for the additional analysis requested on April 24, 1997 for the above-referenced project, received on March 26, 1997. AMRO operates a Quality Control Program which meets or exceeds EPA and state requirements. A copy of the appropriate State Certificate is attached. No quality control deviations were noted during the analyses associated with this project. This project was assigned AMRO Project Number 15804. If you have any questions regarding this project in the future, please refer to this number.

Please be advised that any unused sample volume and sample extracts will be stored for a period of thirty (30) days from this report date. After this time, AMRO will properly dispose of the remaining sample. If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This letter is an integral part of your data report.

Please do not hesitate to call if you have any questions.

Sincerely,

Nancy Stewart

Laboratory Director

Encl.

AMRO Environmental Laboratory Report

Page 1 of 2

Client:

Weston & Sampson Engineers

5 Centennial Drive

Peabody, MA 01960

Client Designation: 96230.A BRA/EDIC-Parcel P-3 Roxbury, MA

Attn: Mr. George Naslas

Samples Qty/Type:

9/Solid

AMRO Designation: 15804*

Date Sampled: 03/25/97

Date Rec'vd:

03/26/97

Date Complete: 05/06/97

COC #: 14866, 14867, 16994

				<u>.</u>			
Sample Identity	AMRO Identity	Test Parameter	Results	Units	Date of Analysis	Run by	EPA Method
B-109 S-3	15804-01	TCLP Extraction			04/25/97	RK	1311
7-9'		Lead, TCLP	0.35	mg/L	05/06/97	EL	6010
B-110 S-1	15804-02	TCLP Extraction			04/25/97	RK	1311
1-3'	13004 02	Lead, TCLP	0.32	mg/L	05/06/97	EL	6010
B-110 S-2	15804-03	TCLP Extraction			04/25/97	RK	1311
4-6'	13004 - 03	Lead, TCLP	0.37	mg/L	05/06/97	EL	6010
B-110 S-3	15804-04	TCLP Extraction			04/25/97	RK	1311
7-9'	13004 04	Lead, TCLP	<0.20	mg/L	05/06/97	EL	6010
B-112 S-1	15804-05	TCLP Extraction	40.00	/T	04/25/97 05/06/97	RK EL	1311 6010
1-3'		Lead, TCLP	<0.20	mg/L	05/06/97	ELL	-6010
B-112 S-2	15804-06	TCLP Extraction			04/25/97	RK	1311
4-6'		Lead, TCLP	0.58	mg/L	05/06/97	EL	6010
B-112 S-3	15804-07	TCLP Extraction			04/25/97	RK	1311
7-9'		Lead, TCLP	0.77	mg/L	05/06/97	EL	6010
B-113 S-1	15804-08	TCLP Extraction			04/25/97	RK	1311
1-31		Lead, TCLP	0.31	mg/L	05/06/97	EL	6010
B-113 S-2	15804-09	TCLP Extraction			04/25/97	RK	1311
4-6'	15001 05	Lead, TCLP	<0.20	mg/L	05/06/97	EL	6010
	Ì						

All analyses performed in accordance with:

USEPA Methods of Chemical Analysis for Water & Waste.

Standard Methods for the Examination of Water and Wastewater, 18th USEPA SW846 Manual, 3rd. ed. Edition, 1992. and

The following standard abbreviations and conventions apply throughout all sections:

< = 'Less than' followed by the detection limit.

> = 'Greater than'

^{* =} Additional analysis requested 04/24/97, formerly Amro # 15550.

Environmental Laboratories Corporation



111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 · FAX: (603) 429-8496

May 06, 1997

Mr. George Naslas Weston & Sampson Engineers 5 Centennial Drive Peabody, MA 01960

RE Your project: 96230.A Roxbury-BRA/EDIC-Parcel P-3

Dear George:

Enclosed please find the results for the additional analysis requested on April 24, 1997 for the above-referenced project, received on March 26, 1997. AMRO operates a Quality Control Frogram which meets or exceeds EPA and state requirements. A copy of the appropriate State Certificate is attached. No quality control deviations were noted during the analyses associated with this project. This project was assigned AMRO Project Number 15793. If you have any questions regarding this project in the future, please refer to this number.

Please be advised that any unused sample volume and sample extracts will be stored for a period of thirty (30) days from this report date. After this time, AMRO will properly dispose of the remaining sample. If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This letter is an integral part of your data report.

Please do not hesitate to call if you have any questions.

Sincerely,

Nancy Stewart

Laboratory Director

Encl.

ANTO Environmental Laboratory Report

Client:

Weston & Sampson Engineers

5 Centennial Drive Peabody, MA 01960

Attn: Mr. George Naslas

Samples Qty/Type:

9/Solid

Client Designation:

96230.A Roxbury BRA/EDIC-Parcel P-3

AMRO Designation: 15793*

Date Sampled: 03/24/97
Date Rec'vd: 03/26/97
Date Complete: 05/02/97

COC #: 14861, 14862, 14863

Sample Identity	AMRO Identity	Test Parameter	Results	Units	Date of Analysis	Run by	EPA Method
						· ~ ~ ~ ~ .	
B-101 S-1	15793-01	TCLP Extraction	10.00	47	04/24/97	RK	1311
		Lead, TCLP	<0.20	mg/L	05/02/97	PB	6010
B-101 S-2	15793-02	TCLP Extraction			04/24/97	RK	1311
		Lead, TCLP	<0.20	mg/L	05/02/97	PB	6010
				J .			
B-102 S-1	15793-03	TCLP Extraction			04/24/97	RK	1311
		Lead, TCLP	<0.20	mg/L	05/02/97	PB	6010
B-102 S-2	15793-04	TCLP Extraction			04/24/97	RK	1311
2 102 0 2	13733 04	Lead, TCLP	0.27	mg/L	05/02/97	PB	6010
			012,	g/ _	03/02/3/		0010
B-102 S-3	15793-05	TCLP Extraction		•	04/24/97	RK	1311
		Lead, TCLP	<0.20	mg/L	05/02/97	PB	6010
B-103 S-1	15793-06	TCLP Extraction			04/04/07	-	
P-103 9-1	13/33-06	Lead, TCLP	<0.20	mg/L	04/24/97 05/02/97	RK PB	1311 6010
		neau, iche	\0.20	mg/r	05/02/97	PB	POTO
B-103 S-2	15793-07	TCLP Extraction			04/24/97	RK	1311
		Lead, TCLP	0.28	mg/L	05/02/97	PB	6010
		_					
B-106 S-1	15793-08	TCLP Extraction			04/24/97	RK	1311
		Lead, TCLP	0.30	mg/L	05/02/97	PB	6010
B-106 S-2	15793-09	TCLP Extraction			04/24/97	RK	1311
		Lead, TCLP	0.32	mg/L	05/02/97	PB	6010

All analyses performed in accordance with:

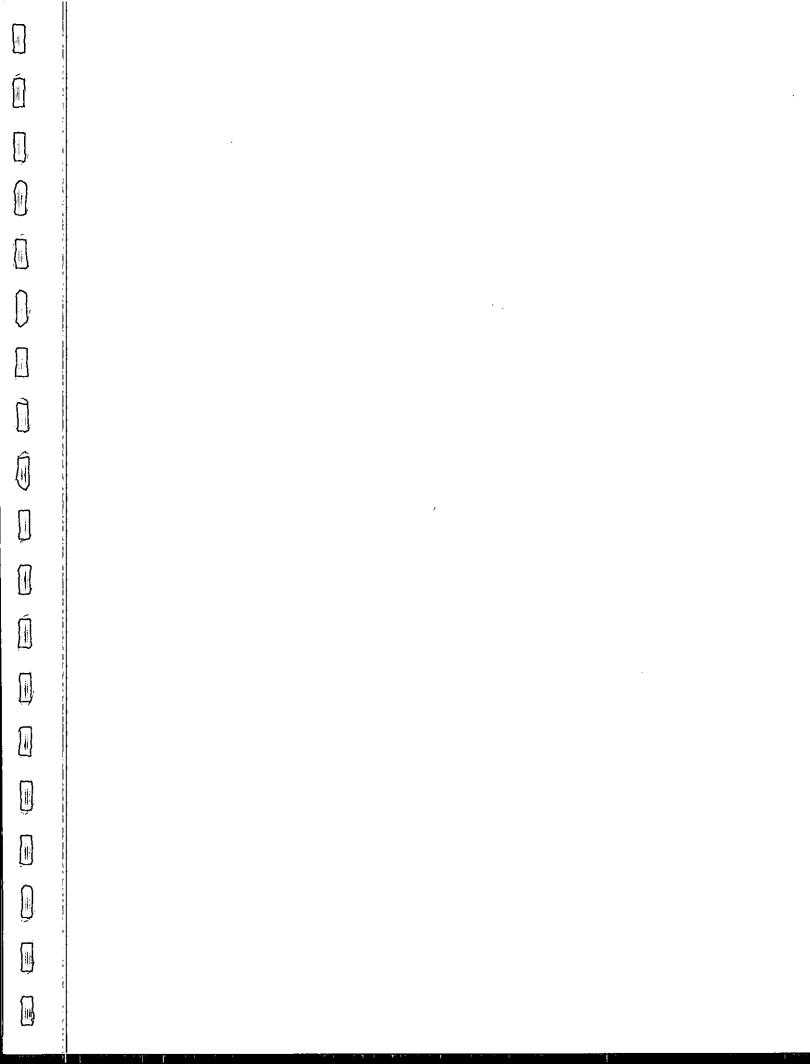
USEPA Methods of Chemical Analysis for Water & Waste. Standard Methods for the Examination of Water and Wastewater, 18th

Edition, 1992. and USEPA SW846 Manual, 3rd. ed.
The following standard abbreviations and conventions apply throughout all sections:

< = 'Less than' followed by the detection limit.

> = 'Greater than'

^{* =} Additional analysis requested on 04/24/97, formerly AMRO # 15550



14861

AMRO Environmental Laboratories Corporation

Office: 603-424-2022 Fax: 603-429-8496

111 Herrick Street Merrimack, N.H. 03054

CHAIN OF CUSTODY RECORD

(329.5)

Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER, PAGE (OF D 26.60 * Samesola (Jew. 1/2 /12) 533. 1900 Remarks VVV 55. PRIORITY TURNAROUND TIME AUTHORIZATION Remarks T.A.T. authorized by: 123 بمعكنته لما Sice Send Results to: X X X X. X X **AUTHORIZATION NO.** X K X K × X ≸. MATRIX Water - A Solitsolid-S X X X X Wasle-W Other-O Explain X 5555 AMRO Project No. ☐ Fax to (phone) v) Results needed V 운 S 0 Seal Intaci? 103 8-02 8.0.8 9 7 50-0 ない。な 8-52 4 50 · C3 9 3.02 ğ Project State Type Size, & No. of Containers R Ò Ø ગ Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguitles are Received for Laboratory by: (Signature) グラージャ 4.5-6.5 .5 -2 いかの・ 1.6.1 10 18-2 7 4-6 4-1 N:3 12 Man Received by (Signature) Received by (Signature) Received by (Signature) Station Location 3 Š 3 r) - 3 5 B-101 5.0 3:5 Ŋ رر: نې Ţ ನ ೧೦/⊹ ラント 40/-**3** (3) · (2) d 2/1 B - (e) ? 13.101 Birec 100 13 X Date Time / 77 Sy Sy. Date Time Roxb According report 3-26-97 M M M 2 ij M BRA Date Time Date Time X Comp Grab X χ X X X 100101 Time 09:35 38160 747 74.60 30.07 24:01 Andrew H 10 3 B 1000 Project Name L . 3c 24:07 4:00 Ä とろうかり ished by (Signature) オでん Relinquished by (Signature) Relinquished by (Signature) 13/20 がん 3/4 15/m びり いく たべ Relinquished by (Signature 12.5 7 がが Date 15/50 Samplers (Signature) 96230, A Si resolved -Sta. No.

Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER. PAGE 20 OF & Mess (1960 Des las Remarks 33 - 15c. PRIORITY TURNAROUND TIME AUTHORIZATION Remarks T.A.T. authorized by: Send Results to: S 8,00 Y X X X X X 440 X X X **AUTHORIZATION NO.** X K X X Ł X CHAIN OF CUSTODY RECORD ≨ Water - A Soil/Splid-S X χ X Waste-W X X 5550 Other-O Explain X MATRIX AMRO Project No. ☐ Fax to (phone) £ Ŋ Results needed Ŋ in Ŋ (V) n V S Seal Intact? Yes 40: 9 8.52 ري در در 3-62 40.0 8-02 . 0. Ş 3.02 .V 20-8 ğ Project State 4 Containers ω Type Size, & No. of 9 00 O 8 Please print clearly, legibly and completely. Samples cannot be logged Received for Laboratory by: (Signature) in and the turnaround time clock will not start until any ambiguities are 3 6 7-9 1 4.6 7 9-4 η Pink: Client copy n; 1/2 7 Received by (Signature) Received by (Signature) Received by (Signature) Slation Location 3:5 3 3 4-5 4-5 - : 5 から ۔ دن 7.5 . AMRO Environmental Laboratories Corporation 7:5 S 101 Roxborg 531 3000 701 727 ; 101 70-B-103 B. F. 3 B-103 (1) $\mathcal{S}_{1,S_{\mathcal{T}}}$ 37 3 ¢C) ¥ Ķ 3-26-97 fellow: Accompanies report Date Time 3/26/ Date Time Date Time Grab Project Name B (2.A Office: 603-424-2022 Fax: 603-429-8496 S 2016 13,00 73 1 CC Sico 35:1 ングニ 130 シャニ みの いだの 3.43 3 ilme Time Audres: H Merrimack, N.H. 03054 Andre Relinquished by (Signature) Relinquished by (Signature) J. Relinquished by (Signature) 3 75 3/34 <u>`</u> 30 3 3 ۶ 3 Ŕ 3 111 Herrick Straat 용 96.02.039. A Samplers (Signature) 3 White: Lab copy resolved. Proj. No. Sta. No.

AMRO Environmental Laboratories Corporation

111 Herrick Street

Merrimack, N.H. 03054 Office: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER, **G**D PAGE & OF Remarks 533 - 1900 12/5-27 337 PRIORITY TURNAROUND TIME AUTHORIZATION 1-52 45 Remarks T.A.T. authorized by: Jun 3 0 8 300 Send Hesults to: X X X χ χ X X X X AUTHORIZATION NO. X X X X ≨ X Water - A Soil/Salid-S X Waste-W χ Other-O Explain X MATRIX Fax to (phone) AMRO Project No. 2 Results needed V Ŋ S ۷ V ণ S Ŋ Seaf Inlact? 40: 20 2 - 6 2 . O . 7 3 : 0 20.8 707 10,7 9 ₹-05 Yes 30° ğ Project State 4 Type Size, & No. of Containers ۵ 8 8 Co A Œ Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are Received for Laboratory by: (Signature) i 4-6 P ŋ ターケ ŋ η 'n Received by (Signature) Received by (Signature) Received by (Signature) Ŵ Station Location 1 3 7) ÿ J: : ij 1:5 'n 5 Й **J** 27 ! 000 0 5 75. 13 - 18 S りつしょ 0 321- A B -105 A RIFEE St. 53-Sylac Time/57 3-36-97 K ĺΩ įΩ Ľ M B Date Time Date Time Project Name X X Gas X X χ X X Andrew Dir Comp B:45 13:50 N 100 いいの 330 N. i be A.10 4100 かべて 4130 かぶ 7.5 Time A uished by (Signature) 人となるの Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) 125/0 75/6 3 7: 7. 14.18 70 15/15/ 75 河 <u>ئ</u> **Dale** ジャング Samplers (Signature) 7623C. A m resolved Sta. No.

Before submitting samples for expedited T.A.T., you must have requested in advance and 1.4.8.65 01260 00 PAGE 🗡 OF からてして Remarks 32 - 1900 Q PRIORITY TURNAROUND TIME AUTHORIZATION 100000000 Remarks すべいってい ixa 45 T.A.T. authorized by: received a coded T.A.T. AUTHORIZATION NUMBER. 4-8-450 200 Send Results to: 2000 X X X X X X 4,00 AUTHORIZATION NO. X X X X X X You CHAIN OF CUSTODY RECORD × Soil/Soid-S X X X Maler - A X 5550 Waste-W Other-O X MATRIX Explain AMRO Project No. Fax to (phone) Results needed ဍ 4 ζ 4 Ŋ U ij ካ Ч ij u Seal Intact? × 0 : .0.7 23. Şe Xe 4 4 ار. د 20 - 00 5. . . . 3 8 .. 62 8. 52 . c . 7 107 Š 4 Project State , Containers 40 ao 20 90 Type Size, & No. of Q٥ ∞ b α Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are Received for Laboratory by: (Signature) 7-91 2 ŋ 4.5 1.2 7-9 × Pink: Cliefil copy Received by (Signature) Received by (Signature) Received by (Signature) Station Location 5-3 4 . 5 3:0 .77 3,5 ٦ AWRO Environmental Laboratories Corporation Ů グックな S 60) S 21 . & 3. 300 40/ 501 **認の/** -101-13-107 107 Date Time BRA / 3-26-97 Ν 2 B ₩, 切 0 M M ΔĄ Yellow: Accompanies report Date Time Date Time Date Time Grab X X X χ X X X Office: 603-424-2022 Fax: 603-429-8496 Comp Andread & Carse स्तत्व 68340J 12:3 53.cc 2833 いからい 25:70 3.30 いいい 25:00 3250 09,000 Time Project Name つるとなりて 3/35/ とまんり がかん Merrimack, N.H. 03054 から いら 103 Berinquished by (Signature) 7.75 いい الم 133/10 Relinquished by (Signature) Refinquished by (Signature) りる Relinquished by (Signature) りつ 111 Herrick Street A.08-639 Samplers (Signature) 7) White: Lab copy Ŵ resolved, Proj. No. Sta. No.

AMRO Environmental Laboratories Corporation

111 Herrick Street Merrimack, N.H. 03054

Office: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

Before submitting samples for expedited T.A.T., you must have requested in advance and $G_{\mathfrak{I}}$ 01760 PAGE S OF 33- 1900 Remarks 201817 180145 PRIORITY TURNAROUND TIME AUTHORIZATION Remarks T.A.T. authorized by: received a coded T.A.T. AUTHORIZATION NUMBER. S S S Send Results to: X X X X X X NE AUTHORIZATION NO. X X 又 X 义 X ĕ Soil/Soild-S Waste-W χ X X X X X Other-O Explain MATRIX AMRO Project No. T Fax to (phone) 욷 Results needed 4 η Ŋ U 'n 4 4 Seal Intacl? 8-02 . 0.2 - 67 No Yes 40 107 107 ار د 20-8 0 701 8.02 ğ Project State .! 30 Type Size, & No. of Containers 50 æ حد 80 ٥Ç Ć 80 ۵ Please print clearly, legibly and completely. Samples cannot be logged Received for Laboratory by: (Signature) in and the turnaround time clock will not start until any ambiguities are 3-1 ひしつ 4.6 m Received by (Signature) Received by (Signature) Received by (Signature) Station Location 5.3 Ą S **M** 7 1-5 Ş 2 7 _ 001 601. 3 00), 8-109 3 Ricksur Date Time 1 M 3-26-97 14 ĺΩ p) Ë BRA Sale Time Date Time Date Time Grab X X Comp ALCONO CONTRACTOR 03,45 05 ist 27195 3:5 54.5 510 2010 300 K160 37 70 3/35 1110 23 € II Time Project Name 3/25 しまり 53 129 3/53/ 1 3 K りつ Relinquished by (Signature) Relinquished by (Signature) Refinquished by (Signature) Relinquished by (Signature) 19 とき人だ شعمه Oate Proj. No. 9 € 23 € . 4 Samplers (Signature) JU) resolved. Sla. No.

ccompanies leport

AMRO Environm 111 Herrick, Street	en	El Lab	orator	ries Cor	orpora	ii ii				- ASSET					Common of the co				4867	
Merrimack, N. Office: 603-42	Merrimack, N.H. 03054 Office: 603-424-2022 Fax: 603-429-8496	603-429-	-8496				CHAIN	OF	CUSTODY		RECORD									í
Proj. No. 96.2.36., A	Project	Name BRA	/	ROKBO	ا ود	١		Project S	Project State	MATRIX Water A	×.×		63	<00 00 00	1	A	PAGE_	HE GOF	CS.	
Samplers (Signature)	3	?)- A	. 3	9	1	3	b	Type Size, & No. of	J o.	Waste-W Other-O	/,	130/	. 18 / E	PAN	ار ویا					 -
Sta. No.	Date 1	Time	Comp Grab		Stati	Station Location			mers	CApid	व्य	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	20	33			Remarks	ırks		
(F)	70/	08: <i>11</i>	メ	W	5 111.	J .	1-31	/	8-62	ی	X									
7)	" ふら	130	×	Ŋ	5 111	1-5	15-1	,	8 - 42	S			X	×						
13	مد/	Shill	X	B	111	S 2	17-7	,	8.02	ч	χ	メ								
"i	3/25 11	5.4.11	ᆺ	B		2.2	7.61	,	20-8	Ŋ		_	X	メ						_
11	3/35 13	(3) cc	ᄽ	Ĭζ	111	5.3	16-6	,	8-02	ণ	X	メ	_							
"	3/35 13	53,500	×	8	111	5.3	16-6.	,	8-02	5			X	メ						
	3/05 13	新の	×	Ġ.	水 二	J. S	18-1	/	8.02	Ŋ	χ	メ								
7	w/ >c/2	13:30	X	B	0	1-5	18-1	-	なってい	Ŋ	_		X							
	3/05 (3	رب. ن.)	メ	B	2	9-1	7-4-1	_	3-c2	4	X	X				:				
* }		54:6/	×	92	ය ප	G . 2)		-	S. 0 %	is		<u> </u>	X	<u>-</u>						<u> </u>
	3/35 /3	Sico	뇟	B . I .	3	5-3	16-2.	/	8.52	S	X	メ								
	3/35 3	(B): cc	メ	62	611	5-3	6-2	/,	32-8	4			X							
			_																	_
Please pril	Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are	egibly a	ind con lock wi	npletely.	. Samp	les can	not be lo	logged	P. P. B. P. P. P. P. P. P. P. P. P. P. P. P. P.	IORITY Sulpa	/ TUR	NARO	UND T	IME AL	PRIORITY TURNAROUND TIME AUTHORIZATION	ZATIO	N(n pole	a o o o o o	
resolved.) 5	Tece	elved a c	L pepo	A.T. AL	THORIZ	ATION N	UMBER		received a coded T.A.T. AUTHORIZATION NUMBER.			
Audrew D	J. K. C.	عارك	_}						AU	AUTHORIZATION NO.	ATION	Š.	1	.T. auth	T.A.T. authorized by:					
Belinquished by (Signature)	(Signature)		Dale Time/	C6/94	Receive 7	Received by (Signature)	tlure)		□ Fax	Tax to (phone)		Š	Send Results to:	ults to:	4/2/240	~	3018-06	ړن		_
	1		1	130	B	18th	TYNO I	d	Results needed	pepaeu				37	1	1	1	27050		_
Relinquished by (Signature)	(Signature)		Date Time	9E	Receiv	Received by (Signalure)	ılure)		PO#			1 1 1			19	A C. C. C. C.		20000	273	
Relinquished by (Signature)	(Signature)		Date Time	91	Receive	Received by (Signature)	ıture)		AMRO	AMRO Project No.						Remarks	es:			
				į								1								
Relinquished by (Signature)	(Signature)		Date Time	25.58 BE	Receive	ed for Labor	Received for Laboratory by: (Signature)	nature)	Seal Intact?	C) Jor										
Both	bulos	'	3-26-97	797	7	1/2	Topson		Yes	No	NA									
White: Lab copy		Yellow: Accompanies report	companies	report		Pink: O	Pink: Offent copy													

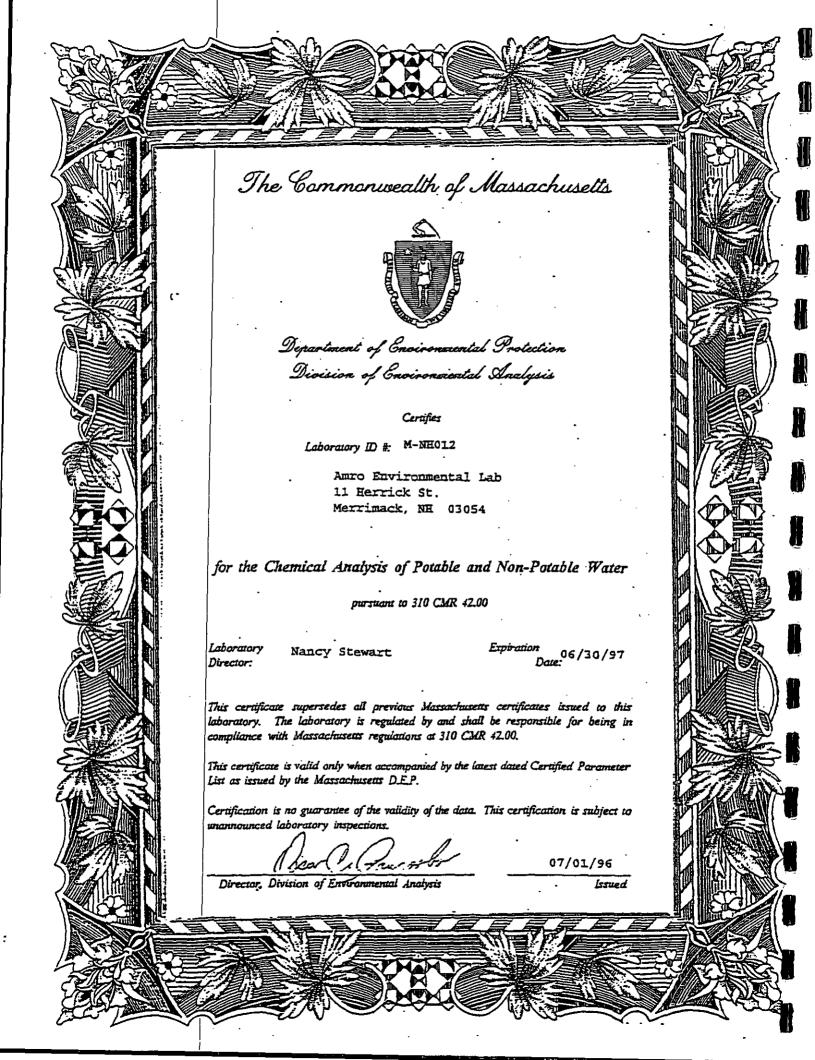
Office: 603-424-2022 Fax: 603-429-8496

Merrimack, N.H. 03054

CHAIN OF CUSTODY RECORD

Before submitting samples for expedited T.A.T., you must have requested in advance and Ø Р PAGE Remarks 3,61 25/20 15.00 PRIORITY TURNAROUND TIME AUTHORIZATION - 774 Remarks Send Results to: T.A.T. authorized by: received a coded T.A.T. AUTHORIZATION NUMBER. 495 30 X ۲ K X X X X AUTHORIZATION NO. X X X ¥ X X ١ Waler - A Soil/Solid-S X X X X Waste-W X X Other-O MATRIX Explain 0555 AMRO Project No. Fax to (phone) £ Results needed Ŋ V) 4 Seal Intact? 2::8 Şeş. 20 -- 8 8-0.2 8-02 8.0.8 70! 70.00 20-2 Z = - 8 20-8 107 S .. CZ õ Project State 4 Type Size, & No. of Containers 30 Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are Received for Laboratory by: (Signature) ・ブ・ケ ņ 7 Received by (Signature) Received by (Signature) Received by (Signature) Station Location 3:5 S: 52 3 3.5 7.5 アナクロメン エニ J = ' ₩ = -T = ; I : 711 -8. 1.3 B-13 pport | Date Time 3-26-97 2 c۵ 3 M Date Time Date Time complex Comp Grab 4 X X X X BRA Time-31.1 3.45 3. 2 いかいか Service Contraction 35.5 B.45 32.2 4100 S. S. ジャング S. 50 Project Name Andrew D. Andrew Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) quished by (Signature) 70/2 いっ 74/5 しら 7 とう 3 ٦ 3 h **K** 'n Date 9603c. A Samplers (Signature) m m m resolved -Sla.-No.-

Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER. **G** 56691 ાં વહેદ රි James 2017 PAGE Remarks Marsh 532 a 47.4X PRIORITY TURNAROUND TIME AUTHORIZATION Remarks 11.00 acc T.A.T. authorized by: Š Š Send Results to: X X X X X 440 **AUTHORIZATION NO.** X X X X X ž CHAIN OF CUSTODY RECORD Waler - A Soil/Solid-S Wasie-W ሂ X X X X Olher-O MATRIX Explain AMRO Project No. ☐ Fax to (phone) V 운 Ŋ Results needed Ŋ Seal Intact? X .. E 30.2 30.5 G) 200 ы СО 2000 30.5 300 Xes ₽ Ø 4 Project State Type Size, & No. of Containers Please print clearly, legibly and completely. Samples cannot be logged Received for Laboratory by: (Signature) in and the turnaround time clock will not start until any ambiguities are 'n 'n , M) ر د د 9-7 Sŋ 1 Pink: Client copy Received by (Signature) Received by (Signature) Received by (Signature) 37:50 Station Location ري ري 3 3 -S しょり -AMRQ Environmental Laboratories Corporation S アンコロメン B- 116 3-115 B - (1.5 X R- 115 35-15 R-115 N - - 81 Set Time S Just 77 3-26-97 fellow: Accompanies report Date Time Date Time BPA یز Comp Grab Office: 603-424-2022 Fax: 603-429-8496 Andrew D. O. E. 63; cc 25:39 55:70 0151 09100 07: K 30:0/ ale 21.20 3 3 8.5 Time Project Name Merrimack, N.H. 03054 d 7 3/86 3/26 Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) イラ/の 3/86 Relinquished by (Signature) (ر. ۲۵ 4 Date Samplers (Signature) 962.30. A 3 111 Herrick Street 37 2) n While: Lab copy resolved Proj. No. Sla. No.



Environmental Laboratories Corporation



111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 · FAX: (603) 429-8496

May 06, 1997

Mr. George Naslas Weston & Sampson Engineers 5 Centennial Drive Peabody, MA 01960

RE Your project: 96230.A Roxbury-BRA/EDIC-Parcel P-3

Dear George:

{ii{

Enclosed please find the results for the additional analysis reugeste on April 24, 1997 for the above-referenced project, received on March 26, 1997. AMRO operates a Quality Control Program which meets or exceeds EPA and state requirements. A copy of the appropriate State Certificate is attached. No quality control deviations were noted during the analyses associated with this project. This project was assigned AMRO Project Number 15794. If you have any questions regarding this project in the future, please refer to this number.

Please be advised that any unused sample volume and sample extracts will be stored for a period of thirty (30) days from this report date. After this time, AMRO will properly dispose of the remaining sample. If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This letter is an integral part of your data report.

Please do not hesitate to call if you have any questions.

Sincerely,

Nancy Stewart

Laboratory Director

Encl.

 $\{\}$

ANRO

AMRO Environmental Laboratory Report

Client:

Weston & Sampson Engineers

5 Centennial Drive Peabody, MA 01960

Client Designation:
96230.A Roxbury BRA/EDIC-Parcel P-3

Attn: Mr. George Naslas

Samples Qty/Type:

9/Solid

AMRO Designation: 15794*

Date Sampled: 03/24/97

Date Rec'vd: 03/26/97
Date Complete: 05/02/97

COC #: 14863, 14865, 14866

Sample Identity	AMRO Identity	Test Parameter	Results	Units	Date of Analysis	Run by	EPA Method
							:
B-106 S-3	15794-01	TCLP Extraction		/=	04/24/97	RK	1311
		Lead, TCLP	0.70	mg/L	05/02/97	PB	6010
B-107 S-1	15794-02	TCLP Extraction			04/24/97	RK	1311
	20:7: 02	Lead, TCLP	0.23	mg/L	05/02/97	PB	6010
B-107 S-2	15794-03	TCLP Extraction			04/24/97	RK	1311
B -107 3-2	13/34 03	Lead, TCLP	0.62	mg/L	05/02/97	PB	6010
		·					*
B-107 S-3	15794-04	TCLP Extraction		•	04/24/97	RK	1311
		Lead, TCLP	0.31	mg/L	05/02/97	PB	6010
B-108 S-1	15794-05	TCLP Extraction			04/24/97	RK	1311
		Lead, TCLP	0.24	mg/L	05/02/97	PB	6010
B-108 S-2	15794-06	TCLP Extraction			04/24/97	RK	1311
P-100 2-2	15/94-06	Lead, TCLP	0.23	mg/L	05/02/97	PB	6010
		·					
B-108 S-3	15794-07	TCLP Extraction			04/24/97	RK	1311
		Lead, TCLP	<0.20	mg/L	05/02/97	PB	6010
B-109 S-1	15794-08	TCLP Extraction			04/24/97	RK	1311
2 100 0 1	23.34 30	Lead, TCLP	0.22	mg/L	05/02/97	PB	6010
					04/04/07	Dif	1211
B-109 S-2	15794-09	TCLP Extraction			04/24/97	RK	1311
	·	Lead, TCLP	<0.20	mg/L	05/02/97	PB	6010

All analyses performed in accordance with:

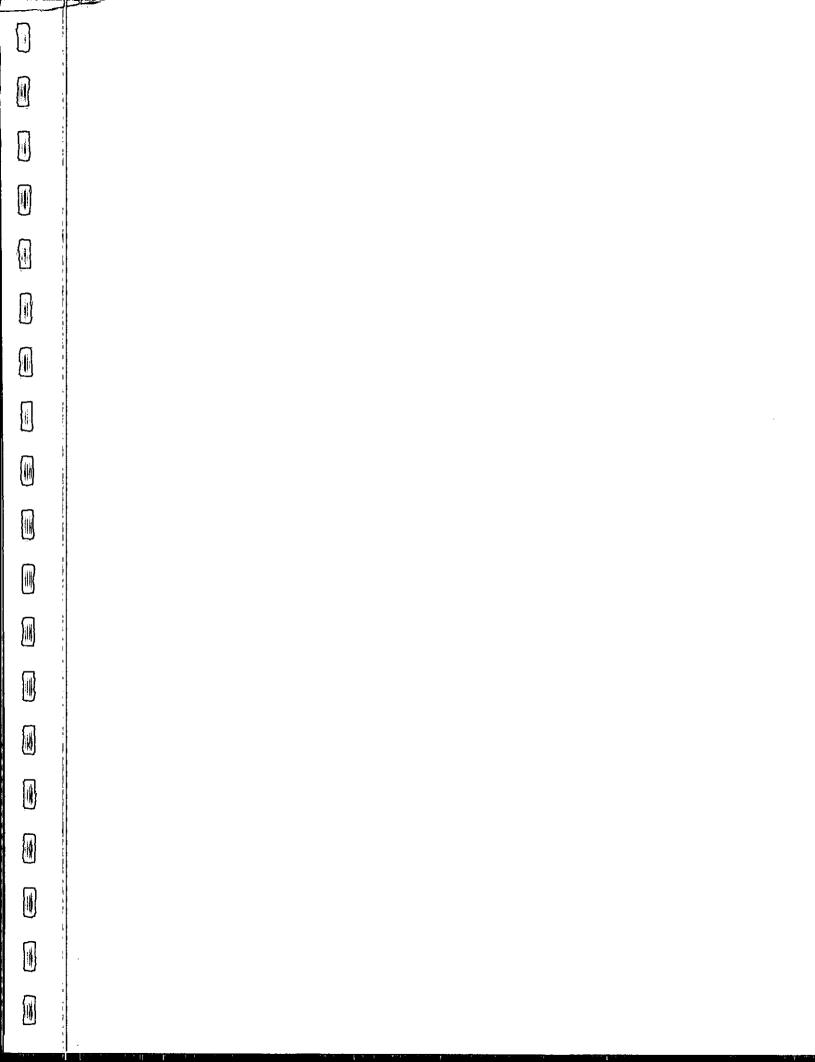
USEPA Methods of Chemical Analysis for Water & Waste. Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992. and USEPA SW846 Manual, 3rd. ed.

The following standard abbreviations and conventions apply throughout all sections:

< = 'Less than' followed by the detection limit.

> = 'Greater than'

^{* =} Additional analysis requested on 04/24/97, formerly AMRO #15550.



ナナナハジ

AMRO Environmental Laboratories Corporation

111 Herrick Street

Merrimack, N.H. 03054 Office: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER. 0 10 1 いいろいつ 533. 1300 Remarks 1756-55. PRIORITY TURNAROUND TIME AUTHORIZATION 125516 Remarks (Decourate T.A.T. authorized by: ASTON S Sics Send Results to: X X X X X X から AUTHORIZATION NO. X L X ¥ X X Waler - A Soil/Solid-S Waste-W X X X Other-O Explain 15550 MATRIX ☐ Fax to (phone) AMRO Project No. v) ٧ Results needed 0 U Seal Intact? SS SS 8-03 N) 5-05 8-62 100 .0. 8-52 3 9 <u>ئ</u> د ğ07 Project Slate Type Size, & No. of Containers 90 R þ Co B 90 Received for Laboratory by: (Signature) Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are 5 4.5-C. 4.5-6.5 N. 3. . 2-2 Pink, Citent copy 3 いる・ 5 Ŋ Received by (Signature) Received by (Signature) Received by (Signature) Station Location ņ 7) 3.5 5.3 3:5 S ... 2 زن ÷ . ī do/: 4 m/ -:3 311 đ Rexbush 001 50. 0 ; B.101 Ja J. B. S) SS. Dale Time 2 Σ 3 - 26 - 9 2 m ij M 8 2 \mathbb{M} ĬΩ Ü 10 Sea Time Date Time Dale Time BR.A Grab X Comp 25:60 28:30 P 2 145 124.6 10100 1000 30.50 10000 130 54:01 And is in 54:01 11:00 뺼 Project Name Samplers (Signature) Relinquished by (Signature) Relinquished by (Signature) Refinquished by (Signature) Refinquished by (Signature) 1907 4-18 40/8 7. 73 7.7. 7 7. 3/3 * <u>ن</u> بر 15/19 Date 96230, A resolved, Proj. No. Sta. No.

Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER. PAGE 30F 8 Mass. 01960 Nr.s/cus Remarks 333 - 18cc PRIORITY TURNAROUND TIME AUTHORIZATION **Pemarks** T.A.T. authorized by: Send Results to: S.c.8 1 8,00 Y X × X X X 440 X X X AUTHORIZATION NO. X X K X X CHAIN OF CUSTODY RECORD ž Maler - A Soil/Splid-S Waste-W X X X X Other-O Explain X MATRIX ☐ Fax to (phone) AMRO Project No. 욷 η Results needed Ŋ in V) n 4 V Ŋ V Seal Intact? Yes . c. 7. 30.0 500 8-02 40. Ŋ 8-05 N P . . . 43..Q 3.62 :\ : õ Project State 4,5 Type Size, & No. of Containers Ø 00 P Ь O Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are Received for Laboratory by: (Signature) 7-91 13.1. 5-1 5-1 150 7.6 9-1 ņ 17 Pink: Client copy Received by (Signature) Received by (Signature) Received by (Signature Station Location 5.5 3-5 3 7) 4-5 4-2 ---5 S AMRO Environmental Laboratories Corporation 7.5 : :5 V) Rexbury S 21 -N21: 7,91 しょし 70-201. オジニ B - 103 B-123 3.103 Sign \mathcal{S} . Date Time 3/26/72 Ŋ 凶 10 內 M (4) 3-26-97 fellow; Accompanies report Date Time AIB A Date Time Project Name Comp Grab X X Office: 603-424-2022 Fax: 603-429-8496 11.42 23 to 30,55 301 13:45 1.30 がある 3,50 J31 47 3.3 シャニ 37.3 Time Audren & Merrimack, N.H. 03054 Andre <u>ئ</u> بې Relinquished by (Signature) Relinquished by (Signature) 3/37 Relinquished by (Signature) 7 3/04 <u>ئ</u>ر 3/4 3/24 7 3 3/10 70 3 111-Herrick Street Oate 86 230. A Samplers (Signature) fellmanished by fer White: Lab copy resolved, Sta. No.

.

AMRO Environmental Laboratories Corporation 111 Herrick Street Merrimack, N.H. 03054 Office: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

				ŀ					-									
	7423C. A	Project Name IS R.A.	SR	, <u> </u>	HATO	, <u>,</u>		Project State	e late	MATRIX Water - A		W.		:\/:	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		PAGE SOF	Q _D
	Samplers (Signature)	A	13	\(\sqrt{1}\)		A	1	Type Size,		Soil/Soil/Soil/Soil/Soil/Soil/Soil/Soil/	જ	\$\\ \sqrt{\delta}{\pi}	16	15.00 10.00				
				<u> </u>				/ & No. of Containers	<u>د</u>	Explain ,	14	3/4	`		<u>,</u>			
	Sta. No. Date	Time	g	Grab	Sta	Station Location			<u>-</u> -		1×/0	K.	\rfloor	1/20			Bomorke	
	3/34	03°9°		φ Χ	201-	3-1	'ق-	8	2 - 6 . 2	Y N	<u> </u>		+				S III	
	3/34	13:35		X	705	1 1-5	1.3.1	8	5.0.2	S			X	X				
	100/2	8.45		X ÿ	201 -	ď	19-15	80	4 0 1	X v	X			<u> </u>	 			
				Ø X	501-	5-5	13-4	&)	70-0	8			X					
	3/24	4.00		X 5	50%	5-3 "	.6 -6.	& -	7.07	メッ	X		-	<u> </u>				
	44/8	4200		X	501.	S3	16.6	8	70 -	S			X					
	4. Just	45.35		Υ iO	301 -	2.1.5	-5-	6	-02	X	X		+-	-				
	13/15	14:30		X	106	1.0	·5-1	·.& /	737	5			×	_				
	15/8	14:47		X	. (= 6	ry V	· 9- 5	æ	7,01	X	X		+	-				
	36/34	14:45		χ ξ	リコー	4	13-17	00	7.07	1	-	Ė	 x	-				
	yc/8:			X (v)	- (a 6-	m	1. 7.	a	. 67	X	1		+	<u> </u>				
	3/24	K.160		X	301 -	53	7-5'	- OF	-0.5	Ŋ			 ¥	 				
				_									-					
	Please print clearly, legibly and completely. Samples cannot be logged in and the turner and time clock with and the turner and turner and the turner and	irly, legibly	/ and	complet	ely. Sam	oles cannol	t be logo	þet	PRIC	RITY 1	URNA	ROUI	VD TIN	IE AU	PRIORITY TURNAROUND TIME AUTHORIZATION	ATION		
	resolved.				i stant um	n any amb	dulles ;	агө	Before receiv	Before submitting samples for expedited T.A.T., you m received a coded T.A.T. AUTHORIZATION NUMBER.	ling sam ed T.A.1	ples for T. AUTH	expedil IORIZA	ed T.A.T	i, you mus JMBER.	st have requ	Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER.	vance and
	ANCHELL-D	3	4	ار					AUTH	AUTHORIZATION NO.	ON NO		T.A.1	: autho	T.A.T. authorized by:_			
	Refinquished by (Signature)		\$ T	C.5/STE/F	_	Received by (Signature)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		☐ Fax to (phone)	(buoud)		Senc	Send Results to	1 ^	4 7 8 4	7 2		
- -			Y	0	7	Nan's	Ä	0	Results needed	эфеф			3		ار ک	Cores of	3	
	Relinquished by (Signature)	(8	Dat	Date Time	Receiv	Received by (Signature)	æ		Pog				LAT Y	308	45.2	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	2007	
	Relinquished by (Signature)		Dal	Date Time	Receiv	Received by (Signature)		i i	AMRO Project No	ect No.					8	Remarks		
'	Relinquished by (Signature)		Dak	Date Time		Received for Laboratory bur (Signatura)	, hv. /Signal	1	Seaf Infact?								•	
	By John A	10	3.	-26-9		Ch.	Sept.	Ď.	Yes	ક	Y X							
	This Later C	, Ve	ccomp	ccompanies eport	8	Fink: Chem copy	ğ.											

AMRO Environmental Laboratories Corporation	tal Laboratories	Corporation			
Merrimack, N.H. 03054 Office: 603-424-2022 Fax: 603-429-8496	603-429-8496	CHAIN	OF CUSTODY RECORD	RECORD	
Proj. No. タルコ・シャ・・A	Name Rex	6DHC	Project State	MATRIX Waler - A	
Samplers (Signature)	7. A	S. D. D.	Type Size,		60000
oN et al.	Times Communication		& No. of Containers	1,50	1200 (000)
3/25	3	-107 S -1 (-3'	8-07	XXX	}
3/36 3	×	7 5-1 1-	70.00 /		X
70 SU/E	BIX Shice	107 53 4-61	7 8.02	x X S	
3/35 67	א ייייטי	19.4 5 5 701	20 · &	8	×
30/50/8	වේ?ය	.107 8-3 7-91	20-8 /	X X	
30 July 20	0830c X B	107 5-3 7-51	22.8 /	5	X
3/25/2	28:3c X B	108 S-1 1-3'	20-81	XX	
30 700/5	SE X SEIGO	1-S 801.	1 8.02	3	X
الان	DE X DE BO	108 S-3 4-E'	8.02	X X S	
3/25/8	8. X 174.80	12.4 ES 801.	7.0.8/	نې	X
3/35 0	09.80 X B	108 S-3 7-9'	70.8 /	X X S	
3/35/0	Office X T	· 108 5-3 7-91	70-8/	Ý	X
Please print clearly, It in and the turnaround	agibly and complet I time clock will not	Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are	<u></u>	ORITY TURNA e submitting samp	PRIORITY TURNAROUND TIME AUTHORIZATION Before submitting samples for expedited T.A.T., you must have requested in advance and
resolved.			receiv	⁰ed a coded T.A.T	AUTHORIZATION NUMBER,
Audran A.	J.s.		AUTH	AUTHORIZATION NO.	T.A.T. authorized by:
Perinquished by (Signature)	Day Time	Received by (Signature)	☐ Fax to (phone)	(phone)	Send Results to: (2, -0, -1, -0, -1)
1/20	2 120	(Saftham 1-0	Results needed	papa	Lesters + Same
Relinquished by (Signature)	Date Time	Received by (Signature)	PO#		(Sep) 533. (900
Refinquished by (Signature)	Date Time	Received by (Signature)	AMRO Project No	yect No.	Remarks
			155	550	
Relinquished by (Signature)	Sale Time	Received for Laboratory by: (Signature)	ure) Seal Intact?	3	
2 mg	3-26-97	E C	Yes	No N/A	
White: Lab copy	Yellow: Accompanies report	Pink: Client copy			

AMRO Environmental Laboratories Corporation 111 Herrick Street Merrimack, N.H. 03054 Ollice: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

Project State MATRIX WALET-A (L) C C C C S OF S	100 00 00 VA	14/6/	1 8.02 S X X	/ 8-o.z S x	/ 8-0'z x x x	x x x x x	1 8-02 S X X	x x 2 2 2	メ × 5 70-8 1	1 8-c2 S X	7 X X X 20:00 1	メ	1 8-02 X X S 20-8 1	X	PRIORITY TURNAROUND Before submitting samples for exreceived a coded T.A.T. AUTHO	AUTHURICATION NO. 1.A. I. BUILDITZEU DY:	□ Fax to (phone) Send Results to:	Results needed	POH FOLKER (MAKE) DIPLO	AMRO Project No.	75250	Seal Intact?	Yes No N/A
BEA (EDIC	is (De Dille	Grab Station Location	1 1-8 601-8. X	X B-109 S-1 1	- 4. C. S 6.1 El X	ケで-5 601-81 ×	X B-109 5-3	X 3-107 5-3	X B. 110 S-1	X B . 11c S . 1	X 3 . 110 S 3- 4-4	X 30 110 X	B - 110	か、S oll - 男 ×	d completely. Samples cann ck will not start until any am		Timy 7.7 Re	16 130 13than	Date Time Received by (Signature)	Date Time Received by (Signature)		Date Time 7.55 Received for Laboratory by: (Signature)	3-26-97 Co-14da
Proj. No. Project Name	Samplers (Signature)	Sta. No. Date Time Comp	3/35 SE/E	3/25 70/8	3/,95 07.45		3/25 10:00	3/31 25/8	3/45 (c)3c	3/10/ 20/8	3/32 10 Hz	754101 SEVE	3/35/1100	3/35 11100	, leg	ALCONO OF CONTROL	Relinquished by (Signahue)	Charles Indian	Relinquished by (Signature)	Reinquished by (Signature)	# 	Relinquished by (Signature)	1

AMRÒ Environmental Laboratories Corporation

Office: 603-424-2022 Fax: 603-429-8496 Merrimack, N.H. 03054

CHAIN OF CUSTODY RECORD

4867

Before submitting samples for expedited T.A.T., you must have requested in advance and රා 313613 PAGE 6- OF 77080 1800 2017 Remarks 1900 - C. 8.2. PRIORITY TURNAROUND TIME AUTHORIZATION -----Remarks Send Results to: Gacony T.A.T. authorized by: received a coded T.A.T. AUTHORIZATION NUMBER. 44.7 P X X X \$ 50°C X X BA Ł X X X AND BANK $\mathcal{C}_{\mathcal{C}}$ **AUTHORIZATION NO.** X X X X K X ۲ Water - A SoiltSolid-S X X X X Waste-W χ Other-O Explain MATHIX Fax to (phone) AMRO Project No. 욷 Results needed Ч ή n ч Ŋ ij ୯ η 5 Seal Intact? 3 : 3 100 73-8 20.2 70:8 eş, . 0.7 S - 62 7 8-03 8 ... 2 なってい 10:0 ğ Project Stale Type Size, & No. of Containers 8 Ø Received for Laboratory by: (Signature) Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are 7-4-15-4. 16-6 16-6 M 73-7 ナル 7 1 la Palson Pink: Offent copy Received by (Signature) Received by (Signature) Received by (Signature) S 4 13:17 Station Location り 7 7 S 3 Rexbarg 4 ų 1 7 R. 113 パニー 7 ニン、 B- (11 EN H Dale Time Bale Time 77 Ŋ 3-26-97 ď Ø M 100 M Ø M 3 Yellow: Accompanies report Date Time Date Time Grab X X メ ላ X × × X X STO A Comp Andrew D. Wise BRA 22.45 SE: 45 シャニ 3,69 37,00 あいつ 37.5 Sico): 3c 24:11 37:17 1330 Project Name Bekinguished by (Signature) 3 130 うるかのうと 3 73 Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) ار و ما しゅ 3 درا 149 と らら と Date 9643e, A Samplers (Signature) 3 resolved. Sta. No.

White: Lab copy

AIVINU Environmental Laboratories Corporation

111 Herrick Street Merrimack, N.H. 03054

Office: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER. W 01360 Ö PAGE Remarks 3 Nos/25 - 4:5 PRIORITY TURNAROUND TIME AUTHORIZATION Remarks T.A.T. authorized by: 1929 Send Results to: X ۲ አ X X X X X X AUTHORIZATION NO. X X X Y X X ≨ Soil/Splid-S X X X X X Water - A Waste-W X Oher-O MATRIX 25.50 Explain AMRO Project No. Fax to (phone) 운 Results needed 4 5 U 4 Seal Intact? Xes 8.5.2 8-02 20-2 20-8 8-02 \$.0.3 707 .0.7 8-62 10,4 8.02 Š Project State 4 Type Size, & No. of Containers صد 00 P Ó Received for Laboratory by: (Signature) Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are Ado > ノダール リソ・カ ノン・ケ Ļ M 7 Received by (Signature) Received by (Signature) Received by (Signature) Station Location m W 3 3:5 S. . S. 7 RUXBULL £0 1 ± 丁二: ٠ ٢ 1=: 1 = . 1 = 1 B-113 ccom کاکراکی Date Time 3-26-97 ĬΩ جم įΩ Ø 00 M4 M S Oale Time Date Time Date Time _Time_| Comp | Grab BRA X 17.45 13:45 B.45 3377 14100 Si 27 べんと みごぞ N. 300 Sign (35/35 3 Project Name Andrew D. (へてかりつい Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) 100 3 Refinguished by (Signature) 7 いか 3 りつ 73 いの 19.45 h 4 K Date 5633c. A Samplers (Signature) resolved, Sta. No.

111 Herrick Street		Awing Environmental Laboratories Corporation 111 Herick Street Morimach N.D. Ogner	orporation			16995	.5
Office: 603-424-2022 Fax: 603-429-8496	22 Fax: 603-4	429-8496	CHAIN	OF CUSTODY	RECORD		
Proj. No. 96.230. A	Project Name	BRA/ED:	ال ر 1 حال	Project State	MATRIX Walei - A	1/2	Pe
Samplers (Signature)	A m		1	Type Size, & No. of	<u> </u>	1000 E	<u></u>
Sta. No. Date	le Time	Comp Grab	Station Location	Containers	'Q'	Reference Remarks	
3/2	26 0910C	- 8: X	115 5-1 1-3 11	- Boz	メメ		
3/4	००१६० जल	A. X	115 5-1 1-31	1 - Box	5	X	
3/8	36 DS: 15	S K R . 1	15 S-3 4-6'	7-30.5	メメソ		
3/	31.30 JE	X B-	15 5-3 4-6	1 - 802	Ŋ	×	
3/6	St. 90 38	K.K.	15 5-3 7-9'	1 . Sox	X X Vi		
3/	38.05 30	X	117 S-3 7-8	1 . OB 0. 4	S	X	
B	30 10 30	ス ぬ	16 5-1 1-31	J. 18 16.2	S X		
3/.	30:01 WE	スピタ	116 5-1 1-3.		Ŋ	×	
3/8	31101 20	- SI X 19	117 5-1 1-3'	20× 7/1	メスト		
3/8	31:01 78	· 图 又 。	117 5-1 1-3.	1 - 80.2	S	×	
Please print of	learly, legib	dy and completely.	Please print clearly, legibly and completely. Samples cannot be logged in and the turnscound time along will not along that the turnscound time along will not along that		ORITY TURNA	PRIORITY TURNAROUND TIME AUTHORIZATION	, ,
resolved.		IG CIOCA WIII 1101 91	reactived.		e submitting sam ved a coded T.A.	belore submitting samples for expedited 1.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER,	
Andrew	Á	4		AUTI	AUTHORIZATION NO.	T,A.T. authorized by:	
Relinquished by (Signature)	ature)	Date Time 9.7	Received by (Signature)	☐ Fax to	Fax to (phone)	Send Results to:	<u>.</u>
		1/6 130	Bolhan J. O	Results needed	pepes	Samos 4	
Relinquished by (Signalure)	ature)	Date Time	Received by (Signeture)	PO#		19 (5) - 53 2 - (3 co.)	0
Relinquished by (Signature)	ature)	Date Time	Received by (Signature)	AMRO Project No.	RO Project No.	Remarks	
		-		ري ا	73.5		
Relinquished by (Signature)	ature)	C2', 2)	Received for Laboratory by: (Signature)	lure) Seat Intact?	.		
Bollston		3-26-97	An Tolom	Yes	No N/A		
画	Yellow	Yellow: Accompanies report	Pink: Client copy				

Environmental Laboratories Corporation



111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 · FAX: (603) 429-8496

April 14, 1997

Mr. George Naslas Weston & Sampson Engineers 5 Centennial Drive Peabody, MA 01960

RE Your project: 96230.A Roxbury-BRA/EDIC

Dear George:

Enclosed please find the results for the above-referenced project, received on March 26, 1997. AMRO operates a Quality Control Program which meets or exceeds EPA and state requirements. A copy of the appropriate State Certificate is attached. No quality control deviations were noted during the analyses associated with this project. This project was assigned AMRO Project Number 15550. If you have any questions regarding this project in the future, please refer to this number.

Please be advised that any unused sample volume and sample extracts will be stored for a period of thirty (30) days from this report date. After this time, AMRO will properly dispose of the remaining sample. If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This letter is an integral part of your data report.

Please do not hesitate to call if you have any questions.

Sincerely,

Nancy Stewart

Laboratory Director

Encl.

AMRO

AMRO Environmental Laboratory Report

Page 1 of 6

Weston & Sampson Engineers
5 Centennial Drive
Peabody, MA 01960

Client Designation: 96230.A Roxbury-BRA/EDIC

Wtn: Mr. George Naslas

mples Qty/Type: 47/Solid

AMRO Designation: 15550

Date Sampled: 03/24/97, 03/25/97

Date Rec'vd: 03/26/97 Date Complete: 04/04/97

COC #'s: 14861, 14862, 14863, 14865,

14866, 14867, 16994 & 16995

mpl Dent		AMRO Identity	Parameter	Results	Undia	Total of Analysis		. EPA Method
1-2.5	1	15550-01	Total Solids Digestion Lead, Total	88.1 210.	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
B 101 4.5'-		15550-02	Total Solids Digestion Lead, Total	90.6 360.	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
B-101	S-3	15550-03	Total Solids Digestion Lead, Total	81.7 46.	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
B-102 ∭3′	S-1	15550-04	Total Solids Digestion Lead, Total	89.5 200.	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
102 46'	S-2	15550-05	Total Solids Digestion Lead, Total	88.1 150.	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
102 9,	S-3	15550-06	Total Solids Digestion Lead, Total	85.2 200.	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
103 1-3'	S-1	15550-07	Total Solids Digestion Lead, Total	89.7 170.	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
B-103 4-6'	S-2	15550-08	Total Solids Digestion Lead, Total	87.5 110.	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010

Continued next page . . .

AM	<u> </u>		<u> </u>			 _	i
AMRO Envir	onmental I	Laboratory Report			Page 2 of	6	5
.mple Identity	AMRO Identity	Test Parameter	Results	Units	Date of Analysis	Run by	EPA Method
					- 		
B-103 S-3	15550-09	Total Solids	89.6	*	03/27/97		
7-9'		Digestion Lead, Total	57.	mg/Kg	03/28/97 03/31/97	SPC EL	3050 6 010
5 466 5 4	1						
B-106 S-1 1-3'	15550-10	Total Solids Digestion	88.5	*	03/27/97 03/28/97		2540G 3050
		Lead, Total	150. 🤾	mg/Kg		EL	6010
£ - 1.06 S−2	***5553-**	Total Solids		9	03 /27 /g7	FI.I	25.35
4-6'	13330 11	Digestion	-	•	03/28/97		
		Lead, Total	330.	mg/Kg	• •	EL	6010
B-106 S-3	15550-12	Total Solids	86.4	8	03/27/97	MNB	2540G
7-91	-	Digestion	- 1	~	03/28/97		3050
		Lead, Total	350./	mg/Kg	03/31/97	EL	6010
B-107 S-1	15550-13	Total Solids	87.6	8	03/27/97	MNB	2540G
1-3'		Digestion	 		03/28/97		3050
		Lead, Total	280.	mg/Kg	03/31/97	EL	6010
B-107 S-2	15550-14	Total Solids	87.4	*	03/27/97	MNB	2540G
6 <i>'</i>		Digestion	ļ		03/28/97		3050
·		Lead, Total	290.	mg/Kg	03/31/97	EL	6010
B-107 S-3	15550-15	Total Solids	84.7	१	03/27/97	MNB	2540G
7-9'		Digestion			03/28/97		3050
		Lead, Total	190.	mg/Kg	03/31/97	EL	6010
B-108 S-1	15550-16	Total Solids	86.2	8	03/27/97	MNB	2540G
1-3'		Digestion	ı		03/28/97	SPC	3050
		Lead, Total	450.	mg/Kg	04/02/97	EL	6010
B-108 S-2	15550-17	Total Solids	84.3	ક	03/27/97	MNB	2540G
4-6'		Digestion	1		03/28/97	SPC	3050
		Lead, Total	190.	mg/Kg	03/31/97	EL	6010
B-108 S-3	15550-18	Total Solids	88.5	8	03/27/97	MNB	2540G
7-9'		Digestion	_		03/28/97	SPC	3050
		Lead, Total	110.	mg/Kg	03/31/97	EL	6010
		a					
	l	Continued next page	• • •				•

<u> AMRO</u>

- driver - driver - driver

MRO	Environmental	Laboratory	Report

Page 3 of 6

.nple	ty	AMRO Identity	Test Parameter	Results	Units	Date of Analysis	Run by	EPA Method
i_109	ı i	15550-19	Total Solids Digestion Lead, Total	88.8	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
	S-2	15550-20	Total Solids Digestion Lead, Total	85.3 130.	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
: !! ;;;	s ɔ	Tangû ⊴,T ≥	Total *Solids Digestion Lead, Total	-88.2 280.	% mg/Kg	03/28/97 04/02/97	≅NB SPC EL	254na 3050 6010
3 □ 10		15550-22	Total Solids Digestion Lead, Total	87.9 240.	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
3=110 1-6'	S-2	15550-23	Total Solids Digestion Lead, Total	85.7 220.	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
3-110	S-3	15550-24	Total Solids Digestion Lead, Total	85.8 670.	% mg/Kg	03/27/97 03/28/97 04/02/97	MNB SPC EL	2540G 3050 6010
B=112 1 3'	s-1	15550-25	Total Solids Digestion Lead, Total	86.1 150./	% mg/Kg	03/27/97 03/28/97 03/31/97	MNB SPC EL	2540G 3050 6010
B 112 4 6'	S-2	15550-26	Total Solids Digestion Lead, Total	85.7 970.	% mg/Kg	03/27/97 03/28/97 04/02/97	MNB SPC EL	2540G 3050 6010
1112 7-9,	s-3	15550-27	Total Solids Digestion Lead, Total	82.9 5,000.	% mg/Kg	03/27/97 03/28/97 04/02/97	MNB SPC EL	2540G 3050 6010
B 113	s-1	15550-28	Total Solids Digestion Lead, Total	88.7	% mg/Kg	03/27/97 03/28/97 04/02/97	MNB SPC EL	2540G 3050 6010
			•		31 3	, ,	_	

Continued next page . . .

AMRO Envir	onmental L	aboratory Report			Page 4 of	6	:
mple	AMRO Identity	Test Parameter	Results	Units	Date of Analysis	Run by	EPA Method
B-113 S-2 4-6'	15550-29	Total Solids Digestion	88.4	*	03/27/97 03/28/97	MNB SPC	2540G 3050
B-113 S-3	15550-30	Lead, Total Total Solids	90.4	mg/Kg %	03/27/97	MNB	2540G
7-9		Digestion Lead, Total	340.	mg/Kg	03/28/97 04/02/97	SPC EL	3050 6010
1-3/	15550-21	Total Dollis Digestion	3.88**	ફ • •.	-03/27/97 03/28/97	- MNB SPC	3050
		Lead, Total	170.	mg/Kg	03/31/97	EL	6010
B-115 S-2 4-6'	15550-32	Total Solids Digestion	88.3	*	03/27/97 03/28/97	MNB SPC	2540G 3050
		Lead, Total	590.	mg/Kg	04/02/97	EL	6010
B-115 S-3 7-9'	15550-33	Total Solids Digestion	88.5	%	03/27/97 03/28/97	MNB SPC	3050
		Lead, Total	1,200.	mg/Kg	04/02/97	EL	6010
B-116 S-1	15550-34	Total Solids Digestion	88.3	*	03/27/97 03/28/97	MNB SPC	3050
		Lead, Total	300.	mg/Kg	04/02/97	EL	6010
B-117 S-1 1-3'	15550-35	Total Solids Digestion	89.4	*	03/27/97 03/28/97	MNB	2540G 3050
B-104 S-1	15550-36	Lead, Total	270.	mg/Kg	04/03/97	EL	6010
1-3'	12220-36	Total Solids Digestion	90.2	% /	03/27/97 03/28/97	MNB	2540G 3050
B-104 S-2	15550-37	Lead, Total Total Solids	270.	mg/Kg %	04/03/97	EL	6010
4-6'	15550-37	Digestion Lead, Total	87.5 270.	mg/Kg	03/27/97 03/28/97 04/03/97	MNB SPC EL	2540G 3050 6010
B-104 S-3	15550-38	Total Solids	89.5	%	03/27/97	MNB	2540G
7-9'		Digestion Lead, Total	98.	mg/Kg	03/28/97 04/03/97	SPC EL	3050 6010
		Continued next pa	age				· · · ·
							: .
							i.
			;				i

anag

.....

AMRO I	Environmental Laboratory Report			Page 5 of 6			
mple Identi		Test ty Parameter	Results	Units	Date of Analysis	Run by	EPA Method
B-114	 S-1 15550-:	39 Total Solids Digestion Lead, Total	86.8 390. /	ક mg/Kg	03/27/97 03/28/97 04/03/97	MNB SPC EL.	2540G 3050 6010
B-114	S-2 15550-	40 Total Solids Digestion Lead, Total	87.9 790.	% mg/Kg	03/27/97 03/28/97 04/03/97	MNB SPC EL	2540G 3050 6010
114	S=3° 15556	Total Solids Digestion Lead, Total	470.	mg/Kg	-03/27/97 03/28/97 04/03/97	MNB SPC EL	2540G 3050 6010
105	S-1 15550-	Digestion Arsenic, Total Cadmium, Total Chromium, Total	90.2 7.8 2.4 38.	% mg/Kg mg/Kg	03/27/97 03/28/97 04/03/97 04/03/97	MNB SPC EL EL	2540G 3050 6010 6010
B-105	S-2 15550-	Lead, Total Mercury, Total 43 Total Solids Digestion Arsenic, Total Cadmium, Total Chromium, Total	940.7 0.321 86.7 6.2 <2.5 30.	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	04/03/97 03/28/97 03/27/97 03/28/97 04/03/97 04/03/97	EL RK MNB SPC EL EL	6010 7471 2540G 3050 6010 6010
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Lead, Total Mercury, Total	330. 0.475	mg/Kg mg/Kg	04/03/97 03/28/97	EL RK	6010 7471
P 105	S-3 15550-	744 Total Solids Digestion Arsenic, Total Cadmium, Total Chromium, Total Lead, Total Mercury, Total	87.4 2.6 <2.5 14. 49. 0.332	% mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	04/03/97	MNB SPC EL EL EL EL	
	i [- ·		-	· •		

.

Continued next page . . .

MRO	Environmental	L	aboratory	Report
------------	---------------	---	-----------	--------

Page 6 of 6

							<u> </u>
mple _entity	AMRO Identity	Test Parameter	Results	Units	Date of Analysis	Run by	EPA Method
3-111 S-1	15550-45	Total Solids	89.4	ક	03/27/97	MNB	2540G
1-3'		Digestion		-	03/28/97		3050
		Arsenic, Total	5.4	mg/Kg	• •		6010
		Cadmium, Total	<2.4	mg/Kg		\mathbf{EL}_{r}	6010
		Chromium, Total	21.	mg/Kg	04/03/97		6010
		Lead, Total	200.	mg/Kg			6010
		Mercury, Total	0.206		• •	RK	7471
B-111 S-2	15550-46	Total Solids	90.6	ક્ષ	03/27/97	MNB	2540G
4-6'		/Digestion			03/20/9.	JPC	3050-
		'Arsenic, Total	6.2	mg/Kg	04/03/97	\mathbf{EL}	6010
		Cadmium, Total	<2.4	mg/Kg	04/03/97		6010
		Chromium, Total	28.	mg/Kg	04/03/97	\mathbf{EL}	6010
		Lead, Total	230. 🎽	mg/Kg	04/03/97	\mathbf{EL}	6010
		Mercury, Total	0.549	mg/Kg	04/04/97	RK	7471
B-111 S-3	15550-47	Total Solids	85.5	8	03/27/97	MNB	2540G
7-9'		Digestion	1		03/28/97	SPC	3050
		Arsenic, Total	6.0	mg/Kg	04/03/97	\mathbf{EL}	6010
		Cadmium, Total		mg/Kg	04/03/97	\mathbf{EL}	6010
		Chromium, Total		mg/Kg		\mathbf{EL}	6010
		Lead, Total				\mathbf{EL}	6010
		Mercury, Total	0.355	mg/Kg	04/04/97	RK	7471
			İ				r ar

Results are in dry weight.

All analyses performed in accordance with:

USEPA Methods of Chemical Analysis for Water & Waste.

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992. and USEPA SW846 Manual, 3rd. ed.

The following standard abbreviations and conventions apply throughout all sections:

< = 'Less than' followed by the detection limit.

> = 'Greater than'

Certified by:

Paula Benham

AMRO

 \prod

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-101 S-1 1-2.5'

AMRO I.D.: 15550-01

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)		
Gasoline	ND	56		
Kerosene	ND	56		
Mineral Spirits	ND	56		
Fuel Oil #2/Diesel	ND	56		
Fuel Oil #4	ND	56		
Fuel Oil #6	ND	110		
Motor Oil/Hydraulic Oil	ND	56		
Unidentified Hydrocarbons	500 *	56		

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 88.1%. Results are in dry weight.

Comments: * = Quantified as Motor Oil

Carbon Range: C20 to C32

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

1/ 501

, 50.00

Nancy Stewart

Petroleum Hydrocarbons by Gas Chromatography
EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-101 S-2 4.5'-6.5'

AMRO I.D.: 15550-02

Date sampled: 03/24/97 Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/05/97

Sar. : /mype: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	53
Kerosene	ND	53
Mineral Spirits	ND	53
Fuel Oil #2/Diesel	ND	53
Fuel Oil #4	ND	53
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	350	53

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 90.6%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

anto

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-115 S-1 1-3'

AMRO I.D.: 15550-31

Date sampled: 03/26/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Sample: Cty/Type: 1/Sclid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	54
Kerosene	ND	54
Mineral Spirits	ND	54
Fuel Oil #2/Diesel	ND	54
Fuel Oil #4	ND	54
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	140	54

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).
Solid Content = 88.8%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: SWC

Approved by

Nancy Stewart

**

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-115 S-2 4-6'

AMRO I.D.: 15550-32

Date sampled: 03/26/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Samp? - 1/501-3

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	56
Kerosene	⊦ ND	56
Mineral Spirits	ND	56
Fuel Oil #2/Diesel	; ND	56
Fuel Oil #4	ND	56
Fuel Oil #6	: ND	110
Motor Oil/Hydraulic Oil	280	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 88.3%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

Art a

4MBO

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-115 S-3 7-9'

AMRO I.D.: 15550-33

Date sampled: 03/26/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

"Sample Oty/Type: 1/2012

	Test Parameter	Results (mg/kg)	<pre>**Reporting Limit(mg/kg)</pre>
	Gasoline	D D	560
1	Kerosene	ИD	560
	Mineral Spirits	ND	560
!	Fuel Oil #2/Diesel	ND	560
	Fuel Oil #4	ND	560
	Fuel Oil #6	ND	1,100
	Motor Oil/Hydraulic Oil	2,400	560

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 88.5%. Results are in dry weight.

Comments:

** = The reporting limit has been elevated due to sample dilution (04/07/97).

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

. p. e.j. . .

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-116 S-1 1-3'

AMRO I.D.: 15550-34

Date sampled: 03/26/97 Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solia

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline Kerosene Mineral Spirits Fuel Oil #2/Diesel Fuel Oil #4 Fuel Oil #6 Motor Oil/Hydraulic Oil	ND ND ND ND ND ND	56 56 56 56 56 110 56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 88.3%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Alle

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-117 S-1 1-3'

AMRO I.D.: 15550-35

Date sampled: 03/26/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

'Sample way , as: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	54
Kerosene	, ND	54
Mineral Spirits	ND	54
Fuel Oil #2/Diesel	ND	54
Fuel Oil #4	ND	54
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	110	54

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 89.4%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

A

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-104 S-1 1-3'

AMRO I.D.: 15550-36

Date | sampled: 03/24/97 | Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/07/97 Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	54
Kerosene	ND	54
Mineral Spirits	ND	54
Fuel Oil #2/Diesel	ND	54
Fuel Oil #4	ND	54
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	3 20	54

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 90.2%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit

Analyzed By: SWC

Approved by

Nancy Stewart

P * 5 * 4



Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-104 S-2 4-6'

AMRO I.D.: 15550-37

Date sampled: 03/24/97 Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/07/97 Sample Qt, 7, 7 1/03/16

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	56
Kerosene	ND	56
Mineral Spirits	ND	56
Fuel Oil #2/Diesel	ND	56
Fuel Oil #4	ND	56
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	240	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 87.5%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

۽ جيو

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-104 S-3 7-9'

AMRO I.D.: 15550-38

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	55
Kerosene	' ND	55
Mineral Spirits	ND	55
Fuel Oil #2/Diesel	ND	55
Fuel Oil #4	ND	55
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	490	55

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 89.5%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: SWC

Approved by

AMED

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-114 S-1 1-3'

AMRO I.D.: 15550-39

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

- Sample Qty/Type: 1/Soild

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	58
Kerosene	ND	58
Mineral Spirits	ND	58
Fuel Oil #2/Diesel	ND	58
Fuel Oil #4	ND	58
Fuel Oil #6	ND	120
Motor Oil/Hydraulic Oil	480	58

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 86.8%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit,

Analyzed By: <u>SWC</u>

Approved by

Nangy Stowart

-

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-114 S-2 4-6'

AMRO I.D.: 15550-40

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

Cample Miny 112 123lid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	56
Kerosene	ND	56
Mineral Spirits	ND	56
Fuel Oil #2/Diesel	ND	56
Fuel Oil #4	ND	56
Fuel Oil #6	! ND	110
Motor Oil/Hydraulic Oil	910	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 87.9%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit,

Analyzed By: <u>SWC</u>

Approved by

ANTO

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-114 S-3 7-9'

AMRO I.D.: 15550-41

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

cample wei/Type. 1/Solia

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	55
Kerosene	ND	55
Mineral Spirits	ND	55
Fuel Oil #2/Diesel	ND	55
Fuel Oil #4	ND	55
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	450	55

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 87.4%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit,

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

· *** 4.

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-105 S-1 1-3'

AMRO I.D.: 15550-42

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

Sample Qty/Type: 1/20114

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	, ND	54
Kerosene	ND	54
Mineral Spirits	ND	54
Fuel Oil #2/Diesel	ND	54
Fuel Oil #4	, ND	54
Fuel Oil #6	, ND	110
Motor Oil/Hydraulic Oil	140	54

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).
Solid Content = 90.2%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

ANTO

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-105 S-2 4-6'

AMRO I.D.: 15550-43

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

Sample Oty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	57
Kerosene	ND	57
Mineral Spirits	ND	57
Fuel Oil #2/Diesel	ND	57
Fuel Oil #4	ND	57
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	230	57

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 86.7%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: SWC A

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-105_S-3_7-9'

AMRO I.D.: 15550-44

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

« Sat με ένυτη/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	56 ⁻
Kerosene	ND	56
Mineral Spirits	ND	56
Fuel Oil #2/Diesel	ND	56
Fuel Oil #4	ND	56
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	1 80	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 87.4%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by



Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-111 S-1 1-3'

AMRO I.D.: 15550-45

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

Comple Cty/Type: w/Subia

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	56
Kerosene	ND	56
Mineral Spirits	ND	56
Fuel Oil #2/Diesel	ND	56
Fuel Oil #4	ND	56
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	190	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 89.4%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-111 S-2 4-6'

AMRO I.D.: 15550-46

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

Sample world in it

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	54
Kerosene	ND	54
Mineral Spirits	ND	54
Fuel Oil #2/Diesel	ND	54
Fuel Oil #4	ND	54
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	200	54

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 90.6%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit

Analyzed By: <u>SWC</u>

Approved by

LABORATORY REPORT

è ii.

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-111 S-3 7-9'

AMRO I.D.: 15550-47

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/08/97

Sample Qty/Type:_____

Test Parameter	Results (mg/kg)	<pre>**Reporting Limit(mg/kg)</pre>
Gasoline	ND	110
Kerosene	ND	110
Mineral Spirits	ND	110
Fuel Oil #2/Diesel	ND	110
Fuel Oil #4	ND	110
Fuel Oil #6	ND	220
Motor Oil/Hydraulic Oil	1,300	110

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 85.5%. Results are in dry weight.

Comments:

** = The reporting limit has been elevated due to sample dilution (04/08/97).

ND = Not Detected at or above the reporting limit

Analyzed By: <u>SWC</u>

Approved by

Prof. 8"

EPA Method 8081 PCB's

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-104 S-1 1-3'

AMRO I.D.: 15550-36

Date sampled: 03/24/97 Date received: 03/26/97

Date prepared: 04/04/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter		Results (ug/Kg)	Reporting Limit(ug/Kg)
PCB-1221		ND	27
PCB-1232		ND	27
PCB-1242	(1016)	ND	27
PCB-1248		ND	27
PCB-1254		ND	27
PCB-1260		-30	27

Solid Content = 90.2%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>RF</u>

Approved by

ANTO

LABORATORY REPORT

EPA Method 8081 PCB's

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-104 S-2 4-6'

AMRO I.D.: 15550-37

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qtv/Type: 1/Solid

Test Parameter	Results (ug/Kg)	Reporting Limit(ug/Kg)
PCB-1221		28
PCB-1232	ND	28
PCB-1242 (1016)	ND	28
PCB-1248	ND	28
PCB-1254	ND	28
PCB-1260	ND	28

Solid Content = 87.5%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: RF

Approved by

Nancy Stewart

FOR

100 2

EPA Method 8081 PCB's

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-104 S-3 7-9'

AMRO I.D.: 15550-38

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solid_

Test Parameter		Results (ug/Kg)	Reporting Limit(ug/Kg)
PCB-1221		ND	27
PCB-1232		ND	27
PCB-1242	(1016)	ND	27
PCB-1248		, ND	27
PCB-1254		ND	27
PCB-1260		ND	27

Solid Content $\frac{1}{2}$ 89.5%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: RF

Approved by

ANRO

LABORATORY REPORT

EPA Method 8081 PCB's

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-114 S-1 1-3'

AMRO I.D.: 15550-39

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/Kg)	Reporting Limit(ug/Kg)
PCB-1221	ND	28
PCB-1232	ND	28
PCB-1242 (1016)	ND	28
PCB-1248	ND	28
PCB-1254	ND	28
PCB-1260	ND	28

Solid Content = 86.8%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: RF

Approved by

Nancy Stewart

EPA Method 8081 PCB's

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-114 S-2 4-6'

AMRO I.D.: 15550-40

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Oty/Type: 1/Solid

Test Parameter		Results (ug/Kg)	Reporting Limit(ug/Kg)
PCB-1221 PCB-1232		ND ND	28 28
PCB-1242	(1016)	ND	28
PCB-1248		ND	28
PCB-1254		ND	28
PCB-1260		ND	28

Solid Content = 87.9%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: RF

Approved by

{

LABORATORY REPORT

EPA Method 8081 PCB's

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-114 S-3 7-9'

AMRO I.D.: 15550-41

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/Kg)	Reporting Limit(ug/Kg)
PCB-1221	ND	28
PCB-1232	ND	28
PCB-1242 (1016)	57	28
PCB-1248	ND	28
PCB-1254	ND	28
PCB-1260	ND	. 28

Solid Content = 87.4%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: RF

Approved by

Nancy Stewart

FOX

-E

anso

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-101 S-1 1-2.5'

AMRO I.D.: 15550-01

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	ND	140
2-Methylnaphthalene	ND	140
Acenaphthylene	ND	140
Acenaphthene	300	140
Fluorene	240	140
Phenanthrene	3,200	140
Anthracene	670	140
Fluoranthene	3,800	140
Pyrene	3,800	140
Benzo[a]anthracene	1,800	140
Chrysene	1,900	140
Benzo[b]fluoranthene	1,300	140
Benzo(k)fluoranthene	1,500	140
Benzo(a)pyrene	1,800	140
Dibenzo[a,h]anthracene	480	280
<pre>Benzo[g,h,i]perylene</pre>	1,600	280
Indeno[1,2,3-cd]pyrene	1,300	280

Solid Content = 88.1%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

Analyzed By: NM

Approved by (

مريو

Nancy Stewart

جه پياني.

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-101 S-2 4.5-6.5'

AMRO I.D.: 15550-02

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	280	140
2-Methylnaphthalene	320	140
Acenaphthylene	220	140
Acenaphthene	5'60	140
Fluorene	640	140
Phenanthrene	5,400	140
Anthracene	1,300	140
Fluoranthene	5,700	140
Pyrene	5,800	140
Benzo[a]anthracene	2,800	140 ′
Chrysene	2,900	140
Benzo[b]fluoranthene	1,700	140
Benzo[k]fluoranthene	1,900	140
Benzo[a]pyrene	2,600	140
Dibenzo[a,h]anthracene	750	270
Benzo[g,h,i]perylene	2,200	270
Indeno[1,2,3-cd]pyrene	1,800	270

Solid Content = 90.6%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

Analyzed By: NM

Approved by

ANTO

i

- Tank

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-101 S-3 7-9'

AMRO I.D.: 15550-03

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene		30
2-Methylnaphthalene	ND	30
Acenaphthylene	ND	30
Acenaphthene	ND	30
Fluorene	ND	30
Phenanthrene	60	30
Anthracene	ND	30
Fluoranthene	42	30
Pyrene	38	30
Benzo(a)anthracene	ND	30
Chrysene	ИД	30
Benzo[b]fluoranthene	ND	30
Benzo[k]fluoranthene	ND	30
Benzo[a]pyrene	ND	30
Dibenzo[a,h]anthracene	ND	60
Benzo[g,h,i]perylene	ND	60
Indeno[1,2,3-cd]pyrene	ND	60

Solid Content = <u>81.7</u>%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

Analyzed By: NM

Approved by

Dame Halad

EPA Method 8270B *Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-102 S-1 1-3'

AMRO I.D.: 15550-04

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	550	280
2-Methylnaphthalene	ND	280
Acenaphthylene	ND	280
Acenaphthene	800	280
Fluorene	820	280
Phenanthrene	7,900	280
Anthracene	2,100	280
Fluoranthene	9,600	280
Pyrene	8,700	280
Benzo[a]anthracene	4,300	280
Chrysene	4,300	280
Benzo[b]fluoranthene	2,900	280
Benzo[k]fluoranthene	2,900	280
Benzo[a]pyrene	4,000	280
Dibenzo[a,h]anthracene	1,100	560
Benzo[g,h,i]perylene	2,800	560
Indeno[1,2,3-cd]pyrene	3,200	560

Solid Content = 89.5%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

The reporting limits have been elevated due to sample dilution on 04/04/97.

Analyzed By: NM

Approved by

Xamel Stock

FOR

inic

.

, and the second

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-102 S-2 4-6'

AMRO I.D.: 15550-05

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
	======================================	28
2-Methylnaphthalene	150	28
Acenaphthylene	96	28
Acenaphthene	410	28
Fluorene	420	28
Phenanthrene	4,600	280**
Anthracene	870	28
Fluoranthene	5,600	280**
Pyrene	4,300	280**
Benzo[a]anthracene	1,900	28
Chrysene	1,900	28
Benzo[b]fluoranthene	1,200	28
Benzo[k]fluoranthene	1,300	28
Benzo[a]pyrene	1,800	28
Dibenzo[a,h]anthracene	500	55
Benzo[g,h,i]perylene	1,400	55
Indeno[1,2,3-cd]pyrene	1,300	55

Solid Content = 88.1%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/07/97.

Analyzed By: NM

Approved by _

Nancy Stewart

FOR

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-102 S-3 7-9'

AMRO I.D.: 15550-06

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	<pre>**Reporting Limit(ug/kg)</pre>
Naphthalene	 250	======================================
2-Methylnaphthalene	160	57
Acenaphthylene	140	57
Acenaphthene	470	57
Fluorene	510	57
Phenanthrene	6,000	570
Anthracene	1,200	57
Fluoranthene	7,400	570
Pyrene	5,800	570
Benzo[a]anthracene	2,500	57
Chrysene	2,400	57
Benzo[b]fluoranthene	1,600	57
Benzo[k]fluoranthene	1,600	57
Benzo[a]pyrene	2,300	57
Dibenzo[a,h]anthracene	570	110
Benzo[g,h,i]perylene	1,400	110
<pre>Indeno[1,2,3-cd]pyrene</pre>	1,400	110

Solid Content = 85.2%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/04/97 and 04/07/97.

Analyzed By: NM

Approved by

ANTO

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-103 S-1 1-3'

AMRO I.D.: 15550-07

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	61	55
2-Methylnaphthalene	ND	55
Acenaphthylene	ND	55
Acenaphthene	200	55
Fluorene	160	55
Phenanthrene	1,800	55
Anthracene	400	55
Fluoranthene	2,000	55
Pyrene	2,100	55
Benzo[a]anthracene	1,000	55
Chrysene	1,100	55
Benzo[b]fluoranthene	650	55
Benzo[k]fluoranthene	680	55
Benzo[a]pyrene	980	55
Dibenzo[a,h]anthracene	250	110
Benzo[g,h,i]perylene	640	110
Indeno[1,2,3-cd]pyrene	620	110

Solid Content = 89.7%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/04/97.

Analyzed By: NM

mary.

Approved by

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-103 S-2 4-6'

AMRO I.D.: 15550-08

Date sampled: 03/24/97 Date received: 03/26/97
Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/8

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	190	55
2-Methylnaphthalene	120	55
Acenaphthylene	ND	55
Acenaphthene	450	-55
Fluorene	350	55
Phenanthrene	4,600	270
Anthracene	810	55
Fluoranthene	5,200	270
Pyrene	4,200	270
Benzo[a]anthracene	1,800	55
Chrysene	1,800	55
Benzo[b]fluoranthene	1,200	55
Benzo[k]fluoranthene	1,300	55
Benzo[a]pyrene	1,700	55
Dibenzo[a,h]anthracene	400	55
Benzo[g,h,i]perylene	970	55
Indeno[1,2,3-cd]pyrene	980	55

Solid Content = 87.5%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/04/97 and 04/07/97.

Nancy-Stewart

Analyzed By: NM

Approved by _

for

ANTIO

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-103 S-3 7-9'

AMRO I.D.: 15550-09

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	48	27
2-Methylnaphthalene	32	27
Acenaphthylene	ND	27
Acenaphthene	ND	27
Fluorene	ND	27
Phenanthrene	190	27
Anthracene	30	27
Fluoranthene	180	27
Pyrene	160	27
Benzo[a]anthracene	64	27
Chrysene	94	27
Benzo[b]fluoranthene	50	27
Benzo[k]fluoranthene	39	27
Benzo[a]pyrene	46	27
Dibenzo[a,h]anthracene	ND	55
Benzo[g,h,i]perylene	ND	55
Indeno[1,2,3-cd]pyrene	ND	55

Solid Content = 89.6%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

Analyzed By: NM

Approved by (

Nancy Stewart

Cor

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-106 S-1 1-3'

AMRO I.D.: 15550-10

Date sampled: 03/24/97 Date received: 03/26/97

Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	250	54
2-Methylnaphthalene	150	54
Acenaphthylene	110	54
Acenaphthene	390	54
Fluorene	410	54
Phenanthrene	5,100	270
Anthracene	960	54
Fluoranthene	5,800	270
Pyrene	4,800	270
Benzo[a]anthracene	1,900	54
Chrysene	1,900	54
Benzo[b]fluoranthene	1,200	54
Benzo[k]fluoranthene	1,300	54
Benzo[a]pyrene	1,800	54
Dibenzo[a,h]anthracene	410	110
Benzo[g,h,i]perylene	970	110
Indeno[1,2,3-cd]pyrene	980	110

Solid Content = 88.5%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/04/97 and 04/07/97.

Analyzed By: NM

Approved by

ANTE



EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-106 S-2 4-6'

AMRO I.D.: 15550-11

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	560	57
2-Methylnaphthalene	300	57
Acenaphthylene	160	. 57
Acenaphthene	910	57
Fluorene	820	57
Phenanthrene	8,900	570
Anthracene	1,700	57
Fluoranthene	9,700	570
Pyrene	7,900	570
Benzo[a]anthracene	3,800	570
Chrysene	4,000	570
Benzo[b]fluoranthene	2,000	57
Benzo[k]fluoranthene	2,100	57
Benzo[a]pyrene	3,600	570
Dibenzo[a,h]anthracene	640	110
Benzo[g,h,i]perylene	1,500	110
<pre>Indeno[1,2,3-cd]pyrene</pre>	1,500	110

Solid Content = 87.4%. Results are in dry weight. ND = Not Detected at or above the reporting limit. * = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/07/97 and 04/07/97.

Analyzed By: NM

Approved by

Nancy Stewart

CO1

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-106 S-3 7-9'

AMRO I.D.: 15550-12

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	270	57
2-Methylnaphthalene	150	57
Acenaphthylene	110	57
Acenaphthéne	470	57
Fluorene	440	57
Phenanthrene	4,600	290
Anthracene	980	57
Fluoranthene	5,300	290
Pyrene	4,600	290
Benzo[a]anthracene	1,900	57
Chrysene	1,900	57
Benzo[b]fluoranthene	1,200	57
Benzo[k]fluoranthene	1,300	57
Benzo[a]pyrene	1,800	57
Dibenzo[a,h]anthracene	340	110
Benzo[g,h,i]perylene	790	110
Indeno[1,2,3-cd]pyrene	800	110

Solid Content = 86.4%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/05/97 and 04/07/97.

Analyzed By: <u>NM</u>

Approved by (

4166

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-107 S-1 1-3'

AMRO I.D.: 15550-13

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	<pre>**Reporting Limit(ug/kg)</pre>
Naphthalene	**************************************	= <u>====================================</u>
2-Methylnaphthalene	ND	56
Acenaphthylene	ND	56
Acenaphthene	170	56
Fluorene	140	56
Phenanthrene	1,700	56
Anthracene	390	56
Fluoranthene	2,100	56
Pyrene	1,900	56
Benzo[a]anthracene	1,100	56
Chrysene	1,100	56
Benzo[b]fluoranthene	730	56
Benzo[k]fluoranthene	740	56
Benzo[a]pyrene	1,000	56
Dibenzo[a,h]anthracene	210	110
Benzo[g,h,i]perylene	480	110
Indeno[1,2,3-cd]pyrene	510	110

Solid Content = 87.6%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/05/97.

Analyzed By: NM

-

Approved by

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-107 S-2 4-6'

AMRO I.D.: 15550-14

Date sampled: 03/25/97 Date received: 03/26/97

Date prepared: 04/03/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	200	110
2-Methylnaphthalene	140	110
Acenaphthylene	ND	110
Acenaphthene	410	110
Fluorene	380	110
Phenanthrene	4,000	110
Anthracene	980	110
Fluoranthène	4,100	110
Pyrene	3,700	110
Benzo[a]anthracene	2,100	110
Chrysene	2,100	110
Benzo[b]fluoranthene	1,400	110
Benzo[k]fluoranthene	1,500	110
Benzo[a]pyrene	1,900	110
Dibenzo[a,h]anthracene	330	220
Benzo[g,h,i]perylene	730	220
<pre>Indeno[1,2,3-cd]pyrene</pre>	810	220

Solid Content $\frac{1}{7}$ 87.4%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/05/97.

Analyzed By: NM

Approved by

Name Moddard

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-107 S-3 7-9'

AMRO I.D.: 15550-15

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	400	58
2-Methylnaphthalene	290	58
Acenaphthylene	120	58
Acenaphthene	1,000	58
Fluorene	880	58
Phenanthrene	9,700	580
Anthracene	4,900	58
Fluoranthene	11,000	580
Pyrene	9,000	580
Benzo[a]anthracene	4,500	580
Chrysene	4,700	580
Benzo[b]fluoranthene	2,400	58
Benzo[k]fluoranthene	2,500	58
Benzo[a]pyrene	4,100	580
Dibenzo[a,h]anthracene	660	120
Benzo[g,h,i]perylene	1,500	120
<pre>Indeno[1,2,3-cd]pyrene</pre>	1,600	120

Solid Content = 84.7%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/05/97 and 04/07/97.

Analyzed By: NM

Î

Approved by

Nancy Stewart

FOR

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-108 S-1 1-3'

AMRO I.D.: 15550-16

Date sampled: 03/25/97 Date received: 03/26/97

Date prepared: 04/03/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	70	== <u></u> =================================
2-Methylnaphthalene	: ND	58
Acenaphthylene	: ND	58
Acenaphthene	220	58
Fluorene	180	58
Phenanthrene	1,800	58
Anthracene	4 30	58
Fluoranthene	2,300	58
Pyrene	2,000	58
Benzo[a]anthracene	1,100	58
Chrysene	1,100	58
Benzo[b]fluoranthene	7,90	58
Benzo[k]fluoranthene	780	58
Benzo[a]pyrene	1,100	58
Dibenzo[a,h]anthracene	200	120
Benzo[g,h,i]perylene	470	120
<pre>Indeno[1,2,3-cd]pyrene</pre>	510	120

Solid Content = 86.2%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/05/97.

Analyzed By: NM

Approved by

ANTI

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-108 S-2 4-6'

AMRO I.D.: 15550-17

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	190	30
2-Methylnaphthalene	96	30
Acenaphthylene	90	30
Acenaphthene	210	30
Fluorene	220	30
Phenanthrene	3,000	150**
Anthracene	400	30
Fluoranthene	3,600	150**
Pyrene	2,800	150**
Benzo[a]anthracene	1,100	30
Chrysene	1,200	30
Benzo[b]fluoranthene	800	30
Benzo[k]fluoranthene	820	30
Benzo[a]pyrene	1,100	30
Dibenzo[a,h]anthracene	190	59
<pre>Benzo[g,h,i]perylene</pre>	140	59
<pre>Indeno[1,2,3-cd]pyrene</pre>	480	5 9

Solid Content = <u>84.3%</u>. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/07/97

Analyzed By: NM

Approved by (

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-108 S-3 7-9'

AMRO I.D.: 15550-18

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	ND	55
2-Methylnaphthalene	ND	55
Acenaphthylene	ND	55
Acenaphthene	57	55
Fluorene	ND	55
Phenanthrene	600	55
Anthracene	150	55
Fluoranthene	670	55
Pyrene	570	55
Benzo[a]anthracene	350	55
Chrysene	370	55
Benzo[b]fluoranthene	250	55
Benzo[k]fluoranthene	270	55
Benzo[a]pyrene	340	55
Dibenzo[a,h]anthracene	ND	110
Benzo[g,h,i]perylene	110	110
Indeno[1,2,3-cd]pyrene	120	110

Solid Content = 88.5%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/05/97

Analyzed By: <u>NM</u>

Approved by

anist

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-109 S-1 1-3'

AMRO I.D.: 15550-19

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/05/97

Sample Oty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	280	54
2-Methylnaphthalene	170	54
Acenaphthylene	88	54
Acenaphthene	480	54
Fluorene	480	54
Phenanthrene	5,400	270
Anthracene	1,100	54
Fluoranthene	6,000	270
Pyrene	5,000	270
Benzo[a]anthracene	2,000	54
Chrysene	2,000	54
Benzo[b]fluoranthene	1,300	54
Benzo[k]fluoranthene	1,500	54
Benzo[a]pyrene	1,900	54
Dibenzo[a,h]anthracene	290	110
Benzo[g,h,i]perylene	580	110
<pre>Indeno[1,2,3-cd]pyrene</pre>	670	110

Solid Content = 88.8%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/05/97 and 04/07/97.

Analyzed By: NM

Approved by

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-109 S-2 4-6'

AMRO | I.D.: 15550-20

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/501id ___

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	290	58
2-Methylnaphthalene	170	58
Acenaphthylene	83	58
Acenaphthene	640	58
Fluorene	640	58
Phenanthrene	6,700	290
Anthracene	1,300	58
Fluoranthene	8,000	290
Pyrene	6,300	290
Benzo(a)anthracene	2,700	58
Chrysene	2, 700	58
Benzo[b]fluoranthene	1,900	58
Benzo[k]fluoranthene	2,100	58
Benzo[a]pyrene	2,500	58
Dibenzo[a,h]anthracene	400	120
Benzo[g,h,i]perylene	800	120
Indeno[1,2,3-cd]pyrene	920	120

Solid Content = 85.3%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/05/97 and 04/07/97

Analyzed By: NM

Approved by

ANHO

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-109 S-3 7-9'

AMRO I.D.: 15550-21

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Results (ug/kg)	**Reporting Limit(ug/kg)
320	56
150	56
92	56
440	56
430	56
4,900	280
1,000	56
5,600	280
5,400	280
1,900	56
2,000	56
1,800	56
1,800	56
2,000	56
250	110
• 550	110
620	110
	(ug/kg) 320 150 92 440 430 4,900 1,000 5,600 5,400 1,900 2,000 1,800 1,800 2,000 250 550

Solid Content = 88.2%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/04/97 and 04/07/97;

Analyzed By: NM

Approved by

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-110 S-1 1-3'

AMRO I.D.: 15550-22

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Oty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	110	55
2-Methylnaphthalene	69	55
Acenaphthylene	'70	55
Acenaphthene	290	55
Fluorene	260	55
Phenanthrene	2,400	55
Anthracene	670	55
Fluoranthene	4,500	280
Pyrene	4,200	280
Benzo[a]anthracene	1,700	55
Chrysene	1,800	55
Benzo[b]fluoranthene	1,800	55
Benzo[k]fluoranthene	1,700	55
Benzo[a]pyrene	1,700	55
Dibenzo[a,h]anthracene	210	110
Benzo[g,h,i]perylene	430	110
Indeno[1,2,3-cd]pyrene	470	110

Solid Content = 87.9%. Results are in dry weight. ND = Not Detected at or above the reporting limit. * = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/04/97 and 04/07/97

Analyzed By: NM

Approved by

AVITO

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-110 S-2 4-6'

AMRO I.D.: 15550-23

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

*************************		~~~~~	
Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)	
Naphthalene	110	29	
2-Methylnaphthalene	61	29	
Acenaphthylene	59	29	
Acenaphthene	190	29	
Fluorene	200	29	
Phenanthrene	2,300	290**	
Anthracene	460	29	
Fluoranthene	3,100	290**	
Pyrene	2,800	290**	
Benzo[a]anthracene	1,100	29	
Chrysene	1,100	29	
Benzo[b]fluoranthene	1,200	29	
Benzo[k]fluoranthene	1,200	29	
Benzo[a]pyrene	1,200	29	
Dibenzo[a,h]anthracene	120	58	
Benzo[g,h,i]perylene	270	58	
<pre>Indeno[1,2,3-cd]pyrene</pre>	290	58	
- · · · · · · · · · · · · · · · · · · ·			

Solid Content = 85.7%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/07/97.

Analyzed By: <u>NM</u>

Approved by

me Tooks &

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-110 S-3 7-9'

AMRO I.D.: 15550-24

Date prepared: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	ND	290
2-Methylnaphthalene	' ND	290
Acenaphthylene	ND	290
Acenaphthene	490	290
Fluorene	630	290
Phenanthrene	5,000	290
Anthracene	1,200	290
Fluoranthene	5,300	290
Pyrene	6,600	290
Benzo[a]anthracene	2,500	290
Chrysene	2,700	290
Benzo[b]fluoranthene	2,500	290
Benzo[k]fluoranthene	2,700	290
Benzo[a]pyrene	2,500	290
Dibenzo[a,h]anthracene	ND	580
Benzo[g,h,i]perylene	520	580
Indeno[1,2,3-cd]pyrene	580	580

Solid Content = 85.8%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/04/97.

Analyzed By: NM

Approved by

ANAS

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-112 S-1 1-3'

AMRO I.D.: 15550-25

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	210	56
2-Methylnaphthalene	. 120	56
Acenaphthylene	82	56
Acenaphthene	460	56
Fluorene	450	56
Phenanthrene	5,400	280
Anthracene	890	56
Fluoranthene	6,200	280
Pyrene	5,900	280
Benzo[a]anthracene	2,200	56
Chrysene	2,300	· 56
Benzo[b]fluoranthene	2,200	56
Benzo[k]fluoranthene	2,400	· 56
Benzo[a]pyrene	2,200	56
Dibenzo[a,h]anthracene	250	110
Benzo(g,h,i)perylene	530	110
Indeno[1,2,3-cd]pyrene	600	110

Solid Content = 86.1%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/04/97 and 04/07/97.

Analyzed By: NM

Approved by

FOR

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-112 S-2 4-6'

AMRO I.D.: 15550-26

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	77	29
2-Methylnaphthalene	50	29
Acenaphthylene	42	29
Acenaphthene	160	29
Fluorene	170	29
Phenanthrene	1,300	29
Anthracene	400	29
Fluoranthene	2,100	58**
Pyrene	2,200	58**
Benzo[a]anthracene	8;40	29
Chrysene	9;00	29
Benzo[b]fluoranthene	8!3 0	29
Benzo[k]fluoranthene	880	29
Benzo[a]pyrene	8:10	29
Dibenzo[a,h]anthracene	81	58
Benzo[g,h,i]perylene	190	58
Indeno[1,2,3-cd]pyrene	210	58

Solid Content $\frac{1}{2}$ 85.7%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/07/97.

Analyzed By: <u>NM</u>

Approved by

Xame Stewart

avho

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-112 S-3 7-9'

AMRO I.D.: 15550-27

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	14,000	7,500**
2-Methylnaphthalene	4,100	150
Acenaphthylene	770	150
Acenaphthene	20,000	7,500**
Fluorene	17,000	7,500**
Phenanthrene	110,000	7,500**
Anthracene	590	150
Fluoranthene	96,000	7,500**
Pyrene	80,000	7,500**
Benzo[a]anthracene	39,000	7,500**
Chrysene	40,000	7,500**
Benzo[b]fluoranthene	29,000	7,500**
Benzo[k]fluoranthene	29,000	7,500**
Benzo[a]pyrene	35,000	7,500**
Dibenzo[a,h]anthracene	3,000	300
Benzo[g,h,i]perylene	6,400	300
<pre>Indeno[1,2,3-cd]pyrene</pre>	7,200	300

Solid Content = 82.9%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/07/97.

Analyzed By: <u>NM</u>

Approved by

Namey Stewart

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-113 S-1 1-3'

AMRO I.D.: 15550-28

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	360	54
2-Methylnaphthalene	280	54
Acenaphthylene	290	54
Acenaphthene	1,100	54
Fluorene	1,000	54
Phenanthrene	12,000	540
Anthracene	1,900	54
Fluoranthene	13,000	540
Pyrene	13,000	540
Benzo[a]anthracene	6,100	540
Chrysene	6,600	540
Benzo[b]fluoranthene	4,800	540
Benzo[k]fluoranthene	5,000	540
Benzo[a]pyrene	5,600	540
Dibenzo[a,h]anthracene	490	110
Benzo[g,h,i]perylene	1,100	110
Indeno[1,2,3-cd]pyrene	1,100	110

Solid Content = 88.7%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/04/97 and 04/07/97.

Analyzed By: NM

Approved by

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-113 S-2 4-6'

AMRO I.D.: 15550-29

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/03/97 Date analyzed: 04/04/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	350	55
2-Methylnaphthalene	220	55
Acenaphthylene	470	55
Acenaphthene	860	55
Fluorene	820	55
Phenanthrene	10,000	550
Anthracene	2,100	55
Fluoranthene	15,000	550
Pyrene	15,000	550
Benzo[a]anthracene	8,400	550
Chrysene	8,200	550
Benzo[b]fluoranthene	5,600	550
Benzo[k]fluoranthene	6,600	550
Benzo[a]pyrene	7,300	550
Dibenzo[a,h]anthracene	700	110
Benzo[g,h,i]perylene	1,400	110
<pre>Indeno[1,2,3-cd]pyrene</pre>	1,600	110

Solid Content = 88.4%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/04/97 and 04/07/97.

Analyzed By: NM

Approved by

Nancy Stewart

) FO.2

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-113 S-3 7-9'

AMRO I.D.: 15550-30

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	1,600	54
2-Methylnaphthalene	780	54
Acenaphthylene	360	54
Acenaphthene	2,600	54
Fluorene	2,100	54
Phenanthrene	20,000	1,400
Anthracene	4,900	1,400
Fluoranthene	21,000	1,400
Pyrene	20,000	1,400
Benzo[a]anthracene	9,500	1,400
Chrysene	10,000	1,400
Benzo[b]fluoranthene	7,600	1,400
Benzo[k]fluoranthene	8,500	1,400
Benzo[a]pyrene	8,700	1,400
Dibenzo[a,h]anthracene	890	110
Benzo[g,h,i]perylene	1,800	110
Indeno[1,2,3-cd]pyrene	2,100	110

Solid Content = 90.4%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/05/97 and 04/07/97.

Analyzed By: NM_

Approved by

Nancy Stewart

COR

AMRO

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-115 S-1 1-3'

AMRO I.D.: 15550-31

Date sampled: 03/26/97 Date received: 03/26/97

Date prepared: 04/04/97 Date analyzed: 04/08/97

Staple Oty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	ND	560
2-Methylnaphthalene	ND	560
Acenaphthylene	ND	560
Acenaphthene	ND	560
Fluorene	ND	560
Phenanthrene	2,200	560
Anthracene	570	560
Fluoranthene	3,000	560
Pyrene	2,800	560
Benzo[a]anthracene	1,500	560
Chrysene	1,600	560
Benzo[b]fluoranthene	1,100	560
Benzo[k]fluoranthene	1,100	560
Benzo[a]pyrene	1,300	560
Dibenzo[a,h]anthracene	ND	1,100
Benzo[g,h,i]perylene	ND	1,100
Indeno[1,2,3-cd]pyrene	ND	1,100

Solid Content = 88.8%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/08/97.

Analyzed By: NM

Approved by

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-115 S-2 4-6'

AMRO I.D.: 15550-32

Date prepared: 03/26/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	430	56
2-Methylnaphthalene	270	56
Acenaphthylene	180	56
Acenaphthene	1,100	56
Fluorene	920	56
Phenanthrene	8,600	560
Anthracene	2,000	56
Fluoranthene	9,900	560
Pyrene	8,600	560
Benzo[a]anthracene	4,300	560
Chrysene	4,400	560
Benzo[b]fluoranthene	3,400	560
Benzo[k]fluoranthene	3,800	560
Benzo[a]pyrene	4,000	560
Dibenzo[a,h]anthracene	420	110
Benzo[g,h,i]perylene	840	110
Indeno[1,2,3-cd]pyrene	940	110

Solid Content = 88.3%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/05/97 and 04/07/97; //

Analyzed By: NM

Approved by

AMEL

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-115 S-3 7-9'

AMRO I.D.: 15550-33

Date sampled: 03/26/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	320	55
2-Methylnaphthalene	210	55
Acenaphthylene	170	55
Acenaphthene	510	55
Fluorene	540	55
Phenanthrene	4,800	550*∜
Anthracene	1,200	55
Fluoranthene	6,200	550*{
Pyrene	5,700	550*{
Benzo[a]anthracene	2,700	55
Chrysene	3,100	550±∜
Benzo[b]fluoranthene	2,000	550≉∷
Benzo[k]fluoranthene	2,300	550 * (
Benzo[a]pyrene	2,600	55 0 *
Dibenzo[a,h]anthracene	290	110 🕕
Benzo[g,h,i]perylene	650	110
Indeno[1,2,3-cd]pyrene	700	110

Solid Content = 88.5%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The report limit has been elevated due to sample dilutions on 04/05/97 and 04/07/97.

Analyzed By: NM

Approved by

Nancy Stewart

~~ 1

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-116 S-1 1-3'

AMRO I.D.: 15550-34

Date sampled: 03/26/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	380	56
2-Methylnaphthalene	230	56
Acenaphthylene	170	56
Acenaphthene	790	56
Fluorene	760	56
Phenanthrene	7,200	560**
Anthracene	1,500	56
Fluoranthene	7,600	560**
Pyrene	7,300	560**
Benzo[a]anthracene	3,300	560**
Chrysene	3,500	560**
Benzo[b]fluoranthene	2,400	560**
Benzo[k]fluoranthene	2,700	560**
Benzo[a]pyrene	3,100	560**
Dibenzo[a], h] anthracene	340	110
Benzo[g,h,i]perylene	680	110
Indeno[1,2,3-cd]pyrene	790	110

Solid Content = 88.3%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/05/97 and 04/07/97.

Analyzed By: NM

Approved by

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-117 S-1 1-3'

AMRO I.D.: 15550-35

Date sampled: 03/26/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	420	56
2-Methylnaphthalene	340	56
Acenaphthylene	250	56
Acenaphthene	1,200	56
Fluorene	1,300	56
Phenanthrene	11,000	560**
Anthracene	2,600	56
Fluoranthene	11,000	560**
Pyrene	9,900	560**
Benzo[a]anthracene	5,100	560**
Chrysene	5,200	560**
Benzo[b]fluoranthene	3,000	560**
Benzo[k]fluoranthene	3,700	560**
Benzo[a]pyrene	4,500	560**
Dibenzo[a,h]anthracene	480	110
Benzo[g,h,i]perylene	910	110
Indeno[1,2,3-cd]pyrene	1,000	110

Solid Content = 89.4%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/05/97 and 04/08/97.

Analyzed By: NM

Approved by _(

KOD

Nancy-Stewart

Z.

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-104 S-1 1-3'

AMRO I.D.: 15550-36

Date prepared: 03/24/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	700	54
2-Methylnaphthalene	400	54
Acenaphthylene	240	54
Acenaphthene	1,000	54
Fluorene	1,100	54
Phenanthrene	9,600	540**
Anthracene	2,000	54
Fluoranthene	12,000	540**
Pyrene	10,000	540**
Benzo[a]anthracene	5,500	540**
Chrysene	5,700	540**
Benzo[b]fluoranthene	4,200	540**
Benzo[k]fluoranthene	4,500	540**
Benzo[a]pyrene	5,600	540**
Dibenzo[a,h]anthracene	650	110
Benzo[g,h,i]perylene	1,400	110
Indeno[1,2,3-cd]pyrene	1,500	110

Solid Content = 90.2%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/05/97 and 04/08/97.

Analyzed By: NM

Approved by

<u> AMRO</u>

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-104 S-2 4-6'

AMRO I.D.: 15550-37

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	51	28
2-Methylnaphthalene	33	28
Acenaphthylene	41	28
Acenaphthene	140	28
Fluorene	150	28
Phenanthrene	1,200	28
Anthracene	360	28
Fluoranthene	2,000	140**
Pyrene	1,900	140**
Benzo[a]anthracene	880	28
Chrysene	840	28
Benzo[b]fluoranthene	960	28
Benzo[k]fluoranthene	1,000	28
Benzo[a]pyrene	890	28
Dibenzo[a,h]anthracene	78	55
Benzo[g,h,i]perylene	190	55
Indeno[1,2,3-cd]pyrene	200	55

Solid Content = 87.5%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/08/97.

Nancy Stewart

Analyzed By: NM

Approved by

FOR

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers
Client I.D.: 96230.A Roxbury-BRA/EDIC

B-104 S-3 7-9'

AMRO I.D.: 15550-38

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	610	55
2-Methylnaphthalene	260	55
Acenaphthylene	240	55
Acenaphthene	1,100	55
Fluorene	1,100	55
Phenanthrene	12,000	550
Anthracene	2,300	55
Fluoranthene	13,000	550
Pyrene	13,000	550
Benzo[a]anthracene	6,000	550
Chrysene	6,300	550
Benzo[b]fluoranthene	4,200	550
Benzo(k)fluoranthene	5,000	550
Benzo[a]pyrene	5,900	550
Dibenzo[a,h]anthracene	670	110
Benzo[g,h,i]perylene	1,500	110
Indeno[1,2,3-cd]pyrene	1,600	110

Solid Content = 89.5%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/05/97 and 04/08/97.

Analyzed By: NM

Approved by

AIT

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-114 S-1 1-3'

AMRO I.D.: 15550-39

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/09/97 Date analyzed: 04/09/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	иD	280
2-Methylnaphthalene	ND	280
Acenaphthylene	ND	280
Acenaphthene	1,000	280
Fluorene	850	280
Phenanthrene	9,500	280
Anthracene	2,000	280
Fluoranthene	9,300	280
Pyrene	9,600	280
Benzo[a]anthracene	4,200	280
Chrysene	4,400	280
Benzo[b]fluoranthene	3,100	280
Benzo[k]fluoranthene	3,200	280
Benzo[a]pyrene	3,900	280
Dibenzo[a,h]anthracene	ND	570
Benzo[g,h,i]perylene	2,100	570
Indeno[1,2,3-cd]pyrene	1,800	570

Solid Content = 86.8%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/09/97.

Analyzed By: NM

Approved by

f (bade

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-114 S-2 4-6'

AMRO I.D.: 15550-40

Date sampled: 03/25/97 Date received: 03/26/97

Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	4,300	1,400
2-Methylnaphthalene	ND	1,400
Acenaphthylene	иD	1,400
Acenaphthene	9,300	1,400
Fluorene	6,400	1,400
Phenanthrene	53,000	1,400
Anthracene	13,000	1,400
Fluoranthene	66,000	1,400
Pyrene	48,000	1,400
Benzo[a]anthracene	26,000	1,400
Chrysene	26,000	1,400
Benzo[b]fluoranthene	20,000	1,400
Benzo[k]fluoranthene	21,000	1,400
Benzo[a]pyrene	25,000	1,400
Dibenzo[a,h]anthracene	5,700	2,800
Benzo[g,h,i]perylene	16,000	2,800
<pre>Indeno[1,2,3-cd]pyrene</pre>	15,000	2,800

Solid Content $\frac{1}{7}$ 87.9%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/08/97.

Analyzed By: NM

Approved by

FOR

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers
Client I.D.: 96230.A Roxbury-BRA/EDIC

B-114 S-3 7-9'

AMRO I.D.: 15550-41

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	3,000	280
2-Methylnaphthalene	1,600	280
Acenaphthylene	700	280
Acenaphthene	4,400	280
Fluorene	4,400	280
Phenanthrene	36,000	1,400
Anthracene	8,800	280
Fluoranthene	36,000	1,400
Pyrene	30,000	1,400
Benzo[a]anthracene	15,000	1,400
Chrysene	15,000	1,400
Benzo[b]fluoranthene	11,000	280
Benzo[k]fluoranthene	10,000	280
Benzo[a]pyrene	14,000	280
Dibenzo[a,h]anthracene	3,500	560
Benzo[g,h,i]perylene	10,000	560
Indeno[1,2,3-cd]pyrene	8,900	560

Solid Content = 87.4%. Results are in dry weight. ND = Not Detected at or above the reporting limit. * = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/08/97.

Analyzed By: NM_

Approved by

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-105 S-1 1-3'

AMRO I.D.: 15550-42

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	1,600	270
2-Methylnaphthalene	820	270
Acenaphthylene	350	270
Acenaphthene	1,900	270
Fluorene	1,900	270
Phenanthrene	15,000	1,400
Anthracene	3,900	270
Fluoranthene	16,000	1,400
Pyrene	14,000	1,400
Benzo[a]anthracene	8,100	270
Chrysene	8,700	270
Benzo[b]fluoranthene	5,300	270
Benzo(k)fluoranthene	5,500	270
Benzo[a]pyrene	7,500	270
Dibenzo[a,h]anthracene	2,000	540
Benzo[g,h,i]perylene	5,800	540
Indeno[1,2,3-cd]pyrene	4,800	540

Solid Content = 90.2%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilutions on 04/08/97.

Analyzed By: NM

Approved by

into

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-105 S-2 4-6'

AMRO I.D.: 15550-43

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	
Naphthalene	1,100	280
2-Methylnaphthalene	510	280
Acenaphthylene	ND	280
Acenaphthene	1,300	280
Fluorene	1,500	280
Phenanthrene	11,000	280
Anthracene	2,800	280
Fluoranthene	11,000	280
Pyrene	9,100	280
Benzo[a]anthracene	4,900	280
Chrysene	4,800	280
Benzo[b]fluoranthene	3,200	280
Benzo[k]fluoranthene	3,300	280
Benzo[a]pyrene	4,100	280
Dibenzo[a,h]anthracene	1,000	560
Benzo[g,h,i]perylene	2,800	560
<pre>Indeno[1,2,3-cd]pyrene</pre>	2,500	560

Solid Content = 86.7%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/08/97.

Analyzed By: NM

Approved by

adday for

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC B-105 S-3 7-9'

AMRO I.D.: 15550-44

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	71	55
2-Methylnaphthalene	ИD	55
Acenaphthylene	ND	55
Acenaphthene	91	55
Fluorene	110	55
Phenanthrene	1,200	55
Anthracene	290	55
Fluoranthene	1,400	55
Pyrene	1,300	55
Benzo[a]anthracene	670	55
Chrysene	700	55
Benzo[b]fluoranthene	450	55
Benzo[k]fluoranthene	530	55
Benzo[a]pyrene	640	55
Dibenzo[a,h]anthracene	140	110
Benzo[g,h,i]perylene	500	110
<pre>Indeno[1,2,3-cd]pyrene</pre>	410	110

Solid Content = 87.4%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/08/97.

Analyzed By: <u>NM</u>

Approved by

ANRO

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-111 S-1 1-3'

AMRO I.D.: 15550-45

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solid

Test Paramete	r	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthal	======================================	 55	======================================
2-Methyl:	naphthalene	ND	55
Acenapht	nylene	ND	55
Acenapht	nene	100	55
Fluorene		86	. 55
Phenanth:	rene	1,200	55
Anthrace	ne	290	55
Fluorant	hene	1,900	55
Pyrene		1,700	55
Benzo[a]	anthracene	940	55
Chrysene		960	55
Benzo[b]	fluoranthene	650	55
	fluoranthene	730	55
Benzo[a]		940	55
Dibenzo[a,h]anthracene	270	110
Benzo[g,	h,i]perylene	730	110
	,2,3-cd]pyrene	690	110

Solid Content = 89.4%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/08/97.

Analyzed By: NM_

Approved by _

FOR

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-111 S-2 4-6'

AMRO I.D.: 15550-46

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	ND	270
2-Methylnaphthalene	ND	270
Acenaphthylene	ND	270
Acenaphthene	350	270
Fluorene	360	270
Phenanthrene	3,700	270
Anthracene	910	270
Fluoranthene	4,700	270
Pyrene	4,100	270
Benzo[a]anthracene	2,000	270
Chrysene	2,100	270
Benzo[b]fluoranthene	1,500	270
Benzo[k]fluoranthene	1,500	270
Benzo[a]pyrene	1,900	270
Dibenzo[a,h]anthracene	410	530
Benzo[g,h,i]perylene	1,600	530
Indeno[1,2,3-cd]pyrene	1,300	530

Solid Content $\frac{1}{1}$ 90.6%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/08/97.

Analyzed By: <u>NM</u>

Approved by

Nancy Stewart

FOR

AMRO

LABORATORY REPORT

EPA Method 8270B* Low Level Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A Roxbury-BRA/EDIC

B-111 S-3 7-9'

AMRO I.D.: 15550-47

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/04/97 Date analyzed: 04/08/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	**Reporting Limit(ug/kg)
Naphthalene	490	290
2-Methylnaphthalene	ND	290
Acenaphthylene	ND	290
Acenaphthene	1,000	290
Fluorene	860	290
Phenanthrene	8,100	290
Anthracene	1,700	290
Fluoranthene	9,300	290
Pyrene	8,200	290
Benzo[a]anthracene	4,000	290
Chrysene	4,200	290
Benzo[b]fluoranthene	2,700	290
Benzo[k]fluoranthene	3,000	290
Benzo[a]pyrene	3,700	290
Dibenzo[a,h]anthracene	900	570
Benzo[g,h,i]perylene	3,000	570
Indeno[1,2,3-cd]pyrene	2,500	570

Solid Content = 85.5%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

* = Modified Compound List.

** = The reporting limit has been elevated due to sample dilution on 04/08/97.

Analyzed By: <u>NM</u>

Approved by

welstaddad F

٠.

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson

Client I.D.: WS-7

AMRO I.D.: 14825-07

Test Parameter	Results (ug/L)	Reporting Limit(ug/L
cis-1,3-Dichloropropene	r========= ND	2.0
trans-1,3-Dichloropropene	ND	2.0
xyrent (total)	ND	2 0
1,2-Dibromo-3-chloropropane	ND .	5.0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ИD	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

Nanov Stowart

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson
Client I.D.: 96230.A BRA/EDIC Roxbury MA
WS-7
AMRO I.D.: 14825-07

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Oty/Type: 1/Water

Sample Qty/Type: 1/water		
Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	2.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	2.0
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	2.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
Dibromomethane	ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	2.0
1,2-Dichloropropane	ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	ND	2.0
Dibromochloromethane	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2-Tetrachloroethane	ИD	2.0
Toluene	ND	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0



LABORATORY REPORT

EPA-Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson

Client I.D.: WS-6 AMRO I.D.: 14825-06

Test	Results	Reporting
Parameter	(ug/L)	Limit(ug/L)
cis-1,3-Dichloropropene	ND	2.0
trans-1,3-Dichloropropene	ND	2.0
Xylene (total)	ND .	2.0
1,2-Dibromo-3-chloropropane	ND	5.0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	ND .	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND ·	2.0

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

Napov Stovart



EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson
Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-6 AMRO I.D.: 14825-06

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

Dampie Qcj/Type:				
Test Parameter	Results (ug/L)	Reporting Limit(ug/L)		
Chloromethane	ND	5.0		
Bromomethane	ND	5.0		
Vinyl Chloride	ND	2.0		
Dichlorodifluoromethane	ND	5.0		
Chloroethane	⊦ ND	5.0		
Methylene Chloride	ND	2.0		
Trichlorofluoromethane	ND	2.0		
1,1-Dichloroethene	ND	2.0		
Bromochloromethane	ND	2.0		
1,1-Dichloroethane	ND	2.0		
cis-1,2-Dichloroethene	ND	2.0		
trans-1,2-Dichloroethene	ND	2.0		
Chloroform	9.1	2.0		
Dibromomethane	ND	2.0		
1,2-Dichloroethane	; ND	2.0		
2,2-Dichloropropane	ND	2.0		
1,1,1-Trichloroethane	ND	2.0		
Carbon Tetrachloride	ND	2.0		
Bromodichloromethane	ND	2.0		
1,2-Dichloropropane	ND	2.0		
1,1-Dichloropropene	ND	2.0		
Trichloroethene	ND	2.0		
Dibromochloromethane	ND	2.0		
1,1,2-Trichloroethane	ND	2.0		
Benzene	ND	2.0		
1,3-Dichloropropane	ND	2.0		
Bromoform	ND	2.0		
1,1,1,2-Tetrachloroethane	ND	2.0		
Tetrachloroethene	ND	2.0		
1,2-Dibromoethane	ND	2.0		
1,1,2,2-Tetrachloroethane	ND	2.0		
Toluene	ND	2.0		
Chlorobenzene	ND	2.0		
Ethylbenzene	ND	2.0		
Bromobenzene	ND	2.0		
Isopropylbenzene	ND	2.0		
Styrene	ND	2.0		
n-Propylbenzene	ND	2.0		

ANTO

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson

Client I.D.: WS-5

AMRO I.D.: 14825-05

Test	Results	Reporting
Parameter	(ug/L)	Limit(ug/L
cis-1,3-Dichloropropene	ND	2.0
trans-1,3-Dichloropropene	ND	2.0
11,13nc (Cotal)	ND	2.0
1,2-Dibromo-3-chloropropane	ND.	5.0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	ND	. 2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

ND = Not Detected at or above the reporting limit.

Analyzed By: DM_

Approved by

Vangerine

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson
Client I.D.: 96230.A BRA/EDIC Roxbury MA
WS-5

AMRO I.D.: 14825-05

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	2.0
Dichlorodifluoromethane	ND.	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	2.0
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	2.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
Dibromomethane	ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	2.0
1,2-Dichloropropane	ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	2.2	2.0
Dibromochloromethane	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2 Tetrachloroethane	i ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2 Tetrachloroethane	ND	2.0
Toluene	ND .	2.0
Chlorobenzene	ND.	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0
	1	

alitic

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson

Client I.D.: WS-4

AMRO I.D.: 14825-04

Test	Results	Reporting
Parameter	(ug/L)	Limit(ug/L
cis-1,3-Dichloropropene	ND	2.0
trans-1,3-Dichloropropene	ND	2.0
Xylene (total)	ND	2.0
1,2-Dibromo-3-chloropropane	ND	5.0
tert-Butylbenzene	ИD	2.0
2-Chlorotoluene	ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson
Client I.D.: 96230.A BRA/EDIC Roxbury MA

AMRO I.D.: 14825-04

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

Test	Results	Reporting
Parameter	(va/L)	Limit(ug/L)
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	2.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	2.0
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	2.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
Dibromomethane	ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	' ND	2.0
Bromodichloromethane	ND	2.0
1,2-Dichloropropane	, ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	ND	2.0
Dibromochloromethane	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2-Tetrachloroethane	: ND	2.0
Toluene	ND	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
	ND	2.0

ANES

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson

Client I.D.: WS-3

AMRO I.D.: 14825-03

Test	Results	Reporting
Parameter	(ug/L)	Limit(ug/L
cis-1,3-Dichloropropene	ND	2.0
trans-1,3-Dichloropropene	ND	2.0
1712900 (total)	ND	2.0
1,2-Dibromo-3-chloropropane	ND	5.0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	. ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>DM</u>

Approved by

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson
Client I.D.: 96230.A BRA/EDIC Roxbury MA

<u> WS-3</u>

AMRO I.D.: 14825-03

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
Chloromethane	ND	5.0
Bromomethane	· ND	5 .0
Vinyl Chloride	ND	2.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	. ND	5.0
Methylene Chloride	ND	2.0
Trichlorofluoromethane	ND	. 2.0
1,1-Dichloroethene	ND	2.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	; ND	2.0
Chloroform	: ND	2.0
Dibromomethane	ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	, ND	2.0
1,2-Dichloropropane	ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	ND	2.0
Dibromochloromethane	ND	2.0
1,1,2-Trichloroethane	, ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	' ND	2.0
1,2-Dibromoethane	ИD	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
Toluene	ИД	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson
Client I.D.: WS-2

AMRO I.D.: 14825-02

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
cis-1,3-Dichloropropene	ND	2.0
trans-1,3-Dichloropropene	ND	2.0
Xylene (total)	4115	2.2
1,2-Dibromo-3-chloropropane	. ND	5.0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Client I.D.: 96230.A BRA/EDIC Roxbury MA WS-2

AMRO I.D.: 14825-02

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96 Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting T.imit(ug/L)
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	2.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	2.0
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	2.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ı ND	2.0
Dibromomethane) ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	¹ ND	2.0
1,2-Dichloropropane	ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	ND	2.0
Dibromochloromethane	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
Toluene	ND	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0

AME

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson

Client I.D.: WS-1

AMRO I.D.: 14825-01

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
cis-1,3-Dichloropropene	ND	2.0
trans-1,3-Dichloropropene	ND	2.0
Ayrein (Cour)	иD	2.0
1,2-Dibromo-3-chloropropane	ND	5.0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by Van

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson
Client I.D.: 96230.A BRA/EDIC Roxbury MA
WS-1

AMRO I.D.: 14825-01

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	' ND	2.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	2.0
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	2.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	; ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
Dibromomethane	ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ИD	2.0
Bromodichloromethane	ND	2.0
1,2-Dichloropropane	ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	ND	2.0
Dibromochloromethane	! ND	2.0
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	. ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
Toluene	ND	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ИD	2.0
Isopropy lbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Roxbury MA

Dup 1

AMRO I.D.: 14825-13

Date sampled: 12/12/96 Date received: 12/13/96

Date prepared: 12/16/96 Date analyzed: 12/18/96

Sumple Qty/Type: 1/Water

Test Parameter	Results (mg/l)	Reporting Limit(mg/l)
Gasoline Kerosene Mineral Spirits Fuel Oil #2/Diesel Fuel Oil #4 Fuel Oil #6 Motor Oil/Hydraulic Oil	ND ND ND ND ND ND	0.70 0.70 0.70 0.70 0.70 1.4 0.70

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: JK

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-12

AMRO I.D.: 14825-12

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/18/96

Sample Qty/Type: 1/Wall

Test Parameter	Results (mg/l)	Reporting Limit(mg/l)
Gasoline	· ND	0.90
Kerosene	ND	0.90
Mineral Spirits	ND	0.90
Fuel Oil #2/Diesel	ND	0.90
Fuel Oil #4	ND	0.90
Fuel Oil #6	ND	1.8
Motor Oil/Hydraulic Oil	ND	0.90

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: JK Approved by

ANTE

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-11

AMRO I.D.: 14825-11

Date sampled: 12/12/96 Date received: 12/13/96

Date prepared: 12/16/96 Date analyzed: 12/18/96

Sample Otto/mono: 1/Water

Test Parameter	Results (mg/l)	Reporting Limit(mg/l)
Gasoline Gasoline	ND	0.80
Kerosene	ND	0.80
Mineral Spirits	ND	0.80
Fuel Oil #2/Diesel	ND	0.80
Fuel Oil #4	i ND	0.80
Fuel Oil #6	ND	1.6
Motor Oil/Hydraulic Oil	ND	0.80

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: JK

Approved by

Canada Starrant

ANTE

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-10

AMRO I.D.: 14825-10

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/18/96

cample Oty/mma: 1/Naver

Test Parameter	Results (mg/1)	Reporting Limit(mg/l)
Gasoline	. ND	0.60
Kerosene	ND	0.60
Mineral Spirits	ND	0.60
Fuel Oil #2/Diesel	ND	0.60
Fuel Oil #4	ŃD	0.60
Fuel Oil #6	ND	1.2
Motor Oil/Hydraulic Oil	ND	0.60

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>JK</u>

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Roxbury MA
WS-9
AMRO I.D.: 14825-09

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/18/96

Sample Qty/Type: 1/Water

Test Parameter	Results (mg/l)	Reporting Limit(mg/l)
Gasoline	ND	0.90 ·
Kerosene	ND	0.90
Mineral Spirits	ND ·	0.90
Fuel Oil #2/Diesel	ND	0.90
Fuel Oil #4	ND	0.90
Fuel Oil #6	ND	1.8
Motor Oil/Hydraulic Oil	ИD	0.90

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>JK</u>

Approved by

anii

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-8

AMRO I.D.: 14825-08

Date sampled: 12/12/96 Date received: 12/13/96

Date prepared: 12/16/96 Date analyzed: 12/18/96

Sample Qty/Type: 1/Water

Test Parameter	Results (mg/l)	Reporting Limit(mg/1)
Gasoline	ND	0.60
Kerosene	ND	0.60
Mineral Spirits	ND	0.60
Fuel Oil #2/Diesel	ND	0.60
Fuel Oil #4	ND	0.60
Fuel Oil #6	ND	1.2
Motor Oil/Hydraulic Oil	NĎ	0.60

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: JK

Approved by

V Comment

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-7

AMRO I.D.: 14825-07

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/18/96

Sample Qty/Type: 1/.....

Test Parameter	Results (mg/l)	Reporting Limit(mg/l)
Gasoline	ND	1.0
Kerosene	ND	1.0
Mineral Spirits	ND	1.0
Fuel Oil #2/Diesel	ND	1.0
Fuel Oil #4	ND	1.0
Fuel Oil #6	ND	2.0
Motor Oil/Hydraulic Oil	ND	1.0

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: JK

Approved by

Janey Stowart

ANTO

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-6

AMRO I.D.: 14825-06

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/18/96

Sample Light, Type: 1/nacci

Test Parameter	Results (mg/l)	Reporting Limit(mg/1)
Gasoline	ND	1.0
Kerosene	ND	1.0
Mineral Spirits	ND	1.0
Fuel Oil #2/Diesel	ND	1.0
Fuel Oil #4	ND	1.0
Fuel Oil #6	ND	2.0
Motor Oil/Hydraulic Oil	ND	1.0

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: JK Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-5

AMRO I.D.: 14825-05

Date sampled: 12/12/96 Date received: 12/13/96

Date prepared: 12/16/96 Date analyzed: 12/18/96

Sample wwy/Type: 1/water

Test Parameter	Results (mg/l)	Reporting Limit(mg/l)	•
Gasoline	ND	1.0	
Kerosene	ND	1.0	1
Mineral Spirits	! ND	1.0	7
Fuel Oil #2/Diesel	ND	1.0	
Fuel Oil #4	ND	1.0	
Fuel Oil #6	ND	2.0	
Motor Oil/Hydraulic Oil	ND	1.0	

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>JK</u>

Approved by

Nandy Stowart

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-4

AMRO I.D.: 14825-04

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/18/96

Sample Qty/Type: 1/Water

Test Parameter	Results (mg/l)	Reporting Limit(mg/l)
Gasoline	ND	1.0
Kerosene	ND	1.0
Mineral Spirits	ND	1.0
Fuel Oil #2/Diesel	ND	1.0
Fuel Oil #4	ND	1.0
Fuel Oil #6	ND	2.0
Motor Oil/Hydraulic Oil	ND	1.0

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>JK</u>

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Roxbury MA
WS-3

AMRO I.D.: 14825-03

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/18/96

Sample Qty/Type: 1/Water

Test Parameter	Results (mg/l)	Reporting Limit(mg/l)
Gasoline	ND	1.0
Kerosene	, ND	1.0
Mineral Spirits	ND	1.0
Fuel Oil #2/Diesel	l ND	1.0
Fuel Oil #4	ND	1.0
Fuel Oil #6	ND	2.0
Motor Oil/Hydraulic Oil	ND	1.0

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>JK</u>

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-2

AMRO I.D.: 14825-02

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/18/96

Test Parameter	Results (mg/l)	Reporting Limit(mg/l)
Gasoline	ND	1.0
Kerosene	ND	1.0
Mineral Spirits	ND	1.0
Fuel Oil #2/Diesel	ND	1.0
Fuel Oil #4	ND	1.0
Fuel Oil #6	ND	2.0
Motor Oil/Hydraulic Oil	ND	1.0

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>JK</u>

Approved by



Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-1

AMRO I.D.: 14825-01

Date sampled: 12/12/96 Date received: 12/13/96

Date prepared: 12/16/96 Date analyzed: 12/18/96

Jan 20 77/Type: 1/Mater

Test Parameter	Results (mg/1)	Reporting Limit(mg/l)
Gasoline	ND	1.0
Kerosene	ND	1.0
Mineral Spirits	ND	1.0
Fuel Oil #2/Diesel	ND	1.0
Fuel Oil #4	ND	1.0
Fuel Oil #6	ND	2.0
Motor Oil/Hydraulic Oil	ри	1.0

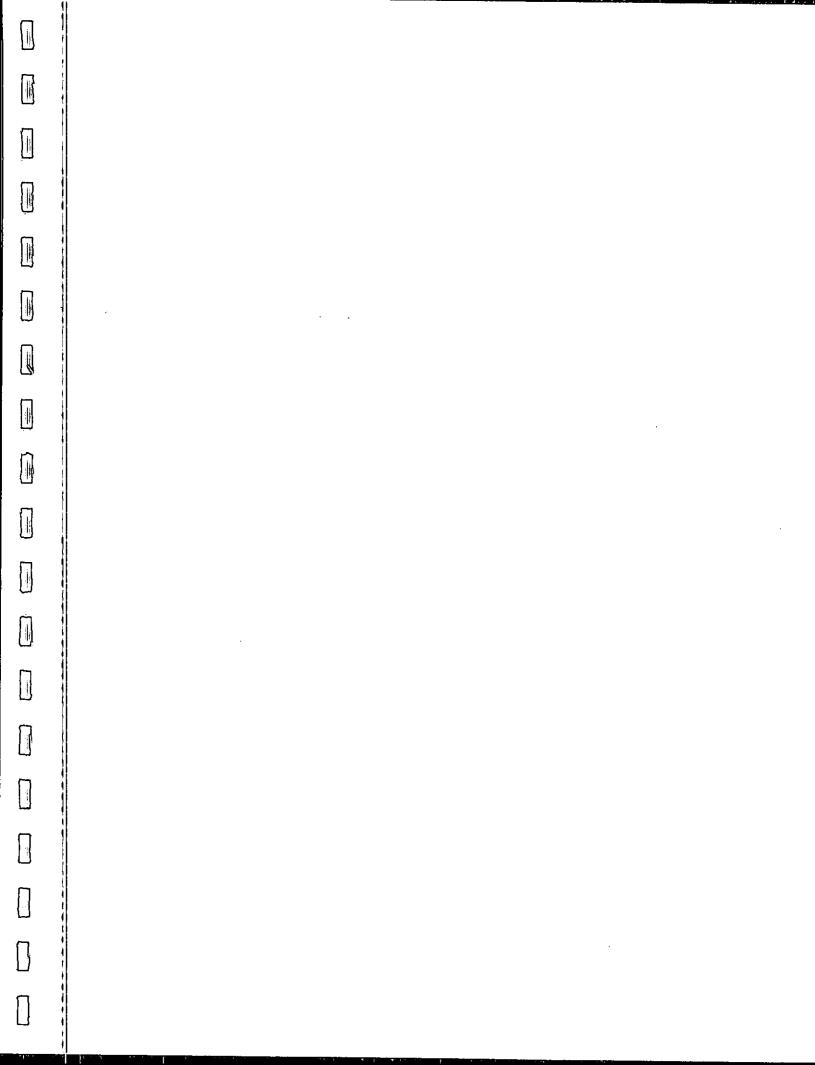
Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>JK</u>

Approved by



Environmental Laboratories Corporation



111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 · FAX: (603) 429-8496

December 24, 1996

Mr. George Naslas Weston & Sampson Engineers 5 Centennial Drive Peabody, MA 01960

RE Your project: 96230.A BRA/EDIC Roxbury, MA

Dear George:

Enclosed please find the results for the above-referenced project, received on December 13, 1996. AMRO operates a Quality Control Program which meets or exceeds EPA and state requirements. A copy of the appropriate State Certificate is attached. No quality control deviations were noted during the analyses associated with this project. This project was assigned AMRO Project Number 14825. If you have any questions regarding this project in the future, please refer to this number.

Please be advised that any unused sample volume and sample extracts will be stored for a period of thirty (30) days from this report date. After this time, AMRO will properly dispose of the remaining sample. If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This letter is an integral part of your data report.

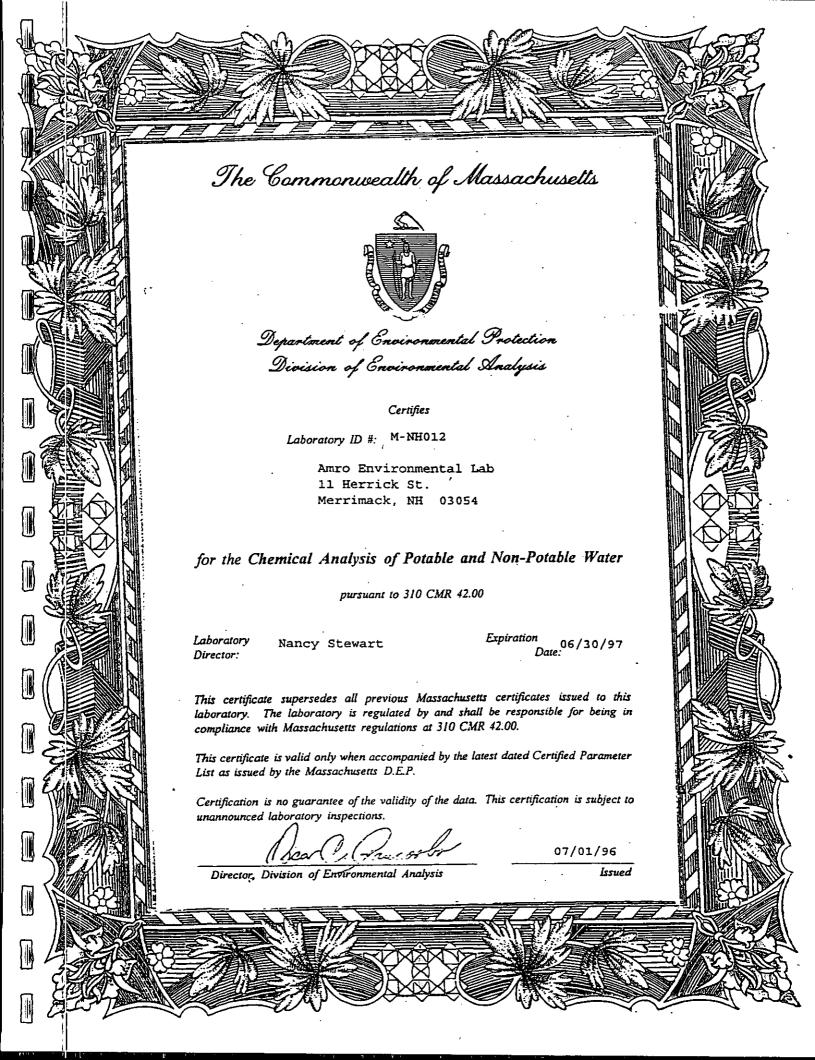
Please do not hesitate to call if you have any questions.

Sincerely,

Nancy Stewart

Laboratory Director

Encl.



HMBS IT MARCH

AMRO Environmental Laboratories Corporation

Office; 603-424-2022 Fax: 603-429-8496

Merrimack, N.H. 03054

111 Herrick Street

CHAIN OF CUSTODY RECORD

della per content Have Been Field Filtereo. Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER. 69672 Por PP-14 Miles Q n Ne will 0750 CASAMARE PAGE As-1 aptedies Remarks. A METAIS AND PAH W HUNTE 01/1/201/20 PRIORITY TURNAROUND TIME AUTHORIZATION Call **Enthonia** T.A.T. authorized by: ZEAGOON Weston Send Results to: **AUTHORIZATION NO.** Olher-O Explain Waste-W Besults needed Fax to (phone) AMRO Project No 8 3/2/plas 3 VOM. 82/ Type Size, , . . & No. of Containers = = = = = = = = ٥ in and the turnaround time clock will not s'art until any ambiguities are Prease print clearly, legibly and completely Samples cannot be logged Received by (Signature) Received by (Signature) Station Location 01-SIN ST S Date Time 11,35 2-13-96 EDIC Date Time Date Time -Time - Comp | Grab 13:35 3.51 JP 6.6 12.96 10:40 2. 19.9 OF 35 36:61 19:61-61 8-12-94 13:25 12.12.96 97:50 3.13.91.11.45 212,96 10:40 215 3.11.9.cl.e 31:11/260:01:01 176-61-61 3681.6 Relinquished by (Signature) Relinquished by (Signature) - Date G 6230F Samplers (Signalure) resolved. -Sta. No.

Seal Injact?

Received for Laboratory by: (Signatura)

Relinquished by (Signature)

AMEC

LABORATORY REPORT

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury, MA

WS-12

AMRO I.D.: 14854-06

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/18/96 Date analyzed: 12/19/96

Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ИD	5.0
Pyrene	ND	5.0
Benzo[a]anthracene	ND	1.0
Chrysene	ND	2.0
Benzo[b]fluoranthene	ND	1.0
Benzo[k]fluoranthene	ND	1.0
Benzo[a]pyrene	ND	0.2
Dibenzo[a,h]anthracene	ND	0.5
Benzo[g,h,i]perylene	ND	0.5
Indeno[1,2,3-cd]pyrene	ND	0.5

ND = Not Detected at or above the reporting limit.

Analyzed By:<u>Lab</u>

Approved by

Nancy Stewart

Resources

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury, MA

WS-11

AMRO I.D.: 14854-05

Date sampled: 12/12/96 Date received: 12/13/96

Date prepared: 12/18/96 Date analyzed: 12/19/96

Sample Qty/Type: 1/Water

Test Parameter	Result (ug/L)	
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ND	5.0
Pyrene	ND	5.0
Benzo[a]anthracene	ND	1.0
Chrysene	ND	2.0
Benzo[b]fluoranthene	ND	1.0
Benzo[k]fluoranthene	ND	1.0
Benzo[a]pyrene	ND	0.2
Dibenzo[a,h]anthracene	ND	0.5
Benzo[g,h,i]perylene	ND	0.5
Indeno[1,2,3-cd]pyrene	ND	0.5

ND = Not Detected at or above the reporting limit.

Analyzed By: Lab Resources Approved by

LABORATORY REPORT

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury, MA

WS-9

AMRO I.D.: 14854-04

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/18/96 Date analyzed: 12/19/96

Sample Qty/Type: 1/Water

Test Parameter	(ug/L)	Reporting Limit(ug/L)
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ND	5.0
Pyrene	ND	5.0
Benzo[a]anthracene	ND	1.0
Chrysene	ND	2.0
Benzo[b]fluoranthene	ND	1.0
Benzo[k]fluoranthene	ND	1.0
Benzo[a]pyrene	ND	0.2
Dibenzo[a,h]anthracene	ND	0.5
<pre>Benzo[g,h,i]perylene</pre>	ND	0.5
Indeno[1,2,3-cd]pyrene	ND	0.5

ND = Not Detected at or above the reporting limit.

Analyzed By: Lab Resources Approved by

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury, MA

WS-8

AMRO I.D.: 14854-03

Date sampled: 12/12/96 Date received: 12/13/96

Date prepared: 12/18/96 Date analyzed: 12/19/96

Sample Qty/Type: 1/Water

Test Parameter	: ,	Results (ug/L)	Laprating Limit(ug/L)
Naphthale		ND	5.0
Acenaphthy	ylene	ND	5.0
Acenaphthe	ene	ND	5.0
Fluorene		ND	5.0
Phenanthre	ene	ND	5.0
Anthracene	e	ND	5.0
Fluoranthe	ene	ND	5.0
Pyrene		ND	5.0
Benzo[a]ar	nthracene	ND	1.0
Chrysene		ND	2.0
Benzo[b]f	luoranthene	ND	1.0
Benzo[k]f	luoranthene	ND	1.0
Benzo[a]py		ND	0.2
	h]anthracene	ND	0.5
	,i]perylene	' ND	0.5
	2,3-cd]pyrene	ND	0.5

ND = Not Detected at or above the reporting limit.

Analyzed By: Lab

Resources

Approved by

Nancy Stewart

aned

1

i mente

1

LABORATORY REPORT

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury, MA

WS-5

AMRO I.D.: 14854-02

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/18/96 Date analyzed: 12/19/96

Sample Qty/Type: 1/Water

Test Parameter	· Perults (ug/L)	Reporting Limit(ug/L)
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ND	5.0
Pyrene	ND	5.0
Benzo[a]anthracene	ND	1.0
Chrysene	ND	2.0
Benzo[b]fluoranthene	ND	1.0
Benzo[k]fluoranthene	ND	1.0
Benzo[a]pyrene	ND	0.2
Dibenzo[a,h]anthracene	ND	0.5
Benzo[g,h,i]perylene	ND	0.5
Indeno[1,2,3-cd]pyrene	ND	0.5

ND = Not Detected at or above the reporting limit.

Resources_

Analyzed By: Lab_

Approved by

James Hodrand FOR Nancy Stewart

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury, MA

WS-2

AMRO I.D.: 14854-01

Date sampled: 12/12/96 Date received: 12/13/96

Date prepared: 12/18/96 Date analyzed: 12/19/96

Sample Qty/Type: 1/Water

ND 5	5.0
· · ·	• ^
ATD S	5.0
ND 5	5.0
ND 5	5.0
ND 5	5.0
ND 5	5.0
ND 5	5.0
ND S	5.0
ND 1	1.0
ND 2	2.0
ND I	1.0
ND 1	1.0
ND O	0.2
ND ON	0.5
ND (0.5
	0.5
]	ND 2 ND 1 ND 1 ND 0 ND 0 ND 0 ND 0

ND = Not Detected at or above the reporting limit.

Analyzed By: Lab

Approved by

1 F01

Resources

Nancy Stewart

İ	4	M			. Laboratory	
AMI	RO (E	invi	ron	mental	. Laboratory	Report

_			_		
P	ac	1e	2	of	2

ample	AMRO	Test =	Results Units	Date of	Run	
Identity	Identity	Parameter		Analysis	рĀ	Method
WS-8	14854-03	Selenium, D	<0.025 mg/L	12/30/96	co	270.2
!!		Digestion	3,	12/20/96	\mathbf{EL}	3005
		Silver, D	<0.007 mg/L	12/24/96	\mathbf{EL}	200.7
il il		-		10/00/06		
WS-09	14854-04	Digestion	40. 04	12/20/96	TC	200
i salah sala		Arsenic, D	<0.01 mg/L	12/23/96	RK	206.2
		Barium, D	0.11 mg/L	12/26/96	EL	200.7
_ {		Cadmium, D	<0.005 mg/L	12/26/96	EL	200.7
		Chromium, D	<0.03 mg/L	12/26/96	EL	200.7
		Lead, D	<0.010 mg/T	12/26/96	RK	239.2
		Mercury, D	<0.0002 mg/L	12/20/96	JB	245.1
		Selenium, D	<0.025 mg/L	12/30/96	CO	270.2
		Digestion	<0.007 ma/T	12/20/96	EL EL	3005 200.7
		Silver, D	<0.007 mg/L	12/24/96	£17	200.7
[[S-1]	14854-05	Digestion		12/20/96	TC	200
		Arsenic, D	<0.01 mg/L	12/23/96	RK	206.2
		Barium, D	<0.05 mg/L	12/26/96	\mathbf{EL}	200.7
		Cadmium, D	<0.005 mg/L	12/26/96	\mathbf{EL}	200.7
		Chromium, D	<0.03 mg/L	12/26/96	EL	200.7
[10]		Lead, D	<0.010 mg/L	12/26/96	RK	239.2
		Mercury, D	<0.0002 mg/L	12/20/96	JВ	245.1
		Selenium, D	<0.005 mg/L	12/30/96	CO	270.2
		Digestion		12/20/96	\mathbf{EL}	3005
		Silver, D	<0.007 mg/L	12/24/96	EL	200.7
S-12	14854-06	Digestion		12/20/96	TC	200
	14054 00	Arsenic, D	<0.01 mg/L	12/23/96	RK	206.2
$\{$		Barium, D	0.12 mg/L	12/26/96	EL	200.7
		Cadmium, D	<0.005 mg/L	12/26/96	EL	200.7
		Chromium, D	<0.03 mg/L	12/26/96	EL	200.7
		Lead, D	<0.005 mg/L	12/26/96	RK	239.2
~ Ⅱ		Mercury, D	<0.0003 mg/L	12/20/96	JB	245.1
		Selenium, D	. <0.005 mg/L	12/30/96	co	270.2
		Digestion	. 10.025 mg/L	12/20/96	EL	3005
_ !		Silver, D	<0.007 mg/L	12/24/96	EL	200.7
			10.00, Mg/L	12,24,30	,	200.1

All analyses performed in accordance with:

USEPA Methods of Chemical Analysis for Water & Waste.

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992. and USEPA SW846 Manual, 3rd. ed.

The roughly all sections: The following standard abbreviations and conventions apply throughout

< = 'Less than' followed by the detection limit.

> = 'Greater than'

D - Dissolved.

* = Additional analysis requested 12/18/96 formerly AMRO #14825.

Certified by:

ANRT

AMRO Environmental Laboratory Report

Page 1 of 2

Client:

Weston & Sampson Engineers

5 Centennial Drive Peabody, MA 01960 Client Designation:

96230.A BRA/EDIC Roxbury, MA

Attn: Mr. George Naslas

Samples Qty/Type:

6/Aqueous

AMRO Designation: 14854*

Date Sampled: 12/12/96 Date Rec'vd: 12/13/96 Date Complete: 12/30/96

Jample	AMRO	Test	Pegults Units	Date of	Rur.	™.Y
Identity	Identity	Parameter	†	Analysis	рÀ	Method
***			 	45 (55 (55		
WS-2	14854-01	Digestion		12/20/96	TC	200
		Arsenic, D	<0.01 mg/L	12/23/96	RK	206.2
		Barium, D	<0.05 mg/L	12/26/96	EL	200.7
		Cadmium, D	<0.005 mg/L	12/26/96	EL	200.7
		Chromium, D	<0.03 mg/L	12/26/96	EL	200.7
		Lead, D	<0.005 mg/L	12/26/96	RK	239.2
		Mercury, D	< 0.0002 mg/L	12/20/96	JВ	245.1
		Selenium, D	< 0.025 mg/L	12/30/96	CO	270.2
		Digestion	l .	12/20/96	\mathbf{EL}	3005
		Silver, D	< 0.007 mg/L	12/24/96	\mathbf{EL}	200.7
			ļ			
WS-5	14854-02	Digestion	1	12/20/96	TC	200
		Arsenic, D	<0.01 mg/L	12/23/96	RK	206.2
		Barium, D	0.11 mg/L	12/26/96	\mathbf{EL}	200.7
		Cadmium, D	< 0.005 mg/L	12/26/96	\mathbf{EL}	200.7
		Chromium, D	<0.03 mg/L	12/26/96	\mathbf{EL}	200.7
		Lead, D	< 0.005 mg/L	12/26/96	RK	239.2
		Mercury, D	<0.0002 mg/L	12/20/96	JВ	245.1
	i	Selenium, D	<0.025 mg/L	12/30/96	CO	270.2
		Digestion		12/20/96	\mathbf{EL}	3005
		Silver, D	< 0.007 mg/L	12/24/96	\mathbf{EL}	200.7
	Ì	•	:	•		•
WS-8	14854-03	Digestion		12/20/96	TC	200
		Arsenic, D	<0.02 mg/L	12/23/96	RK	206.2
•		Barium, D	0.15 mg/L	12/26/96	EL	200.7
		Cadmium, D	<0.005 mg/L	12/26/96	EL	200.7
		Chromium, D	<0.03 mg/L	12/26/96	EL	200.7
		Lead, D	<0.010 mg/L	12/26/96	RK	239.2
		Mercury, D	<0.0002 mg/L	12/20/96	JB	245.1
			-3.000E mg/E			
			1			1
		Continued next page	• • •			

Environmental Laboratories Corporation



111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 · FAX: (603) 429-8496

January 02, 1997

Mr. George Naslas Weston & Sampson Engineers 5 Centennial Drive Peabody, MA 01960

RE Your project: 96230.A BRA/EDIC Roxbury, MA

Dear George:

Enclosed please find the results for the above-referenced project, received on December 13, 1996. AMRO operates a Quality Control Program which meets or exceeds EPA and state requirements. A copy of the appropriate State Certificate is attached. No quality control deviations were noted during the analyses associated with this project. This project was assigned AMRO Project Number 14854. If you have any questions regarding this project in the future, please refer to this number.

Please be advised that any unused sample volume and sample extracts will be stored for a period of thirty (30) days from this report date. After this time, AMRO will properly dispose of the remaining sample. If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This letter is an integral part of your data report.

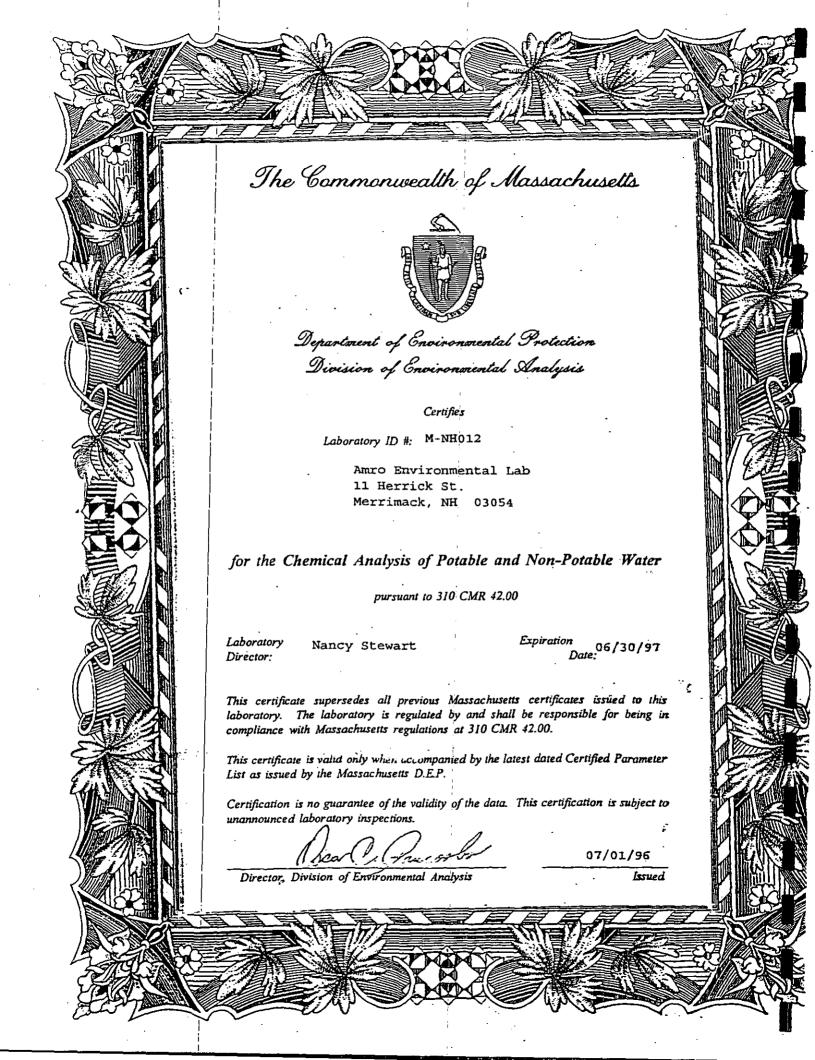
Please do not hesitate to call if you have any questions.

Sincerely,

Nancy Stewart

Laboratory Director

Encl.



三16到5·三 Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER. a 9**6**0 PAGE O OF Naslas Remarks 1307 PRIORITY TURNAROUND TIME AUTHORIZATION Remarks JA:04 12 T.A.? authorized by: æ Send Result to: X 1000 X X X X AUTHORIZATION NO. X X X X X CHAIN OF CUSTODY RECORD. ٤ Water - A Soil/Shid-S Waste-W X X X X Other-O Explain X MATRIX 1 AMRO Project No. Fax to (phone) Ŋ 4 £ Ŋ Ч Results needed V Λ V Seal Intact? 16 X02 60 00 200 **%** 64 **%**0% 00 00 9 9 16 X . Z \$ 0 K 800 ŝ å Project State Type Size, & No. of Containers Received for Laboratory by: (Signature) . Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are 47 1 7.9 /ŋ -'n . . (O) - (C) / - Canada Received by (Signature) Received by (Signature) Received by (Signature) 3 lt) S Station Location S-S -5 -, 5 (一) Oremtal (一) Oremtal (一) Oremiaes (一) Oremiaes (一) Oremtal (一) Oremtaes (-) Oremtaes (-) Or Roxbury X B-115 R- 115 311 - XI X 21-四义 メード・ニハ SI·AIX Date Time S S S S M Date Time Date Time Comp | Grab Office 1603-424-2022-Faxi-603-429-64-96---00;01 05,30 09100 00:60 51:30 3/86 b9:36 8:0 25:15 3/04 - 10:15 10.10 Time Project Name L Ø 3/26 3/00/8 Andrew D. 30/8 3/8/5 9 L P g Refinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) Samplers (Signature) 96230. A esolved. Proj. No. Sta. No.

111 Herrick Street

Merrimack, N.H. 03054 Office: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER. 00 0(360 P 2006/ - 65 PAGE Remarks Kiew Nos/25 PRIORITY TURNAROUND TIME AUTHORIZATION Remarks T.A.T. authorized by: 19391 Send Results to; χ X ž X X χ 440 X X × AUTHORIZATION NO. X X y X X X ¥ Water - A Soil/Splid-S イト X Waste-W X × χ X Other-O Explain MATRIX 5 5 5 Fax to (phone) AMRO Project No. 욷 4 Ŋ Results needed (J Ч S Ŋ 4 4 Seal Intact? 8---02-70, 8-02 20-02 20-8 Yes 20-8 107 20-02 8-02 Ņ No : 00 No : 0 ā Project State 4 Type Size, & No. of Containers 00 Ф Ø Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are Received for Laboratory by: (Signature) ンダ・カ 6 7-91 7-5' 7- 91 m , 7-4 7 - 7 7.6 ኅን Received by (Signature) Received by (Signature) Received by (Signature Station Location N-5 5-5 Sin 5-3 Ŋ 7 7 Ś 9 ROXBULL 7- - 四 W-IN エニ・ B. I.V B - 114 B- 114 <u>=</u> آرا 7 B-11.3 Date Time ρ (20) M Ŋ QΩ ς.w Γ.ο 14 5-26-9 S Ofte Time 3 Date Time Date Time Comp | Grab X X BRA 3.45 13.45 14:00 J. 33 7.25 00:50 £100 3.3 シャンと 3 ST TO 87.89 Project Name Time Andrew D. Archar 100 150) Relinquished by (Signature) Refirmuished by (Signature) Relinquished by (Signature) Relinquished by (Signature) 5 3/05 .X 60/E. 3/2/ 100 75/57 700/2 Y 100/M 78/E Date Proj. No. 96233. ₳ Samplers (Signature) resolved. Sta. No.

AmRO C. Johnental Endoraces C. Jorannell Herrick Street Merrimack, N.H. 03054	mental=	andra.		Jord	п							Ţİ.	- Topics	**************************************		1	4537	1	
Proj. No.	Project Name	-	S.	779	1		Proje	Project State	MATRIX	\ ×		10	K	15.	12	PAGE	J	(h	
96930, A	34	38A	(A)	J			-	۲ ۲	Soil/Soil/Soil/Soil/Soil/Soil/Soil/Soil/		~/	a [']	(a. (a)		<u> </u>	?			1
Samplers (Signature)	A o	93,50		1	3	h	Size 8	Type Size,	Waste-W Other-O		30/	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	200						
Sta No.	Time	Comp Grab		Static	Station Location		Conta	iners	Explain	d	8	Ø3/	193			Remarks	ıks		-
3/	*		知	-111 5	5-1	1-31	-	8-02	5	X X	L								
30/8	oE;///	メ	'n	2 111		1-31	j	8-62	8			χ	X						
>c/E	54:11	X	Ŕ	1	S-2	4-6,		8.02	ч	X X									
36/8	54:11	x	5	11	ر ا ا	4-6'	_	8-02	4	-		X	メ						
76/E	Co; 69	×	B-	111	N 'S	1-6-2	_	8-02	_'	X X									
36/E	8,4	×	B	111	5-3	16-6	//	8-02	۷			ע	X						
3/02	A. C.	×	- B -	4	1-5	1-31		8-02		X X									
30/8	0E(&	×	p ;)	7	1-5	1-31	•	8-02	Ŋ			X							
3/05	27.6	X	 	7	4-7	,9-h	_	8-02	5	X					:				
26/2	54:e/	×		(13	5.0	,4-H	,	8-02	S			አ							·
3/8	A3:00	X	B.	4 =	S-3	16-4		20 - 8	8	X X		+	_						
Se/E	00:87	Х	PA PA	0	5-3	7-5	_	30-8	4			X							
	-											_	_						7
Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are resolved.	ırly, legibly ound time	y and con s clock wi	mpletely ill not st	. Samp art until	les cant any art	not be lo nbiguitie:	gged s are	P B S S S S S S S S S S S S S S S S S S	PRIORITY TURNAROUND TIN E AUTHORIZATION Before submitting samples for expedi ed T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER.	TURN.	AROU	ND TII	E AU	THORI F., you m	ZATIOI ust have	۲ ، request	ted in adv	vance af	<u> </u>
Audren D	4. (3) . a	و	-			٠		PA.	AUTHORIZATION NO.	TION NC		T.A.	T, autho	T.A.T. authorized by:					-
Belinquished by (Signature)	0	Orte Time/	26/au	Receive	Received by (Signature)	ture)		□ Fax	☐ Fax to (phone)		Ser	Send Result to:	ig Q	7.50	ヹ	20/20	u		
COC !	1	1/1	30	B	1/1/1	77		Results	Results needed				T.	8	2	7050	3		
Relinquished by (Signature)	(6)	Date Time	e.	Receive	Received by (Signature)	ture)		å å			1			100	4 C X	120	000	260	
Relinquished by (Signature)	6	Date Time	ne	Receive	Received by (Signature)	'ure)		AMRO	AMRO Project No.						Remarks				
Relinquished by (Signature)	(Date Time	87.55 ma 7.05	Receiver	d for Labora	Received for Laboratory by: (Signature)	nature)	Seal Intact?	act?	¥/N	, -								
1 2 pr 1 177 1860 LA		0		X		16.5		2											7

AMRO Environmental Laboratories Corporation

111 Herrick Street

Merrimack, N.H. 03054 Office: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

Before submitting samples for expedit J.T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZAL ON NUMBER. 01260 ω Ö Ŋ PAGE (50 Remarks MA-5.2 47 PRIORITY TURNAROUND TIME AUTHORIZATION Remarks T.A. authorized by: 20 Send Result to: O X X X X X X Dar AUTHORIZATION NO. 又 X X X X ž Water - A Soil/Solid-S Waste-W χ 5550 X X X X Other-O Explain MATRIX AMRO Project No. ☐ Fax to (phone) £ Results needed Ŋ U 9 U Ŋ 5 4 Seal Intact? 107 No /es Ŋ O Ņ O 4 8-02 101 701 201 4 6 70 å Project State ó Type Size, & No. of Containers Š Ó٦ 6 00 80 00 Ø က Ò Received for Laboratory by: (Signature) Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are C これり 4-61 15-6 2-5 ٥ ا 4-6 m; Δĵ j M Received by (Signature) Received by (Signature) Received by (Signature) ઇ. ડ S-W m Station Location CO-US d -5 3 -15 9 0 0 0 0 00 3-109 0 = -P01-8 000 0 ナクロメの St. 5.7 3/06/57 2-76-90 M M 14 pC Ø 14 19 14 14 Date Time Date Time X X X Comp | Grab X × al14 8 C 54.0 00:11 27:60 09:45 CEL SO 09:30 00.00 5:0 00; // 3.0/ 8) e Time Project Name A Andrew D. 500 Ses! Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) 3/02 S 50 VI G 3 700 हि 3 7 Z Margan Date A.OECOP Samplers (Signature) Rejinquished by resolved. Proj. No. -Sta. No.

			,					-	-		-	Ţ.		·			and						
SAS / (9 9		!													advance				01960		
- 144 <u></u>		PAGE 4		Remarks													quested in		Dostas	3000	200		
		1/2															ATION st have re				2 2 - (Remarks	
		XX															'HORIZ'	ized by:	4	4	25	Re	
		<0°	11.00 P	937				-	_	 	 -	 		<u></u>			ME AUT	T.A.T. authorized by:	lts to:	مدي	200		
- Allegander - Allegander - Innament		000	6	200		X		х)	\	×		X		X		OUND TII	T.A.	Send Results to:	اد			
	<u>(</u>		(2)				X	,	X	}	×	×		X			PRIORITY TURNAROUND TIME AUTHORIZATION Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZA*ION NUMBER.	N NO.	တ	! 	1		ΝΆ
	-GHAIN-OF-GUSTOBY-HECOND-	MATRIX Water - A	Soil/Solid-S Waste-W Other-O		×	ท	X	\dashv	χ η υ	+	X 1 0	>	╂	X	4		RITY TU submitting ad a codec	AUTHORIZATION NO.	opoue)	pep		oct No.	N N
	TODI.	# C	<u>J</u>		ų,	٥ م	-02		4 1	7 (40 4	, N		70	۲0		PRIO Before receive	AUTH	☐ Fax to (phone)	Results needed	PO#	AMRO Project No	Seal Intact? Yes
	10 L	Project State	Type Size, & No. of	Containers	00	8					0 0			3	/ 8-	:	ogged ss are			Ň			ıture)
	- NIKE		B		3,	ر س	٠, ع	1	1		ν, ·)	1 7 7	7-9'	7-91		ot be log biguities		V(e.	4	(e _z	(a.	Received for Laboratory by: (Signature)
!		ال ،	A	Station Location	-1 1-	1	4	i.	m (ກຸ	` I .			N	5-3		es canno any amb		Received by (Signature)	1/2012	Received by (Signature)	Received by (Signature)	for Laborato
ora		H CO H	C.) je	2 60/	2 70	107 5	- 1	رام	راً،	00 0		1_	مه	801		Sample art until		Received	1	Received	Received	Received
BS (E		A CX	9,0		M	1	8	B	m I	\dashv	60) (┰			<u>,</u>		mpletely ill not st		me/9 >		6)	e W	ムンンン Date Time
s Jord	9-8496	38		Comp		X	X	×	+	-	×			×	×		and co	9	Palé Time	7/	Date Time	Date Time	Date Time
∋htal 🚍	ax: 603-42	Project Name	7		05,70	ه∹. حه	24.70	54.60	08,30	00:00	0.838		2 5 00 0	05,00	09700		, legibly ind time	Ž					.2.
<u>ச</u> ். rori சூ htal கூலர்க்க கேற்றாக k Street "N.H., 03054	Office: 603-424-2022 Fax: 603-429-8496	Pro Pro	Auck &	ç	3/25	3/02	3/25	3/05	20/2		3/05	<u> </u>	1007 1007 1007 1007 1007 1007 1007 1007		3/25		Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are resolved.	A J	(Signature)	3	(Signature)	(Signature)	_ 1
Aman Street Street Merrimack, N.H., O	e: 603-42	Proj. No. 96230	Samplers (Signature)		+	,	''	-17		7	-7		-		-		Please prir in and the resolved.	ત	Relipquished by (Signature)		Relinquished by (Signature)	Relinquished by (Signature)	Relinquished by (Signature)
Merr H	Office	P. O.	San	SH SH	ğ	<u> </u>											<u> </u> ⊈ '∈ g	\forall	TE TE	3	Relia	Retin	Relin

AMRO E. ronmental Laboratories Corporation 111 Herrick Street Merrimack, N.H. 03054 Office: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

				-				-			- -			
Proj. No.	Proj	ect Name		リックなどる	, <u> </u>	-	Project State	MATRIX		6	≺ ;	/	/ PAGE (3	∂ b
96230.A		BRA	5 8.A	(E.D	JH		4	Water - A			do'	ν,	\	
Samplers (Signature)	, J	Á	3	7	S S S S S S S S S S S S S S S S S S S		Type Size, No. of	Waste-W Other-O		00	for/	25		
S. S. S. S. S. S. S. S. S. S. S. S. S. S	Date		Comp Grab		Station Location		Containers		100/00/	do.	3,0	1	Remarks	
Old No.	3/24	l _A	X	3			-20-8-1-	:5K	- >		- 			
	3/24	3:5	X	1	1-5	1-31	20-8 1	Ŋ		X	^			
	40/0	54:8	X	3	105 S-A	4-6	1 8-02	n	X		+ 			
	100/5	37:81	X	Ŋ	C-5 501	4-6'	1 8-02	2		X	X			
	7/24	14:00	×	3-1	105 5-3	7-9'	1 8-02	Л	X					
	3/24	47.00	×	7 - 19	E-8 501	7-91	1 8-02	Ŋ		X	X			
	3/004	¥ 38	X	3-1	1-5 90	, 8-1	18-02	X	Х					1
	160	4:30	X	,	1-8 901	1-3	20-8 1	Ŋ		×				
	75/50	17.7	X	7-13	E-S 901	4-6	1 3-02	× ×	X					
	3/24	Shit	X	K	10 C S-2	4-6	1 8-02	S		X				
	3/24	15.300	X	M	(06 5-3	7- 9'	1 8-02	X Y	×	_	_			
	13/34	DO 1. D	X	ρG	E-5-9-01-	7-9'	1-3-02	S		X				
						•	1							
Please	print clearl	y, legibly	and con	npletely.	Please print clearly, legibly and completely. Samples cannot be logged	ot be logo		RIORITY (TURNA	ROUNE	TIME C	PRIORITY TURNAROUND TIME AUTHORIZATION	FION have requested in	advance and
in and th resolved	ne turnaro d.	una time	¥ 2005 •	101 std	in and the turnaround time clock will not start utilitially attributions are resolved.	Somman		seived a co	ded T.A.T	, AUTHO	RIZATIO	N NUMBER.	received a coded T.A.T. AUTHORIZATION NUMBER.	
4	Judy end	i) A	J.				AL	AUTHORIZATION NO.	TION NO.		T.A.T. a	T.A.T. authorized by:		
Refinduishe	Refinquished by (Signature)		Date Time	C5/80	Received by (Signature)	(e)	E.	☐ Fax to (phone)		Send F	Send Results to:) 	Nostas	
1///	34		1/10/		(Softhwest	1 Kill	Result	Results needed			36	5 Jan 4	10000000000000000000000000000000000000	
Relinquishe	Relinquished by (Signature)		Date Time	9	Received by (Signature)	ire)	#OA					23 600	Mass. 0196	0 90
Relinquishe	Relinquished by (Signature)		Date Time	e.	Received by (Signature)	(eur	AMBC	AMRO Project No.			-	Rer	Remarks	
				7	Section 1	Part Politice	Seal Intact?	ntact?						
Relinquishe	Relinquished by (Signature)		Date In	_	Hecelved for Laboratory	ory by. (Signature)		2	∀ /Z					
1.45/	Trung.	,5,	X-21F	///		J. J.	2	ľ						

111 Herrio	Em. on one state and orace state of the stat	न्त्रोtal ि	anorak	S	امراسی	™				- Properties			The state of the s		A CONTROL OF THE PARTY OF THE P	The state of the s	violetini violet			
Office: 603	Office: 603-424-2022 - Fax: 603-429-8496	-ax: 603-4	129:8496				-CHAIR	FOF:	-CHAIN-OF-CUSTODY-RECORD	7-RE€	-GHO									
Proj. No.	0j. No. 962230. A	Project Name S	BRA	Rex	45	ן טר	į	Proje ~	Project State	MATRIX Water - A	×۰	1)	83	* 0	25.00		PAGE C	30 C	00	
Samplers (Signature)	다	Ä	3	4	B	7	1	Type Size, No. of	ö	Soil/Soild-Waste-W		6	000	10	ary c					
Sta	Date		S S S S S S S	Grab	ö	Station Location	-	Cont	Containers	Explain	(Q)	(8)	1830 1830	200		Œ	Remarks			
	3/24	JE: 13		10	6.	3-5	, E - 1	_	8-02	S	X	-		 						
	76/6	cE: //		XB	- (03	S.(1-3'	_	8.02	Ŋ			Å							
	76/5	24.11		ス の	- 103	S-2	,9-4	/	8.02	Ŋ	X									
	10/8	547.11		X B.	. (0 3	5-2	,9-4	,	8-05	S			У							
	%c'/€	00:00		XB	- 103	5.3	7-9	,	8-02	S	X									
	_	12 100		X	E01 -	5-3	5-6	,	8.02	S			x							
	15/5	1		£÷) ×	. 164	5-1	1-31	/	8 02	S	×	×				•				
		3		X	101-	1-5	15-1	-	8-02	iη			X							. '
	76/2	54:01		X	- 104	5-2	4-6	_	8-02	S	X X	X								,
	3/24	14:45		X	401 -	١.	,9-1,	/	8-02	S			¥							•
	3/34	13:00		X Ø	- 104	5-3	7-91	,	20.8	S	X	X								;
	3/24	(3)		κ)	104	S-3	7-9'		8-02	S			X	_						•
	•										_									
Please in and t	Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are	ly, legibly und time	y and α	omplete will not	ely. Sam start un	ples car til any a	not be lo nbiguities	gged s are	PRI Befo	ORITY re submi	TURN Hing sar	AROL nples fo	IND TI	M': AU	PRIORITY TURNAROUND TIM! AUTHORIZATION Before submitting samples for expedite 1 T.A.T., you must have	PRIORITY TURNAROUND TIM! AUTHORIZATION Before submitting samples for expedite 1 T.A.T., you must have requested in advance and	quested ir	т адуалсе	and	
resolved.		1							ece -	received a coded 1.A.I. AUTHORIZA! ON NUMBER.	A.1 Debo	AUI	HOHIC	Z Z Z Z Z	UMBEH.					
Aucrew	and D	j	4						AUT	AUTHORIZATION NO.	NOIL NO		T.A.1	.T autho	authorized by:					
Relinquished	Relinquished by (Glanature)		Date Time	Time / 97		Ž.	ature)			Fax to (phone)		Ser	Send Results to:	床 to:	2001	Ž	20/20			
1	A	8	9/		$\frac{1}{2}$	でもようれ	2-18-17	X	Results needed	pepee	:		3	3	+	3	200			
Relinquished	Relinquished by (Signature)		Date Time	E L	Recei	Received by (Signature)	ature)		PO#				47	20.00	539	W.55	6)0 , 8	0 0 0		<u> </u>
Relinquished	Relinquished by (Signature)		Date Time	Time	Recei	Received by (Signature)	ature)		AMRO Pro	Ject No.	C	-			Re	Remarks				
Relinquished	Relinquished by (Signature)	,	S Date Time	.5 : 5 € Time		ved for Labo	Received for Laboratory by: (Signal	nature)	Š		, VIII								·	
1.2.1	1-424-11	1		6779		110	17.70		res	2	¥/¥								7	

AMRO En., conmental Laboratories Corporation 111 Herrick Street Merrimack, N.H. 03054 Office: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

5				,)												
۴	Proj. No.		Project Name	η. Υ. Υ.	アンカンズ	, ,		Project State	MATRIX		8		/	7	PAGE	کر ا
-	96230.A			BRA	イジノ	J 14 0		3	- Water - A	"		0%		\ \ \		
1_°S_	Samplers (Signature)	ature)	A		1		1	Type Size,	Waste-W		\$0\ \$0\ \$0\	gr. /	0/2.			
				1				ontainers	•	10	15/30/	\	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
رى	Sta. No.	Date	Time	Comp Grab		Station Location			1	$\mathcal M$	1	\mathcal{A}			Remarks	
1_	-	40/8	I K	X	101-8	\$-1)-5	, 50	18.02	N ×	×						
<u> </u>		3/24	09:30	×	B-10	-1 1-5 1	2.5	8.02	S		×					
1			34:60	Х	01 - 10	-S'4 C-5 10	5-6.5'	8.02	x V)	×						
1	-	1/0/18	39:45	×	8 - 10	(S-w	4.5-65	18.02	٧		メ					
			00:0/	×	J. D	7 5-3 7	-51	18.02	S	X						
1	-	40/E	0010/	X	101-8	5-3 7	- 7'	18-02	S		X	- 	1			
<u> </u>		3/24	10:30	X	B. 10	i . S &	1-3'	18.02	X V	X		- 	-			
			o o	×)- 원	1 1-5 601	1-31	1.8.02	S		×	- 				
<u> </u>		3/24	5.510/	X	1-8	4 6-5 401	, 9-,	1 8-02	N X	×						
<u> </u>		1,00/5	54:01	K	р	102 S-2	4-6'	20-8 /	S		٧	- 				
		190/2	11100	X	(B)	02 S-3 7	, 6-6	8-02	X V	X	_	 				
Ļ.,		1,00/0	0 0 : 1	X 	8-7	5-5 Co	7.8.7	20-8 1	S	!	X		-		-	:
1	-											_				
ــــــــــــــــــــــــــــــــــــــ	Please pri	int clear	ly, legibly	and con	npletely.	Please print clearly, legibly and completely. Samples cannot b	t be logged		PRIORITY TURNAROUND TIME AUTHORIZATION	URNA	ROUNI	TINE	AUTHOF	RIZATION	o botoo	בינה שטעהאטה
	in and the	turnaro	und time	clock wi	II not sta	in and the turnaround time clock will not start until any ambiguities are resolved.	iguities a		Before submitting samples for expedition 1.3.1., you mile feelived a coded T.A.T. AUTHORIZA 10N NUMBER.	ing sampled T.A.1	AUTHO	xpediligo RIZA: 10	N NUMBE	111051 119ve R.	Before submitting samples for expedition 1.A.1., you must have requested in covering and received a coded T.A.T. AUTHORIZA, ION NUMBER.	
	A. d. chan		B	Carr				At	AUTHORIZATION NO.	ON NO.		T.A.1	T.A.T authorized by:	by:		
	Relinquished by (Signature)	(Signature)		Daye Tin	re / 67	Received by (Signature)	(a)	□ □	Fax to (phone)		Send	Send Result to:	020	4	Nachas	ે કડકે _.
_	See .		1	36 : 30	nin nin	12. Maure	400	Result	Results needed			3,	+ 302	Sam	2000	d
<u> </u>	Relinquished by (Signature)	/ (Signature)	·	Date Time	96	Received by (Signature)	ê	# O D					08	W. 5	(300	09510
<u> </u>	Relinquished by (Signature)	y (Signature)		Date Time	9L	Received by (Signature)	(e)	AMRC	AMRO Project No.				·	Remarks		
<u> </u>	Relinquished by (Signature)	y (Signature		Date Time	راد درار الله	Received for Laboratory by: (Signature)	ry by: (Signat	Seg	•					·		
	14 17 17 17 17 17 17 17 17 17 17 17 17 17	June 1	1	3.26-17	(-17	(Je Trap	7	Yes	S S	N/A						

anso

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-8

AMRO I.D.: 14825-08

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
	======================================	
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	2.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	2.0
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	2.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
Dibromomethane	ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	2.0
1,2-Dichloropropane	ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	ND	2.0
Dibromochloromethane	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
Toluene	ND	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson
Client I.D.: WS-8

AMRO I.D.: 14825-08

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
cis-1,3-Dichloropropene	ND	2.0
trans-1,3-Dichloropropene	ND	2.0
Xylene (20101)	Mi	2.0
1,2-Dibromo-3-chloropropane	ND	5.0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ı ND	2.0
1,3,5-Trimethylbenzene	ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

Vayau

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-9

AMRO I.D.: 14825-09

Date sampled: 12/12/96 Date received: 12/13/96

Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
Chloromethane	ND	5.0
Bromomethane	ND	5.0 2.0
Vinyl Chloride	ND	5.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	ND	
Methylene Chloride	ND	2.0 2.0
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	•
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
Dibromomethane	ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ИD	2.0
Bromodichloromethane	ND	2.0
1,2-Dichloropropane	ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	ND	2.0
Dibromochloromethane	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
Toluene	ND	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson

Client I.D.: WS-9

AMRO I.D.: 14825-09

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
cis-1,3-Dichloropropene	========= ND	2.0
trans-1,3-Dichloropropene	ND	2.0
I/lene (itotal)	בוא	2.0
1,2-Dibromo-3-chloropropane	ND	5.0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	. ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	, ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

Nancy Stowart

AMEG

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-10

AMRO I.D.: 14825-10

Date sampled: 12/12/96 Date received: 12/13/96

Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

	Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
.•	Chloromethane	ND	5.0
	Bromomethane	ND	5.0
	Vinyl Chloride	ND	2.0
	Dichlorodifluoromethane	ND	5.0
	Chloroethane	NĐ	5.0
	Methylene Chloride	ND	2.0
	Trichlorofluoromethane	ND	2.0
	1,1-Dichloroethene	ND	2.0
	Bromochloromethane	ИĎ	2.0
	1,1-Dichloroethane	ND	2.0
	cis-1,2-Dichloroethene	ND	2.0
	trans-1,2-Dichloroethene	ND	2.0
	Chloroform	5.8	2.0
	Dibromomethane	ND	2.0
	1,2-Dichloroethane	ND	2.0
	2,2-Dichloropropane	ND	2.0
	1,1,1-Trichloroethane	ND	2.0
	Carbon Tetrachloride	ND	2.0
	Bromodichloromethane	ND	2.0
	1,2-Dichloropropane	ND	2.0
	1,1-Dichloropropene	ND	2.0
	Trichloroethene	ND	2.0
	Dibromochloromethane	ND	2.0
	1,1,2-Trichloroethane	ND	2.0
	Benzene	ND	2.0
	1,3-Dichloropropane	ND	2.0
	Bromoform	ND	2.0
	1,1,1,2-Tetrachloroethane	ND	2.0
	Tetrachloroethene	ND	2.0
	1,2-Dibromoethane	ND	2.0
	1,1,2,2-Tetrachloroethane	ND	2.0
	Toluene	ND	2.0
	Chlorobenzene	ND	2.0
	Ethylbenzene	ND	2.0
	Bromobenzene	ND	2.0
	Isopropylbenzene	ND	2.0
	Styrene	ND	2.0
	n-Propylbenzene	ND	2.0

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson
Client I.D.: WS-10
AMRO I.D.: 14825-10

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)	
cis-1,3-Dichloropropene	ND	2.0	==:
trans-1,3-Dichloropropene	ND	2.0	
and the second s	ND	2.0	
1,2-Dibromo-3-chloropropane	ND	5.0	
tert-Butylbenzene	ND	2.0	
2-Chlorotoluene	ND	2.0	
Hexachlorobutadiene	ND	2.0	
4-Chlorotoluene	ND	2.0	
sec-Butylbenzene	ND	2.0	
1,3-Dichlorobenzene	ND	2.0	
1,2-Dichlorobenzene	ND	2.0	
1,4-Dichlorobenzene	ND	2.0	
1,2,3-Trichloropropane	ND	2.0	1
n-Butylbenzene	ND	2.0	
4-Isopropyltoluene	ND	2.0	r
Naphthalene	ND	2.0	
1,2,4-Trimethylbenzene	ND	2.0	
1,3,5-Trimethylbenzene	ND	2.0	
1,2,3-Trichlorobenzene	ND	2.0	
1,2,4-Trichlorobenzene	ND	2.0	
Methyl-tert-butyl ether (MTBE)	ND	2.0	i.

ND = Not Detected at or above the reporting limit.

Analyzed By: DM_

Approved by

Varant

4 ne

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson
Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-11

AMRO I.D.: 14825-11

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND.	2.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	2.0
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	2.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
Dibromomethane	ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	2.0
1,2-Dichloropropane	ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	ND	2.0
Dibromochloromethane	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
Toluene	ND	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson

Client I.D.: WS-11

AMRO I.D.: 14825-11

Test Parameter	Results (ug/L)	Reporting Limit(ug/L
cis-1,3-Dichloropropene	ND	2.0
trans-1,3-Dichloropropene	ND	. 2.0
Xylene (total)	ND _	~)
1,2-Dibromo-3-chloropropane	ND	5.0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

Vener Starret

AME

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury MA

WS-12

AMRO I.D.: 14825-12

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
Chloromethane	ND	5.0
Bromomethane	. ND	5.0
Vinyl Chloride	ND	2.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	2.0
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	2.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
Dibromomethane	ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND .	2.0
Bromodichloromethane	ND	2.0
1,2-Dichloropropane	ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	ND	2.0
Dibromochloromethane	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
Toluene	ND	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0



EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson

Client I.D.: WS-12

AMRO I.D.: 14825-12

Test	Results	Reporting
Parameter	(ug/L)	Limit(ug/L)
cis-1,3-Dichloropropene	ND	2.0
trans-1,3-Dichloropropene	ND	2.0
Xylene (total)	ÚИ	2.0
1,2-Dibromo-3-chloropropane	ND	5.0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	2.8	2.0
Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

Menden

Altei

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury MA

Dup 1

AMRO I.D.: 14825-13

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
Chloromethane	ND	5.0
Bromomethane	ND ND	5.0
Vinyl Chloride	ND ND	2.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	ND ND	5.0
Methylene Chloride	ND	2.0
Trichlorofluoromethane	ND ND	2.0
		2.0
1,1-Dichloroethene	ND	2.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND ND	2.0
cis-1,2-Dichloroethene	-	2.0
trans-1,2-Dichloroethene Chloroform	ND ND	2.0
Dibromomethane		2.0
1,2-Dichloroethane	ND	2.0
· · · · · · · · · · · · · · · · · · ·	ND ND	2.0
2,2-Dichloropropane 1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND ND	2.0
Bromodichloromethane	ND ND	2.0
1,2-Dichloropropane	ND	2.0
	ИD	2.0
1,1-Dichloropropene Trichloroethene	ИD	2.0
Dibromochloromethane		2.0
	ND	
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2-Tetrachloroethane	ИD	2.0
Toluene	ND	2.0
Chlorobenzene	ИД	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson
Client I.D.: Dup 1
AMRO I.D.: 14825-13

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)	:
cis-1,3-Dichloropropene	ND	2.0	1
trans-1,3-Dichloropropene	ND	2.0	
Yylene (tebal)	ND		
1,2-Dibromo-3-chloropropane	ND	5.0	
tert-Butylbenzene	ND	2.0	
2-Chlorotoluene	ND	2.0	
Hexachlorobutadiene	ı ND	2.0	
4-Chlorotoluene	ND	2.0	
sec-Butylbenzene	ND	2.0	
1,3-Dichlorobenzene	ND	2.0	
1,2-Dichlorobenzene	ND	2.0	
1,4-Dichlorobenzene	ND	2.0	
1,2,3-Trichloropropane	ND	2.0	
n-Butylbenzene	ND	2.0	
4-Isopropyltoluene	2.6	2.0	
Naphthalene	ND	2.0	
1,2,4-Trimethylbenzene	ND	2.0	
1,3,5-Trimethylbenzene	ND	2.0	
1,2,3-Trichlorobenzene	ND	2.0	
1,2,4-Trichlorobenzene	ND	2.0	
Methyl-tert-butyl ether (MTBE)	ND	2.0	

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

ncy Stowart

Avij

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson

Client I.D.: 96230.A BRA/EDIC Roxbury MA

Trip Blank

AMRO I.D.: 14825-14

Date sampled: 12/12/96 Date received: 12/13/96 Date prepared: 12/16/96 Date analyzed: 12/16/96

Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
Chloromethane	ND	5.0
Bromomethane	ND	.5.0
Vinyl Chloride	ND	2.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	2.8	2.0
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	2.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
Dibromomethane	ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	2.0
1,2-Dichloropropane	ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	ND	. 2.0
Dibromochloromethane	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
Toluene	ND	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson
Client I.D.: Trip Blank
AMRO I.D.: 14825-14

Test Parameter	Results (ug/L)	Reporting Limit(ug/L)
cis-1,3-Dichloropropene	·========= ND	2.0
trans-1,3-Dichloropropene	ND	2.0
Xylene (5-2-1)		2.0
1,2-Dibromo-3-chloropropane	'ND	. 5 .0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene	! ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	: ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

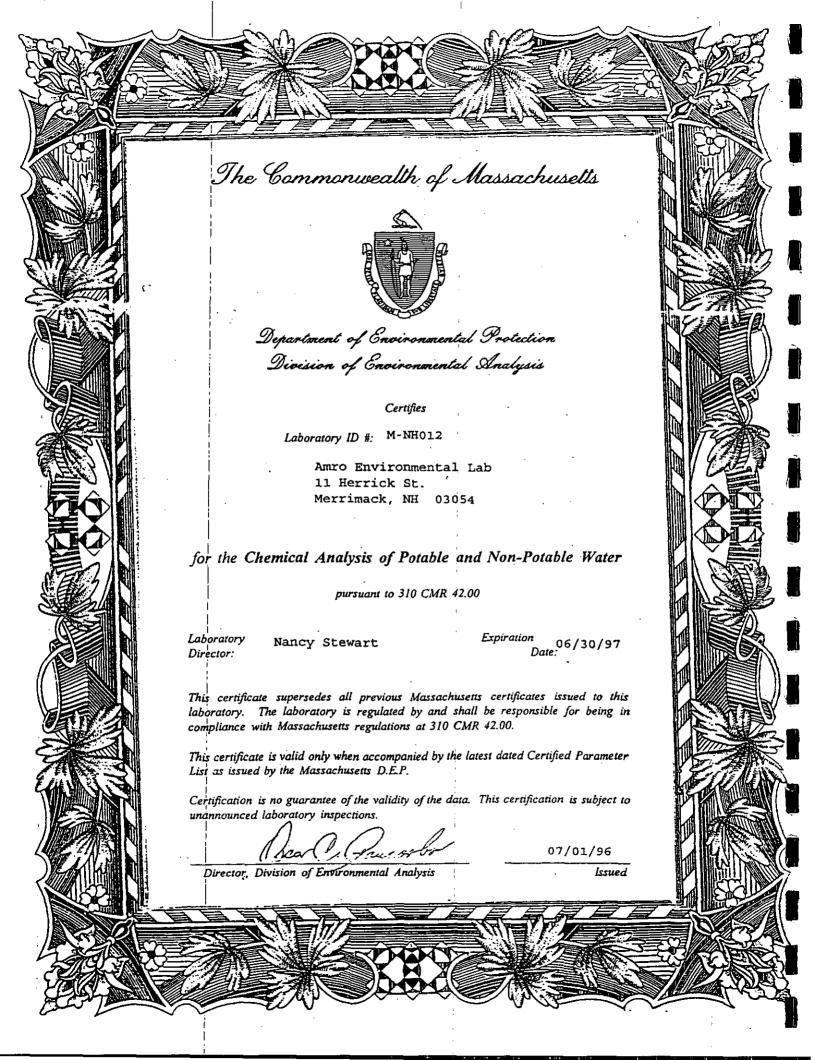
ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

Nancy Stewart

And RO Environmental Edboraturies Corporation Merrimack. N.H. 03054	ar Eabolandrie	s Corporation [
Office: 603-424-2022 Fax: 60	Fax: 603-429-8496	CHAIN	CHAIN OF CUSTODY RECORD		0.797
Proj. No.			Project State MATDIV	1 2 2	
100	7	C KOXIXOX V	Water-A		PAGE 1 OF 1
	N 1 1 8	Jan 180 /2		10/0/0/00/00/00/00/00/00/00/00/00/00/00/	
Sta. No. Date		7	& No. of Other-O Containers Explain		
009.61.61	S COUNTY OF THE	Station Location	100 A	3	Bomorles
13	+-	1) \$25	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	×××	Culpingu
	(5)	50.3		X	
200000000000000000000000000000000000000		WS-4.	1	XXX	+ 10 d + 11 + +
01 75 6	7	SS		×	
7 ~	 -	0.00	A X	XXX	Color of the Color
34:01 36 C B		820	X		(A) (CA)
12 13 16 10:40	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1	XXX	××	
S1:11 4 1:11 11	10		×	××	817 By F.C. t. L.
12.25		11.57	XXX	×	
7		NS: 12	× ;	XXX	All analyses to Mio
000 July 10 CO	7	2021	4	×	1
Please print clearly, legibly	ly and complete	and completely. Samples cannot be located	<i>*</i> /		
resolved.	le clock will not s	in and the turnaround time clock will not start until any ambiguities are resolved.		Before submitting samples for expedited T.A.T., you must have neceived a coded T.A.T. AUTHORIZATION	Before submitting samples for expeding T.A.T., you must have requested in advance and received a coded T.A.T. AUTHOBIZA JON MILESTON
Belindliched by C.			AUTHORIZATION NO.	T.A.: authorized hu	Port.
COUNTRICE OF COUNTRICE) 2 - 13 - 94	Received by	☐ Fax to (phone)	Send Result: to:	M
Refinquished by (Signature)	Date Time		Besults needed PO# NATA TO PO#	C/1 Wesser 210	ACCOUNT DON'S
Relinquished by (Signature)	Date Time	Received by (Signature)	AMRO Project No.	W. W	iks (
Relinquished by (Signature),	Date Time	Received for Laboratory by: (Signature)	Sealink	Have	Box Fire Fillers.
Melbara Managara	1 to 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	O'rail. Olland same	Yes No N/A	-	



Environmental Laboratories Corporation



111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 · FAX: (603) 429-8496

December 16, 1996

Mr. George Naslas Weston & Sampson Engineers 5 Centennial Drive Peabody, MA 01960

RE Your project: 96230.A BRA/EDIC Parcel P-3

Dear George:

Enclosed please find the results for the above-referenced project, received on December 06, 1996. AMRO operates a Quality Control Program which meets or exceeds EPA and state requirements. A copy of the appropriate State Certificate is attached. No quality control deviations were noted during the analyses associated with this project. This project was assigned AMRO Project Number 14789. If you have any questions regarding this project in the future, please refer to this number.

Please be advised that any unused sample volume and sample extracts will be stored for a period of thirty (30) days from this report date. After this time, AMRO will properly dispose of the remaining sample. If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This letter is an integral part of your data report.

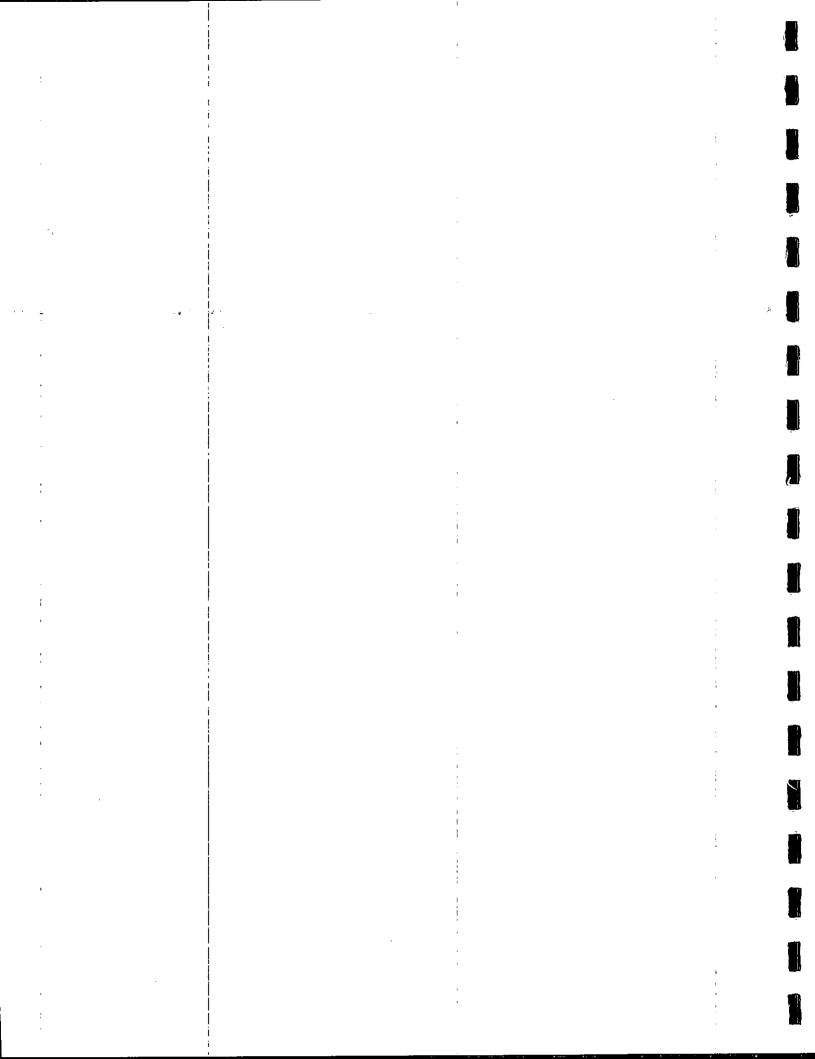
Please do not hesitate to call if you have any questions.

Sincerely,

Nancy Stewart

Laboratory Director

Encl.



AMRO Environmental Laboratory Report

Page 1 of 2

lient:

Weston & Sampson Engineers

5 Centennial Drive Peabody, MA 01960

Attn: Mr. George Naslas

mples Qty/Type:

3/Solid

Client Designation:

96230.A BRA/EDIC Parcel P-3

AMRO Designation: 14789

Date Sampled: 12/03 & 05/96

Date Rec'vd: 12/06/96 Date Complete: 12/13/96

COC #: 16993

56-1		·						
mpi dent	e ity	'AMRO Identity	Test Parameter	Results	U.LL.	Date of Analysis	by	EPA Method
] .							
5-2	İ	14789-01	Total Solids	43.0	*	12/09/96	LP	2540G
	1	21.703 02	Digestion	43.0	•	12/11/96	TC	3050
	ŀ		Arsenic, Total	7.1	mg/Kg	12/12/96	EL	6010
			Barium, Total	62.	mg/Kg	12/12/96	EL	6010
			Cadmium, Total	<5.5	mg/Kg	12/12/96	EL	6010
			Chromium, Total	54.	mg/Kg	12/12/96	EL	6010
			Lead, Total	13.	mg/Kg	12/12/96	\mathbf{EL}	6010
ויי ויי			Mercury, Total	<0.033	mg/Kg	12/13/96	RK	747 1
_			Selenium, Total	<5.5	mg/Kg	12/12/96	\mathbf{EL}	6010
			Digestion			12/11/96	TC.	3005
			Silver, Total	<5.2	mg/Kg	12/12/96	EL	6010
₩\$-3		14789-02	Total Solids	56.9	8	12/09/96	LP	2540G
WS-3			Digestion			12/11/96	TC	3050
י י	1		Arsenic, Total	7.5	mg/Kg	12/12/96	EL	6010
_	ļ		Barium, Total	57.	mg/Kg	12/12/96	EL	6010
	}		Cadmium, Total	<4.2	mg/Kg	12/12/96	EL	6010
	i		Chromium, Total	84.	mg/Kg	12/12/96	EL	6010
ì	}		Lead, Total	9.8	mg/Kg	12/12/96	EL	6010
	ŀ		Mercury, Total	0.059	mg/Kg	12/13/96	RK	7471
			Selenium, Total	<4.2	mg/Kg	12/12/96	${ t EL}$	6010
Ì	ļ		Digestion			12/11/96	TC	3005
			Silver, Total	<4.1	mg/Kg	12/12/96	EL	6010

Continued next page . . .

AMRO Environmental Laboratory Report

Page	2	of	2
------	---	----	---

Sample Identity	AMRO Identity	Test Parameter	Results	Units	Date of Analysis	Run by	EPA Method
WS-11	14789-03	Total Solids	87.6	8	12/09/96	\mathbf{LP}	2540G
		Digestion			12/11/96	TC	3050
1	1	Arsenic, Total	8.1	mg/Kg	12/12/96	\mathbf{EL}	6010
•		Barium, Total	53.	mg/Kg	12/12/96	\mathbf{EL}	6010
•		Cadmium, Total	<2.4	mg/Kg	12/12/96	EL	6010
:		Chromium, Total	11.	mg/Kg	12/12/96	\mathbf{EL}	6010
	i	Lead, Total	51.	mg/Kg	12/12/96	\mathbf{EL}	6010
	j	Mercury, Total	<0.015	mg/Kg	12/13/96	RK	7471
i		Selenium, Total	<2.4	mg/	73,43,40¢	स्ट्र	5010
		Digestion		· · · · •	12/11/96	TC	3005
· · ,		Silver, Total	<2.4	mg/Kg	12/12/96	\mathbf{EL}	6010
•	. ;			•			

Results are in dry weight.

All analyses performed in accordance with:

USEPA Methods of Chemical Analysis for Water & Waste.

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992. and USEPA SW846 Manual, 3rd. ed.

The following standard abbreviations and conventions apply throughout all sections:

< = 'Less than' followed by the detection limit.

> = 'Greater than'

Certified by:

Paula Ronham

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-2

AMRO I.D.: 14789-01

Date sampled: 12/03/96 Date received: 12/06/96 Date prepared: 12/10/96 Date analyzed: 12/12/96

Sample Qty/Type: 1/Solid

lest Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	ND	57
2-Methylnaphthalene	ND	57 ·
Acenaphthylene	ND	57
Acenaphthene	ND	57
Fluorene	ND	57
Phenanthrene	ND	57
Anthracene	ND	57
Fluoranthene	ND	57
Pyrene	ND	57
Benzo[a]anthracene	ND	57
Chrysene	ND	· 57
Benzo[b]fluoranthene	ND	57
Benzo[k]fluoranthene	ND	57
Benzo[a]pyrene	ND	57
Dibenzo[a,h]anthracene	ND	110
Benzo[g,h,i]perylene	ND	110
Indeno[1,2,3-cd]pyrene	ND	110

Solid Content = 43.0%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

Analyzed By: NM

Approved by

Nancy Stewart

FOR

anst

LABORATORY REPORT

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-3

AMRO I.D.: 14789-02

Date sampled: 12/03/96 Date received: 12/06/96

Date prepared: 12/10/96 Date analyzed: 12/12/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Limit(ug/kg)
Naphthalene	ND	25
2-Methylnaphthalene	ND	25
Acenaphthylene	ND	25
Acenaphthene	ND	25
Fluorene	ND	25
Phenanthrene	ND	25
Anthracene	ND	25
Fluoranthene	ND	25
Pyrene	ND	25
Benzo[a]anthracene	ND	25
Chrysene	ND	25
Benzo[b]fluoranthene	ND	25
Benzo[k]fluoranthene	ND	25
Benzo[a]pyrene	ND	25
Dibenzo[a,h]anthracene	ND	50
Benzo[g,h,i]perylene	ND	50
Indeno[1,2,3-cd]pyrene	ND	50

Solid Content = 56.9%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

Analyzed By: NM_

Approved by

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-11

AMRO I.D.: 14789-03

Date sampled: 12/05/96 Date received: 12/06/96

Date prepared: 12/10/96 Date analyzed: 12/12/96

Sample Qty/Type: 1/Solid

Tesc Parameter	Results (ug/kg)	Limit(ug/kg)
Naphthalene	ND	28 ·
2-Methylnaphthalene	ND	28
Acenaphthylene	ND	28
Acenaphthene	ND	28
Fluorene	ND	28
Phenanthrene	ND	28
Anthracene	ND	28
Fluoranthene	ND	28
Pyrene	ND	28
Benzo[a]anthracene	ND	28
Chrysene	ND	28
Benzo[b]fluoranthene	. ND	28
Benzo[k]fluoranthene	ND	28
Benzo[a]pyrene	ND	28
Dibenzo[a,h]anthracene	ND	56
Benzo[g,h,i]perylene	ND	56
Indeno[1,2,3-cd]pyrene	ND	56

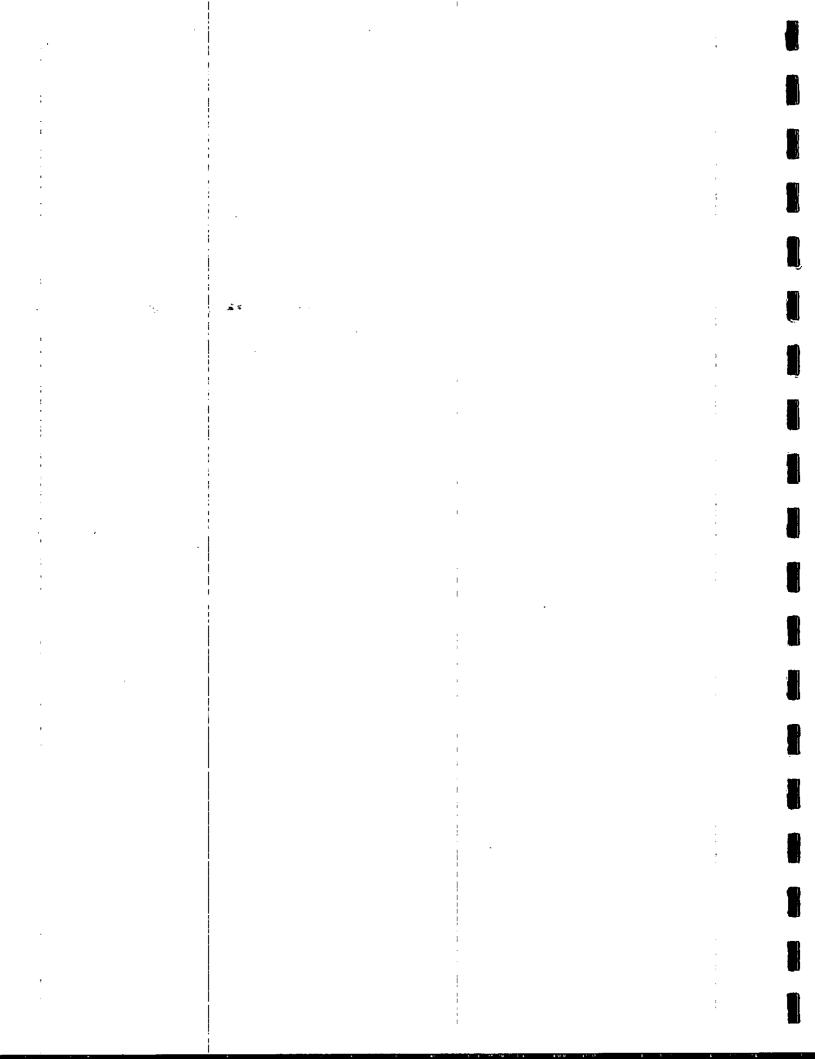
Solid Content = 87.6%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

Analyzed By: NM

an e

Approved by



LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-2

AMRO I.D.: 14789-01

Date sampled: 12/03/96 Date received: 12/06/96

Date prepared: 12/10/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)	
Gasoline	ND	110	
Kerosene	ND	110	
Mineral Spirits	ND	110	
Fuel Oil #2/Diesel	ND	110	
Fuel Oil #4	ND	110	
Fuel Oil #6	ND	230	
Motor Oil/Hydraulic Oil	ND	110	

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap). Solid Content = 43.0%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>JK</u>

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-3

AMRO 1.D.: 14789-02

Date sampled: 12/03/96 Date received: 12/06/96

Date prepared: 12/10/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)	
Gasoline	ND	86	
Kerosene	ND	· 86	
Mineral Spirits	ND	86 ;	
Fuel Oil #2/Diesel	ND	86	
Fuel Oil #4	ND	86	
Fuel Oil #6	ND	170	
Motor Oil/Hydraulic Oil	ИD	86	

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Solid Content = 56.9%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>JK</u>

Approved by

AWEO

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-101 S-3 7-9'

AMRO I.D.: 15550-03

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

Campio Otalunas: Tingi

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)	
\\F=0F=\F#\#\\\\\\\\\\\\\\\\\\\\\\\\\\\\	======================================	: C=	
Gasoline	ND	61	
Kerosene	ND	61	
Mineral Spirits	ND	61	
Fuel Oil #2/Diesel	ND	61	
Fuel Oil #4	ND	61	
Fuel Oil #6	ND	120	
Motor Oil/Hydraulic Oil	ND	61	

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 81.7%. Results are in dry weight.

Comments:

in the second

ND = Not Detected at or above the reporting limit.

Analyzed By: SWC

Approved by

Nancy Stewart

1.

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-102 S-1 1-3'

AMRO I.D.: 15550-04

Date sampled: 03/24/97 Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/05/97

Sample 2 - /mme. 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)	
Gasoline	ND	56	
Kerosene	∖ ND	56	
Mineral Spirits	ND	56	-
Fuel Oil #2/Diesel	ND	56	
Fuel Oil #4	ND	56	
Fuel Oil #6	ND	110	
Motor Oil/Hydraulic Oil	440	56	

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 89.5%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

....

aŭ Eo

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers
Client I D.: 96230.A Roxbury-BRA/EDIC
B-102 S-2 4-6'

AMRO I.D.: 15550-05
Date sampled: 03/24/97 Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	55
Kerosene	ND	55
Mineral Spirits	ND	55
Fuel Oil #2/Diesel	ND	55
Fuel Oil #4	ND	55
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	380	55

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 88.1%. Results are in dry weight.

Comments:

1

ND =	Not	Detected	at	or	above	the	reporting	limit
_							- , / "	~ 11.1

Analyzed By: <u>SWC</u> Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-102 S-3 7-9'

AMRO I.D.: 15550-06

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	56
Kerosene	ND	56
Mineral Spirits	ND	56
Fuel Oil #2/Diesel	ND	56
Fuel Oil #4	ND	56
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	560	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).
Solid Content = 85.2%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: SWC

Approved by

awro

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-103 S-1 1-3'

AMRO I.D.: 15550-07

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/05/97

Sample of Tipe: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	55
Kerosene	ND	55
Mineral Spirits	ND	55
Fuel Oil #2/Diesel	ND	55
Fuel Oil #4	ND	55
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	160	55

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a medified EPA 8015 or 8260A (purge and trap). Solid Content = 89.7%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit,

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

سے

.....

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-103 S-2 4-6'

AMRO I.D.: 15550-08

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/05/97

Cample Oty/Typo: 1/0011

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	56
Kerosene	ND	56
Mineral Spirits	ИD	56
Fuel Oil #2/Diesel	ND	56
Fuel Oil #4	. ND	56
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	270	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 87.5%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

P3"

ahed

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-103 S-3 7-9'

AMRO I.D.: 15550-09

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/05/97

- Sampl. 1/501:4

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)	
Gasoline	ND	55	
Kerosene	ND	5 5	
Mineral Spirits	ND	55	
Fuel Oil #2/Diesel	ND	55	
Fuel Oil #4	ND	55	
Fuel Oil #6	ND	110	
Motor Oil/Hydraulic Oil	120	55	

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 89.6%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

P1.

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-106 S-1 1-3'

AMRO I.D.: 15550-10

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/05/97

Sample Qty/Type: 1/Soli.

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	56
Kerosene	ND	56
Mineral Spirits	ND	56
Fuel Oil #2/Diesel	ND	56
Fuel Oil #4	ND	56
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	450	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 88.5%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit,

Analyzed By: <u>SWC</u>

Approved by

<u> Allao</u>

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-106 S-2 4-6'

AMRO I.D.: 15550-11

Date sampled: 03/24/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/05/97

Sample Oty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	57
Kerosene	ND	57
Mineral Spirits	ND	57
Fuel Oil #2/Diesel	ND	57
Fuel Oil #4	ND	57
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	700	57

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 87.4%. Results are in dry weight.

Comments:

B

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-106 S-3 7-9'

AMRO I.D.: 15550-12

Date sampled: 03/24/97 Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/07/97

Sampil www. ... a: 1/Solid

Test Parameter	Results (mg/kg)	**Reporting Limit(mg/kg)	
Gasoline	ND	560	-
Kerosene	ND	560	į
Mineral Spirits	ND	560	
Fuel Oil #2/Diesel	ND	560	
Fuel Oil #4	ND	560	
Fuel Oil #6	ND	1,100	
Motor Oil/Hydraulic Oil	6,700	560	

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 86.4%. Results are in dry weight.

Comments:

** = The reporting limit has been elevated due to sample dilution (04/07/97).

ND = Not Detected at or above the reporting limit,

Analyzed By: <u>SWC</u>

Approved by

MANAG

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-107 S-1 1-3'

AMRO I.D.: 15550-13

Date sampled: 03/25/97 Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/05/97

Transfer Quy/Type. 1/au.id

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	55
Kerosene	ND	55
Mineral Spirits	ND	55
Fuel Oil #2/Diesel	ND	55
Fuel Oil #4	ND	55
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	140	55

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).
Solid Content = 87.6%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-107 S-2 4-6'

AMRO I.D.: 15550-14

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

Sample ve, Tipe. Tiscilia

Test Parameter	Results (mg/kg)	**Reporting Limit(mg/kg)
Gasoline	ND	280
Kerosene	ND	280
Mineral Spirits	ND	280
Fuel Oil #2/Diesel	! ND	280
Fuel Oil #4	ND	280
Fuel Oil #6	i ND	560
Motor Oil/Hydraulic Oil	2,300	280

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 87.4%. Results are in dry weight.

Comments:

** = The reporting limit has been elevated due to sample dilution (04/07/97).

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

7.7

ANTI

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-107 S-3 7-9'

AMRO I.D.: 15550-15

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Sample Qty/Type: 1/30114

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	 ND	59
Kerosene	ND	59
Mineral Spirits	ND	59
Fuel Oil #2/Diesel	ND	59
Fuel Oil #4	ND	59
Fuel Oil #6	ND	120
Motor Oil/Hydraulic Oil	700	59

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 84.7%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

. ~** =

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-108 S-1 1-3'

AMRO I.D.: 15550-16

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	57
Kerosene	ND	57
Mineral Spirits	i ND	57
Fuel Oil #2/Diesel	ND	57
Fuel Oil #4	ND	57
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	220	57

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 86.2%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Alleo

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers
Client I D.: 96230.A Roxbury-BRA/EDIC

B-108 S-2 4-6'

AMRO I.D.: 15550-17

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/07/97

Sample uty, Type: 2/Solid

Test Parameter	Results (mg/kg)	**Reporting Limit(mg/kg)
Gasoline	ND	120
Kerosene	ND	120
Mineral Spirits	ND	120
Fuel Oil #2/Diesel	ND	120
Fuel Oil #4	ND	120
Fuel Oil #6	ND	240
Motor Oil/Hydraulic Oil	1,600	120

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 84.3%. Results are in dry weight.

Comments:

** = The reporting limit has been elevated due to sample dilution (04/07/97).

ND = Not Detected at or above the reporting limit

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

**

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers
Client I D.: 96230.A Roxbury-BRA/EDIC

B-108 S-3 7-9'

AMRO I.D.: 15550-18

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Test Parameter		Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline		ND	56
Kerosene		ND	56
Mineral S	oirits	ND	56
Fuel Oil		ND	56
Fuel Oil		ND	56
Fuel Oil		ı ND	110
	/Hydraulic Oil	110	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).
Solid Content = 88.5%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by



Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-109 S-1 1-3'

AMRO I.D.: 15550-19

Date sampled: 03/25/97 Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/06/97 Sample 201/77 11/50111

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	56
Kerosene	ND	56
Mineral Spirits	ND	56
Fuel Oil #2/Diesel	ND	56
Fuel Oil #4	ND	56
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	230	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 88.8%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

· 💝 . . .

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-109 S-2 4-6'

AMRO I.D.: 15550-20

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Sample Qty/Type: 1'C' 44

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	57
Kerosene	ND	57
Mineral Spirits	ND	57
Fuel Oil #2/Diesel	ND	57
Fuel Oil #4	ND	5 7
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	330	57

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 85.3%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: SWC

Approved by

Nancy Stewart

25

aiis

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-109 S-3 7-9'

AMRO I.D.: 15550-21

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Sample Quy/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	<u></u> 56
Kerosene	ND	56
Mineral Spirits	ND	56
Fuel Oil #2/Diesel	ND	56
Fuel Oil #4	ND	56
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	170	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 88.2%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-110 S-1 1-3'

AMRO I.D.: 15550-22

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

- Sample Cy Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	
Kerosene	ND	55
Mineral Spirits	ND	55
Fuel Oil #2/Diesel	ND	55
Fuel Oil #4	ND	55
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	170	55

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 87.9%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: SWC

Approved by

anfo

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-110 S-2 4-6'

AMRO I.D.: 15550-23

Date sampled: 03/25/97 Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/06/97

- Comple of Mypol Lyou !-

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	58
Kerosene	ND	58
Mineral Spirits	ND	58
Fuel Oil #2/Diesel	ND	58
Fuel Oil #4	ND	58
Fuel Oil #6	ND	120
Motor Oil/Hydraulic Oil	140	58

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).
Solid Content = 85.7%. Results are in dry weight.

Comments:

j

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

المنطقة المساورة المساورة المساورة المساورة المساورة المساورة المساورة المساورة المساورة المساورة المساورة الم المساورة المساورة المساورة المساورة المساورة المساورة المساورة المساورة المساورة المساورة المساورة المساورة ال

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-110 S-3 7-9'

AMRO I.D.: 15550-24

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	56
Kerosene	ND	56
Mineral Spirits	i ND	56
Fuel Oil #2/Diesel	ND	56
Fuel Oil #4	, ND	56
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	1,100	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 85.8%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Nancy Stewart

.

affi

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-112 S-1 1-3'

AMRO I.D.: 15550-25

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Star 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	57
Kerosene	ND	57
Mineral Spirits	ND	57
Fuel Oil #2/Diesel	ND	57
Fuel Oil #4	ND	57
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	500	57

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).
Solid Content = 86.1%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-112 S-2 4-6'

AMRO I.D.: 15550-26

Date sampled: 03/25/97 Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/06/97

Sample saturayna: _______

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	56
Kerosene	ND	56
Mineral Spirits	, ND	56
Fuel Oil #2/Diesel	ND	· 56
Fuel Oil #4	' ND	56
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	190	56

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).

Solid Content = 85.7%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

ans

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-112 S-3 7-9'

AMRO I.D.: 15550-27

Date sampled: 03/25/97 Date received: 03/26/97

Date prepared: 04/02/97 Date analyzed: 04/06/97

Sample oty/myno. 1/50110

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	60
Kerosene	ND	60
Mineral Spirits	ND	60
Fuel Oil #2/Diesel	ND	60
Fuel Oil #4	ND	60
Fuel Oil #6	ND	120
Motor Oil/Hydraulic Oil	970	60

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap).
Solid Content = 82.9%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-113 S-1 1-3'

AMRO I.D.: 15550-28

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Sample Qty/Type: 1/90114

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	54
Kerosene	ND	54
Mineral Spirits	ND	54
Fuel Oil #2/Diesel	ND	54
Fuel Oil #4	ND	54
Fuel Oil #6	! ND	110
Motor Oil/Hydraulic Oil	290	54

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 88.7%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by



Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-113 S-2 4-6'

AMRO I.D.: 15550-29

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	55
Kerosene	ND	55
Mineral Spirits	ND	55
Fuel Oil #2/Diesel	ND	55
Fuel Oil #4	ND	55
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	360	55

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 88.4%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A Roxbury-BRA/EDIC

B-113 S-3 7-9'

AMRO I.D.: 15550-30

Date sampled: 03/25/97 Date received: 03/26/97 Date prepared: 04/02/97 Date analyzed: 04/06/97

Sumpre (%) i, pe: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	53
Kerosene	ND	53
Mineral Spirits	ND	53
Fuel Oil #2/Diesel	ND	53
Fuel Oil #4	' ND	53
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	730	53

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8260A (purge and trap). Solid Content = 90.4%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SWC</u>

Approved by

Alleg

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-11

AMRO I.D.: 14789-03

Date sampled: 12/05/96 Date received: 12/06/96 Date prepared: 12/10/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	47
Kerosene	ND	47
Mineral Spirits	ND	47
Fuel Oil #2/Diesel	ND	47
Fuel Oil #4	ND	47
Fuel Oil #6	ND .	94
Motor Oil/Hydraulic Oil	ND	47

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap). Solid Content = 87.6%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>JK</u>

Approved by

Petroleum Hydrocarbons by Gas Chromatography
EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-1

AMRO I.D.: 14789-04

Date sampled: 12/03/96 Date received: 12/06/96 Date prepared: 12/10/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	52
Kerosene	ND	52
Mineral Spirits	ND	52
Fuel Oil #2/Diesel	ND	¹ 52
Fuel Oil #4	ND	52
Fuel Oil #6	ND	110
Motor Oil/Hydraulic Oil	ND	52

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Solid Content = 85.6%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: JK

Approved by _(

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3
WS-4

AMRO I.D.: 14789-05

Date sampled: 12/03/96 Date received: 12/06/96 Date prepared: 12/10/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	110
Kerosene	ND ND	110
Mineral Spirits	ND	110
Fuel Oil #2/Diesel	ND	110
Fuel Oil #4	ND	110
Fuel Oil #6	ND	230
Motor Oil/Hydraulic Oil	ND.	110

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap). Solid Content = 44.3%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reportaing limit.

Analyzed By: <u>JK</u>

Approved by _

Name (Stewart

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-5

AMRO I.D.: 14789-06

Date sampled: 12/04/96 Date received: 12/06/96 Date prepared: 12/10/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/	
Gasoline	ND	54	:
Kerosene	ND	54	2.1
Mineral Spirits	ND	54	•
Fuel Oil #2/Diesel	ND	54	
Fuel Oil #4	ИD	54	
Fuel Oil #6	ND	110	n 1
Motor Oil/Hydraulic Oil	ND	54	li s

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Solid Content = 90.4%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limits,

Analyzed By: <u>JK</u>

Approved by

§1

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-6

AMRO I.D.: 14789-07

Date sampled: 12/04/96 Date received: 12/06/96 Date prepared: 12/10/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	. 45
Kerosene	ND	45
Mineral Spirits	ND	45
Fuel Oil #2/Diesel	ND	45
Fuel Oil #4	ND	45
Fuel Oil #6	ND	90
Motor Oil/Hydraulic Oil	ND	45

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap). Solid Content = 88.8%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limits

Analyzed By: <u>JK</u> Approved by

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3
WS-7

AMRO I.D.: 14789-08

Date sampled: 12/04/96 Date received: 12/06/96 Date prepared: 12/10/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	51
Kerosene	ND	51
Mineral Spirits	ND	51
Fuel Oil #2/Diesel	ND	51
Fuel Oil #4	ND	51
Fuel Oil #6	, ND	100
Motor Oil/Hydraulic Oil	ND	51

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap).

Solid Content = 91.6%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>JK</u>

Approved by

Name Stewart

101

4 Ni Rij

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3
WS-2

AMRO I.D.: 14789-01

Date sampled: 12/03/96 Date received: 12/06/96 Date prepared: 12/11/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Chloromethane	ND	170
Bromomethane	ND	170
Vinyl Chloride	ИD	170
Dichlorodifluoromethane	ND	170
Chloroethane	ND	170
Methylene Chloride	ИD	70
Trichlorofluoromethane	ND	70
1,1-Dichloroethene	ND	70
Bromochloromethane	ND	70
1,1-Dichloroethane	ИD	70
cis-1,2-Dichloroethene	ND	70
trans-1,2-Dichloroethene	ND	70
Chloroform	ND	70
Dibromomethane	ND	70
1,2-Dichloroethane	ND	70
2,2-Dichloropropane	ND	70
1,1,1-Trichloroethane	ND	70
Carbon Tetrachloride	ND	70
Bromodichloromethane	ND	70
1,2-Dichloropropane	ND	70
1,1-Dichloropropene	ND	70
Trichloroethene	ND	70
Dibromochloromethane	ND	70
1,1,2-Trichloroethane	ND	70
Benzene	ND	70
1,3-Dichloropropane	ND	70
Bromoform	ND	70
1,1,1,2-Tetrachloroethane	ND	70
Tetrachloroethene	ND	70
1,2-Dibromoethane	ND	70
1,1,2,2-Tetrachloroethane	ND	70
Toluene	ND	70
Chlorobenzene	ND	70
Ethylbenzene	ND	70
Bromobenzene	ND	70
Isopropylbenzene	ND	70
Styrene	ND	70
n-Propylbenzene	ND	70

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson Engineers
Client I.D.: WS-2
AMRO I.D.: 14789-01

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
cis-1,3-Dichloropropene	ND ND	70 ,
trans-1,3-Dichloropropene	ND	70
Xyrene (total)	ND	70
1,2-Dibromo-3-chloropropane	ND	70
tert-Butylbenzene	ND	70
2-Chlorotoluene	ND	70
Hexachlorobutadiene	ND	70
4-Chlorotoluene	ND	70
sec-Butylbenzene	ND	70
1,3-Dichlorobenzene	ND	70
1,2-Dichlorobenzene	ND	70
1,4-Dichlorobenzene	ND	70
1,2,3-Trichloropropane	ND	70
n-Butylbenzene	ND	70
4-Isopropyltoluene	ND	70
Naphthalene	ND	70
1,2,4-Trimethylbenzene	ND	70
1,3,5-Trimethylbenzene	ND	70
1,2,3-Trichlorobenzene	· ND	70
1,2,4-Trichlorobenzene	, ND	70
Methyl-tert-butyl ether (MTBE)	ND	70

Solid Content = 43.0%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

AVET

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-3

AMRO I.D.: 14789-02

Date sampled: 12/03/96 Date received: 12/06/96 Date prepared: 12/11/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

	Test	Results	Reporting
	Parameter	(ug/kg) 	Limit(ug/kg)
	Chloromethane	ND	120
•	Bromomethane	ND	120
	Vinyl Chloride	ИD	120
	Dichlorodifluoromethane	ND	120
	Chloroethane	ND	120
	Methylene Chloride	ND	47
	Trichlorofluoromethane	ND	47
	1,1-Dichloroethene	ND	47
	Bromochloromethane	ND	47
	1,1-Dichloroethane	ND	47
	cis-1,2-Dichloroethene	ND	47
	trans-1,2-Dichloroethene	ND	47
	Chloroform	ND	47
	Dibromomethane	ND	47
	1,2-Dichloroethane	ND	47
	2,2-Dichloropropane	ND	47 .
	1,1,1-Trichloroethane	ND	47
	Carbon Tetrachloride	ND	47
	Bromodichloromethane	ND	47
	1,2-Dichloropropane	ND	47
	1,1-Dichloropropene	ND	47
	Trichloroethene	ND	· 47
	Dibromochloromethane	ND	47
	1,1,2-Trichloroethane	ND	47
	Benzene	ND	47
	1,3-Dichloropropane	ND	47
	Bromoform	ND	47
	1,1,1,2-Tetrachloroethane	ND	47
	Tetrachloroethene	ND	47
	1,2-Dibromoethane	ND	47
	1,1,2,2-Tetrachloroethane	ND	47
	Toluene	ND	47
	Chlorobenzene	ИD	47
	Ethylbenzene	ND	47
	Bromobenzene	ND	47
	Isopropylbenzene	ND	47
	Styrene	ND	47
	n-Propylbenzene	ND .	47

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson Engineers
Client I.D.: WS-3

AMRO I.D.: 14789-02

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
cis-1,3-Dichloropropene	' ND	47
trans-1,3-Dichloropropene	ND	47
Mylane (total)	ND	47
1,2-Dibromo-3-chloropropane	ND	47
tert-Butylbenzene	ND	47
2-Chlorotoluene	ND	47
Hexachlorobutadiene	ND	47
4-Chlorotoluene	ND	47
sec-Butylbenzene	ND	47
1,3-Dichlorobenzene	! ND	47
1,2-Dichlorobenzene	ⁱ ND	47
1,4-Dichlorobenzene	ND	47
1,2,3-Trichloropropane	ND	47
n-Butylbenzene	ND	47
4-Isopropyltoluene	ND	. 47
Naphthal'ene	ND	47
1,2,4-Trimethylbenzene	ND	47
1,3,5-Trimethylbenzene	ND	47
1,2,3-Trichlorobenzene	ND	47
1,2,4-Trichlorobenzene	ND	47
Methyl-tert-butyl ether (MTBE)	ND	47

Solid Content = 56.9%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-11

AMRO I.D.: 14789-03

Date sampled: 12/05/96 Date received: 12/06/96 Date prepared: 12/11/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test	Results	Reporting
Parameter	(ug/kg)	Limit(ug/kg)
Chloromethane	ND	67
Bromomethane	ND	67
Vinyl Chloride	ND	67
Dichlorodifluoromethane	ND	67
Chloroethane	ND	67
Methylene Chloride	ND	27
Trichlorofluoromethane	ND	27
1,1-Dichloroethene	ND	27
Bromochloromethane	ND	27
1,1-Dichloroethane	ND	27
cis-1,2-Dichloroethene	ND	27
trans-1,2-Dichloroethene	ND	27
Chloroform	ND	27
Dibromomethane	ND	27
1,2-Dichloroethane	ND	27
2,2-Dichloropropane	ND	27
1,1,1-Trichloroethane	ND	27
Carbon Tetrachloride	ND	27
Bromodichloromethane	ND	27
1,2-Dichloropropane	ND	27
1,1-Dichloropropene	ND	27
Trichloroethene	ND	. 27
Dibromochloromethane	ND	27
1,1,2-Trichloroethane	ND	27
Benzene	ND	27
1,3-Dichloropropane	ND	27
Bromoform	ND	27
1,1,1,2-Tetrachloroethane	ND	27
Tetrachloroethene	ND	27
1,2-Dibromoethane	ND	27
1,1,2,2-Tetrachloroethane	ND	27
Toluene	ŅD	27
Chlorobenzene	ND	27
Ethylbenzene	ND	27
Bromobenzene	ND	. 27
Isopropylbenzene	ND	27
Styrene	ND	27
n-Propylbenzene	ND	27
	•	

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson Engineers
Client I.D.: WS-11
AMRO I.D.: 14789-03

Test	Re	sults Repo	orting
Parameter	່ (ນ	g/kg) Lim	it(ug/kg)
cis-1,3-Dichloropropene		ND 2	
trans-1,3-Dichloroprope		ND 2	27
Xylene (total)	i	רוזיג .	27 ~
1,2-Dibromo-3-chloropro	pane	ND 2	27
tert-Butylbenzene		ND :	27
2-Chlorotoluene		ND :	27
Hexachlorobutadiene	:	ND 2	27
4-Chlorotoluene		ND 2	27
sec-Butylbenzene	'	ND :	27
1,3-Dichlorobenzene	İ	ND	27
1,2-Dichlorobenzene	 	ND :	27
1,4-Dichlorobenzene	i	ND 2	27
1,2,3-Trichloropropane		ND :	27
n-Butylbenzene		ND :	27
4-Isopropyltoluene		ND 2	27
Naphthalene		ND :	27
1,2,4-Trimethylbenzene		ND :	27
1,3,5-Trimethylbenzene		ND 2	27
1,2,3-Trichlorobenzene	· 	ND :	27
1,2,4-Trichlorobenzene	j	ND	27
Methyl-tert-butyl ether	(MTBE)	ND 2	27

Solid Content = 87.6%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-1

AMRO I.D.: 14789-04

Date sampled: 12/03/96 Date received: 12/06/96 Date prepared: 12/11/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test	Results	Reporting
Parameter	(ug/kg) 	Limit(ug/kg)
Chloromethane	ND	63
Bromomethane	ND	63
Vinyl Chloride	ND	63
Dichlorodifluoromethane	ND	63
Chloroethane	ND	63
Methylene Chloride	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Bromochloromethane	ND	25
1,1-Dichloroethane	ND	25
cis-1,2-Dichloroethene	ND	. 25
trans-1,2-Dichloroethene	ND	25
Chloroform	ND	25
Dibromomethane	ND	25
1,2-Dichloroethane	ND	25
2,2-Dichloropropane	ND	25
1,1,1-Trichloroethane	ND	25
Carbon Tetrachloride	ND	25
Bromodichloromethane	ND	25
1,2-Dichloropropane	ИD	25
1,1-Dichloropropene	ND	25
Trichloroethene	ND	· 25
Dibromochloromethane	ND	25
1,1,2-Trichloroethane	ND	25
Benzene	ND	25
1,3-Dichloropropane	ND	25
Bromoform	ND	25
1,1,1,2-Tetrachloroethane	ND	25
Tetrachloroethene	ND	25
1,2-Dibromoethane	ND	25
1,1,2,2-Tetrachloroethane	ND	25
Toluene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
Bromobenzene	ND	25
Isopropylbenzene	ND	25
Styrene	ND	25
n-Propylbenzene	ND	25

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson Engineers

Client I.D.: WS-1

AMRO I.D.: 14789-04

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
cis-1,3-Dichloropropene	ND	25
trans-1,3-Dichloropropene	ND	25
Mylano (tatal) -	ND	25
1,2-Dibromo-3-chloropropane	ND	25
tert-Butylbenzene	ND	25
2-Chlorotoluene	ND	25
Hexachlorobutadiene	ND	25
4-Chlorotoluene	ND	25
sec-Butylbenzene	ND	25
1,3-Dichlorobenzene	ND	25
1,2-Dichlorobenzene	ND	25
1,4-Dichlorobenzene	ND	25
1,2,3-Trichloropropane	ИD	25
n-Butylbenzene	. ND	25
4-Isopropyltoluene	ND	25
Naphthalene	ND	25
1,2,4-Trimethylbenzene	ND	25
1,3,5-Trimethylbenzene	ND	25
1,2,3-Trichlorobenzene	ND	25
1,2,4-Trichlorobenzene	ND	25
Methyl-tert-butyl ether (MTBE)	ND	25

Solid Content = 85.6%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-4

AMRO I.D.: 14789-05

Date sampled: 12/03/96 Date received: 12/06/96

Date prepared: 12/11/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid_

Test	Results	Reporting
Parameter	(ug/kg)	Limit(ug/kg)
Chloromethane	ND .	180
Bromomethane	ND	180
Vinyl Chloride	ND	180
Dichlorodifluoromethane	ND	180
Chloroethane	ND	. 180
Methylene Chloride	ND	70
Trichlorofluoromethane	ND	70
1,1-Dichloroethene	ND	70
Bromochloromethane	. ND	70
1,1-Dichloroethane	ND	70
cis-1,2-Dichloroethene	ND	70
trans-1,2-Dichloroethene	ND	70
Chloroform	ND	70
Dibromomethane	ND	70
1,2-Dichloroethane	ND	70
2,2-Dichloropropane	ND	70
1,1,1-Trichloroethane	ND	70
Carbon Tetrachloride	ND	70
Bromodichloromethane	ND	70
1,2-Dichloropropane	ND	70
1,1-Dichloropropene	ND	70
Trichloroethene	ND	. 70
Dibromochloromethane	ND	70
1,1,2-Trichloroethane	ND	70
Benzene	ND	70
1,3-Dichloropropane	ND	70
Bromoform	ND	70
1,1,1,2-Tetrachloroethane	ND	70
Tetrachloroethene	ND	70
1,2-Dibromoethane	ND	70
1,1,2,2-Tetrachloroethane	ND	70
Toluene	ND	70
Chlorobenzene	ND	70
Ethylbenzene	ND	70
Bromobenzene	ND	70
Isopropylbenzene	ND	70
Styrene	ND	· 70
n-Propylbenzene	ND	70

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson Engineers
Client I.D.: WS-4
AMRO I.D.: 14789-05

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
cis-1,3-Dichloropropene	ND	70
trans-1,3-Dichloropropene	ND	70
Xylene (total)	ייי	70
1,2-Dibromo-3-chloropropane	ND	70
tert-Butylbenzene	ND	70
2-Chlorotoluene	ND	70
Hexachlorobutadiene	ND	70
4-Chlorotoluene	ND	70
sec-Butylbenzene	ND	70
1,3-Dichlorobenzene	ND	70
1,2-Dichlorobenzene	ND	70
1,4-Dichlorobenzene	ND	· 70
1,2,3-Trichloropropane	ND	70
n-Butylbenzene	иD	70
4-Isopropyltoluene	ND	70
Naphthalene	ND	70
1,2,4-Trimethylbenzene	ИD	70
1,3,5-Trimethylbenzene	ND	70
1,2,3-Trichlorobenzene	ı ND	70
1,2,4-Trichlorobenzene	ND	70
Methyl-tert-butyl ether (MTBE)	ND	70

Solid Content = 44.3%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

MITT

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-5

AMRO I.D.: 14789-06

Date sampled: 12/04/96 Date received: 12/06/96 Date prepared: 12/11/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
· Chloromethane	ND	68
Bromomethane	ND	68
Vinyl Chloride	ND	68
Dichlorodifluoromethane	ND	68
Chloroethane	ND	68
Methylene Chloride	ND	27
Trichlorofluoromethane	ND	27
1,1-Dichloroethene	ИD	27
Bromochloromethane	ND	27
1,1-Dichloroethane	ND	27
cis-1,2-Dichloroethene	ND	27
trans-1,2-Dichloroethene	ND	27
Chloroform	ND	27
Dibromomethane	ND	27
1,2-Dichloroethane	ND	27
2,2-Dichloropropane	ИD	27
1,1,1-Trichloroethane	ND	27
Carbon Tetrachloride	ND	27
Bromodichloromethane	ND	27
1,2-Dichloropropane	ND	27
1,1-Dichloropropene	ND	27
Trichloroethene	ND	. 27
Dibromochloromethane	ND	27
1,1,2-Trichloroethane	ND	27
Benzene	ND	27
1,3-Dichloropropane	ND	27
Bromoform	ND	27
1,1,1,2-Tetrachloroethane	ND	27
Tetrachloroethene	ND	27
1,2-Dibromoethane	ND	27
1,1,2,2-Tetrachloroethane	ND	27
Toluene	ND	. 27
Chlorobenzene	ND	27
Ethylbenzene	ND	27
Bromobenzene	ИD	27
Isopropylbenzene	ND ·	27
Styrene	ND	27
n-Propylbenzene	ND	27

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson Engineers
Client I.D.: WS-5
AMRO I.D.: 14789-06

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
cis-1,3-Dichloropropene	ND ND	27
trans-1,3-Dichloropropene	ND	27
Xvlene (1.tal)	ND	27
1,2-Dibromo-3-chloropropane	ND	. 27
tert-Butylbenzene	ND	27
2-Chlorotoluene	ND	27
Hexachlorobutadiene	ND	27
4-Chlorotoluene	ND	27
sec-Butylbenzene	ND	27
1,3-Dichlorobenzene	ND	27
1,2-Dichlorobenzene	ND	27
1,4-Dichlorobenzene	ND	27
1,2,3-Trichloropropane	ND	27
n-Butylbenzene	i ND	27
4-Isopropyltoluene	ND	27
Naphthalene	ND	27
1,2,4-Trimethylbenzene	! ND	27
1,3,5-Trimethylbenzene	ı ND	27
1,2,3-Trichlorobenzene	ND	27
1,2,4-Trichlorobenzene	ND	27
Methyl-tert-butyl ether (MTBE)	ND	27

Solid Content = 90.4%. Results are in dry weight.
ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

Nancy Stewart

FOR

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3
WS-6

AMRO I.D.: 14789-07

Date sampled: 12/04/96 Date received: 12/06/96 Date prepared: 12/11/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Chloromethane	ND	61
Bromomethane	ND	61
Vinyl Chloride	ND	61
Dichlorodifluoromethane	ND	61
Chloroethane	ND	61
Methylene Chloride	ND	24
Trichlorofluoromethane	ND	24
1,1-Dichloroethene	ND ·	24
Bromochloromethane	ND	24
1,1-Dichloroethane	ND	24
cis-1,2-Dichloroethene	ИD	24
trans-1,2-Dichloroethene	ND	24
Chloroform	ND	24
Dibromomethane	ND	24
1,2-Dichloroethane	ND	24
2,2-Dichloropropane	ND	24
1,1,1-Trichloroethane	ND	24
Carbon Tetrachloride	ND	24
Bromodichloromethane	ND	24
1,2-Dichloropropane	ND	24
1,1-Dichloropropene	ND	24
Trichloroethene	ND	- 24
Dibromochloromethane	ND	24
1,1,2-Trichloroethane	ND	24
Benzene	ND	24
1,3-Dichloropropane	ND	24
Bromoform	ND	24
1,1,1,2-Tetrachloroethane	ND	24
Tetrachloroethene	ND	24
1,2-Dibromoethane	ND	24
1,1,2,2-Tetrachloroethane	ND	24
Toluene	ND	24
Chlorobenzene	ND	24
Ethylbenzene	ND	24
Bromobenzene	ND	24
Isopropylbenzene	ND	24
Styrene	ND -	24
n-Propylbenzene	ND	24

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson Engineers

Client I.D.: WS-6 AMRO I.D.: 14789-07

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
cis-1,3-Dichloropropene	ND	24
trans-1,3-Dichloropropene	ND	24
Xylene (total)	ND .	24
1,2-Dibromo-3-chloropropane	ИD	24
tert-Butylbenzene	l ND	24
2-Chlorotoluene	ND	24
Hexachlorobutadiene	' ND	24
4-Chlorotoluene	ND	24
sec-Butylbenzene	ND	24
1,3-Dichlorobenzene	ND	24
1,2-Dichlorobenzene	ND	24
1,4-Dichlorobenzene	ND	24
1,2,3-Trichloropropane	ND	24
n-Butylbenzene	ND	24
4-Isopropyltoluene	' ND	24
Naphthalene	ND	24
1,2,4-Trimethylbenzene	ND	24
1,3,5-Trimethylbenzene	ND	24
1,2,3-Trichlorobenzene	ND	24
1,2,4-Trichlorobenzene	ND	24
Methyl-tert-butyl ether (MTBE)	ND	24

Solid Content = 88.8%. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

Xamel Modelog Nancy Stewart

100

anto

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3

WS-7

AMRO I.D.: 14789-08

Date sampled: 12/04/96 Date received: 12/06/96
Date prepared: 12/11/96 Date analyzed: 12/11/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Chloromethane	ND	68
Bromomethane	ND	68
Vinyl Chloride	ND	68
Dichlorodifluoromethane	ND	68
Chloroethane	ND	68 .
Methylene Chloride	ND	27
Trichlorofluoromethane	ND	27
1,1-Dichloroethene	ND	27
Bromochloromethane	ND	. 27
1,1-Dichloroethane	ND	27
cis-1,2-Dichloroethene	ND	27
trans-1,2-Dichloroethene	ND	27
Chloroform	ND	27
Dibromomethane	ND	27
1,2-Dichloroethane	ND	27
2,2-Dichloropropane	ND	27
1,1,1-Trichloroethane	ND	27
Carbon Tetrachloride	ND	27
Bromodichloromethane	ND	27
1,2-Dichloropropane	ND	27
1,1-Dichloropropene	ND	27
Trichloroethene	ND	. 27
Dibromochloromethane	ND	27
1,1,2-Trichloroethane	ND	27
Benzene	ND	27
1,3-Dichloropropane	ND	27
Bromoform	ND	27
1,1,1,2-Tetrachloroethane	ND	27
Tetrachloroethene	ND	27
1,2-Dibromoethane	ND	27
1,1,2,2-Tetrachloroethane	ND	27
Toluene	ND	27
Chlorobenzene	ND	27
Ethylbenzene	ND	27
Bromobenzene	ND	27
Isopropylbenzene	ND	27
Styrene	ND	27
n-Propylbenzene	ND	27

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson Engineers
Client I.D.: WS-7
AMRO I.D.: 14789-08

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
cis-1,3-Dichloropropene	ND	27
trans-1,3-Dichloropropene	ND	27
<pre>⟨yl≠n≡ (total)</pre>	ND	27 .
1,2-Dibromo-3-chloropropane	ND	27
tert-Butylbenzene	ND	27
2-Chlorotoluene	ND	27
Hexachlorobutadiene	ND	27
4-Chlorotoluene	ND	27
sec-Butylbenzene	ND	27
1,3-Dichlorobenzene	ND	27
1,2-Dichlorobenzene	ND	27
1,4-Dichlorobenzene	ND .	27
1,2,3-Trichloropropane	ND	27
n-Butylbenzene	ND	27
4-Isopropyltoluene	ND	27
Naphthalene	ND	27
1,2,4-Trimethylbenzene	ND	27
1,3,5-Trimethylbenzene	ND	27
1,2,3-Trichlorobenzene	ND	27
1,2,4-Trichlorobenzene	ND	27
Methyl-tert-butyl ether (MTBE)	ND	27

Solid Content = 91.6%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: DM

Approved by

AWRO Environmental Laboratories C. rporation		
Merrimack, N.H. 03054 Office: 603-424-2022 Fax: 603-429-8496	CHAIN OF CUSTODY RECORD	
Proj No. Project Name BRA (IDIC 94233 A D (Parce) P-3	Project State MATRIX	
Samplers (Signature) Audraco	Soil/Soild-S Waste-W	300
Sta. No. Date Time Comp Grab Station Location	Containers Explain	44
12/3 09:30 × WS	(S 1-208-2)	7 3-1
1.5/3 X 8180 8/01	G-802-1 S	\frac{1}{x}
6-50 × 00:60 x/4/	X 202-10 X	
2 - S() X 00160 E/21	X J 1-208-5	5 B-6 10-12'
	C-802-1	X
5 - 5(3) × 00:11 5/01	X 4 1.208-5	
5 - 5(2) x 0011/ 5/61	(S - 302-1 5 X	/ (1 - 5) 11 - 84 人
5 - 5(2) X 00:11 5/5:	G - 802-1 S	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
42/3 A2100 X (25. 4	X 5 1-20 @ - 5	7 B - 10 10 - 12.
7 - S(2) X (2) 8/6/	(S. Buz.1 S X	\
	,	
Please print clearly, legibly and complete.y. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are resolved.		PRIORITY TURNAROUND TIME AUTHORIZATION Before submitting samples for expedited T.A.T., you must have requested in advance and received a coded T.A.T. AUTHORIZATION NUMBER.
Audres & Six	AUTHORIZATION NO.	IO, T.A.T. authorized by:
ature) Date/me/sp. 60	أم	Send Results to:
NO ON THE REAL PROPERTY.	Bindantal	Cantannial Drive.
1 2 may 2/1/9/2 2 2 maring 3	1 Halletto	Gastye D. Waster
Relinquished by (Signature) Date Time Received by (Signature)	nature) AMRO Project No.	Remarks
Date Time 7.02	atory by: (Signature)	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Yes No N/A	

AMRO Environmental Laboratories Corporation

111 Herrick Street

Merrimack, N.H. 03054 Office: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

Before submitting samples for expedited T.A.T., you must have requested in advance and d 1 ત્ 1 d 7 Ĵ Ы 1777 1) on 10.5 ţ Common Com PAGE P 0 o ٥ Ó Ó ወ - Remarks 2 Ú ر ا ر 7-1 B. 13 PRIORITY TURNAROUND TIME AUTHORIZATION **Remarks** 1 A 1 8 70 + 1 P M М T.A.T. authorized by: received a coded T.A.T. AUTHORIZATION NUMBER. Send Results to: 丁せつまるす 360 X. AUTHORIZATION NO. X X 7 X X Water - A Soil/Soild-S Waste-W X X Other-O Explain MATRIX AMRO Project No. □ Fax to (phone) Results needed v) Y v) Ŋ U) Ŋ Ŋ S Seal Intact? , 1 1-200-5 832-1 S. s. s. S G - 802-1 - Bez -- 200 1-204-5 1-201-5 <u>*</u> 200-5 **4**, Project State Type Size, & No. of Containers Please print clearly, legibly and complete, y. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are Received for Laboratory by: (Signature) J ۍ -Received by (Signature) pived by (Signature Station Location Kole × Received by (S Q 4 HA 1 4 Date Time 14: Date Time /7, 40 5/96 Date Time R CA __Time__ Comp | Grab_ X X X X ¥ 又 入 X 07:43 24:70 05:15 0:40 001// 00:11 23:50 40; 11 0 > 50 Project Name Brown Commoner Relinguished by (Signature) Audray B. Relinquished by (Signature) Relier, uished by (Signature) Beliqquished by (Signature) 7/5 7 2 5/0 Date_ Proj. No. 100 Samplers (Signature) (8) 4 đ ₹ ો 7 resolved Sta. No.



Environmental Laboratories Corporation



111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 · FAX: (603) 429-8496

December 11, 1996

Mr. George Naslas Weston & Sampson Engineers 5 Centennial Drive Peabody, MA 01960

RE Your project: 96230.A BRA/EDIC Parcel P-3

Dear George:

Enclosed please find the results for the above-referenced project, received on November 27, 1996. AMRO operates a Quality Control Program which meets or exceeds EPA and state requirements. A copy of the appropriate State Certificate is attached. No quality control deviations were noted during the analyses associated with this project. This project was assigned AMRO Project Number 14729. If you have any questions regarding this project in the future, please refer to this number.

Please be advised that any unused sample volume and sample extracts will be stored for a period of thirty (30) days from this report date. After this time, AMRO will properly dispose of the remaining sample. If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This letter is an integral part of your data report.

Please do not hesitate to call if you have any questions.

Sincerely,

Nancy Stewart

Laboratory Director

Encl.

ANS

AMRO Environmental Laboratory Report

Page 1 of 2

Glient: Weston & Sampson Engineers

5 Centennial Drive Peabody, MA 01960

ttn: Mr. George Naslas

amples Qty/Type: 3/Solid

Client Designation: 96230.A BRA/EDIC Parcel P-3

AMRO Designation: 14729

Date Sampled: 11/27/96
Date Rec'vd: 11/27/96
Date Complete: 12/09/96

COC #: 16991

	i	AMRO	Test	Results	Units	Date of	 Run	EPA
den		Identity	Parameter			Analysis	by	Method
mi l								
P-1	!	14729-01	Total Solids	67.1	8	12/02/96	LP	2540G
لوسك			Digestion_		4	12/04/96	JВ	3050
~	•		Arsenic, Total	4.4	mg/Kg	12/09/96	EL	6010
			Barium, Total	72.	mg/Kg	12/09/96	EL	6010
ا ب	ì		Cadmium, Total	<3.3	mg/Kg	12/09/96	EL	6010
			Chromium, Total	27.	mg/Kg	12/09/96	EL	6010
$ \sqrt{1} $	į		Lead, Total	120.	mg/Kg	12/09/96	EL	6010
	1		Mercury, Total	<0.022	2. 2	12/04/96	RK	7471
	ì		Selenium, Total	<3.3	mg/Kg	12/09/96	EL	6010
آ ہ	1		Digestion			12/04/96	JB	3005
	1		Silver, Total	<3.3	mg/Kg	12/09/96	EL.	6010
TP-4	1	14729-02	Total Solids	82.8	%	12/02/96	\mathbf{LP}	2540G
5	!		Digestion			12/04/96	JВ	3050
	ł	•	Arsenic, Total	7.8	mg/Kg	12/09/96	EL	6010
			Barium, Total	160.	mg/Kg	12/09/96	EL	6010
_			Cadmium, Total	<2.7	mg/Kg	12/09/96	${ t EL}$	6010
	ł		Chromium, Total	14.	mg/Kg	12/09/96	EL	6010
ט ן	Ì		Lead, Total	980.	mg/Kg	12/09/96	\mathtt{EL}	6010
. 1	i		Mercury, Total	0.204		12/03/96	RK	7471
			Selenium, Total	<2.7	mg/Kg	12/09/96	EL	6010
D 1	!		Digestion			12/04/96	JВ	3005
			Silver, Total	<2.6	mg/Kg	12/09/96	EL	6010
P-5		14729-03	Total Solids	82.6	 &	12/02/96	LP	2540G
ן ש			Digestion		•	12/04/96	JВ	3050
	i		Arsenic, Total	7.3	mg/Kg	12/09/96	EL	6010
	Ì		Barium, Total	240.	mg/Kg	12/09/96	EL	6010
	1		Cadmium, Total	4.5	mg/Kg	12/09/96	EL	6010
			Chromium, Total	23.	mg/Kg	12/09/96	EL	6010
1	1		Lead, Total	520.	mg/Kg		EL	6010
	1		Mercury, Total	3.07	mg/Kg		RK	7471
٠.	į		Selenium, Total	<2.6	mg/Kg	12/09/96	EL	6010
			Continued next page	e				

AMRO Environmental Laboratory Report			Page 2 of 2		
Sample Identity	AMRO Identity	Test Parameter	Results Units	Date of Analysis	Run EPA by Method
ო ნ_6	14729-03	Digestion	!	12/04/96	JB 3005

Results are in dry weight.

All analyses performed in accordance wrent

USEPA Methods of Chemical Analysis for Water & Waste. Standard Methods for the Examination of Water and Wastewater, 18th

Edition, 1992. and USEPA SW846 Manual, 3rd. ed.

The following standard abbreviations and conventions apply throughout all sections:

< = 'Less than' followed by the detection limit.

> = 'Greater than'

Certified by:

Silver, Total <2.8 mg/Kg 12/09/96

Paula Benham

6010

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A BRA/EDIC Parcel P-3

TP-1

AMRO I.D.: 14729-01

Date sampled: 11/27/96 Date received: 11/27/96

Date prepared: 12/02/96 Date analyzed: 12/04/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	72
Kerosene	ND	72
Mineral Spirits	ND	72
Fuel Oil #2/Diesel	8,400 *	72
Fuel Oil #4	ND	72
Fuel Oil #6	ND	140
Motor Oil/Hydraulic Oil	ND	72

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap). Solid Content = 67.1%. Results are in dry weight.

Comments: * = Weathered.

ND = Not Detected at or above the reporting limit.

Analyzed By: <u>MM</u>

Approved by

Nancy Stewart

FOR

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A BRA/EDIC Parcel P-3

TP-4

AMRO I.D.: 14729-02

Date sampled: 11/27/96 Date received: 11/27/96

Date prepared: 12/02/96 Date analyzed: 12/03/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	58
Kerosene	ND	58
Mineral Spirits	ND	58
Fuel Oil #2/Diesel	ND	58
Fuel Oil #4	ND	58
Fuel Oil #6	ND	120
Motor Oil/Hydraulic Oil	ND	58

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap). Solid Content = 82.2%. Results are in dry weight.

Comments:

ND = Not Detected at or above the reporting limit.

Analyzed By: JK

Approved by

lifi

LABORATORY REPORT

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A BRA/EDIC Parcel P-3

TP-5

AMRO I.D.: 14729-03

Date sampled: 11/27/96 Date received: 11/27/96 Date prepared: 12/02/96 Date analyzed: 12/03/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/kg)
Gasoline	ND	59
Kerosene	ND	59
Mineral Spirits	ND	5 9
Fuel Oil #2/Diesel	ND	59
Fuel Oil #4	ND	59
Fuel Oil #6	ND	120
Motor Oil/Hydraulic Oil	500	59

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap). Solid Content = 82.6%. Results are in dry weight.

Comments: Polynuclear Aromatic Hydrocarbons present.

ND = Not Detected at or above the reporting limit.

Analyzed By: MM

Approved by

e Stockbed F

Petroleum Hydrocarbons by Gas Chromatography EPA Method 8100 (Modified)

Client: Weston & Sampson Engineers

Client I D.: 96230.A BRA/EDIC Parcel P-3

TP-7

AMRO I.D.: 14729-04

Date sampled: 11/27/96 Date received: 11/27/96 Date prepared: 12/02/96 Date analyzed: 12/04/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (mg/kg)	Reporting Limit(mg/	
Gasoline	ND	52	
Kerosene	ND	52	ı
Mineral Spirits	ND	52	6
Fuel Oil #2/Diesel	150 *	52	
Fuel Oil #4	ND	52	
Fuel Oil #6	i hD	100	h
Motor Oil/Hydraulic Oil	920	52	,

Gasoline results are provided for screening purposes only. The recommended procedure for gasoline analysis is a modified EPA 8015 or 8240 (purge and trap). Solid Content = 92.4%. Results are in dry weight.

Comments: Polynuclear Aromatic Hydrocarbons present.

* = Weathered.

ND = Not Detected at or above the reporting limit.

Analyzed By: MM

Approved by

FOR

API T

LABORATORY REPORT

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

TP-1

AMRO I.D.: 14729-01

Date sampled: 11/27/96 Date received: 11/27/96

Date prepared: 11/29/96 Date analyzed: 12/03/96

Sample Qty/Type: 1/Solid

Test Parameter	Recalis, a (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	1,000	360
2-Methylnaphthalene	23,000	360
Acenaphthylene	800	360
Acenaphthene	3,400	360
Fluorene	3,900	360
Phenanthrene	11,000	360
Anthracene	2,700	360
Fluoranthene	4,100	360
Pyrene	4,100	360
Benzo[a]anthracene	1,500	360
Chrysene	1,700	360
Benzo[b]fluoranthene	1,200	360
Benzo[k]fluoranthene	1,300	360
Benzo[a]pyrene	1,400	360
Dibenzo[a,h]anthracene	ND	720
Benzo[g,h,i]perylene	ND	720
Indeno[1,2,3-cd]pyrene	ND	720

Solid Content = 67.1 %. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: NM

Approved by

dJ ₽

<u>Allita</u>

LABORATORY REPORT

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

TP-4

AMRO I.D.: 14729-02

Date sampled: 11/27/96 Date received: 11/27/96 Date prepared: 11/29/96 Date analyzed: 12/03/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Repolting Limit(ug/kg)
Naphthalene	130	59
2-Methylnaphthalene	60	59
Acenaphthylene	ND	59
Acenaphthene	180	59
Fluorene	200	59
Phenanthrene	1,500	59
Anthracene	440	59
Fluoranthene	1,600	59 ·
Pyrene	1,400	59
Benzo[a]anthracene	630	59
Chrysene	690	59
Benzo[b]fluoranthene	560	59
Benzo[k]fluoranthene	550	59
Benzo[a]pyrene	610	59
Dibenzo[a,h]anthracene	ND	120
Benzo[g,h,i]perylene	190	120
Indeno[1,2,3-cd]pyrene	200	120

Solid Content = 82.8 %. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

Analyzed By: NM

Approved by

Nancy Stewart

ソド

avied

LABORATORY REPORT

EPA Method 8100 Polynuclear Aromatic Hydrocarbons

Client: Weston & Sampson Engineers

Client I.D.: 96230.A BRA/EDIC Parcel P-3

TP-5

AMRO I.D.: 14729-03

Date sampled: 11/27/96 Date received: 11/27/96 Date prepared: 11/29/96 Date analyzed: 12/03/96

Sample Qty/Type: 1/Solid

Parameter	Resu]+= (ug/kg)	Reporting Limit(ug/kg)
Naphthalene	8,200	1,500
2-Methylnaphthalene	4,300	1,500
Acenaphthylene	2,000	1,500
Acenaphthene	12,000	1,500
Fluorene	11,000	1,500
Phenanthrene	93,000	1,500
Anthracene	21,000	1,500
Fluoranthene	92,000	1,500
Pyrene	82,000	1,500
Benzo[a]anthracene	38,000	1,500
Chrysene	44,000	1,500
Benzo[b]fluoranthene	34,000	1,500
Benzo[k]fluoranthene	35,000	1,50 0
Benzo[a]pyrene	39,000	1,500
Dibenzo[a,h]anthracene	4,700	2,900
Benzo[g,h,i]perylene	13,000	2,900
Indeno[1,2,3-cd]pyrene	14,000	2,900

Solid Content = 82.6 %. Results are in dry weight.

ND = Not Detected at or above the reporting limit.

Analyzed By: NM

Approved by _

/ FC

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3
TP-1

AMRO I.D.: 14729-01

Date sampled: 11/27/96 Date received: 11/27/96 Date prepared: 11/29/96 Date analyzed: 12/10/96

Sample Qty/Type: 1/Solid Results Reporting Test Limit(ug/kg) (ug/kg) Parameter ND 86 Chloromethane 86 ND Bromomethane 86 Vinyl Chloride ND Dichlorodifluoromethane ND 86 Chloroethane 86 ND ND 34 Methylene Chloride 34 ND Trichlorofluoromethane 34 ND 1.1-Dichloroethene 34 Bromochloromethane ND ND 34 1,1-Dichloroethane ND 34 cis-1,2-Dichloroethene trans-1,2-Dichloroethene ND 34 34 Chloroform ND 34 Dibromomethane ND 1,2-Dichloroethane ND 34 ND 34 2,2-Dichloropropane 34 ND 1,1,1-Trichloroethane ND 34 Carbon Tetrachloride 34 ND Bromodichloromethane ND 34 1,2-Dichloropropane ND 34 1,1-Dichloropropene 34 ND Trichloroethene ND 34 Dibromochloromethane 34 ND 1,1,2-Trichloroethane 34 ND Benzene ND 34 1,3-Dichloropropane ND 34 Bromoform 34 ND 1,1,1,2-Tetrachloroethane ND 34 Tetrachloroethene 34 1,2-Dibromoethane ND ND 34 1,1,2,2-Tetrachloroethane ND 34 Toluene 34 ND Chlorobenzene ИD 34 Ethylbenzene 34 Bromobenzene ND 34 330 Isopropylbenzene 34 ND Styrene 34 760 n-Propylbenzene

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson Engineers
Client I.D.: TP-1
AMRO I.D.: 14729-01

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
cis-1,3-Dichloropropene	ND	34
trans-1,3-Dichloropropene	ND	34
Yvlene (total)	2ء	34
1,2-Dibromo-3-chloropropane	ND	34
tert-Butylbenzene	36	34
2-Chlorotoluene	ND	34
Hexachlorobutadiene	ND	34
4-Chlorotoluene	ND	34
sec-Butylbenzene	270	34
1,3-Dichlorobenzene	ND	34
1,2-Dichlorobenzene	ND	34
1,4-Dichlorobenzene	ND	34
1,2,3-Trichloropropane	ND	34
n-Butylbenzene	470	34
4-Isopropyltoluene	ND	34
Naphthalene	160	34
1,2,4-Trimethylbenzene	70	34
1,3,5-Trimethylbenzene	ND	34
1,2,3-Trichlorobenzene	ND	34
1,2,4-Trichlorobenzene	ND	34
Methyl-tert-butyl ether (MTBE)	ND	34

Solid Content = 67.1%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SK</u>

Approved by dome

Koure Stood FOR Nancy Stewart

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3

AMRO I.D.: $\frac{\text{TP-4}}{14729-02}$

Date sampled: 11/27/96 Date received: 11/27/96 Date prepared: 11/29/96 Date analyzed: 12/10/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Chloromethane	ND	65
Bromomethane	ND	65
Vinyl Chloride	ND	65
Dichlorodifluoromethane	ND	65
Chloroethane	ND	65
Methylene Chloride	ND	26
Trichlorofluoromethane	ND	26
1,1-Dichloroethene	ND	26
Bromochloromethane	ND	26
1,1-Dichloroethane	ND	26
cis-1,2-Dichloroethene	ND	26
trans-1,2-Dichloroethene	ND	26
Chloroform	ND	26
Dibromomethane	ND	26
1,2-Dichloroethane	ND	26
2,2-Dichloropropane	ND	26
1,1,1-Trichloroethane	, ND	26
Carbon Tetrachloride	ND	26
Bromodichloromethane	ND	26
1,2-Dichloropropane	ND	26
1,1-Dichloropropene	ND	26
Trichloroethene	ND	· 26
Dibromochloromethane	, ND	26
1,1,2-Trichloroethane	ND	26
Benzene	87	26
1,3-Dichloropropane	ND	26
Bromoform	ND	26
1,1,1,2-Tetrachloroethane	ND	26
Tetrachloroethene	ND	26
1,2-Dibromoethane	ND	26
1,1,2,2-Tetrachloroethane	ND	26
Toluene	ND	26
Chlorobenzene	ND	26
Ethylbenzene	ND	26
Bromobenzene	ND	26
Isopropylbenzene	ND	26
Styrene	ND	26
n-Propylbenzene	, ND	26

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page-2-of 2

Client: Weston & Sampson Engineers

Client I.D.: TP-4

AMRO I.D.: 14729-02

35±==±±±±±±============================		
Test	Results	Reporting
Parameter	(ug/kg)	Limit(ug/kg)
cis-1,3-Dichloropropene	иD	26
trans-1,3-Dichloropropene	ND	26
Xylene (total)	ND	26
1,2-Dibromo-3-chloropropane	ND	26
tert-Butylbenzene	ND	26
2-Chlorotoluene	ND	26
Hexachlorobutadiene	ND	26
4-Chlorotoluene	ND	26
sec-Butylbenzene	ND	26
1,3-Dichlorobenzene	ND	26
1,2-Dichlorobenzene	ND	26
1,4-Dichlorobenzene	ND	26
1,2,3-Trichloropropane	ND	26
n-Butylbenzene	ND	26
4-Isopropyltoluene	ND	26
Naphthalene	ND	26
1,2,4-Trimethylbenzene	ND	26
1,3,5-Trimethylbenzene	ND	26
1,2,3-Trichlorobenzene	ND	26
1,2,4-Trichlorobenzene	ND	26
Methyl-tert-butyl ether (MTBE)	ND	26
		=======================================

Solid Content = 82.8%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: SK

Approved by Xame

Dic

EPA Method 8260 Volatile Organic Compounds Page I of 2

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3
TP-5

AMRO I.D.: 14729-03

Date sampled: 11/27/96 Date received: 11/27/96 Date prepared: 11/29/96 Date analyzed: 12/10/96

Sample Qty/Type: 1/Solid

Test	Results	Reporting
Parameter	(ug/kg)	Limit(ug/kg)
Chloromethane	ND	76
Bromomethane	ND	76
Vinyl Chloride	ND	76
Dichlorodifluoromethane	ND	76
Chloroethane	ND	76
Methylene Chloride	ND	30
Trichlorofluoromethane	' ND	30
1,1-Dichloroethene	ND	30
Bromochloromethane	ND	30
1,1-Dichloroethane	ND	30
cis-1,2-Dichloroethene	ND	30
trans-1,2-Dichloroethene	ND	30
Chloroform	ND	30
Dibromomethane	ND	30
1,2-Dichloroethane	ND	30
2,2-Dichloropropane	ND	30
1,1,1-Trichloroethane	: ND	30
Carbon Tetrachloride	ND	30
Bromodichloromethane	ND	30
1,2-Dichloropropane	ND	30
1,1-Dichloropropene	ND	30
Trichloroethene	' ND	. 30
Dibromochloromethane	ND	30
1,1,2-Trichloroethane	ND	30
Benzene '	ND	30
1,3-Dichloropropane	ND	30
Bromoform	ND	30
1,1,1,2-Tetrachloroethane	ND	30
Tetrachloroethene	ND	30
1,2-Dibromoethane	ND	30
1,1,2,2-Tetrachloroethane	' ND	30
Toluene	ND	30
Chlorobenzene	ND	30
Ethylbenzene	ND	30
Bromobenzene	ND	30
Isopropylbenzene	ND	30
Styrene	ND	30
n-Propylbenzene	ND	30

ANTO

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson Engineers
Client I.D.: TP-5

AMRO I.D.: 14729-03

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
cis-1,3-Dichloropropene	ND	30
trans-1,3-Dichloropropene	ND	30
Xvlene (total)	ND	30
1,2-Dibromo-3-chloropropane	ND	30
tert-Butylbenzene	ND	30
2-Chlorotoluene	ND	30
Hexachlorobutadiene	ND	30
4-Chlorotoluene	ND	30
sec-Butylbenzene	ND	30
1,3-Dichlorobenzene	ND	30
1,2-Dichlorobenzene	ND	30
1,4-Dichlorobenzene	ND	30
1,2,3-Trichloropropane	ND	30
n-Butylbenzene	ND	30
4-Isopropyltoluene	ND	30
Naphthalene	150	30
1,2,4-Trimethylbenzene	ND	30
1,3,5-Trimethylbenzene	ND	30
1,2,3-Trichlorobenzene	ND	30
1,2,4-Trichlorobenzene	ND	30
Methyl-tert-butyl ether (MTBE)	ND	30

Solid Content = 82.6%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SK</u>

Approved by Olime

EPA Method 8260 Volatile Organic Compounds Page 1 of 2

Client: Weston & Sampson Engineers
Client I.D.: 96230.A BRA/EDIC Parcel P-3

<u>TP-7</u>

AMRO | I.D.: 14729-04

Date sampled: 11/27/96 Date received: 11/27/96 Date prepared: 11/29/96 Date analyzed: 12/10/96

Sample Qty/Type: 1/Solid

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg)
Chloromethane	ND	
Bromomethane	ND	68
Vinyl Chloride	ND	68
Dichlorodifluoromethane	ND	68
Chloroethane	ND	68
Methylene Chloride	ND	27
Trichlorofluoromethane	ND	27
1,1-Dichloroethene	ND	27
Bromochloromethane	, ND	27
1,1-Dichloroethane	ND	27
cis-1,2-Dichloroethene	ND	27
trans-1,2-Dichloroethene	ND	27
Chloroform	ND	27
Dibromomethane	ND	27
1,2-Dichloroethane	' ND	27
2,2-Dichloropropane	ND	27
1,1,1-Trichloroethane	ND	27
Carbon Tetrachloride	ND	27
Bromodichloromethane	, ND	27
1,2-Dichloropropane	: ND	27
1,1-Dichloropropene	ND	27
Trichloroethene	ND	. 27
Dibromochloromethane	ND	27
1,1,2-Trichloroethane	ND	27
Benzene	ND	27
1,3-Dichloropropane	ND	27
Bromoform	i ND	27
1,1,1,2-Tetrachloroethane	ND	27
Tetrachloroethene	ND	27
1,2-Dibromoethane	ı ND	27
1,1,2,2-Tetrachloroethane	ND	27
Toluene	! ND	27
Chlorobenzene	ND	27
Ethylbenzene	ND	27
Bromobenzene	ND	27
Isopropylbenzene	ND	27
Styrene '	, ND	27
n-Propylbenzene	, ND	27

ANTO

LABORATORY REPORT

EPA Method 8260 Volatile Organic Compounds Page 2 of 2

Client: Weston & Sampson Engineers

Client I.D.: TP-7

AMRO I.D.: 14729-04

Test Parameter	Results (ug/kg)	Reporting Limit(ug/kg
cis-1,3-Dichloropropene	ND	27
trans-1,3-Dichloropropene	ND	27
Xylene (total)	ND	~7
1,2-Dibromo-3-chloropropane	ND	27
tert-Butylbenzene	ND	27
2-Chlorotoluene	ND	27
Hexachlorobutadiene	ND	27
4-Chlorotoluene	ND	27
sec-Butylbenzene	ND	27
1,3-Dichlorobenzene	ND	27
1,2-Dichlorobenzene	ND	27
1,4-Dichlorobenzene	ND	27
1,2,3-Trichloropropane	ND	27
n-Butylbenzene	ND	27
4-Isopropyltoluene	ND	27
Naphthalene	150	27
1,2,4-Trimethylbenzene	ND	27
1,3,5-Trimethylbenzene	ND	27
1,2,3-Trichlorobenzene	ND	27
1,2,4-Trichlorobenzene	ND	27
Methyl-tert-butyl ether (MTBE)	ND	27

Solid Content = 92.4%. Results are in dry weight. ND = Not Detected at or above the reporting limit.

Analyzed By: <u>SK</u>

Approved by Jame

Name Stewart

And RO Environmental Laboratories Try poration 111 Herrick Street
Merrimack, N.H. 03054
Office: 603-424-2022 Fax: 603-429-8496

CHAIN OF CUSTODY RECORD

16991

White: Lab copy / 1/ Yellc	mullion	Relinquished by (Signature)	Relinquished by (Signature)	Relinquished by (Signature)	Mary Calas	Relinquished by (Signature)	Andrew & Ois	Please print clearly, legibly and completely. Samples cannot be logged in and the turnaround time clock will not start until any ambiguities are resolved.		,	11/27	11/27	11 (47	11 /27	11/47	11/27	1. /27	11/27	11/27	11/27	///27	Sta. No. Date Time	Samplers (Signature)	Proj. No. Project Name	
Yellow: Accompanies report	17:40	Date Tyne/	Date Time	Date Time	17.1.57	Date Time / 96		ibly and completely. me clock will not st			× 10	× To	X T T	x T6	×	X T 6	X 7	×		X	×	e Comp Grab	iew Duy	Der I	
Pink: Client copy	1-575 aunio	Received for Laboratory by: (Signature)	Received by (Signature)	Received by (Signature)	The state of the s	Received by (Signature)		Samples cannot be log art until any ambiguities			7	» - 7	- 5	D-5	7.5	2 - 4	5 - 4	h-d	P - 1	P - 1	0 + 1	Station Location	132	D+C	
	Yes Yes	ature) Seal Intact?	AMRO Project No.	PO#	Results needed	(1)7/52	_				C-802-	G-202.	G-802-1	G-802-1	(5-20 c-1	G-802-1	G-802-1		•	5-8-2-1	6-202-1	Containers	Type Size, & No. of	Project State	
	. No - N/A	d?	roject No. 子公子		eeded	(phone)	AUTHORIZATION NO.	PRIORITY TURNA Before submitting sam received a coded T.A.1			N	S X	S	SXX	X	D	(V	SX	S	S X.	SX	Explain Solver	.\ 25		
				٠٠٠	15	Send Results to:	T.A.T. authorized by:	RNAROUND TIME AL samples for expedited T.A T.A.T. AUTHORIZATION I					X			*			X			C. C. C. C.	10.6/	60/17	
		·	Remarks	4	8 0 d. 100 c. 34	100 - 1 - Some	orized by:	RNAROUND TIME AUTHORIZATION samples for expedited T.A.T., you must have requested in advance and T.A.T. AUTHORIZATION NUMBER.			<u>ل</u>	78-71		> B-8 /			> B-5 /	7	C.	1 P-8 4	J	Re			
	•			5 6	101760 101760			sted in advance and	Average and a second se			7.5-18:01		7.0-17.5'			18.5 - 19.0			11.5 - 12.0'		Remarks		PAGE 1 OF	

Yellow: Accompanies report

Pink: Client copy



APPENDIX F

HYDRAULIC GRADIENT AND VELOCITY CALCULATIONS

Weston & Sampson	PROJECT:	DATE: 9/98	PAGE:
ENGINEERS, INC.	BRAKDIL	BY: G.D. Nas	
· <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	96230.A	CHKD. BY:	2/27/98
lidden er fir			
Ho	RIZONTAL HYDRAU	LL GRADIEN	T)
	PARCEL P-3		
Hydraulic Graduat in	8W Portug of P-3	Madreon Park F	tuch School
Parking Lot:	,	- · ·	9
~	45' contour = 0:5	5 Peul	
DH = 85' contain to 81 DL = 220 Rest.			
Graduat (I) = 0.5	5 = 0.009273	= 0.0013	 ,
22	0	V	
er herburd schwargett.	our Cornolly's Taver	\: :	
AH = 86' contain to	85' contour = 1 Pa	ω <i>γ</i> .	
AL = 50'			
Gradient (I) = 11	150 = 0.02	· · · · · · · · · · · · · · · · · · ·	
· · · · · · · · · · · · · · · · · · ·	V		
			-
		-	
		ال المالي الماليونيون الماليون الماليون الماليون	- L
	en de la composição de la composição de la composição de la composição de la composição de la composição de la La composição de la composição de la composição de la composição de la composição de la composição de la compo	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
			1
			ے بینے راتے بینسین اسٹان بینند
	t to me where the comment of the comment	the same and a same and a same and a same and	بيدي للما تتعجوب متكافت اؤه

Weston & Sampson	PROJECT:	DATE: 2/20/98	PAGE: ②
ENGINEERS, INC.	BRA/EDIC 96230.A		N95L95 3EE) 2/27/98
GROUNDOTE	2 VELOCITY C	DECULATIONS	Amount to come to the control of the
V = Ki			
K= Hydraulic (
-assumed i = 0.0023	value of 25	of ft/day is	Freaz + Cherry KTK who sty said a boothour
n= 0.2	(Drocol): 1989)		
a) for a value of 0.00)93		
2.55 	3 × 0.0023	- 0,0325	5 ft/day
2 11.9	ft / year ~	-	
b) for c value of 0.	02	1 1 ! !	
V = 2883	×0.02		
2 0 33	5-2		
	- Pt/you.	h h h h h h h	

APPENDIX G

NUMERICAL RANKING SYSTEM SCORESHEET

- Mary par

Ì
