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DAVIS TUBE TEST REPORT AND ASSAYS
on
IRON ORE SAMPLES
submitted by
WESFROB MINES LIMITED - TASSOO PROPERTY
Progress Report No. 6

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WESFROB MINES LIMITED - TASSOO PROPERTY

Progress Report No. 6

Project No. L.R.L. 733

Note:

This report refers to the samples as received.

The practice of this Company in issuing reports of this nature is to require the recipient not to publish the report or any part thereof without the written consent of Lakefield Research Limited.

LAKEFIELD RESEARCH LIMITED
Lakefield, Ontario
December 24, 1957

INTRODUCTION

Mr. J.M. MacKay requested us in a letter dated November 26th, 1957 to prepare composite samples from ore received on October 1st, 1957 and to carry out chemical analyses and Davis tube tests on these composite samples.

LAKEFIELD RESEARCH LIMITED

John W Britton

SAMPLE PREPARATION

The weights of the samples as received were as follows:

Zone 3	Tunnel Orebody
	1-A 97 lbs.
	1-B 88 lbs.
	1-C 87 lbs.
Zone 2	Upper T Bone
	2-A 88 lbs.
	2-B 83 lbs.
	2-C 96 lbs.
Zone 1	Lower T Bone
	3-A 84 lbs.
	3-B 90 lbs.
	3-C 86 lbs.
Zone 1	Lower Extension
	4-A 93 lbs.
	4-B 106 lbs.
	4-C 108 lbs.
	4-D 77 lbs.
	4-E 54 lbs.

Each sample was crushed to $-3/8$ inch and one half was rejected. The remainder was stage-crushed to minus 10 mesh on rolls. Four composites were made by combining weighted portions of the appropriate samples. The composite samples were then crushed to minus 20 mesh and a 125 g. portion of each composite sample was ground to minus 200 mesh in a pebble mill followed by hand-mortaring of the oversize.

TEST RESULTS

A. Chemical analyses of composite samples

	Comp. No. 1 (Zone 3, tunnel orebody)	Comp. No. 2 (Zone 2, upper T-bone)	Comp. No. 3 (Zone 1, lower T-bone)	Comp. No. 4 (Zone 1, lower extension)
Total iron (Fe)	62.05%	61.23%	58.47%	53.97%
Copper (Cu)	1.36%	0.41%	0.10%	0.07%
Lead (Pb)	0.15%	0.12%	0.08%	0.27%
Phosphorus (P)	0.04%	0.04%	0.05%	0.07%
Total sulphur (S)	2.50%	3.25%	2.32%	2.46%
Alumina (Al ₂ O ₃)	1.36%	1.57%	1.88%	3.49%
Lime (CaO)	3.32%	3.48%	4.76%	6.07%
Magnesia (MgO)	0.28%	0.22%	0.19%	0.80%
Manganese (Mn)	0.08%	0.13%	0.22%	0.25%

B. Davis tube test results

Sample No.	Grind (mesh)	Head (calc.) % Fe(1)	Wt. %	Concentrate		Tailing
				% Fe(1)	% Fe Rec'y.	% Fe(1)
Comp. 1	-200	60.86	84.2	70.42	97.4	9.89
Comp. 2	-200	59.98	81.7	70.42	95.9	13.38
Comp. 3	-200	57.02	77.3	70.36	95.4	11.60
Comp. 4	-200	51.82	69.7	70.24	94.5	9.45

(1) Acid-soluble iron

Investigation by:

D.M. Wyslouzil

Lakefield Research Limited,
Lakefield, Ontario.

December 24, 1957/PAW