

**APPENDIX D**

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**CUT AND PLUG IRM ANALYTICAL RESULTS**

**TABLE 1**  
**HEMPSTEAD INTERSECTION STREET FORMER MGP SITE**  
**CUT AND PLUG SAMPLING PROGRAM**  
**GRAB SOIL SAMPLING RESULTS**  
**BTEX COMPOUNDS**

SAMPLE ID	HCP-01	HCP-02	HCP-03	HCP-04	HCP-05	HCP-06	HCP-07	Contract Required Detection Limit (mg/kg)
DATE OF COLLECTION	3/1/99	3/1/99	3/1/99	3/2/99	3/2/99	3/2/99	3/2/99	
PERCENT SOLIDS	57	86	100	83	80	76	83	
DILUTION FACTOR	1000	500	100	100	1	100	100	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Benzene	14	4.5	0.25	0.41	0.006	0.16	1.2	0.001
Toluene	7.7	32	0.064 J	0.38	U	0.048 J	0.2	0.001
Ethylbenzene	1.8	34	0.89	6.8	0.0007 J	0.52	2.6	0.001
Xylenes	15	70	0.47	3.5	0.002	0.68	2.4	0.001
Total BTEX	38.5	140.5	1.674	11.09	0.0087	1.408	6.4	0.001

SAMPLE ID	HCP-08	HCP-09	HCP-10	HCP-11	HCP-12	HCP-13	HCP-14	Contract Required Detection Limit (mg/kg)
DATE OF COLLECTION	3/4/99	3/4/99	3/4/99	3/7/99	3/7/99	3/7/99	3/7/99	
PERCENT SOLIDS	74	78	77	79	79	70	79	
DILUTION FACTOR	1	500	2000	500	1	5000	10000	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Benzene	U	U	2.7	1.5	U	2.2 J	24	0.001
Toluene	0.001	0.66	19	16	0.002	85	240	0.001
Ethylbenzene	U	17	13	21	0.002	59	180	0.001
Xylenes	U	20	40	41	0.002	420	840	0.001
Total BTEX	0.001	37.66	74.7	79.5	0.006	566.2	1,284	0.001

**QUALIFIERS:**

U: Compound analyzed for but not detected

J: Compound found at a concentration less than the CRDL, value estimated

TABLE 2  
HEMPSTEAD INTERSECTION STREET FORMER MGP SITE  
CUT AND PLUG PROGRAM  
GRAB SOIL SAMPLING RESULTS  
SEMIVOLATILE ORGANIC COMPOUNDS

SAMPLE ID	HCP-01	HCP-02	HCP-03	HCP-04	HCP-05	HCP-06	HCP-07	Contract Required Detection Limit (mg/kg)
DATE OF COLLECTION	3/1/99	3/1/99	3/1/99	3/2/99	3/2/99	3/2/99	3/2/99	
PERCENT SOLIDS	64	83	87	89	84	80	80	
DILUTION FACTOR	6400	400	10	50	1	4	20	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Naphthalene	670 J	1,100	0.67 J	56	1.3	10	0.43 J	0.33
2-Methylnaphthalene	6,500	670	1.1	82	0.5	3.9	0.73 J	0.33
Acenaphthylene	3,800	220	5.1	4.2 J	1.8	7.1	13	0.33
Acenaphthene	660 J	29 J	0.26 J	5 J	0.088 J	0.8 J	0.81 J	0.33
Fluorene	3,200 J	130 J	0.69 J	11 J	0.07 J	0.71 J	1.4 J	0.33
Phenanthrene	11,000	430	5.3	16 J	0.46	2.7	6 J	0.33
Anthracene	2,600 J	110 J	2.5 J	1.4 J	1.1	3.3	4.8 J	0.33
Fluoranthene	3,000 J	120 J	6.2	3.2 J	0.82	0.73 J	17	0.33
Pyrene	5,800	220	22	6.8 J	2.2	2.8	58	0.33
Benzo (a) anthracene	1,700 J	65 J	9.1	2 J	1.3	1.2 J	15	0.33
Chrysene	1,800 J	66 J	13	2.6 J	1.7	2.4	16	0.33
Benzo (b) fluoranthene	330 J	15 J	7.6	0.71 J	1.6	1.4 J	6.6 J	0.33
Benzo (k) fluoranthene	1,000 J	34 J	8.9	1.5 J	2.8	1.9	12	0.33
Benzo (a) pyrene	1,200 J	47 J	5.8	1.3 J	1.6	1.8	16	0.33
Indeno (1,2,3-cd) pyrene	360 J	14 J	4.2	U	0.49	0.56 J	4.9 J	0.33
Dibenzo (a,h) anthracene	180 J	U	2.3 J	U	0.21 J	0.25 J	2.5 J	0.33
Benzo (g,h,i) perylene	460 J	18 J	4.4	U	0.64	0.6 J	6.4 J	0.33
Total PAHs	37,760	2,618	98.02	111.71	18.178	38.25	180.84	-
Total CaPAHs	6,570	241	50.9	8.11	9.7	9.51	73	-

QUALIFIERS:

U: Compound analyzed for but not detected

J: Compound found at a concentration below the detection limit

**TABLE 2 (cont'd)**  
**HEMPSTEAD INTERSECTION STREET FORMER MGP SITE**  
**CUT AND PLUG SAMPLING PROGRAM**  
**GRAB SOIL SAMPLING RESULTS**  
**SEMIVOLATILE ORGANIC COMPOUNDS**

SAMPLE ID	HCP-08	HCP-09	HCP-10	HCP-11	HCP-12	HCP-13	HCP-14	Contract Required Detection Limit (mg/kg)
DATE OF COLLECTION	3/4/99	3/4/99	3/4/99	3/7/99	3/7/99	3/7/99	3/7/99	
PERCENT SOLIDS	76	75	66	79	75	70	70	
DILUTION FACTOR	8	50	500	400	8	800	2000	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Naphthalene	1.5 J	87	600	1,000 B	1.5 JB	1,900 B	3,200 B	0.33
2-Methylnaphthalene	1.5 J	100	830	950	1.4 J	1,400	2,200	0.33
Acenaphthylene	5.2	16 J	110 J	83 J	9.9	390	590 J	0.33
Acenaphthene	0.15 J	41	78 J	310	0.57 J	60 J	76 J	0.33
Fluorene	0.17 J	39	140 J	230	0.49 J	210 J	290 J	0.33
Phenanthrene	3.5	180	690	810	2.3 J	830	1,000	0.33
Anthracene	4.2	48	150 J	230	8.5	170 J	240 J	0.33
Fluoranthene	4.7	60	240 J	240	3.5	190 J	240 J	0.33
Pyrene	15	150	790	500	15	420	560 J	0.33
Benzo (a) anthracene	9.30	50	240 J	150 J	6	94 J	130 J	0.33
Chrysene	11	49	230 J	160 J	8.9	96 J	130 J	0.33
Benzo (b) fluoranthene	5.2	14 J	85 J	24 J	5.2	25 J	30 J	0.33
Benzo (k) fluoranthene	11	21 J	120 J	77 J	6	43 J	66 J	0.33
Benzo (a) pyrene	8.4	32	160 J	88 J	10	67 J	110 J	0.33
Indeno (1,2,3-cd) pyrene	4	8.5 J	58 J	22 J	4	24 J	33 J	0.33
Dibenzo (a,h) anthracene	2.1 J	4.9 J	25 J	8 J	2.1 J	11 J	17 J	0.33
Benzo (g,h,i) perylene	4.1	11 J	77 J	28 J	4.4	36 J	50 J	0.33
Total PAHs	89.52	811.4	3,793	3,959.9	88.36	4,566	6,762	-
Total CaPAHs	51	179.4	918	528.9	42.2	360	516	-

**QUALIFIERS:**

- U: Compound analyzed for but not detected
- J: Compound found at a concentration below the detection limit
- B: Compound found in the method blank as well as the sample

**TABLE 3**  
**HEMPSTEAD INTERSECTION STREET FORMER MGP SITE**  
**CUT AND PLUG PROGRAM**  
**GRAB SOIL SAMPLING RESULTS**  
**RCRA METALS AND CYANIDE**

SAMPLE ID	HCP-01	HCP-02	HCP-03	HCP-04	HCP-05	HCP-06	HCP-07	Instrument Detection Limit (ug/l)
DATE OF COLLECTION	3/1/99	3/1/99	3/1/99	3/2/99	3/2/99	3/2/99	3/2/99	
PERCENT SOLIDS	64.4	83.4	86.8	88.8	83.6	80.5	79.6	
DILUTION FACTOR	1	1	1	1	1	1	1	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Arsenic	66.3	17.3	5.7	1.5 B	6.6	7	6.5	3.0
Barium	357	70.3	39	19.6 B	118	32.1	59.8	1.0
Cadmium	4.4	1	0.22 B	0.26 B	5.2	0.52 B	0.57 B	1.0
Chromium	23.6	10.6	10.9	4.9	14.3	12.6	11.9	1.0
Lead	3910	714	62.8	8.7	250	25.1	197	2.0
Mercury	5.9	0.4	0.15	U	1.2	5.5	0.1	0.1
Selenium	25	6	1.4	U	2.3	2.6	1.6	1.0
Silver	2.2 B	0.5 B	U	U	U	U	U	1.0
Cyanide	108	8.75	18.6	5.68	3.02	6.09	U	10

**QUALIFIERS:**

U: Constituent analyzed for but not detected  
 B: Constituent concentration is less than the CRDL  
 but greater than the IDL

TABLE 3 (cont'd)  
 HEMPSTEAD INTERSECTION STREET FORMER MGP SITE  
 CUT AND PLUG PROGRAM  
 GRAB SOIL SAMPLING RESULTS  
 RCRA METALS AND CYANIDE

SAMPLE ID	HCP-08	HCP-09	HCP-10	HCP-11	HCP-12	HCP-13	HCP-14	Instrument Detection Limit
DATE OF COLLECTION	3/4/99	3/4/99	3/4/99	3/7/99	3/7/99	3/7/99	3/7/99	
PERCENT SOLIDS	76.5	73.9	61.8	75.3	76.2	69.6	85	
DILUTION FACTOR	1	1	1	1	1	1	1	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(ug/l)
Arsenic	22.6	6	21.8	17.7	5	10	20.1	3.0
Barium	124	121	23.5 B	59.3	37.9	110	36.7 B	1.0
Cadmium	U	U	U	2.5	0.61 B	0.55 B	1.2	1.0
Chromium	19.1	18	4.1	13.1	14.2	15.8	15.6	1.0
Lead	190	39.2	96.8	118	21.7	17.1	403	2.0
Mercury	2.7	1.3	0.46	1.1	0.32	0.17	0.1	0.1
Selenium	5.3	1.9	4.7	5.1	1.7	2.6	10.8	1.0
Silver	2.1	U	U	U	U	U	0.67 B	1.0
Cyanide	0.952	U	U	U	0.736	0.862	0.832	10

QUALIFIERS:

U: Constituent analyzed for but not detected

B: Constituent concentration is less than the CRDL  
 but greater than the IDL