

TABLE 4-7

Chemicals Detected in Subsurface Soil (Landfill Materials) at Site LF01

Bellows OU1 EE/CA, Bellows AFS, Hawaii

Location	LF01-013	LF01-018	LF01-020	LF01-030	LF01-038	LF01-040	LF01-050			
Sample ID	LF01-BH013B	LF01-BH018B	LF01-BH020B	LF01-BH030B	LF01-BH038B	LF01-BH040B	LF01-BH050B			
Sampling Date	11/04/98	11/03/98	11/02/98	11/04/98	11/02/98	11/02/98	11/03/98			
Depth (feet)	2-8.5	1.5-4.5	2-4.5	1.5-8.5	2-4	2-6	2-11			
Chemical Group	Analyte	CAS	Units							
VOC	1,2-DCB	95-50-1	mg/kg	ND	0.0003 F	ND	0.000175 D F	ND	ND	ND
VOC	1,4-DCB	106-46-7	mg/kg	ND	0.0004 F	ND	ND	ND	ND	ND
VOC	Benzene	71-43-2	mg/kg	ND	ND	ND	ND	ND	0.0007 F	ND
VOC	TCE	79-01-6	mg/kg	ND	ND	ND	0.0012 F	ND	ND	ND
VOC	Toluene	108-88-3	mg/kg	ND	ND	0.0003 F	ND	0.0009 F	0.0008 F	ND
VOC	Trichlorofluoromethane	75-69-4	mg/kg	ND	0.0021 F	ND	ND	ND	ND	0.0007 F
VOC	m, p-Xylene	108-38-3/1	mg/kg	ND	ND	ND	ND	0.001 F	ND	ND
TPH	TPH-Diesel	TPH-DIESEL	mg/kg	ND	27 F	36 F	2.1 F	29 F	48 F	14 F
TPH	TPH-Gasoline	TPH-GASOLINE	mg/kg	0.02 F	ND	0.01 F	ND	ND	0.01 F	ND
SVOC	Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	ND	ND	ND	ND	ND	ND	0.28 F
SVOC	Butyl benzylphthalate	85-68-7	mg/kg	ND	ND	ND	ND	ND	ND	0.64 F
PEST	4,4'-DDT	50-29-3	mg/kg	ND	0.22 J	---	0.007275 D F	---	---	0.11 J
PEST	Chlordane (Alpha)	5103-71-9	mg/kg	ND	0.019 F	---	0.0049925 D F	---	---	0.0022 F
PCB	Aroclor-1016	12674-11-2	mg/kg	ND	ND	---	0.007 D F	---	---	ND
PCB	Aroclor-1260	11096-82-5	mg/kg	ND	ND	---	0.0143 D F	---	---	0.1 F
PAH	Anthracene	120-12-7	mg/kg	ND	0.06 F	ND	ND	ND	0.007 F	ND
PAH	Benzo (a) anthracene	56-55-3	mg/kg	0.0142	0.0588 F	0.0067 F	0.0026 D F	0.008 F	0.0342 J	ND
PAH	Benzo (a) pyrene	50-32-8	mg/kg	0.0296	0.123 F	0.0134 F	0.003025 D F	0.0144 F	0.0321	ND
PAH	Benzo (b) fluoranthene	205-99-2	mg/kg	0.0395	0.103 F	0.0236	0.006975 D F	0.0343	0.075	ND
PAH	Benzo (g,h,i) perylene	191-24-2	mg/kg	0.041 F	0.19 F	0.147 F	0.0065 D F	0.017 F	0.026 F	ND
PAH	Benzo (k) fluoranthene	207-08-9	mg/kg	0.0139	0.045 F	0.0072 F	0.002425 D F	0.008 F	0.0196	0.031 F
PAH	Chrysene	218-01-9	mg/kg	0.04 F	0.16 F	0.02 F	0.00525 D F	0.02 F	0.08 F	ND
PAH	Dibenzo (a,h) anthracene	53-70-3	mg/kg	ND	ND	ND	ND	ND	ND	0.086 F
PAH	Fluoranthene	206-44-0	mg/kg	0.022 F	0.07 F	0.018 F	ND	0.015 F	0.063 F	ND
PAH	Indeno (1,2,3-c,d) pyrene	193-39-5	mg/kg	0.068	ND	ND	0.015 D F	0.032 F	0.058 J	ND
PAH	Phenanthrene	85-01-8	mg/kg	0.003 F	0.03 F	0.005 F	0.003 D F	0.004 F	0.033 F	ND
PAH	Pyrene	129-00-0	mg/kg	0.026 F	0.02 F	0.019 F	0.00225 D F	0.021 F	0.049 F	ND
METALS	Aluminum	7429-90-5	mg/kg	8120	15600	10400	11075 J	5330	7300	8970
METALS	Antimony	7440-36-0	mg/kg	0.52 F	1.9 F	5.2	2.42 D	0.72	15.2	ND
METALS	Arsenic	7440-38-2	mg/kg	9.6	12.1	18.4	12.2 J	14	26.6	17.5
METALS	Barium	7440-39-3	mg/kg	26	50.4	96	43.65 J	19	95.5	49.1
METALS	Beryllium	7440-41-7	mg/kg	0.15 F	0.24 F	0.15 F	0.215 F	0.13 F	0.15 F	0.23 F
METALS	Cadmium	7440-43-9	mg/kg	0.53 F	2.9	3.8	1.885 D	0.51 F	5.5	0.59
METALS	Calcium	7440-70-2	mg/kg	330000	246000	260000	262500	313000	177000	299000
METALS	Chromium	7440-47-3	mg/kg	34	55.8	47.4	62.25 J	26.2	147	45.5
METALS	Cobalt	7440-48-4	mg/kg	6.2 F	9.9 F	10.1 F	12.6 D	5.1 F	19.2	7.3 F
METALS	Copper	7440-50-8	mg/kg	31.1	66	189	146 J	23.8	1600	23.9
METALS	Iron	7439-89-6	mg/kg	14000	23100	54700	61950 J	11100	109000	13300
METALS	Lead	7439-92-1	mg/kg	59.9	326	1050	495.85 J	61.1	1590	362

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Depth (feet)		2-8.5	1.5-4.5	2-4.5	1.5-8.5	2-4	2-6	2-11		
Chemical										
Group	Analyte	CAS	Units							
METALS	Magnesium	7439-95-4	mg/kg	7430	10200	6460	4655 J	4300	4480	6020
METALS	Manganese	7439-96-5	mg/kg	197	322	464	440.5 J	177	1180	306
METALS	Mercury	7439-97-6	mg/kg	ND	0.13	0.08 F	0.07 D	ND	0.26	ND
METALS	Nickel	7440-02-0	mg/kg	26.2	38	31.2	52.6 J	20.8	87.1	36.9
METALS	Potassium	7440-09-7	mg/kg	448 F	782	661	509 D	458 F	628 F	326 F
METALS	Silver	7440-22-4	mg/kg	ND	0.44 F	1.9	0.7325 D	ND	2.1	ND
METALS	Sodium	7440-23-5	mg/kg	922	1380	783	286.5 J	399	601	643
METALS	Thallium	7440-28-0	mg/kg	ND	ND	0.39 F	0.08 D F	ND	0.62 F	ND
METALS	Vanadium	7440-62-2	mg/kg	26.4	44.2	21.8	21.8 J	22.7	12.7	31.1
METALS	Zinc	7440-66-6	mg/kg	327	664	1300	353.65 J	70	1220	138
HERB	MCPA	94-74-6	mg/kg	9.8 F	ND	ND	ND	ND	R	ND

Notes:

Chemical Groups

VOC = volatile organic compounds
 TPH = total petroleum hydrocarbons
 SVOC = semivolatile organic compounds
 PEST = pesticides
 PCB = polychlorinated biphenyls
 PAH = polynuclear aromatic hydrocarbons
 HERB = herbicides

Abbreviations

mg/kg = milligrams per kilogram

Data Qualifiers

D = Applied to averaged results when non "U" qualifiers are not identical.
 F = The analyte was positively identified but the associated numerical value is below the sample-specific reporting limit (RL).
 J = The analyte was positively identified; the quantitation is an estimation.
 DF = Same as "D", and the analyte was positively identified but the associated numerical value is below the sample-specific reporting limit (RL).
 ND = Not detected.
 --- = Not analyzed.