TABLE B-19
SOIL AND SEDIMENT PHYSICAL PROPERTIES
CASMALIA RESOURCES SUPERFUND SITE REMEDIAL INVESTIGATION

			Test Method:	9045C	ASTM D2216		ASTM D2937	API RP40	ASTM D4318			USCS Classification	Walkley Blakley		ASTM D422/D4464M								
			Parameter:	pH	Moisture Content	Volumetric Moisture	Bulk Density	Total Porosity	Liquid Limit	Plastic Limit	Plasticity Index		Total Organic Carbon (TOC)	Fractional Organic Carbon (FOC)	Mean Grain Size Description	Median Grain Size	Gravel	Coarse Sand	Medium Sand	Fine Sand	Silt	Clay	Silt & Clay
			Units:	units	%wt		g/cc	%vb					mg/kg	g/g		mm	%wt	%wt	%wt	%wt	%wt	%wt	%wt
Area	Location ID	Sample ID	Depth (ft)	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Sediment Samples																							
Stormwater Ponds	RISESP-01	SED00015	0	7.66	76.2	0.662	0.87	63.7	80.6	33.9	46.7	OH	9600		Silt	0.005	0.00	0.00	0.00	0.00	49.44	50.56	100.00
		SED00016	2.8	7.66					71.1	40.5	30.6	OH	1800		Silt	0.007	0.00	0.00	0.00	0.00	62.86	37.14	100.00
		SED00017	4.5	7.8	34.1	0.275	0.81	66.7	71.4	38.6	32.8	OH	9400		Fine sand	0.045	0.00	0.00	7.33	33.65	41.35	17.67	59.02
		SED00018	4.5	8.15					66.2	41.2	25.0	OH	8400		Silt	0.007	0.00	0.00	0.00	0.00	63.10	36.90	100.00
	RISESP-02	SED00019	0	7.42	183.0	0.85	0.47	46.6	82.9	40.7	42.2	OH	20000		Silt	0.008	0.00	0.00	0.00	0.00	64.40	35.60	100.00
		SED00020	3	6.66	38.2	0.48	1.26	125.9	66.9	33.6	33.3	MH	2700		Silt	0.023	0.00	0.00	0.00	19.81	61.81	18.38	80.19
		SED00021	5	7.87	29.5	0.37	1.25	124.6	63.7	33.6	30.1	MH	4100		Silt	0.024	0.00	0.00	0.00	17.51	65.86	16.63	82.49
	RISESP-03	SED00022	0	7.52	243.8	0.861	0.35	85.3	93.1	39.6	53.5	OH	27000		Silt	0.005	0.00	0.00	0.00	0.00	48.14	51.86	100.00
		SED00023	3	6.89	76.2	0.660	0.87	64.3	73.6	34.3	39.3	OH	6800		Silt	0.008	0.00	0.00	0.00	0.00	65.70	34.30	100.00
		SED00024	5	7.05	75.2	0.673	0.89	63.4	81.1	31.7	49.4	OH	4200		Silt	0.005	0.00	0.00	0.00	0.00	52.22	47.78	100.00
	RISESP-04	SED00025	0	7.35	244.9	0.876	0.36	85.0	103.2	39.9	63.3	OH	15000		Silt	0.005	0.00	0.00	0.00	0.00	49.10	50.90	100.00
		SED00026	2.5	7.46	131.2	0.772	0.59	75.7	92.4	33.3	59.1	OH	11000		Silt	0.006	0.00	0.00	0.00	0.00	57.80	42.20	100.00
		SED00027	5	7.21	45.9	0.497	1.08	55.5	75.1	30.3	44.8	OH	2600		Silt	0.005	0.00	0.00	0.00	0.00	53.13	46.87	100.00
	RISESP-05	SED00028	0	7.51	146.4	0.78	0.53	53.2	74.7	36.8	37.9	OH	22000		Silt	0.009	0.00	0.00	0.00	0.00	68.19	31.81	100.00
		SED00029	0	7.42	159.5	0.80	0.50	50.2	81.3	39.6	41.7	OH	15000		Silt	0.009	0.00	0.00	0.00	0.00	69.35	30.65	100.00
		SED00030	3	6.31	53.2	0.56	1.04	104.3	79.7	33.7	46.0	CH	2300		Silt	0.007	0.00	0.00	0.00	0.00	61.61	38.39	100.00
		SED00031	5	6.59	40.6	0.50	1.23	123.4	73.5	28.0	45.5	CH	1700		Silt	0.010	0.00	0.00	0.00	0.02	67.05	32.93	99.98
	RISESP-06	SED00032	0	7.44	50.0	0.493	0.99	58.7	78.4	30.7	47.7	OH	3900		Silt	0.005	0.00	0.00	0.00	0.00	49.47	50.53	100.00
		SED00033	3	7.38	62.8	0.610	0.97	59.7	70.8	30.7	40.1	OH	5900		Silt	0.006	0.00	0.00	0.00	0.00	54.65	45.35	100.00
		SED00034	5	6.78	52.3	0.572	1.09	55.3	75.1	42.4	32.7	OH	1700		Silt	0.007	0.00	0.00	0.00	0.00	62.87	37.13	100.00
	RISESP-07	SED00035	0	7.63	261.2	0.871	0.33	85.6	93.4	40.6	52.8	OH	25000		Clay	0.004	0.00	0.00	0.00	0.00	40.48	59.52	100.00
		SED00036	3	7.12	51.9	0.545	1.05	54.9	75.0	33.3	41.7	OH	4300		Silt	0.008	0.00	0.00	0.00	0.00	65.01	34.99	100.00
		SED00037	5	6.96	58.4	0.594	1.02	56.3	77.3	35.4	41.9	OH	3600		Silt	0.008	0.00	0.00	0.00	0.00	66.20	33.80	100.00
	RISESP-08	SED00038	0	7.5	214.9	0.859	0.40	83.4	95.3	38.3	57.0	OH	17000		Clay	0.004	0.00	0.00	0.00	0.00	38.86	61.14	100.00
		SED00039	2.5	7.53	135.7	0.774	0.57	75.5	90.0	38.2	51.8	OH	7300		Clay	0.004	0.00	0.00	0.00	0.00	38.08	61.92	100.00
		SED00040	2.5	7.5	151.6	0.800	0.53	77.0	90.5	37.4	53.1	OH	9700		Clay	0.003	0.00	0.00	0.00	0.00	35.98	64.02	100.00
		SED00041	4.7	7.02	40.5	0.391	0.97	59.0	77.8	35.3	42.5	OH	2200		Silt	0.007	0.00	0.00	0.00	0.00	63.48	36.52	100.00
	RISESP-09	SED00042	0	7.52	142.8	0.788	0.55	76.6	79.1	31.9	47.2	OH	18000		Silt	0.005	0.00	0.00	0.00	0.00	53.01	46.99	100.00
		SED00043	3	7.42	53.8	0.568	1.05	54.6	78.5	34.2	44.3	OH	3100		Silt	0.008	0.00	0.00	0.00	0.00	66.07	33.93	100.00
		SED00044	5	6.99	48.4	0.538	1.11	52.5	78.3	33.9	44.4	OH	2400		Silt	0.009	0.00	0.00	0.00	0.00	68.20	31.80	100.00
	RISESP-10	SED00045	0	7.13	52.9	0.52	1.09	50.8	77.0	37.3	39.7	MH	<1600		Silt	0.007	0.00	0.00	0.00	0.00	62.74	37.26	100.00
		SED00046	3	7.46	48.1	0.49	1.15	49.0	78.7	32.6	46.1	CH	2400		Silt	0.006	0.00	0.00	0.00	0.00	57.76	42.24	100.00
		SED00047	5	6.78	38.2	0.42	1.27	44.2	87.5	23.7	63.8	CH	<1400		Silt	0.006	0.00	0.00	0.00	0.00	53.83	46.17	100.00
	RISESP-11	SED00048	0	7.72	114.5	0.65	0.76	52.5	75.3	36.6	38.7	MH	35000		Silt	0.006	0.00	0.00	0.00	0.00	57.90	42.10	100.00
		SED00049	3	8.15	25.9	0.35	1.50	37.0	62.0	32.5	29.5	MH	2800		Silt	0.009	0.00	0.00	0.00	0.00	67.43	32.57	100.00
		SED00050	5	7.62	23.9	0.34	1.53	37.1	55.7	32.4	23.3	MH	<1300		Silt	0.019	0.00	0.00	0.00	11.22	69.23	19.54	88.78
	RISESP-12	SED00052	0	7.9	98.6	0.64	0.82	53.2	74.2	48.1	26.1	MH	12000		Silt	0.015	0.00	0.00	0.00	13.80	62.67	23.52	86.20
		SED00053	3	6.98	29.1	0.40	1.47	39.0	61.2	33.0	28.2	MH	4700		Silt	0.024	0.00	0.00	0.00	18.25	63.15	18.60	81.75
		SED00054	5	8.74	28.8	0.34	1.41	37.5	61.4	34.3	27.1	MH	6400		Silt	0.013	0.00	0.00	0.00	2.59	71.84	25.57	97.41
	RISESP-13	SED00055	0	8.12	60.6	0.55	1.00	53.2	71.0	48.4	22.6	MH	12000		Silt	0.009	0.00	0.00	0.00	0.00	66.79	33.21	100.00
		SED00056	2	7.6	38.1	0.45	1.19	50.5	74.8	51.2	23.6	MH	<1600		Silt	0.023	0.00	0.00	0.00	20.54	61.53	17.93	79.46
		SED00057	5	7.82	33.3	0.39	1.27	44.9	63.6	40.8	22.8	MH	1500		Fine sand	0.251	0.00	0.00	37.51	30.72	23.85	7.93	31.78
Treated Liquids Impounds	RISETL-01	SED00058	0	7.44	125.5	0.74	0.59	59.1	90.8	34.7	56.1	OH	15000		Medium sand	0.901	0.00	0.00	55.71	6.75	22.42	15.12	37.54
		SED00059	0	7.66	107.9	0.74	0.69	68.6	77.7	38.8	38.9	OH	18000		Silt	0.006	0.00	0.00	0.00	0.00	55.12	44.88	100.00
		SED00060	5	7.6	29.7	0.43	1.43	143.1	85.9	34.6	51.3	CH	5700		Silt	0.029	0.00	0.00	3.76	25.86	52.50	17.88	70.38
	RISETL-02	SED00061	0	7.81	110.7	0.72	0.65	65.3	81.4	37.8	43.6	OH	21000		Silt	0.005	0.00	0.00	0.00	0.00	48.76	51.24	100.00
		SED00062	0	7.74	111.7	0.81	0.72	72.2	77.2	31.5	45.7	OH	20000		Silt	0.006	0.00	0.00	0.00	0.00	57.33	42.67	100.00
		SED00063	3	6.61	28.3	0.41	1.44	144.3	67.5	31.1	36.4	CH	1800		Silt	0.022	0.00	0.00	0.00	17.89	60.77	21.34	82.11
		SED00064	4.7	7.01	32.0	0.44	1.36	135.9	75.0	33.5	41.5	CH	2600		Silt	0.016	0.00	0.00	0.00	11.59	63.16	25.26	88.41

TABLE B-19
SOIL AND SEDIMENT PHYSICAL PROPERTIES
CASMALIA RESOURCES SUPERFUND SITE REMEDIAL INVESTIGATION

			Test Method:	9045C	ASTM D2216		ASTM D2937	API RP40	ASTM D4318			USCS Classification	Walkley Blakley		ASTM D422/D4464M								
			Parameter:	pH	Moisture Content	Volumetric Moisture	Bulk Density	Total Porosity	Liquid Limit	Plastic Limit	Plasticity Index		Total Organic Carbon (TOC)	Fractional Organic Carbon (FOC)	Mean Grain Size Description	Median Grain Size	Gravel	Coarse Sand	Medium Sand	Fine Sand	Silt	Clay	Silt & Clay
			Units:	units	%wt		g/cc	%vb					mg/kg	g/g		mm	%wt	%wt	%wt	%wt	%wt	%wt	%wt
Area	Location ID	Sample ID	Depth (ft)	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Treated Liquids Impounds (continued)	RISETL-03	SED00065	0	7.2	275.2	0.89	0.32	32.2	80.8	29.1	51.7	OH	25000		Silt	0.008	0.00	0.00	0.00	0.00	63.83	36.17	100.00
		SED00066	3	6.88	31.8	0.43	1.35	135.3	73.4	35.1	38.3	MH	2000		Silt	0.017	0.00	0.00	0.00	7.88	69.48	22.65	92.12
		SED00067	5	6.85	31.9	0.39	1.24	123.6	72.0	38.4	33.6	MH	2000		Silt	0.028	0.00	0.00	3.29	26.60	51.94	18.17	70.11
	RISETL-04	SED00068	0	7.09	69.7	0.621	0.89	62.7	73.3	33.4	39.9	OH	5800		Silt	0.008	0.00	0.00	0.00	0.00	64.07	35.93	100.00
		SED00069	2.5	6.94	43.9	0.411	0.94	60.8	72.6	21.9	50.7	OH	1600		Silt	0.00675177	0.00	0.00	0.00	0.00	59.96	40.04	100.00
		SED00070	4.5	7.2	43.3	0.441	1.02	57.2	70.7	31.9	38.8	OH	<1500		Silt	0.00497690	0.00	0.00	0.00	0.00	49.88	50.12	100.00
	RISETL-05	SED00071	0	7.66	138.2	0.776	0.56	76.4	80.9	26.5	54.4	OH	23000		Silt	0.00580064	0.00	0.00	0.00	0.00	55.68	44.32	100.00
		SED00072	2.5	7.15	45.4	0.440	0.97	58.4	76.2	32.6	43.6	OH	1700		Silt	0.00785831	0.00	0.00	0.00	0.00	64.99	35.01	100.00
		SED00073	2.5	7.61	49.5	0.539	1.09	54.3	71.5	31.0	40.5	OH	<1400		Silt	0.02712010	0.00	0.00	0.01	27.10	54.45	18.44	72.89
		SED00074	5	7.23	58.4	0.559	0.96	59.2	69.8	48.7	21.1	MH	2900		Silt	0.00629779	0.00	0.00	0.00	0.00	58.23	41.77	100.00
	RISETL-06	SED00075	0	7.38	162.5	0.802	0.49	79.3	85.5	37.4	48.1	OH	29000		Silt	0.00522726	0.00	0.00	0.00	0.00	51.69	48.31	100.00
		SED00076	2.7	7.45	45.2	0.419	0.93	59.9	76.0	33.6	42.4	OH	2600		Silt	0.00670993	0.00	0.00	0.00	0.00	60.49	39.51	100.00
		SED00077	4.5	7.41	54.3	0.560	1.03	55.4	78.5	34.1	44.4	OH	1900		Silt	0.00652573	0.00	0.00	0.00	0.00	59.38	40.62	100.00
		SED00078	4.5	7.72	47.3	0.438	0.93	61.9	74.1	31.9	42.2	OH	1900		Silt	0.00545270	0.00	0.00	0.00	0.00	53.37	46.63	100.00
Soil Samples																							
Capped Landfills	RISSCL-07	SSS01042	47.5												Silt	0.009	0.00	0.00	0.00	13.35	51.96	34.69	86.65
	RISSCL-08	SSS01041	24.5												Silt	0.011	0.00	0.00	0.00	9.25	56.85	33.90	90.75
	RISSCL-09	SSS01040	23												Silt	0.012	0.00	0.00	0.00	24.40	43.93	31.67	75.60
Central Drainage	RISBCD-01	SSS00204	10	5.7	43.0	0.45	1.22	50.8	81.4	24.1	57.3	CH	<1500		Silt	0.005	0.00	0.00	0.00	0.00	51.25	48.75	100.00
	RISBCD-02	SSS00208	10	6	37.3	0.37	1.04	58.6	78.2	42.2	36.0	MH	<1400		Silt	0.015	0.00	0.00	0.00	0.10	75.69	24.22	99.90
Liquid Treatment	RISBLT-03	SSS00269	10		39.1	0.38	0.98	60.7	84.8	44.2	40.6	MH	<1300		Silt	0.021	0.00	0.00	0.00	18.27	65.09	16.63	81.73
	RISBLT-04	SSS00274	10	7.09	37.9	0.36	0.95	61.7	75.9	30.2	45.7	MH	<1400		Fine sand	0.046	0.00	0.00	16.47	24.90	46.67	11.96	58.63
Maintenance Shed	RISBMS-01	SSS00331	10	6.93	37.6	0.33	0.92	62.2	63.7	27.1	36.6	CH	<1400		Silt	0.060	0.00	0.00	0.00	44.02	44.86	11.12	55.98
	RISBMS-04	SSS00335	10	7.18	37.0	0.34	0.98	60.5	77.6	46.8	30.8	MH	<1400		Fine sand	0.085	0.00	0.00	3.18	49.80	37.32	9.70	47.02
Off-site	RISSOF-04	SSS01043	5										4820	0.00482									
	RISSOF-05	SSS01044	5										2160	0.00216									
Remain On-site	RISSON-43	SSS01060	3										8980	0.00898									
	RISSON-43	SSS01061	3										1580	0.00158									
	RISSON-43	SSS01062	5										1750	0.00175									
	RISSON-44	SSS01063	3										10300	0.0103									
	RISSON-44	SSS01064	5										6000	0.00600									
	RISSON-45	SSS01065	3										2900	0.00290									
	RISSON-45	SSS01066	5										1170	0.00117									
	RISSON-46	SSS01067	3										3760	0.00376									
	RISSON-46	SSS01068	5										6060	0.00606									

Notes:
%wt = weight
%vb = bulk volume
g/cc = grams/cubic centimeter
g/g = grams/gram
mg/kg = milligrams/kilogram
mm = millimeter