

TABLE II

## CARBON PLANT OPERATION

Mo.	Untreated Dust		Carbon			Barren Solution			Carbon Tailing Solids			Reagents-lb/ton Dust					%Au Recovery		Cottrell Eff.	Cottrell Dust Assays		
	Tons	Au	Tons	Au	% Dist	Tons	Au	% Dist	Tons	Au	% Dist	NiDH	Ni <sub>2</sub> CO <sub>3</sub>	NaCN	Amine Acet.	C	CN	Absorption		Au	As	Sb
1972																						
Jan	339.1	2.329	1.87	301.70	71.43	642.60	.012	.95	339.1	.643	27.62	.914	4.57	9.89	.64	10.08	72.38	98.68	74.86	2.33	3.59	1.51
Feb	341.9	2.304	1.967	275.30	68.75	643.10	.009	.71	341.9	.704	30.54	.91	4.53	9.74	.63	9.74	69.46	98.98	81.84	2.30	3.38	1.90
Mar	327.7	2.186	1.857	275.934	71.53	603.60	.010	.84	327.7	.604	27.63	.88	4.42	9.51	.62	9.61	72.37	98.84	66.02	2.19	3.61	1.53
Apr	356.0	2.53	2.007	348.40	77.71	639.80	.011	.76	356.0	.54	21.53	.88	4.35	8.95	.61	9.35	78.47	99.03	80.05	2.53	3.69	1.24
May	339.0	2.42	1.901	314.803	72.94	628.70	.008	.63	339.0	.64	26.43	.89	4.42	8.75	.62	9.56	73.58	99.15	84.44	2.42	3.71	1.47
Jun	380.7	2.29	1.954	316.00	70.97	641.90	.008	.61	380.7	.65	28.42	.85	4.07	8.96	.57	8.75	71.58	99.14	85.79	2.29	3.42	1.34
Jul	380.3	2.417	1.991	343.61	74.41	620.20	.012	.82	380.3	.599	24.77	.82	3.94	9.48	.55	8.52	75.23	98.91	88.26	2.42	2.94	.93
Aug	390.8	2.24	2.049	314.39	73.61	636.0	.019	1.38	390.8	.56	25.01	.93	3.97	10.16	.56	8.98	74.99	98.16	85.78	2.24	2.86	1.30
Sep	384.0	2.56	2.036	371.30	76.79	632.9	.011	.68	384.0	.58	22.53	1.00	4.04	10.12	.57	8.49	77.47	99.12	89.82	2.56	3.04	1.39
Oct	333.6	2.20	1.495	359.87	73.27	611.8	.009	.73	333.6	.57	26.00	.76	4.50	10.16	.64	7.87	74.00	99.01	86.39	2.20	2.83	1.1
Nov	354.0	2.37	1.663	377.16	74.78	607.6	.007	.53	354.0	.59	24.69	.90	4.38	9.79	.62	8.53	75.31	99.28	88.91	2.37	3.49	1.49
Dec																						
Total /Av.												.88	4.29	9.59	.60	9.04	74.08	98.94	83.83	2.35	3.32	1.39
1973																						
Jan	351.3	1.94	1.907	241.22	67.66	630.10	.007	.67	351.30	.61	31.67	.77	4.24	9.48	.59	9.11	68.83	99.02	84.44	1.94	3.04	1.12
Feb	350.1	1.93	1.716	270.29	68.55	630.4	.005	.48	350.1	.60	30.97	.78	4.16	7.84	.58	7.05	69.03	99.31	90.37	1.93	2.90	1.51
Mar	308.1	1.36	1.167	153.46	42.84	574.6	.008	1.05	308.1	.76	56.11	1.41	4.41	8.46	.62	6.14	58.14	98.65	75.34	2.02	2.93	1.80
Apr	331.2	2.14	1.268	500.86	70.60	627.3	.006	.57	331.2	.62	28.83	1.13	4.83	9.66	.54	6.70	70.03	99.20	80.95	2.14	2.82	.99
May	323.0	1.89	1.176	337.45	64.90	616.0	.007	.66	323.0	.65	34.44	.96	4.31	9.13	.60	6.23	65.56	98.99	70.78	1.89	3.21	1.32
Jun	346.7	2.405	1.004	601.80	72.45	631.6	.017	1.33	346.7	.631	26.22	.84	3.89	7.90	.54	4.14	73.78	98.20	84.44	2.41	2.66	1.83
Jul	329.7	2.15	.866	560.88	68.39	613.8	.022	1.89	329.7	.52	29.72	.95	3.85	8.52	.52	4.84	70.28	97.31	91.32	2.15	2.89	1.1
Aug	386.0	2.05	1.149	513.23	74.67	621.9	.013	1.00	386.0	.50	24.33	1.25	4.40	9.12	.56	6.27	75.67	98.6	91.33	2.05	2.59	.97
Sep	388.7	1.959	1.271	359.32	65.97	610.1	.016	1.29	388.7	.642	32.74	.77	4.24	7.39	.50	5.52	67.26	98.09	91.21	1.96	2.66	1.00
Oct	423.6	2.23	1.365	489.5	70.73	675.1	.012	.88	423.6	.633	28.39	.75	3.54	6.87	.48	5.26	71.61	98.77	89.50	2.23	2.96	1.03
Nov	371.0	2.069	1.249	424.45	69.07	615.5	.006	.51	371.0	.629	30.42	.87	6.19	7.43	.54	6.02	69.58	99.27	86.46	2.07	2.89	1.06
Dec	320.0	2.215	1.317	398.50	74.06	607.8	.005	.39	320.0	.566	25.55	.91	5.32	8.13	.57	6.44	74.45	99.47	87.74	2.22	2.84	.89
Total /Av.												.95	4.45	8.30	.55	6.14	69.60	98.74	85.32	2.08	2.87	1.22

TABLE III

## Roaster &amp; Cyanide Extraction Data

Mo.	Roaster Feed						Roaster Calcine										NaCN lb/ton Calcine	% Au Rec by CN	lb/T Mill Feed    Roaster																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	Tons	Assays					Tons	Wt %	Assays					% Recovery					Zn Dust	NaCN	Lime	Op Hr	TPH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Au	Fe	S	As	Sb			Au	Fe	S	As	Sb	S	As	Sb																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
1972																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

TABLE IV

Summary of Losses & Recoveries																
Mo	Roaster & Calcine Extraction % Internal Distribution Au						Overall Recoveries-%Au			Overall Losses % Au						
	Hot Cottrell Dust	Bag- house Dust	Wash Thick O-Flow	Preg. Sol'n	Calcine Residue Solids	Calcine Residue Sol'n	Calcine Bulcan & Slag	Carbon Gold	Total Recovery	Baghouse Dust	Wash Thick O'Flow	Carbon Tailing Solids	Carbon Barren Soln.	Calcine Residue Solids	Flot'n Tailing	Calcine Residue Sol'n.
1972																
Jan	3.69	1.26	.15	91.72	2.96	.22	87.15	2.50	89.65	1.20	.15	.97	.03	2.82	4.98	.20
Feb	4.41	.98	.18	90.62	3.68	.13	86.01	2.88	88.89	.93	.17	1.28	.03	3.49	5.09	.12
Mar	3.69	1.90	.20	90.46	3.67	.08	85.76	2.50	88.26	1.80	.19	.97	.03	3.48	5.19	.08
Apr	4.57	1.14	.14	90.95	3.13	.07	86.04	3.36	89.40	1.08	.13	.93	.03	2.96	5.40	.07
May	4.22	.78	.17	91.35	3.38	.10	87.04	2.93	89.97	.74	.17	1.06	.03	3.22	4.72	.09
Jun	5.07	.84	.38	89.79	3.78	.14	85.55	3.43	88.98	.80	.36	1.37	.03	3.60	4.72	.14
Jul	5.36	.71	.11	90.42	3.28	.12	86.02	3.80	89.82	.68	.10	1.26	.04	3.13	4.85	.12
Aug	4.96	.82	.08	90.92	3.09	.13	86.36	3.47	89.83	.78	.07	1.18	.07	2.94	5.00	.12
Sep	5.96	.68	.12	89.91	3.11	.22	85.40	4.35	89.75	.64	.11	1.28	.04	2.96	5.02	.20
Oct	4.49	.71	.13	91.42	3.12	.13	86.52	3.11	89.63	.67	.12	1.10	.03	2.95	5.37	.13
Nov	5.30	.66	.11	90.64	3.05	.24	85.85	3.76	89.61	.63	.10	1.24	.03	3.04	5.12	.23
Dec																
Tot/Av	4.70	.95	.16	90.75	3.30	0.14	86.15	3.28	89.43	.90	.15	1.16	.04	3.14	5.04	.14
1973																
Jan	4.33	.80	.14	91.57	3.04	.12	86.86	2.78	89.64	.76	.13	1.30	.03	2.88	5.15	.01
Feb	4.99	.53	.10	91.03	3.24	.11	86.86	3.26	90.12	.51	.10	1.47	.02	3.10	4.58	.10
Mar	2.68	1.18	.07	91.98	3.87	.22	87.40	1.09	88.49	1.12	.07	1.43	.03	3.67	4.98	.21
Apr	4.51	1.06	.08	90.27	3.94	.14	85.29	3.01	88.30	1.00	.08	1.23	.02	3.72	5.52	.13
May	3.78	1.56	.22	90.53	3.81	.10	85.41	2.32	87.72	1.47	.21	1.23	.02	3.60	5.66	.09
Jun	5.55	1.02	.09	89.75	3.51	.08	84.79	3.80	88.59	.96	.09	1.37	.07	3.32	5.53	.07
Jul	4.36	.41	.04	91.95	3.18	.06	86.55	2.81	89.36	.39	.03	1.22	.08	2.99	5.87	.06
Aug	6.25	.59	.04	89.89	3.18	.05	84.68	4.39	89.07	.56	.04	1.43	.06	3.00	5.79	.05
Sep	5.55	.74	.04	89.90	3.70	.06	85.01	3.46	88.47	.70	.04	1.72	.07	3.50	5.44	.06
Oct	8.81	1.09	.06	86.18	3.80	.06	81.10	5.95	87.05	1.03	.05	2.28	.07	3.57	5.90	.05
Nov	6.19	.97	.07	88.67	3.83	.07	83.69	4.03	87.72	.91	.06	1.77	.03	3.61	5.83	.07
Dec	6.45	.90	.06	88.29	4.24	.06	82.47	4.46	86.93	.84	.05	1.54	.02	3.97	6.59	.06
Tot/Av	5.29	.90	.08	90.05	3.60	.08	85.00	3.45	88.45	.85	.08	1.50	.04	3.41	5.57	.08