

## **El Sol Iron Mine, North Western Ontario**

### **General:**

The purpose of this document is to provide a summary assessment of the work carried out to date on the El Sol Iron Ore Project in The Red lake mining district of Northern Ontario and to highlight the positive aspects this project offers to investors.

The project is located some 40 km NE of Ear Falls and 75 km N of the mining town of Red Lake, Ontario. Extensive exploration and metallurgical testing was conducted during 1956 – 1957.

### **Exploration work on the property to date:**

Airborne and ground magnetic surveys identified two very large parallel Zones ('A' & 'B') of magnetic anomaly with several other smaller Zones in close proximity. The A Zone measures over 4 km in length while the B Zone, lying to the South West approx. 600 meters, measures over 2 km in length. Several additional magnetic anomalies have not been tested.

67 diamond drill holes with a combined length of 34,000 feet (10,365 meters) on these two Zones identified a reserve of 312,550,00 Tonnes grading 32.4% Fe to a depth of 305 meters. The other remaining smaller Zones have yet to be drilled and could also prove to enhance reserves.

### **Metallurgy:**

Metallurgical tests have been carried out by Prow. H. U. Joss of the University of Toronto, at the laboratories of Lakefield Research Ltd., at Wakefield, Ontario, and at the plant of Lurgi Gesellschaft fur Chemie and Huettenwesen at Frankfort am Main, Germany.

The samples submitted comprised 725 assay office rejects, representing 6,900 feet of diamond drill core with a total weight of approximately 4,750 pounds. Tests included concentration and pelletizing studies, and are covered in two reports dated July 29, 1957 and November, 1957. Tests included microscopic examination of polished sections of Davis Tube separation tests, production of concentrates and pelletization thereof.

Final concentrate assay was 70.8 iron and 2.0% silica and pellet assay 68.39% iron and 2.20% silica. Grind was 100% -325 mesh. The quality of the iron present in this deposit is in the form of a particularly pure variety of magnetite, free of inclusions and favourable for production of a premium pellet.

### **Mining:**

Also during this period it was stated the width of the deposit will limit Open Pit mining down to a depth between 122 and 135 meters below surface while maintaining a stripping ratio of .85:1. With much better efficiencies in modern equipment (bigger) and methodologies (ground control, conveyors, etc...) the effective depth of an Open Pit should be able to increase at least 10%. This should translate to an Open Pit reserve in excess of 198,093,578 tonnes.

Present and developing underground mining methodologies should offer favorable economics to fully exploit this deposit at current product prices.

### **Other noteworthy highlights:**

Road access currently exists to within only a few kilometers of the deposit.

Two Hydroelectric Power Generating Stations are in close proximity to the project:

- Manitou (73 MW)
- Ear Falls (17 MW), consideration for additional 12 MW now pending

Access to the power grid approx. 40 km's from site.  
Canadian National Railways CNR within 130 km's.

The deposit is approximately 40 km's away from the Griffith Iron Ore Mine (closed in '86). The railway that served this mine was removed in the early 90's for salvage and reclamation however the rail bed still exists within 20km of the El Sol iron ore deposit. The project has easy rail access to global markets via Thunder Bay (approx. 700 km) or to Algoma Steel in Sault Saint Marie (1000 km) enhancing the economics of the deposit.

**Conclusion:**

The proximity of this project to existing infrastructure, port and a possible customer combined with low cost open pit mining offer favorable economics that warrant a scoping study to better define the project's economics and viability.

**Asset and Cash Flow Estimate for El Sol Iron Mine**

April '05

Reserve Tonnes	Grade % Fe	Tonnes of		Iron Ore Pellet Price USD/Mt contained iron	Asset Value in Iron Ore Pellets	Iron Ore Fines Price USD/Mt contained iron	Asset Value in Iron Ore Fines
		Iron Tonnes @ 90% recovery	Iron Concentrate @ 71% grade				
<b><u>Open Pit (to a depth of 147 meters)</u></b>							
198,093,000	32.4	57,763,918	26,256,326	\$95	\$2,494,351,048	\$70	\$1,837,942,820
<b><u>Total (to a depth of 305 meters)</u></b>							
312,550,000	32.4	91,139,580	41,427,081	\$95	\$3,935,572,695	\$70	\$2,899,895,670

Total Open Pit Tons	MTPD	Annual Tonnes	Mine Life Days	Mine Life Years	Iron Concentrate Tons/Per day	Cash Flow/Day @ \$70 con	Cash Flow/Ann @ \$70 con
198,093,000	25,000	9,125,000	7,923	21.7	3,313	\$231,954	\$84,663,409