

FIG. 4
MAGNETIC CONCENTRATION, BATHURST ORE, SHIPMENT No. 2

ANALYSIS

Ferrous Oxide.	Ferric Oxide.	Insoluble.	Sulphur.	Phosphorus.	Iron.
13.63	44.57	30.66	0.095	0.751	41.81

2124 POUNDS TO DRY TEST

1423 POUNDS TO WET TEST

DRY CONCENTRATION.

Sample Number	Through Mesh.	CRUDE ORE SIZED.				CONCENTRATES.					TAILINGS.				DUST LOSS.		EFFICIENCY.					
		Weight and per cent.		Analyses.		Weight and per cent.		Analyses.			Weight and per cent.		Analyses.		Per cent.	Per cent.	Units of Crude Per Unit of Concentrate.					
		Pounds	Per cent.	Iron, per cent.	Insoluble, per cent.	Sulphur, per cent.	Phosphorus, per cent.	Pounds	Per cent.	Iron, per cent.	Insoluble, per cent.	Sulphur, per cent.	Phosphorus, per cent.	Pounds	Per cent.	Iron, per cent.		Insoluble, per cent.	Per cent.			
1	40	437	20.57	41.31	31.12	0.148	0.757	364	83.27	46.81	26.42	0.011	0.531	66	15.10	13.22	58.09	7	1.63	94.03	5.97	1.19
2	20	178	8.38	41.99	32.58	0.672	0.748	150	84.26	46.23	27.31	0.005	0.567	25	14.04	17.61	52.22	3	1.69	94.09	5.91	1.17
3	10	637	29.99	41.91	30.76	0.679	0.794	464	72.81	47.17	26.39	0.007	0.470	168	26.37	27.82	44.68	5	0.79	82.16	17.84	1.37
4	6	872	41.66	42.39	29.93	0.681	0.679	783	89.78	41.42	28.39	0.006	0.484	85	9.73	25.01	48.38	4	0.49	94.41	5.59	1.11
Totals		2,124	100.00	41.94	30.64	0.663	0.738	1,761	82.90	45.78	27.36	0.007	0.496	344	16.19	23.57	48.71	19	0.91	90.95	9.05	1.20

RECAPITULATION FOR TOTALS.

Pounds of iron in crude, 890.80	806.33	Per cent saved in concentrate	90.50
concentrate	81.11	lost in tailings	9.10
tailings	3.36	lost in dust	0.40
dust			
Totals	890.80		100.00

Units of crude required per unit of concentrate, 1.20.

WET CONCENTRATION.

Sample Number	Ground to Mesh.	CRUDE ORE.		CONCENTRATES.					TAILINGS.				SLIME LOSS.		EFFICIENCY.							
		Weight in Pounds.	Analyses.	Weight and per cent.		Analyses.			Weight and per cent.		Analyses.		Per cent. of Iron Saved.	Per cent. of Iron Lost.	Units of Crude Per Unit of Concentrate.							
		Iron, per cent.		Insoluble, per cent.	Sulphur, per cent.	Phosphorus, per cent.	Pounds	Per cent.	Iron, per cent.	Insoluble, per cent.	Sulphur, per cent.	Phosphorus, per cent.				Pounds	Per cent.					
1	20	494	41.81	30.66	0.095	0.751	423	85.62	46.33	26.38	0.005	0.526	61	12.32	14.41	55.32	10	2.06	95.52	4.48	1.16	
2	40	491	41.81	30.66	0.095	0.751	389	79.22	49.00	24.43	0.005	0.498	36	17.54	14.22	56.08	16	3.27	93.01	6.99	1.26	
3	60	448	41.81	30.66	0.095	0.751			51.31	22.07	0.005	0.344										
3e	150		51.31	22.07	0.005	0.344	239	53.31	63.12	10.75	Trace	0.151	175	39.06	17.43	59.18	34	7.60	80.73	19.27	1.87	

RECAPITULATION FOR SAMPLE No. 33e.

Pounds of iron in crude, 187.31	150.86	Per cent saved in concentrate	80.54
concentrate	30.50	lost in tailings	16.28
tailings	5.95	lost in slime	3.18
slime			
Totals	187.31		100.00

Units of crude required per unit of concentrate, 1.87.