

Appendix F

Overburden Water Quality and Groundwater Quality Data,  
Mashudda Strip Mine Area

SUMMARY OF OVERBURDEN WATER QUALITY DATA - MASHUDDA STRIP MINE  
April 2 - 4, 1984

Sample Point	Description	Field (S.U.)	pH	Lab (S.U.)	Field Temp. (°C)	Field Conductivity (umhos)	Acidity (CaCO <sub>3</sub> ) (mg/l)	Alkal. (CaCO <sub>3</sub> ) (mg/l)	Net Acidity (mg/l)	Field (mg/l)	Total Iron Lab (mg/l)	Fe +2 (mg/l)	SO <sub>4</sub> (mg/l)
P1-P	Test Pit 1 Piezometer	6.9 ?		5.43	5.8	329	5	3	2	0.4	0.26	0.04	18
P1-L	Test Pit 1 Lysimeter	6.9 ?		6.29	6.8	417	1	29	-28	0.4	0.12	0.02	90
P2-P	Test Pit 2 Piezometer	6.65 ?		5.51	6.0	222	6	4	2	0.7	0.14	0	22
P2-L	Test Pit 2 Lysimeter	5.85		5.57	5.7	1900	4	15	-11	0.8	0	0	535
P3-P	Test Pit 3 Piezometer	4.5		4.14	2.5	80	12	0	12	1.8	2.55	0	49
P3-L	Test Pit 3 Lysimeter	5.4		5.00	6.5	370	19	4	15	1.2	0.26	0	96
P4-P	Test Pit 4 Piezometer	Dry		--	--	--	--	--	--	--	--	--	--
P4-L	Test Pit 4 Lysimeter	5.05		5.19	5.5	1790	29	14	15	0.6	--	--	1089
P5-P	Test Pit 5 Piezometer	5.55		4.53	12	82	17	0	17	9.2	11.5	0	44
P5-L	Test Pit 5 Lysimeter	5.2		4.77	7	328	37	2	35	9.8	10.9	0	122
P6-P	Test Pit 6 Piezometer	Dry		--	--	--	--	--	--	--	--	--	--
P6-L	Test Pit 6 Lysimeter	5.45		4.45	5.5	65	22	0	22	0.7	0.14	0	255
P7-P	Test Pit 7 Piezometer	5.15		4.82	11	40	5	3	2	0.8	0.24	0	23
P7-L	Test Pit 7 Lysimeter	6.15 ?		6.79	5.5	1450	0	87	-87	0.3	0.16	0	388
P8-P	Test Pit 8 Piezometer	6.5		5.47	7.75	22	3	5	-2	0.4	0.22	0	19
P8-L	Test Pit 8 Lysimeter	5.85		5.91	--	212	0	13	-13	--	0.2	0	218
P9-P	Test Pit 9 Piezometer	5.58		5.69	--	210	2	11	-9	--	0.26	0	32
P9-L	Test Pit 9 Lysimeter	6.84		6.80	--	100	0	64	-64	--	0.26	0.06	488

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SUMMARY OF GROUNDWATER QUALITY DATA - MASHUDDA STRIP MINE  
April 2 - 5, 1984

Sample Point	Aquifer	pH		Field Temp. (°C)	Field Conductivity (umhos)	Acidity (CaCO <sub>3</sub> ) (mg/l)	Alkal. (CaCO <sub>3</sub> ) (mg/l)	Net Acidity (mg/l)	Total Iron		Fe + 2 (mg/l)	SO <sub>4</sub> (mg/l)
		Field (S.U.)	Lab (S.U.)						Field (mg/l)	Lab (mg/l)		
B-1	Lower Allegheny Group	5.85	6.29	9.2	153	7	50	-43	4.6	5.4	0	17
B-2U	Lower Kittanning Coal	6.40	6.35	7.5	187	0	41	-41	--	12.6	0.02	59
B-2M	Brookville/Clarion Coal	6.25	5.97	7.5	147	0	32	-32	8.2	10.5	0.02	21
B-2L	Homewood Formation	6.30	6.66	8.0	85	0	103	-103	0.6	0.34	0	68
B-3U	Brookville/Clarion Coal and Overburden	5.55	4.41	11	124	31	0	31	<10	28.0	0.08	93
B-3M	Rider Coal Seam	5.95	4.99	12	125	9	3	6	7.6	11.8	0.02	62
B-3L	Homewood Formation	5.95	5.62	11.5	132	3	14	-11	--	12.1	0.04	60
B-4U	Kittanning Clastic Rocks	5.65	5.57	9	22	6	8	-2	0.6	0.28	0	21
B-4M	Brookville/Clarion Coal	6.55	6.06	9	33	0	19	-19	0.4	0.32	0	19
B-5	Brookville/Clarion Coal and Overburden	6.20	5.96	11.25	85	6	18	-12	>10	21.4	0	20
B-6U	Overburden	5.90	5.66	10.25	210	0	23	-23	1.5	0.22	0	15
B-6L	Homewood Formation	6.05	5.78	10.5	52	2	26	-24	2.9	0.50	0	19
B-7	Homewood Formation	6.35	5.55	11.75	27	3	8	-5	0.8	0.18	0	18
B-8U	Brookville/Clarion Coal and Overburden	5.65	5.13	9	131	5	7	-2	8.2	10.6	0.02	74
B-8L	Homewood Formation	5.75	6.22	14	265	0	70	-70	7.8	10.1	0.04	133
B-9	Homewood Formation	5.90	5.50	9.75	35	4	11	-7	0.6	0.1	0	19
B-10U	Overburden	--	3.98	11	62	12	0	12	--	12.2	0.02	31
B-10L	Homewood Formation	6.05	4.93	13.25	85	2	3	-1	5.3	6.2	0.02	43
B-11	Homewood Formation	5.90	5.62	10.5	22	5	9	-4	0.6	0.14	0	19
B-12U	Kittanning Clastic Rocks	6.15	5.86	7	140	0	15	-15	6.2	6.1	0	19
B-12M	Brookville/Clarion Coal	6.25	6.12	8.5	180	0	28	-28	0.8	0.1	0	34
B-12L	Homewood Formation	--	6.30	8	155	0	52	-52	4.0	4.95	0	43
B-13	Brookville/Clarion Coal	--	6.28	10.7	70	0	42	-42	2	5.9	0	22

Note: U = Upper, M = Middle, L = Lower Piezometer

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