TABLE B-9
PREVALENCE OF DETECTED CHEMICALS IN SOIL - LIQUIDS TREATMENT AREA
CASMALIA RESOURCES SUPERFUND SITE REMEDIAL INVESTIGATION

		All Depth Ranges					0 to 6 Inches					0 to 5 Feet					0 to 10 Feet					Greater than 10 Feet					Screening Levels			
Compound	CAS Number	Number of Detects	Number of Samples Collected	FOD[1]	Range of Detected Concentrations[2]	Average Detected Value	Number of Detects	Number of Samples Collected	FOD[1]	Range of Detected Concentrations[2]	Average Detected Value	Number of Detects	Number of Samples Collected	FOD[1]	Range of Detected Concentrations[2]	Average Detected Value	Number of Detects	Number of Samples Collected	FOD[1]	Range of Detected Concentrations[2]	Average Detected Value	Number of Detects	Number of Samples Collected	FOD[1]	Range of Detected Concentrations[2]	Average Detected Value	Industrial PRG	Industrial PRG (CA)	Lowest Ecological Screening Level	UTL[3]
Metals and Cyanide (mg/kg)																														
Aluminum	7429-90-5	60	60	100%	3800 - 20000	9233.333	18	18	100%	3800 - 14000	9205.556	30	30	100%	3800 - 14000	9463.333	41	41	100%	3800 - 20000	9863.415	19	19	100%	6400 - 11000	7873.684	100000			18000
Arsenic	7440-38-2	55	60	92%	0.59 - 26	4.693	17	18	94%	2.4 - 12	4.300	28	30	93%	2.2 - 12	4.096	39	41	95%	0.59 - 19	4.359	16	19	84%	1.1 - 26	5.506	1.590407549	0.251396321	18	22
Barium	7440-39-3	60	60	100%	18 - 330	67.55	18	18	100%	44 - 330	99.778	30	30	100%	18 - 330	94.333	41	41	100%	18 - 330	83.854	19	19	100%	19 - 130	32.368	66577.34934	5400	330	174
Beryllium	7440-41-7	60	60	100%	0.19 - 0.88	0.417	18	18	100%	0.19 - 0.62	0.416	30	30	100%	0.19 - 0.62	0.426	41	41	100%	0.19 - 0.88	0.447	19	19	100%	0.28 - 0.48	0.352	1940.690344		10	0.91
Cadmium	7440-43-9	60	60	100%	0.3 - 34	1.883	18	18	100%	0.5 - 34	3.389	30	30	100%	0.3 - 34	2.563	41	41	100%	0.3 - 34	2.248	19	19	100%	0.32 - 2.3	1.095	451.4132238		0.36	3.2
Calcium	7440-70-2	60	60	100%	2300 - 18000	7593.333	18	18	100%	2900 - 16000	8711.111	30	30	100%	2300 - 16000	7893.333	41	41	100%	2300 - 18000	7948.780	19	19	100%	3300 - 11000	6826.316				
Chromium	7440-47-3	60	60	100%	14 - 68	25.133	18	18	100%	14 - 68	27.611	30	30	100%	14 - 68	27.167	41	41	100%	14 - 68	26.854	19	19	100%	17 - 27	21.421	448.3169314		0.4	47
Cobalt	7440-48-4	60	60	100%	1.9 - 18	4.927	18	18	100%	2.1 - 18	5.167	30	30	100%	2.1 - 18	5.457	41	41	100%	1.9 - 18	5.395	19	19	100%	1.9 - 6.7	3.916	1921.352617		13	20
Copper	7440-50-8	60	60	100%	6 - 96	16.353	18	18	100%	8.8 - 96	20.767	30	30	100%	8.8 - 96	20.020	41	41	100%	8.8 - 96	18.622	19	19	100%	6 - 19	11.458	40876.65792		28	19
Iron	7439-89-6	60	60	100%	8900 - 71000	19871.667	18	18	100%	8900 - 24000	18716.66667	30	30	100%	8900 - 24000	18896.66667	41	41	100%	8900 - 71000	20558.53659	19	19	100%	9400 - 33000	18389.474	100000			25000
Lead	7439-92-1	7	60	12%	8.6 - 41	16.471	5	18	28%	8.6 - 41	17.060	6	30	20%	8.6 - 41	17.383	7	41	17%	8.6 - 41	16.4714	0	19	0%	- 0		800		11	11.9
Magnesium	7439-95-4	60	60	100%	2300 - 9900	4338.333	18	18	100%	2300 - 6400	3983.333	30	30	100%	2300 - 6400	4043.333	41	41	100%	2300 - 9900	4292.683	19	19	100%	3200 - 5700	4436.842				5500
Manganese	7439-96-5	60	60	100%	43 - 1300	190.517	18	18	100%	54 - 450	198.556	30	30	100%	54 - 1300	231.933	41	41	100%	54 - 1300	213.317	19	19	100%	43 - 250	141.316	19458.10708			330
Mercury	7439-97-6	15	60	25%	0.021 - 0.07	0.038	8	18	44%	0.024 - 0.062	0.038	12	30	40%	0.024 - 0.07	0.040	13	41	32%	0.024 - 0.07	0.0397	2	19	11%	0.021 - 0.034	0.028	306.599812		0.1	0.026
Molybdenum	7439-98-7	39	60	65%	2.4 - 8.6	4.261538462	15	18	83%	2.4 - 6.9	4.060	24	30	80%	2.4 - 8.6	4.571	29	41	71%	2.4 - 8.6	4.597	10	19	53%	2.4 - 5.3	3.290	5109.947776		2	10
Nickel	7440-02-0	60	60	100%	11 - 70	31.967	18	18	100%	18 - 49	31.833	30	30	100%	18 - 59	33.333	41	41	100%	18 - 70	34.366	19	19	100%	11 - 46	26.789	20439.16445		30	49
Potassium	7440-09-7	60	60	100%	910 - 4100	2265.5	18	18	100%	910 - 3100	2196.111	30	30	100%	910 - 3100	2247.667	41	41	100%	910 - 4100	2288.537	19	19	100%	1800 - 2500	2215.789				
Selenium	7782-49-2	13	60	22%	1.2 - 4.1	1.776923077	1	18	6%	1.7 - 1.7	1.7000	3	30	10%	1.5 - 2.6	1.9333	8	41	20%	1.5 - 4.1	2.05	5	19	26%	1.2 - 1.5	1.340	5109.947776		1	3.3
Silver	7440-22-4	1	60	2%	2.1 - 2.1	2.1	0	18	0%	-		1	30	3%	2.1 - 2.1	2.1	1	41	2%	2.1 - 2.1	2.1	0	19	0%	- 0		5109.947776		4.2	
Sodium	7440-23-5	60	60	100%	170 - 5000	1843.5	18	18	100%	170 - 2900	1256.111	30	30	100%	170 - 4800	1567.000	41	41	100%	170 - 5000	1844.146	19	19	100%	1000 - 3500	1842.105				
Thallium	7440-28-0	51	60	85%	0.21 - 0.95	0.354	13	18	72%	0.21 - 0.49	0.329	24	30	80%	0.21 - 0.95	0.356	34	41	83%	0.21 - 0.95	0.371	17	19	89%	0.23 - 0.45	0.322	67.4519909		1	0.64
Tin	7440-31-5	52	60	87%	29 - 72	43.481	15	18	83%	33 - 72	43.2	25	30	83%	33 - 72	43.36	35	41	85%	33 - 72	45.029	17	19	89%	29 - 60	40.294	100000		50	65
Vanadium	7440-62-2	60	60	100%	14 - 460	35.217	18	18	100%	14 - 46	25	30	30	100%	14 - 140	29.86666667	41	41	100%	14 - 460	41.902	19	19	100%	14 - 44	20.789	1021.997911		2	81
Zinc	7440-66-6	60	60	100%	30 - 280	54.167	18	18	100%	34 - 280	63.833	30	30	100%	31 - 280	60.133	41	41	100%	31 - 280	58.829	19	19	100%	30 - 64	44.105	100000		50	104
Amenable Cyanide	A57-12-5	1	1	100%	1.4 - 1.4	1.4	1	1	100%	1.4 - 1.4	1.4	1	1	100%	1.4 - 1.4	1.4	1	1	100%	1.4 - 1.4	1.4				-					
Total Cyanide	57-12-5	3	60	5%	1.1 - 9.8	4.233	2	18	11%	1.8 - 9.8	5.800	3	30	10%	1.1 - 9.8	4.233	3	41	7%	1.1 - 9.8	4.233	0	19	0%	- 0		12313.1014			
VOCs (mg/kg)																														
1,1,1-Trichloroethane	71-55-6	1	60	2%	0.0017 - 0.0017	1.700E-03	0	18	0%	-		1	30	3%	0.0017 - 0.0017	0.0017	1	41	2%	0.0017 - 0.0017	0.002	0	19	0%	- 0		1200			
1,1-Dichloroethane	75-34-3	14	59	24%	0.0014 - 0.5	0.079	1	18	6%	0.0025 - 0.0025	0	2	29	7%	0.0025 - 0.0025	0	5	40	13%	0.0014 - 0.04	0.010	9	19	47%	0.0021 - 0.5	0.12	1738.654276	6.009210002		
1,1-Dichloroethylene	75-35-4	8	60	13%	0.0095 - 0.072	0.035	0	18	0%	-		1	30	3%	0.037 - 0.037	0.037	2	41	5%	0.037 - 0.072	0.055	6	19	32%	0.0095 - 0.072	0.03	413.3254458			
1,2,3-Trichlorobenzene	87-61-6	1	60	2%	0.089 - 0.089	0.089	1	18	6%	0.089 - 0.089	0.089	1	30	3%	0.089 - 0.089	0.089	1	41	2%	0.089 - 0.089	0.089	0	19	0%	- 0				20	
1,2,4-Trimethylbenzene	95-63-6	1	60	2%	0.0048 - 0.0048	0.005	0	18	0%	-		1	30	3%	0.0048 - 0.0048	0.0048	1	41	2%	0.0048 - 0.0048	0.005	0	19	0%	- 0		170.2715462			
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	1	60	2%	0.0031 - 0.0031	3.100E-03	1	18	6%	0.0031 - 0.0031	0	1	30	3%	0.0031 - 0.0031	0	1	41	2%	0.0031 - 0.0031	0.003	0	19	0%	- 0		2.016575178	0.076		
1,2-Dichloroethane	107-06-2	2	60	3%	0.0023 - 0.0036	2.950E-03	0	18	0%	-		0	30	0%	-		2	41	5%	0.0023 - 0.0036	0.003	0	19	0%	- 0		0.603488094			
1,2-Dichloroethene	540-59-0	6	60	10%	0.0034 - 0.024	0.01	1	18	6%	0.016 - 0.016	0.016	1	30	3%	0.016 - 0.016	0.016	1	41	2%	0.016 - 0.016	0.016	5	19	26%	0.0034 - 0.024	0.009				
1,2-Dichloropropane	78-87-5	10	60	17%	0.0028 - 0.14	0.035	0	18	0%	-		0	30	0%	-		2	41	5%	0.006 - 0.031	0.019	8	19	42%	0.0028 - 0.14	0.039	0.742249256		700	
1,3-Dichlorobenzene	541-73-1	1	60	2%	0.0093 - 0.0093	0.009	1	18	6%	0.0093 - 0.0093	0.009	1	30	3%	0.0093 - 0.0093	0.009	1	41	2%	0.0093 - 0.0093	0.009	0	19	0%	- 0		600			
Benzene	71-43-2	16	60	27%	0.0015 - 0.62	0.071	4	18	22%	0.0015 - 0.0024	0	6	30	20%	0.0015 - 0.0044	0	9	41	22%	0.0015 - 0.022	0.004	7	19	37%	0.0016 - 0.62	0.157	1.409401928			
Carbon disulfide	75-15-0	4	60	7%	0.0065 - 0.015	0.010	0	18	0%	-		1	30	3%	0.011 - 0.011	0.011	3	41	7%	0.0065 - 0.015	0.011	1	19	5%	0.009 - 0.009	0	720			
Chloroethane	75-00-3	1	60	2%	0.0034 - 0.0034	3.400E-03	0	18	0%	-		0	30	0%	-		0	41	0%	-		1	19	5%	0.0034 - 0.0034	0	6.485488046			
Chloroform	67-66-3	3	60	5%	0.002 - 0.0089	0.006	0	18	0%	-		1	30	3%	0.002 - 0.002	0.002	2	41	5%	0.002 - 0.0089	0.005	1	19	5%	0.0083 - 0.0083	0.0	0.469844889	2.003022942		
Chloromethane	74-87-3	2	60	3%	0.00088 - 0.16	0.080	0	18	0%	-		0	30	0%	-		0	41	0%	-		2	19	11%	0.00088 - 0.16	0.080	155.7459142			
Chlorotrifluoroethene	79-38-9	3	60	5%	0.0091 - 0.022	0.016	0	18	0%	-		1	30	3%	0.022 - 0.022	0.022	1	41	2%	0.022 - 0.022	0.022	2	19	11%	0.0091 - 0.017	0.013				
Diisopropyl ether	108-20-3	6	60	10%	0.0022 - 0.013	0.006	0	18	0%	-		0	30	0%	-		1	41	2%	0.0038 - 0.0038	0.004	5	19	26%	0.0022 - 0.013	0.006				
Ethylbenzene	100-41-4	1	60	2%	0.002 - 0.002	2.000E-03	0	18	0%	-		0	30	0%	-		0	41	0%	-		1	19	5%	0.002 - 0.002	0	395			
Freon 113 (1,1,2-trichloro-1,2,2-trifluo	76-13-1	21	60	35%	0.0013 - 1.4	0.270	2	18	11%	0.0017 - 0.0036	0	5	30	17%	0.0017 - 1.4	0	7	41	17%	0.0017 - 1.4	0.232	14	19	74%	0.0013 - 1.4	0.289	5600			
Methyl tert-butyl ether (MTBE)	1634-04-4	1	60	2%	0.0048 - 0.0048	0.005	0	18	0%	-		0	30	0%	-		0	41	0%	-		1	19	5%	0.0048 - 0.0048	0	70			
Methylcyclopentane	96-37-7	5	60	8%	0.0083 - 3.4	0.859	0	18	0%	-		1	30	3%	0.0083 - 0.0083	0.0083	1	41	2%	0.0083 - 0.0083	0.008	4	19	21%	0.0088 - 3.4	1.071				
Methylene chloride	75-09-2	6	60	10%	0.0014 - 0.091	0.019	0	18	0%	-		0	30	0%	-		3	41	7%	0.0016 - 0.091	0.033	3	19	16%	0.0014 - 0.009	0.005	20.52652511			
o-Xylene	95-47-6	2	60	3%	0.0018 - 0.0023	2.050E-03	0	18	0%	-		0	30	0%	-		0	41	0%	-		2	19	11%	0.0018 - 0.0023	0				
Propanal	123-38-6	1	60	2%	0.13 - 0.13	0.130	0	18	0%	-		0	30	0%	-		0	41	0%	-		1	19	5%	0.13 - 0.13	0.130				
Tetrachloroethylene	127-18-4	13	60	22%	0.002 - 0.067	0.013	3	18	17%	0.011 - 0.03	0.018	6	30	20%	0.0028 - 0.067	0.023	7	41	17%	0.0028 - 0.067	0.020	6	19	32%	0.002 - 0.01	0.005	1.308620966			
Tetrahydrofuran	109-99-9	4	60	7%	0.0033 - 0.15	0.041	0	18	0%	-		1	30	3%	0.15 - 0.15	0.15	2	41	5%	0.0033 - 0.15	0.077	2	19	11%	0.0052 - 0.0063	0.006	21.15151464			
Toluene	108-88-3	4	60	7%	0.0018 - 0.0042	0.003	1	18	6%	0.0032 - 0.0032	0	2	30	7%	0.0025 - 0.0032	0	2	41	5%	0.0025 - 0.0032	0.003	2	19	11%	0.0018 - 0.0042	0	520		200	
trans-1,2-Dichloroethylene	156-60-5	3	60	5%	0.0018 - 0.012	0.005	0	18	0%	-		0	30	0%	-		0	41	0%	-		3	19	16%	0.0018 - 0.012	0.005	234.8229966			
Trichloroethylene	79-01-6	12	60	20%	0.0031 - 1.1	0.210	1	18	6%	0.0031 - 0.0031	0	3	30	10%	0.0031 - 0.0038	0	4	41	10%	0.0031 - 0.039	0.012	8	19	42%	0.0037 - 1.1	0.309	0.114737659	6.46752801		
SVOCs (mg/kg)																														
Bis(2-ethylhexyl)phthalate	117-81-7	3	60	5%	0.084 - 1.7	0.661	3	18	17%	0.084 - 1.7	0.661	3	30	10%	0.084 - 1.7	0.661	3	41	7%	0.084 - 1.7	0.661	0	19	0%	- 0		123.1212582			
Diethylphthalate	84-66-2	3	60	5%	0.23 - 0.37	0.283	0	18	0%	-		2	30	7%	0.23 - 0.37	0.3	3	41	7%	0.23 - 0.37	0.283	0	19	0%	- 0		100000		100	
Dimethylphthalate	131-11-3	2	60	3%	0.27 - 0.3	0.285	1	18	6%	0.27 - 0.27	0.27	2	30	7%	0.27 - 0.3	0.285	2	41	5%	0.27 - 0.3	0.285	0	19	0%	- 0		100000		200	
Di-n-butylphthalate	84-74-2	2	60	3%	0.18 - 0.52	0.350	1	18	6%	0.52 - 0.52	0.52	2	30	7%	0.18 - 0.52	0.35	2	41	5%	0.18 - 0.52	0.35	0	19	0%	- 0		61560.62909		200	
Di-n-octylphthalate	117-84-0	1	60	2%	0.2 - 0.2	0.200	0	18	0%	-		1	30	3%	0.2 - 0.2	0.2	1	41	2%	0.2 - 0.2	0.2	0	19	0%	- 0		24624.25163			
PAHs (mg/kg)																														
Acenaphthene	83-32-9	2	60	3%	0.0027 - 0.051	0.027	1	18	6%	0.051 - 0.051	0.051	1	30	3%	0.051 - 0.051	0.051	1	41	2%	0.051 - 0.051	0.051	1	19	5%	0.0027 - 0.0027	0	29219.32727		20	
Acenaphthylene	208-96-8	1	60	2%	0.0037 - 0.0037	3.700E-03	0	18	0%	-		0	30	0%	-		0	41	0%	-		1	19	5%	0.0037 - 0.0037	0				
Anthracene	120-12-7	1	60	2%	0.0089 - 0.0089	0.009	1	18	6%	0.0089 - 0.0089	0.009	1	30	3%	0.0089 - 0.0089	0.009	1	41	2%	0.0089 - 0.0089	0.009	0	19	0%	- 0		100000			
Benzo(a)anthracene	56-55-3	2	60	3%	0.0033 - 0.0037	0.004	1	18	6%	0.0033 - 0.0033	0.003	1	30	3%	0.0033 - 0.0033	0.003	1	41	2%	0.0033 - 0.0033	0.003	1	19	5%	0.0037 - 0.0037	0	2.109622922			
Benzo(a)pyrene	50-32-8	4	60	7%	0.007 - 0.0078	0.007	2	18	11%	0.0071 - 0.0077	0.007	3	30	10%	0.0071 - 0.0078	0.008	4	41	10%	0.007 - 0.0078	0.007	0	19	0%	- 0		0.210962292			
Benzo(b)fluoranthene	205-99-2	5	60	8%	0.0045 - 0.0063	0.006	3	18	17%	0.0045 - 0.0063	0.006	4	30	13%	0.0045 - 0.0063	0.006	5	41	12%	0.0045 - 0.0063	0.006	0	19	0%	- 0		2.109622922			
Benzo(k)fluoranthene	207-08-9	4	60	7%	0.0037 - 0.0045	0.004	2	18	11%	0.0041 - 0.0045	0	3	30	10%	0.0041 - 0.0045	0	4	41	10%	0.0037 - 0.0045	0.004	0	19	0%	- 0		21.09622922	1.283424799		
Chrysene	218-01-9	7	60	12%	0.0022 - 0.016	0.007	5	18	28%	0.0022 - 0.016	0.006	6	30	20%	0.0022 - 0.016	0.007	6	41	15%	0.0022 - 0.016	0.007	1	19	5%	0.0085 - 0.0085	0	210.9622922	12.83424799		
Fluoranthene	206-44-0	5	60	8%	0.0028 - 0.0064	0.004	3	18	17%	0.0028 - 0.003	0	4	30	13%	0.0028 - 0.0055	0	4	41	10%	0.0028 - 0.0055	0.004	1	19	5%	0.0064 - 0.0064	0	22000.35333			
Fluorene	86-73-7	1	60	2%	0.0088 - 0.0088	0.009	0	18	0%	-		0	30	0%	-		0	41	0%	-		1	19	5%	0.0088 - 0.0088	0	26281.43345		30	
Naphthalene	91-20-3	7	60	12%	0.0038 - 0.015	0.007	3	18	17%	0.0038 - 0.0074	0.006	5	30	17%	0.0038 - 0.0074	0.005	5	41	12%	0.0038 - 0.0074	0.005	2	19	11%	0.0047 - 0.015	0.010	187.6909137	4.2		
Pyrene	129-00-0	7	60	12%	0.0033 - 0.031	0.009	5	18	28%	0.0033 - 0.031	0.010	5	30	17%	0.0033 - 0.031	0.010	5	41	12%	0.0033 - 0.031	0.010	2	19	11%	0.0048 - 0.008	0.006	29126.2007			
Pesticides (mg/kg)																														
4,4'-DDE	72-55-9	3	60	5%	0.0009 - 0.0022	1.567E-03	2	18	11%	0.0016 - 0.0022	0	2	30	7%	0.0016 - 0.0022	0	3	41	7%	0.0009 - 0.0022	0.002	0	19	0%	- 0		7.024543429			
4,4'-DDT	50-29-3	5	60	8%	0.0014 - 3.1	0.626	5	18	28%	0.0014 - 3.1	0.626	5	30	17%	0.0014 - 3.1	0.626	5	41	12%	0.0014 - 3.1	0.626	0	19	0%	- 0		7.02454474			
Aldrin	309-00-2	2	60	3%	0.00081 - 0.086	0.043	2	18	11%	0.00081 - 0.086	0.043	2	30	7%	0.00081 - 0.086	0.043	2	41	5%	0.00081 - 0.086	0.043	0	19	0%	- 0		0.101393895			
beta-BHC	319-85-7	1	60	2%	0.055 - 0.055	0.055	1	18	6%	0.055 - 0.055	0.055	1	30	3%	0.055 - 0.055	0.055	1	41	2%	0.055 - 0.055	0.055	0	19	0%	- 0		1.257584379			
Chlordane, alpha	5103-71-9	2	60	3%	0.0034 - 0.0041	0.004	1	18	6%	0.0041 - 0.0041	0	2	30	7%	0.0034 - 0.0041	0	2	41	5%	0.0034 - 0.0041	0.004	0	19	0%	- 0					
Chlordane, gamma	12789-03-6	1	60	2%	0.11 - 0.11	0.110	1	18	6%	0.11 - 0.11	0.110	1	30	3%	0.11 - 0.11	0.110	1	41	2%	0.11 - 0.11	0.11	0	19	0%	- 0		6.5			
Dieldrin	60-57-1	2	60	3%	0.00092 - 0.0064	0.004	1	18	6%	0.0064 - 0.0064	0	2	30	7%	0.00092 - 0.0064	0	2	41	5%	0.00092 - 0.0064	0.004	0	19	0%	- 0		0.107731039			
Endrin ketone	53494-70-5	1	60	2%	0.0037 - 0.0037	3.700E-03	1	18	6%	0.0037 - 0.0037	0	1	30	3%	0.0037 - 0.0037	0	1	41	2%	0.0037 - 0.0037	0.004	0	19	0%	- 0					
Heptachlor	76-44-8	1	60	2%	0.001 - 0.001	1.000E-03	1	18	6%	0.001 - 0.001	1.000E-03	1	30	3%	0.001 - 0.001	1.000E-03	1	41	2%	0.001 - 0.001	0.001	0	19	0%	- 0		0.383043525			
Hexachlorobenzene	118-74-1	5	60	8%	0.00093 - 3.1	0.622	5	18	28%	0.00093 - 3.1	0.622	5	30	17%	0.00093 - 3.1	0.622	5	41	12%	0.00093 - 3.1	0.622	0	19	0%	- 0		1.077310393			
Mirex	2385-85-5	3	60	5%	0.0048 - 0.58	0.197	3	18	17%	0.0048 - 0.58	0.197	3	30	10%	0.0048 - 0.58	0.197	3	41	7%	0.0048 - 0.58	0.197	0	19	0%	- 0		0.957609786			
Herbicides (mg/kg)																														
2,4,5-T	93-76-5	2	58	3%	0.065 - 0.36	0.213	1	17	6%	0.36 - 0.36	0.360	2	28	7%	0.065 - 0.36	0.213	2	39	5%	0.065 - 0.36	0.213	0	19	0%	- 0		6156.062909			
2,4,5-TP (Silvex)	93-72-1	1	58	2%	0.015 - 0.015	0.015	1	17	6%	0.015 - 0.015	0.015	1	28	4%	0.015 - 0.015	0.015	1	39	3%	0.015 - 0.015	0.015	0	19	0%	- 0		4924.850327			
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	2	58	3%	0.016 - 0.67	0.343	1	17	6%	0.67 - 0.67	0.670	1	28	4%	0.67 - 0.67	0.670	1	39	3%	0.67 - 0.67	0.67	1	19	5%	0.016 - 0.016	0.016	7683.332572			
2,4-Dichlorophenoxybutyric acid (2,4-DB)	94-82-6	10	60	17%	0.0083 - 0.076	0.029	4	18	22%	0.0083 - 0.054	0.028	5	30	17%	0.0083 - 0.076	0.037	7	41	17%	0.0083 - 0.076	0.034	3	19	16%	0.016 - 0.023	0.019	4924.850327			
2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	3	24	13%	0.015 - 0.057	0.031	1	6	17%	0.021 - 0.021	0.021	3	13	23%	0.015 - 0.057	0.031	3	18	17%	0.015 - 0.057	0.031	0	6	0%	- 0		615.6062909			
Dalapon	75-99-0	5	59	8%	0.013 - 0.068	0.039	1	18	6%	0.054 - 0.054	0.054	2	29	7%	0.054 - 0.068	0.061	3	40	8%	0.039 - 0.068	0.054	2	19	11%	0.013 - 0.023	0.018	18468.18873			
Dicamba	1918-00-9	2	58	3%	0.015 - 0.058	0.037	1	17	6%	0.015 - 0.015	0.015	2	28	7%	0.015 - 0.058	0.037	2	39	5%	0.015 - 0.058	0.037	0	19	0%	- 0		18468.18873			
Dichlorprop	120-36-5	3	58	5%	0.028 - 0.34	0.150	1	17	6%	0.34 - 0.34	0.34	2	28	7%	0.082 - 0.34	0.211	3	39	8%	0.028 - 0.34	0.15	0	19	0%	- 0					
MCPA	94-74-6	11	60	18%	0.49 - 19	3.245454545	2	18	11%	0.58 - 0.82	0.700	4	30	13%	0.58 - 19	5.850	4	41	10%	0.58 - 19	5.85	7	19	37%	0.49 - 4.7	1.757	307.8031454			
MCPP	93-65-2	6	59	10%	0.75 - 1400	237.142	3	18	17%	0.75 - 1400	468.250	4	29	14%	0.75 - 1400	354.688	4	40	10%	0.75 - 1400	354.688	2	19	11%	1 - 3.1	2.050	615.6062909		350	
Poor-Purge Organics (mg/kg)																														
1-Butanol	71-36-3	2	60	3%	0.027 - 0.096	0.062	1	18	6%	0.027 - 0.027	0.027	1	30	3%	0.027 - 0.027	0.027	1	41	2%	0.027 - 0.027	0.027	1	19	5%	0.096 - 0.096	0.096	61350.23762			
2-Pentanone	107-87-9	1	60	2%	0.004 - 0.004	4.000E-03	0	18	0%	-		0	30	0%	-		0	41	0%	-		1	19	5%	0.004 - 0.004	0				
Acetone	67-64-1	23	60	38%	0.0099 - 0.2	0.048	6	18	33%	0.01 - 0.2	0.08	10	30	33%	0.01 - 0.2	0.05	13	41	32%	0.01 - 0.2	0.057	10	19	53%	0.0099 - 0.14	0.035	54320.98608			
Acetonitrile	75-05-8	2	60	3%	0.13 - 0.19	0.160	2	18	11%	0.13 - 0.19	0.16	2	30	7%	0.13 - 0.19	0.16	2	41	5%	0.13 - 0.19	0.16	0	19	0%	- 0		1817.648383			
Acrolein	107-02-8	1	60	2%	0.0038 - 0.0038	3.800E-03	1	18	6%	0.0038 - 0.0038	0	1	30	3%	0.0038 - 0.0038	0	1	41	2%	0.0038 - 0.0038	0.004	0	19	0%	- 0		0.336368752			
Ethanol	64-17-5	1	60	2%	0.076 - 0.076	0.076	1	18	6%	0.076 - 0.076	0.076	1	30	3%	0.076 - 0.076	0.076	1	41	2%	0.076 - 0.076	0.076	0	19	0%	- 0					
Isobutyl alcohol	78-83-1	1	60	2%	0.069 - 0.069	0.069	0	18	0%	-		1	30	3%	0.069 - 0.069	0.069	1	41	2%	0.069 - 0.069	0.069	0	19	0%	- 0					
Isopropanol	67-63-0	1	60	2%	0.026 - 0.026	0.026	0	18	0%	-		0	30	0%	-		0	41	0%	-		1	19	5%	0.026 - 0.026	0.026				
Methyl ethyl ketone	78-93-3	14	60	23%	0.0047 - 0.028	0.010	4	18	22%	0.0047 - 0.0082	0.006	6	30	20%	0.0047 - 0.0082	0.006	11	41	27%	0.0047 - 0.028	0.011	3	19	16%	0.0051 - 0.012	0.009	113264.3883			
Tert-Butyl alcohol (TBA)	75-65-0	8	60	13%	0.015 - 0.06	0.028	1	18	6%	0.04 - 0.04	0.040	3	30	10%	0.021 - 0.06	0.040	5	41	12%	0.017 - 0.06	0.033	3	19	16%	0.015 - 0.029	0.020	1700			

TABLE B-9
PREVALENCE OF DETECTED CHEMICALS IN SOIL - LIQUIDS TREATMENT AREA
CASMALIA RESOURCES SUPERFUND SITE REMEDIAL INVESTIGATION

		All Depth Ranges					0 to 6 Inches					0 to 5 Feet					0 to 10 Feet					Greater than 10 Feet					Screening Levels			
Compound	CAS Number	Number of Detects	Number of Samples Collected	FOD[1]	Range of Detected Concentrations[2]	Average Detected Value	Number of Detects	Number of Samples Collected	FOD[1]	Range of Detected Concentrations[2]	Average Detected Value	Number of Detects	Number of Samples Collected	FOD[1]	Range of Detected Concentrations[2]	Average Detected Value	Number of Detects	Number of Samples Collected	FOD[1]	Range of Detected Concentrations[2]	Average Detected Value	Number of Detects	Number of Samples Collected	FOD[1]	Range of Detected Concentrations[2]	Average Detected Value	Industrial PRG	Industrial PRG (CA)	Lowest Ecological Screening Level	UTL[3]
Dioxins and Furans (pg/g)																														
1,2,3,4,6,7,8-HpCDD	35822-46-9	9	9	100%	0.2 - 14.1	3.598	3	3	100%	0.404 - 14.1	6.56	6	6	100%	0.2 - 14.1	4.979833333	8	8	100%	0.2 - 14.1	4.021	1	1	100%	0.218 - 0.218	0.218				
1,2,3,4,6,7,8-HpCDF	67562-39-4	7	9	78%	0.052 - 0.789	0.344	3	3	100%	0.089 - 0.789	0.426	6	6	100%	0.052 - 0.789	0.389333333	6	8	75%	0.052 - 0.789	0.389	1	1	100%	0.075 - 0.075	0.075				
1,2,3,4,7,8-HxCDF	70648-26-9	5	9	56%	0.084 - 0.159	0.119	2	3	67%	0.121 - 0.159	0.140	4	6	67%	0.084 - 0.159	0.118	4	8	50%	0.084 - 0.159	0.118	1	1	100%	0.125 - 0.125	0.125				
1,2,3,6,7,8-HxCDD	57653-85-7	2	9	22%	0.957 - 1.355	1.156	1	3	33%	0.957 - 0.957	0.957	2	6	33%	0.957 - 1.355	1.156	2	8	25%	0.957 - 1.355	1.156	0	1	0%	- 0					
1,2,3,7,8,9-HxCDD	19408-74-3	2	9	22%	0.395 - 1.43	0.913	1	3	33%	0.395 - 0.395	0.395	2	6	33%	0.395 - 1.43	0.913	2	8	25%	0.395 - 1.43	0.913	0	1	0%	- 0					
1,2,3,7,8,9-HxCDF	72918-21-9	1	9	11%	3.673 - 3.673	3.673	0	3	0%	-		1	6	17%	3.673 - 3.673	3.673	1	8	13%	3.673 - 3.673	3.673	0	1	0%	- 0					
1,2,3,7,8-PeCDF	57117-41-6	1	9	11%	0.504 - 0.504	0.504	0	3	0%	-		1	6	17%	0.504 - 0.504	0.504	1	8	13%	0.504 - 0.504	0.504	0	1	0%	- 0					
Avian Dioxin TEQ	URS-TEQ-04	9	9	100%	0.000591 - 0.5879757	0.086	3	3	100%	0.0119449 - 0.1034454	0.043	6	6	100%	0.0116447 - 0.5879757	0.126	8	8	100%	0.000591 - 0.5879757	0.094621463	1	1	100%	0.0137215 - 0.0137215	0.0137215				16
Fish Dioxin TEQ	URS-TEQ-06	9	9	100%	0.000591 - 0.42943	0.061	3	3	100%	0.009176 - 0.05141	0.02466	6	6	100%	0.009176 - 0.42943	0.089018167	8	8	100%	0.000591 - 0.42943	0.067	1	1	100%	0.013468 - 0.013468	0.013468				
Mammal Dioxin TEQ	URS-TEQ-02	9	9	100%	0.00591 - 0.7357771	0.144	3	3	100%	0.0193847 - 0.3494462	0.1442992	6	6	100%	0.0140941 - 0.7357771	0.208995217	8	8	100%	0.00591 - 0.7357771	0.160	1	1	100%	0.0161905 - 0.0161905	0.0161905	15.92229844			13
OCDD	3268-87-9	8	9	89%	2.375 - 163.159	38.580	3	3	100%	7.534 - 163.159	66.127	6	6	100%	3.102 - 163.159	48.446	7	8	88%	3.102 - 163.159	43.752	1	1	100%	2.375 - 2.375	2.375				
OCDF	39001-02-0	5	9	56%	0.145 - 2.838	1.031	2	3	67%	0.315 - 1.695	1.005	4	6	67%	0.145 - 2.838	1.24825	4	8	50%	0.145 - 2.838	1.24825	1	1	100%	0.16 - 0.16	0.16				
Total HpCDD	37871-00-4	9	9	100%	0.2 - 27.481	6.815	3	3	100%	1.039 - 27.481	12.424	6	6	100%	0.2 - 27.481	9.512333333	8	8	100%	0.2 - 27.481	7.624625	1	1	100%	0.334 - 0.334	0.334				
Total HpCDF	38998-75-3	6	9	67%	0.088 - 1.954	0.576	2	3	67%	0.134 - 0.789	0.4615	4	6	67%	0.134 - 1.954	0.80225	5	8	63%	0.088 - 1.954	0.6594	1	1	100%	0.158 - 0.158	0.158				
Total HxCDD	34465-46-8	4	9	44%	0.104 - 4.316	1.688	2	3	67%	0.367 - 4.316	2.3415	4	6	67%	0.104 - 4.316	1.688	4	8	50%	0.104 - 4.316	1.688	0	1	0%	- 0					
Total HxCDF	55684-94-1	7	9	78%	0.072 - 3.673	0.835	2	3	67%	0.121 - 1.379	0.750	5	6	83%	0.106 - 3.673	1.129	6	8	75%	0.072 - 3.673	0.953	1	1	100%	0.125 - 0.125	0.125				
Total PeCDF	30402-15-4	2	9	22%	0.353 - 1.261	0.807	1	3	33%	0.353 - 0.353	0.353	2	6	33%	0.353 - 1.261	0.807	2	8	25%	0.353 - 1.261	0.807	0	1	0%	- 0					
Total TCDF	55722-27-5	1	9	11%	1.53 - 1.53	1.530	0	3	0%	-		1	6	17%	1.53 - 1.53	1.530	1	8	13%	1.53 - 1.53	1.530	0	1	0%	- 0					
PCB Congeners (pg/g)																														
2,2',3,4,4',5,5'-HpCB-180	35065-29-3	2	2	100%	959 - 1780	1369.5	2	2	100%	959 - 1780	1369.5	2	2	100%	959 - 1780	1369.5	2	2	100%	959 - 1780	1369.5				-					
2,2'3,3'4,4',5-HpCB-170	35065-30-6	2	2	100%	291 - 603	447	2	2	100%	291 - 603	447	2	2	100%	291 - 603	447	2	2	100%	291 - 603	447				-					
2,3,3',4,4',5,5'-HpCB-189	39635-31-9	2	2	100%	12.2 - 22.1	17.15	2	2	100%	12.2 - 22.1	17.15	2	2	100%	12.2 - 22.1	17.15	2	2	100%	12.2 - 22.1	17.15				-					
2,3,3',4,4',5-HxCB-156	38380-08-4	2	2	100%	75 - 158	116.5	2	2	100%	75 - 158	116.5	2	2	100%	75 - 158	116.5	2	2	100%	75 - 158	116.5				-					
2,3,3',4,4',5'-HxCB-157	69782-90-7	2	2	100%	11 - 23.3	17.15	2	2	100%	11 - 23.3	17.15	2	2	100%	11 - 23.3	17.15	2	2	100%	11 - 23.3	17.15				-					
2,3,3',4,4'-PeCB-105	32598-14-4	2	2	100%	214 - 232	223	2	2	100%	214 - 232	223	2	2	100%	214 - 232	223	2	2	100%	214 - 232	223				-					
2,3',4,4',5,5'-HxCB-167	52663-72-6	2	2	100%	29 - 65.5	47.25	2	2	100%	29 - 65.5	47.25	2	2	100%	29 - 65.5	47.25	2	2	100%	29 - 65.5	47.25				-					
2,3,4,4',5-PeCB-114	74472-37-0	2	2	100%	5.44 - 5.47	5.455	2	2	100%	5.44 - 5.47	5.455	2	2	100%	5.44 - 5.47	5.455	2	2	100%	5.44 - 5.47	5.455				-					
2,3',4,4',5-PeCB-118	31508-00-6	2	2	100%	323 - 431	377	2	2	100%	323 - 431	377	2	2	100%	323 - 431	377	2	2	100%	323 - 431	377				-					
2',3,4,4',5-PeCB-123	65510-44-3	1	2	50%	9.26 - 9.26	9.26	1	2	50%	9.26 - 9.26	9.26	1	2	50%	9.26 - 9.26	9.26	1	2	50%	9.26 - 9.26	9.26				-					
3,3',4,4',5-PeCB-126	57465-28-8	1	2	50%	3.26 - 3.26	3.26	1	2	50%	3.26 - 3.26	3.26	1	2	50%	3.26 - 3.26	3.26	1	2	50%	3.26 - 3.26	3.26				-					
3,3',4,4'-TeCB-77	32598-13-3	2	2	100%	37 - 51.3	44.15	2	2	100%	37 - 51.3	44.15	2	2	100%	37 - 51.3	44.15	2	2	100%	37 - 51.3	44.15				-					
3,4,4',5-TeCB-81	70362-50-4	2	2	100%	5.39 - 12.9	9.145	2	2	100%	5.39 - 12.9	9.145	2	2	100%	5.39 - 12.9	9.145	2	2	100%	5.39 - 12.9	9.145				-					
Avian PCBC TEQ	URS-TEQ-05	2	2	100%	3.18526 - 3.4660816	3.3256708	2	2	100%	3.18526 - 3.4660816	3.3256708	2	2	100%	3.18526 - 3.4660816	3.3256708	2	2	100%	3.18526 - 3.4660816	3.3256708				-					
Fish PCBC TEQ	URS-TEQ-07	2	2	100%	0.01015 - 0.024125	0.0171375	2	2	100%	0.01015 - 0.024125	0.0171375	2	2	100%	0.01015 - 0.024125	0.0171375	2	2	100%	0.01015 - 0.024125	0.0171375				-					
Mammal PCBC TEQ	URS-TEQ-03	2	2	100%	0.0351502 - 0.3536549	0.19440255	2	2	100%	0.0351502 - 0.3536549	0.19440255	2	2	100%	0.0351502 - 0.3536549	0.19440255	2	2	100%	0.0351502 - 0.3536549	0.19440255				-		15.92229844			12
Sum of PCB Congeners	URS-SUM-PCBC	2	2	100%	2006.88 - 3352.24	2679.560	2	2	100%	2006.88 - 3352.24	2679.560	2	2	100%	2006.88 - 3352.24	2679.560	2	2	100%	2006.88 - 3352.24	2679.560				-					

Notes:
[1] FOD = Percent Frequency of Detection
[2] Minimum value detected above MDL
[3] UTL = Upper Threshold Limit
mg/kg = milligrams/kilogram
pg/g = picograms/gram