

TABLE 2.3-9

SUMMARY OF 2002, PHASE I, PHASE II, PHASE III, AND 2010 OVERBURDEN DATA FOR OVERBURDEN ANALYSIS

Parameter	Statistics	Above D Coal	Above D Coal in Mine Pit	All Samples Collected
Calcium (meq/L)	Minimum	0.05	0.05	0.05
	Average	7.34	7.79	5.06
	Maximum	135	33.4	135
	<i>Number</i>	<i>1277</i>	<i>988</i>	<i>2097</i>
Magnesium (meq/L)	Minimum	<0.08	<0.08	<0.04
	Average	12.41	13.70	8.21
	Maximum	173	173	173
	<i>Number</i>	<i>1277</i>	<i>988</i>	<i>2097</i>
Sodium (meq/L)	Minimum	0.32	0.32	0.32
	Average	32.9	33.6	27.9
	Maximum	345	345	639
	<i>Number</i>	<i>1277</i>	<i>988</i>	<i>2097</i>
SAR	Minimum	0.23	0.23	0.23
	Average	17.6	17.0	20.7
	Maximum	78.3	65.0	78.3
	<i>Number</i>	<i>1277</i>	<i>988</i>	<i>2097</i>
Paste pH (s.u.)	Minimum	3.3	3.3	3.3
	Average	8.0	7.9	8.3
	Maximum	9.8	9.7	9.8
	<i>Number</i>	<i>1278</i>	<i>989</i>	<i>2101</i>
Electrical Conductivity (mS/cm)	Minimum	0.24	0.24	0.22
	Average	3.88	4.04	3.14
	Maximum	26.5	26.5	41.2
	<i>Number</i>	<i>1278</i>	<i>989</i>	<i>2102</i>
Saturation Percent (%)	Minimum	16.3	21.0	16.3
	Average	96.7	96.8	103
	Maximum	634	634	634
	<i>Number</i>	<i>1277</i>	<i>988</i>	<i>2104</i>
Percent Sand (%)	Minimum	0	0	0
	Average	31.4	31.2	32.5
	Maximum	91.3	91.3	91.3
	<i>Number</i>	<i>1269</i>	<i>970</i>	<i>2109</i>
Percent Silt (%)	Minimum	4.9	4.9	2.5
	Average	39.3	39.4	38.4
	Maximum	76	76	76
	<i>Number</i>	<i>1269</i>	<i>970</i>	<i>2109</i>
Percent Clay (%)	Minimum	1.3	1.3	1.3
	Average	29.4	29.4	29.1
	Maximum	73	73	78
	<i>Number</i>	<i>1269</i>	<i>970</i>	<i>2109</i>

Notes:

- Arithmetic average shown
- *Number* = total number of samples used in calculation
- SAR = Sodium Adsorption Ratio
- meq/L = millequivalent per liter
- mS/cm = milliSiemens per centimeter
- s.u. = standard units
- % = percent