

99

ALL OFFICIAL CORRESPONDENCE
SHOULD BE ADDRESSED TO THE DIRECTOR.
DIVISION OF ORE DRESSING AND
METALLURGY



MINES BRANCH
EUGENE HAANEL, PH. D.
Director.

G. C. MACKENZIE, B.SC., CHIEF OF DIVISION
W. B. TIMM, B.SC., 1ST ENGINEER
C. S. PARSONS, B.SC., 2ND ENGINEER
H. C. MABEE, B.SC., CHEMIST
R. J. TRAILL, ASST. CHEMIST
B. M. DERRY, MILLMAN

OTTAWA, Ont., July 18th, 1918.

Report of Ore Dressing & Metallurgical Laboratories.

Test No. 99

Two Samples of Manganese Ore was received on June 17th 1918, from W.F.C. Parsons Esq., Bathurst, N.B.

These samples were marked Nos. 1 and 2 and contained Pyrolusite, finely crystalline in a reddish slate gangue.

Concentration tests were made on a laboratory Wilfley table to determine their adaptability to concentration.

Both samples were ground to 50 mesh.

3000 grams of Sample #1 were taken.

1000 grams of Sample #2 were taken.

Sample #1 gave an Analysis of:-
Mn- 24.92% Fe- 9.00%

Sample #2 gave an Analysis of:-
Mn- 16.20% Fe- 8.10%

The results of the test work are contained in the following table.

99b

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Sample No.	Product.	Wt. Grams	Analysis			Content		%age of Mn Values.
			% Mn.	% Fe.	% S.O ₂	Mn. Grams		
1	Concentrates	589	41.97	10.0	17.15	247.20	49.6	
	Middlings #1	61	25.82	11.6		15.75	3.2	
	Middlings #2	179	12.72	11.7		22.77	4.6	
	Tailings	568	5.51			31.30	6.3	
	Slime Loss	603	30.08			181.38	36.4	
Totals & Averages		2000	24.92	9.0		498.40	100.1	
2	Concentrates	98	48.35	7.1	9.20	47.38	29.3	
	Middlings	39	30.76			12.00	7.4	
	Tailings	526	9.33			49.08	30.3	
	Slime Loss	337	15.90			53.54	33.0	
Totals & Averages		1000	16.20	8.1		162.00	100.0	

Conclusion:- From the above results, the concentration of this ore in practice would be for a Manganese Concentrate of Grade 40%, a recovery of 50% to 60% of the Manganese Values, and for a Manganese Concentrate of Grade approaching 50% a recovery of 30 to 40% of the Manganese Values.