

PBK Engineering Evaluation of Lodestone Iron 1992

675764

Lodestone
92H/10

- production rate 900,000 tpy of DR pellet
- magnetic Fe concentrate from grinding + wet + dry magnetic separation grade is 67.5% Fe Pure magnetite is 100% Fe
- Electrical power 138KV transmission line from Princeton
- Natural gas - new pipeline from Princeton
- Reserve definition for feasibility study \$2.5M (in 1991)
- Magnetite consumption by Canadian coal producers estimated 75,000 to 100,000 tonnes/yr. Crucial major supplier.
(from Wright report, 1970)

(Note cement plants in Western Canada need need ~ 100,000 tpy +

(Coal producers in W Canada

Luxair Limestone, Edson	10000 tpy
Peck Elkview	6-9 "
Bullmoose	?
Fordey 3 mines	?
Hillsborough - Quinson	?

- Findlay cites 9 analyses for HS pyroxene range 6.3 - 22.7% mt average 13.3% mt.
- Findlay notes Thloren chromites are very high in Fe (15 - 25% Fe₂O₃), also moderate to strong magnetite.

Hole	Grid	% Sol Fe	depth	dx%	Existing drill holes treated with '5 year put' limits.
B2	5.6N 9 W	18.98	269	5106	
B10		14.84	100	1484	
	OS 5W	18.97	200	3794	
B7		18.67	444 incl.	8289	
	OS 14W	21.41	200	4282	
B8	1.0N 1.8E	16.08	196	3152	
C 204		13.54	280	3791	
B4		19.9	98	1950	
B9		19.33	259	5006	
C 208		18.19	130	2365	
8 S 1W		23.62	202	4771	
B5		19.84	132	2619	

$\frac{2570}{\text{avg } 209' @ 18.57\% \text{ sol Fe}} \quad 46,609$

Appendix III - 3 Wright mineralized pyroxenite SG. 3.57 measured

$$\text{III-4 } \left[\% \text{ magnetic Fe} = -4.81 + 1.1 (\% \text{ Soluble Fe}) \right]$$

avg grade eg. $1.1 (18.57) - 4.81 = \underline{15.67\% \text{ mag. Fe}}$

Scrapall dry miller cost \$0.32/ton of ore.

Rec. 28.5' diam Scrapall mill (inside diam) ~~270~~ 270 t/hr.

Jim Dawson

New associates Jakarta:

Craynest - few reserves of tailings
- up to \$80/t
- not yet returned US.

George Stewart: had hired contract
miners.
Major Greenwood 200-445-6456

Suggests Courtland Smith
mine feasibility software

Also contacts equipment mkt.

Kettle R. Resources: 1-800-856-3966

Atlas Loper? well other
Tamrock } advice, operate

Lunch Friday

Cognitively play NS 1 of in place

look like Nicola coarse flows in Tom Sch.

Ep. abund. quartz conformable. Kurato like Shany
on Re mtn. VMS characteristics.

Avala massive Zn - Sherrill-type MS
fine grained. Earl Dodson says some P.G.

Jim Soyl / Minnesota Iron Range can ship all
magnetite concentrates west, by rail.

/ Shipping costs are big problem - beware

/ Price Craynest resource is \$80/t

/ He has Craynest detailed economic
analysis - up for sale recently -
did sales economic study.

John Eckersley 1965 reunion

John Kerr 68/ 2271 off 685-3869 no.



Support (Crested 2 units)
 min pressure softener
 Also control equipment
 After paper 5 will enter
 Tank 1 above, quite

$$\begin{array}{r}
 1 \text{ cu} \ 62.5 \\
 \times \ 3.16 \\
 \hline
 \end{array}$$

1 cu ft are 196.87 lb

John K... 1985
 John K... 1985