

FIG. 1

MAGNETIC CONCENTRATION, BRISTOL ORE, SHIPMENT No. 1

1836 POUNDS TO DRY TEST ←

→ POUNDS TO WET TEST 1922

DRY CONCENTRATION.

WET CONCENTRATION.

CRUDE ORE SIZED.				CONCENTRATES.				TAILINGS.				DUST LOSS.		EFFICIENCY.								
Sample Number	Through Mesh.	Weight and Per cent.		Analyses.				Weight and Per cent.		Analyses.				Pounds.	Per cent.	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.									
1	40	714	38.85	55.70	16.32	2.25	0.009	558	78.15	69.12	2.59	0.202	0.0003	141	19.74	7.81	70.88	15	2.11	96.95	3.05	1.280
2	20	355	19.35	58.43	12.00	2.28	0.015	296	83.38	68.23	3.43	0.341	0.0007	52	14.64	9.63	66.79	7	1.98	97.31	2.69	1.200
3	10	378	20.60	51.44	17.89	3.00	0.012	313	82.80	59.41	12.43	1.403	0.0020	61	16.13	12.64	64.75	4	1.07	95.93	4.07	1.204
4	6	389	21.20	47.51	28.03	3.06	0.014	349	89.71	51.00	22.43	2.560	0.0010	37	9.51	17.23	63.67	3	0.78	96.71	3.29	1.112
Totals .....		1,836	100.00	52.73	18.08	2.57	0.012	1,516	82.57	62.77	8.95	1.010	0.0010	291	15.84	10.34	67.94	29	1.59	96.71	3.29	1.208

CRUDE ORE.				CONCENTRATES.				TAILINGS.				SLIME LOSS.		EFFICIENCY.								
Sample Number.	Ground to Mesh.	Weight in Pounds.		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 Concentrates.				
		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.									
1	10	639	53.49	17.46	2.62	0.011	532	83.25	64.45	6.37	0.539	0.0010	100	15.64	6.92	68.47	7	1.11	97.56	2.44	1.235	
2	20	535	53.49	17.46	2.62	0.011	424	79.25	64.24	5.45	0.516	0.0010	101	18.87	5.91	70.72	10	1.88	98.04	1.96	1.225	
3	40	648	53.49	17.46	2.62	0.011	504	77.77	67.42	3.70	0.361	0.0004	132	20.37	5.03	67.28	12	1.86	97.93	2.07	1.287	
Totals .....																						

RECAPITULATION FOR TOTALS.

RECAPITULATION FOR SAMPLE No. 3.

Pounds iron in crude, 986.48.		Per cent saved in concentrate.....	96.46
" concentrate.....	951.59	" lost in tailings.....	3.04
" tailings.....	30.08	" lost in dust.....	0.50
" dust.....	4.81	Totals.....	100.00
Totals.....	986.48		

Pounds iron in crude, 346.61.		Per cent saved in concentrate.....	98.03
" concentrate.....	339.79	" lost in tailings.....	1.89
" tailings.....	6.63	" lost in slime.....	0.08
" slime.....	0.19	Totals.....	100.00
Totals.....	346.61		

Units of crude required per unit of concentrate, 1.211.

Units of crude required per unit of concentrate, 1.30.