



Sludge Mapping Database

Serial No.	Factory code	332A2	331A5, 331E2	331B2, 331C1	112A1, 112B1	111A1, 111B1	4A1	112C1	111C1	5B1	222D1	112C2	221A1	112B1	221B1	221B2	221A2	221A3	221F1	112A1	221D1	111A1	222B1	4A1	
	Factory Type	Knit+Printing+Wash	Knit+Yarn+Wash	Woven+Denim	Knit+Woven+Print+Wash	Knit+Woven+Print+Wash	Knit + Print	Denim	Denim	Woven	Washing	Denim Wash	Knit Composite	Woven+Denim	Woven+yarn	Woven	Knit + Printing	knit	Accessories	Knit	Composite	Knit	woven	Knit+print+wash	
	ETP Types	Physio-Biological	Physio-Biological	Biological	Biological	Biological	Electro Coagulation	Physio-Chem-Biological	Physio-Chem-Biological	Electro-chemical Biological	Physio-Chemical	Bio-chemical	Physio-Biological	Physico-Chemical Biological	Biological	Biological	biological	biological	Biological	Chemical-Biological	Biological (Aerobic)	Chemical-Biological	Biological	Biological, Advanced disinfection	
	ETP capacity	165 m ³ /hr	290 m ³ /hr	200 m ³ /hr	100 m ³ /hr	165 m ³ /hr	170 m ³ /hr	60 m ³ /hr	150 & 50 m ³ /hr	70 m ³ /hr	-														
	ETP technique	ASP, AN	ASP	ASP	PAC, PE	Lime, FeSO4	-	PAC, PE	Lime, FeSO4	-	PAC, PE	PAC, PE Aerobic	Aerobic	PAC, PE, Aerobic	Aerobic	Aerobic	Aerobic	Aerobic	Aerobic	PAC, PE Aerobic	Biological (Aerobic)	Lime & FeSO4, Aerobic	Anerobic-Aerobic	Aerobic	
1	Sludge Color	Black	Black	Black	Deep Ash	Light Ash	Brown	Blue	Light Ash	Deep Ash	Deep Ash	Black	Ash	Black	Deep Ash	Black	Deep Ash	Ash	Black	Deep Ash	Black	Brown	Black		
2	Moisture content (%): As Received Basis	89.91%	77.46%	71.52%	86.65%	84.37%	82.40%	59.61%	51.51%	55.66%	75.32%	70%	89.38%	84.31%	87.62%	89.21%	89%	87%	94.12%	84.82%	84.37%	69.10%	85%	87.13%	
3	Ash content (%)	10.36%	15.57%	17.20%	25.76%	10.24%	30.44%	14.04%	19.03%	25.59%	31.33%	40%	20.79%	30.73%	20.89%	13.38%	13.50%	11.94%	14.06%	28%	16%	22.75%	13.08%	22.22%	
4	Volatile Organic Matter (%) 950C	56.27%	28.52%	32.92%	42.42%	26.11%	42.40%	10.77%	17.99%	30.97%	28.13%	3.33%	67.22%	31.22%	52.89%	66.52%	54%	55.29%	65.11%	52%	57.00%	22.73%	68.12%	58.30%	
5	Fixed carbon (%)	23.28%	33.37%	21.40%	18.48%	48.01%	9.56%	34.08%	37.02%	19.03%	15.86%	26.67%	1.37%	22.36%	13.84%	9.31%	21.50%	19.77%	14.95%	4.82%	11.37%	23.62%	3.80%	6.61%	
6	pH	7.65	7.86	7.88	8.04	7.84	7.2	7.22	8.11	7.82	8.23	7.6	8.4	6.98	7.82	9.04	6.95	8.56	8.1	8.12	6.77	7.94	7.1	7.64	
7	Electrical conductivity (µS/cm)	4300	1730	2730	836	3230	3670	591	998	1986	982	617	4840	2470	1517	2970	482	586	1713	1173	528	921	7360	3750	
8	Total Dissolve Solid (TDS) (mg/L)	1958	763	1208	1707	1121	1779	294	499	993	491	444	2400	1228	797	1190	1760	1471	858	561	2560	331	3820	1780	
9	Specific gravity (gm/cc)	0.561	0.709	0.52	0.704	0.505	0.72	0.902	0.813	0.704	0.658	0.83	94	0.85	0.88	0.85	0.72	0.81	0.85	0.93	0.8	1	0.79	0.84	
10	Total Hardness (ppm)	270	550	550	1290	2390	1450	900	1300	1800	700	550	3100	340	300	2280	1100	250	1235	510	850	200	720	2910	
11	Alkalinity (mg/L)	600	140	210	320	140	220	500	800	400	700	210	1900	50	550	1250	680	700	450	40	360	130	470	1100	
12	Chloride (mg/L)	500	460	420	524	560	700	750	700	350	325	311	470	290	300	315	570	480	378	500	280	550	370	411	
13	Phosphate (mg/L)	36.8	10.3	7.6	8	37	19	3	32	2.7	5	4.8	52	3	60	29	23	12.5	7	3.3	42.4	5.3	33.9	21.4	
14	Calorific value (Kcal/kg)	4671.88	4820	4172	1549.13	387.44	2172.95	1402	Below detection limit	Below detection limit	1475.95	Below detection limit	370	300	430	Below detection limit	3350.2	4106.7	760	1480.2	2553.6	560	310	1275.8	
Element Analysis (ppm)																									
15	Sulfur (S)	189220	151220.8	285596.4	39929.2	51333.6	34720.4	17325	20705	73460	48647	322813.2	756736	287943.8	159591.5	475130.625	130183.8	45287.75	94159.4	451562	1572804	3027944	2313434	2631749	
16	Silicon (Si)	57338.4	125632.27	38758.07	185058.53	27454.47	31511.67	616672	538294	262958	444506														
17	Calcium (Ca)	55545.71	75621.43	54652.86	51996.43	220284.29	2053.57	28215	128784	170940	76636	176623.7	454715.5	84666.7	46017.31	37713.063	32625.9	16979.13	56410.8	140174.3	184738.3	6027625	358819	4536576	
18	Phosphorus (P)	30847.62	21531.03	10894.1	19636.97	2160.83	7255.75	11885	16775	61796			1399989	1312269	43810.73	283188.156		109740.7							
19	Iron (Fe)	23143.4	32373.6	28577.5	46897.2	321935.6	55525.6	36524	42160	237880	137989	62116.5	1973129	716.318	761.615	3581.091	7637.7	500.277	61848.9	17162.8	35170.4	195623	113071.5	1753995.5	
20	Ruthenium (Ru)	0	18833.74	6926.18	0	0	0	9144	11565	12660	27916	16463.6		56709.9	15189.61			13379.45	12905.4	26854.7	67195.9	116084	55687	542699.5	
21	Sodium (Na)	25940.29	17811.65	9439.65	16147.48	3688.16	13509.9	40249	35493	20295	26696														
22	Potassium (K)	20208.64	15205.85	5625.13	12288.32	1731.77	947.62	126625	108408	35078	72152	13472.2	207406	28397.21	29990.48	142431.656	38634.3	30951	21843.1	28657.6	146558.2	859729.5	240629	1389287	
23	Copper (Cu)	4473.75	14178.47	1320.32	2836.33	0	0	0	444	971	236.9	3401	20.881	69.784		311.561	989.3	63.286	271.9	352.3	337.4	13706		26352.5	
24	Aluminum (Al)	6025.76	7367.29	3326.29	123959.65	5484.71	569.65	97895	66762	84532	81311		136152									281029.5		3335262.5	
25	Magnesium (Mg)	6594.75	8472.75	4494.75	11054.25	7770	1626.75	1583	3450	3955	10324														
26	Titanium (Ti)	61782.6	4905.6	813	9706.2	6471.6	0	0	4448	7052	16240	1022.6		328.044	68.629	198.963	556.9	52.843	1188.1	2463.1	5922.7	13651	4966	50708	
27	Zinc (Zn)	14891.42	5917.41	1060.06	4076.54	580.99	0	395	1174	653	8765	3719.7	12684	436.741	469.365	2677.207	1705.8	162.494	3419.8	6089.2	4974.5	267242	14485	176553.5	
28	Nickel (Ni)	969.65	1800.22	411.75	0	0	0	2711	6812	951	19783	990.5		115.733	180.233	326.167	1123.3	52.135	1352.1	1304.9	1711.2	42896.5	4656.5	66889	
29	Manganese (Mn)	0	1022.54	3674.15	1730.56	2189.93	2844.51	1812	0	18079	2427	719.1	9025	65.14	93.61	469.423	0	63.735	306.6	211.7	995.2	5778	0	25428	
30	Chromium (Cr)	0	0	638.37	1413.58	0	1357.47	1445	727	770	2616	0	0	0	0	75.467	0	0	0	0	0	17049.5	0	12936.5	
31	Strontium (Sr)	0	0	241.99	460.59	299.02	0	0	0	0	0	0	0	122.123	100.244	54.871	0	39.941	0	0	0	18400.5	0	10874	
32	Chlorine (Cl)	8254	20796	8947	3500	860	4320	6399	5946	7486	11961					306865.813	0	0	0	0	0	0	0	0	
33	Bromine (Br)	6496	1367	0	0	0	0	0	0	1011	11060	303.4		134.217	84.798	594.758	0	184.341	524.7	181.9	1095.6	7001	2445	0	
34	Zirconium (Zr)	0	0	0	118.45	0	0	0	0	0	0						1328.4	0	0	0	0	0	0	0	
35	Cadmium (Cd)	0	0	0	0	0	0	0	0	0	0						0	0	0	0	0	0	0	0	
36	Lead (Pb)	0	0	0	0	0	0	0	0	0	0	2912				82.38	1822.5	0	2169.7	3870	27369.7	71509.5	0	69607.5	
37	Scandium (Sc)	0	0	0	0	0	0	0	0	0	0						0	0	0	0	0	0	0	0	
38	Vanadium (V)	0	0	0	0	0	0	392	631	0	0														
39	Arsenic (As)	0	0	0	0	0	0	0	0	0	0	60.2	0	7.298	17.882	179.804	1134.7	3.25	1422.3	481.4	742.6	32115.5	0	28007	
41	Cobalt (Co)	0	0	0	0	0	0	0	0	0	0														
42	Rubidium (Rb)	0	0	0	0	0	0	729	700	0	0														
43	Mercury (Hg)																							4589.5	
44	Germanium																					13372.5			