

FIG. 3  
MAGNETIC CONCENTRATION, BATHURST ORE, SHIPMENT No. 1

ANALYSIS

Ferrous Oxide.	Ferric Oxide.	Insoluble.	Sulphur.	Phosphorus.	Iron.
6.17	34.42	55.06	0.039	0.35	28.88

1927 POUNDS TO DRY TEST ←

→ POUNDS TO WET TEST 1484

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.		Pounds.	Per cent.	Per cent of Iron Saved.	Per cent of Iron Lost.	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.							
1	40	447	23.19	21.18	65.93	0.054	0.26	196	43.62	37.21	42.62	0.008	0.22	224	54.58	8.64	85.25	8	1.8	77.40	22.60	2.27		
2	20	124	6.44	28.40	51.43	0.059	0.36	47	39.90	40.25	39.68	0.005	0.183	75	60.49	21.42	64.98	2	1.61	52.68	47.32	2.69		
3	10	416	21.59	31.85	49.60	0.054	0.37	229	55.04	36.42	44.78	0.006	0.173	184	44.24	26.23	58.35	3	0.72	63.15	36.85	1.81		
4	6	940	48.78	31.49	51.02	0.024	0.35	568	60.42	34.83	47.69	0.001	0.197	367	39.04	26.36	58.60	5	0.54	67.04	32.96	1.65		
Totals		1,927	100.00	28.97	54.71	0.038	0.34	1,039	52.92	35.87	45.64	0.003	0.195	870	45.15	20.73	64.61	18	0.93	67.66	32.34	1.83		

  

RECAPITULATION FOR TOTALS.			
Pounds of iron in crude, 558.25.		Per cent saved in concentrate.....	66.76
" concentrate.....	372.74	" lost in tailings.....	32.82
" tailings.....	180.43	" lost in dust.....	0.91
" dust.....	5.08	Totals.....	100.00
Totals.....	558.25	Units of crude required per unit of concentrate, 1.85.	

Sample Number	Ground to Mesh.	Weight in Pounds.	CRUDE ORE.							CONCENTRATES.							TAILINGS.				SLIME LOSS.		EFFICIENCY.		
			Weight and Per cent.		Analyses.					Weight and Per cent.		Analyses.					Weight and Per cent.		Analyses.		Pounds.	Per cent.	Per cent of Iron Saved.	Per cent of Iron Lost.	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.							
1	20	494	28.88	55.06	0.039	0.35	287	58.09	40.09	39.46	0.002	0.197	194	39.27	13.60	76.35	13	2.64	80.71	19.29	1.72				
2	40	492	28.88	55.06	0.039	0.35	263	53.45	42.07	36.08	0.001	0.182	210	42.68	13.66	76.37	10	3.87	77.90	22.10	1.87				
3	60	498	28.88	55.06	0.039	0.35	.....	47.12	30.82	0.002	0.144	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			
3c	150	.....	47.12	30.82	0.002	0.144	121	24.29	62.13	11.36	Trace.	0.053	329	66.06	18.03	69.40	48	9.65	53.03	46.97	4.06				
Totals		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			

  

RECAPITULATION FOR SAMPLE No. 3c.			
Pounds of iron in crude, 143.82.		Per cent saved in concentrate.....	52.27
" concentrate.....	75.18	" lost in tailings.....	41.24
" tailings.....	59.32	" lost in slime.....	6.49
" slime.....	9.32	Totals.....	100.00
Totals.....	143.82	Units of crude required per unit of concentrate, 4.11.	