

Gold Commissioner's Office VANCOUVER, B.C.



CONSULTING GEOLOGIST

GEOLOGIC AND ECONOMIC EVALUATION

OF THE

GUST MINERAL CLAIMS

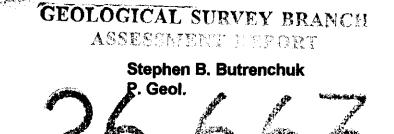
Situated at:

Latitude 51° 11' 40" N Longitude 116° 22' 00" W N.T.S. 82N/01W

in the

GOLDEN MINING DIVISION

Report prepared for Magtite Minerals Ltd. NPL Box 880 Elkford, British Columbia V0B 1H0



September 30, 2001

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SUMMARY

Magtite Minerals Ltd. has located a magnetite-ilmenite resource near the headwaters of Moose Creek in southeastern British Columbia. The property, consisting of 6 mineral claims, is located in a wedge of land between Yoho and Kootenay National Parks. Because of its location, exploration of the property is subject to several environmental conditions and intense scrutiny.

To date, exploration has indicated a resource potential of approximately 250,000 tonnes of magnetite. Reliability of this calculation has not been verified by the author. In addition to the magnetite there may be an additional resource in the form of ilmenite. The primary market for the magnetite is the coal industry where 50,000-70,000 tonnes of magnetite are consumed annually. This market is presently being supplied by Craigmont Mines.

In order for the property to be advanced towards development, the resource has to be upgraded by either increasing the tonnage or by increasing the magnetite grade. Market studies are required for both the magnetite and ilmenite to determine market share, prices and potential competition. A pilot plant is also required to determine mining costs and recoveries. It is doubtful that the development of this property will proceed any further unless road access is granted.

TABLE OF CONTENTS

INTRODUCTION	1
LOCATION, ACCESS AND PHYSIOGRAPHY	2
PROPERTY	2
HISTORY	7
GEOLOGY	8
ECONOMIC GEOLOGY	11
Mineralization	11
Markets	13
CONCLUSIONS	14
RECOMMENDATIONS	15
REFERENCES	16
STATEMENT OF QUALIFICATIONS	17
STATEMENT OF EXPENDITURES	18

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LIST OF FIGURES

Figure 1:	Location Map Gust Claims	3
Figure 2:	Gust Claims	6
Figure 3:	Regional Geology (from Currie, 1975)	9
Figure 4:	Moose Creek area showing tenure and Mineral Potential	10
Figure 5:	Moose Creek magnetite deposit	12

LIST OF TABLES

Table 1:Tenure details7

LIST OF PLATES

Plate 1:	View looking northerly towards headwaters of Moose Creek from a locality near south end of claims	4
Plate 2:	View looking northeasterly from a locality near south end of claims	4
Plate 3:	View looking southerly from a location at south end of property	5

GEOLOGIC AND ECONOMIC EVALUATION OF THE GUST MINERAL CLAIMS

INTRODUCTION:

In early August, 2001, the author was asked by Magtite Minerals Ltd. to prepare a geologic and economic evaluation of the magnetite potential on the GUST Mineral claims. This work was, in part, to satisfy assessment requirements and, in part, to meet the requirements set forth by the British Columbia Ministry of Energy and Mines. The Ministry requested that a third party expert with recognized expertise in Industrial Minerals investigate the deposit and report on its economic viability. Should there be a favourable report, the Ministry would then proceed with the permitting process for allowing ground access to the property.

The GUST claims are located in a wedge of land along Moose Creek between Yoho and Kootenay National Parks. It is because of their location that they require special management, in particular, its high biological diversity with special attention to the grizzly bear habitat. This region is also considered to have high mineral potential.

The purpose of this report is to satisfy assessment requirements to maintain the claims in good standing for one year and to provide an economic evaluation of the magnetite potential. Data for this report was obtained from government data bases and reports, from internal company reports, from oral communication with government personnel and from an on-site visit to the property in September, 2001. Geologic and economic evaluation commenced prior to the due date of the claims (period August 1-12, 2001) and continued into the next assessment year.



LOCATION, ACCESS AND PHYSIOGRAPHY:

Moose Creek occupies a glaciated valley between Yoho and Kootenay National Parks. The valley floor has been filled with alluvium and glacial till. Valley walls are steep and prone to avalanche activity.

The GUST claims are located near the headwaters of Moose Creek at an elevation of 2000 - 2600 metres (Figure 1). They are situated in the Golden Mining Division on NTS sheet 82N/01W at:

Latitude: 51° 11' 40" Longitude: 116° 21' 00" W

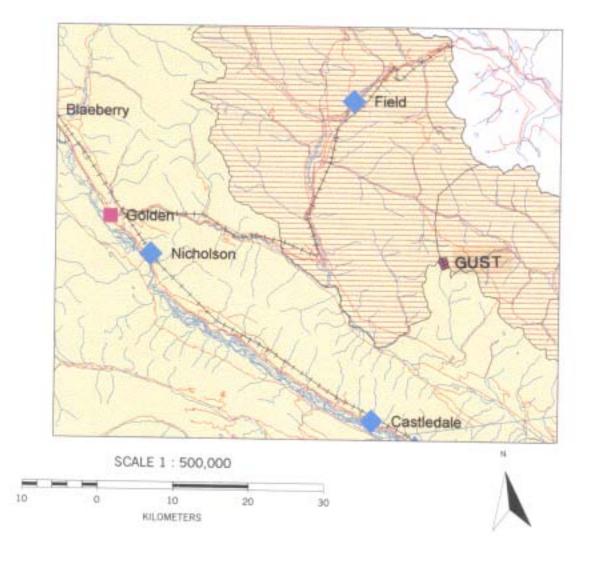
At present access to the property is via helicopter from Golden, a distance of 45 kilometres. Forest Service roads come within 7 kilometres of the south end of the property. From here the property is also accessible by a horse trail that is used throughout the summer by an outfitter.

The property is located above tree line but does contain some scrub vegetation (Plates 1-3). Snowfall in the area usually has accumulations of 3-4 metres. Access to the property is restricted to the period July through October to accommodate grizzly bear travel in the valleys located near the mouth of Moose Creek. A number of other restrictions are also in place in order to mitigate against disturbance to the grizzly bear population. Timber below the property is subject to future logging by timber companies. Should this logging proceed in the Moose Creek valley then road access to the GUST property will be significantly improved.

PROPERTY:

Moose Creek is located approximately 45 kilometres southeast of Golden, B.C. or approximately 23 kilometres south of Field, B.C. The property consists of six, 2-post contiguously located mineral claims (GUST 3-8). An additional 2 claims were staked on September 13, 2001. At the time of writing this report, these claims had not been recorded. Claim boundaries and post locations are shown in Figure 2. Details pertaining to the claims are summarized in Table 1.

FIGURE 1: LOCATION MAP- GUST CLAIMS



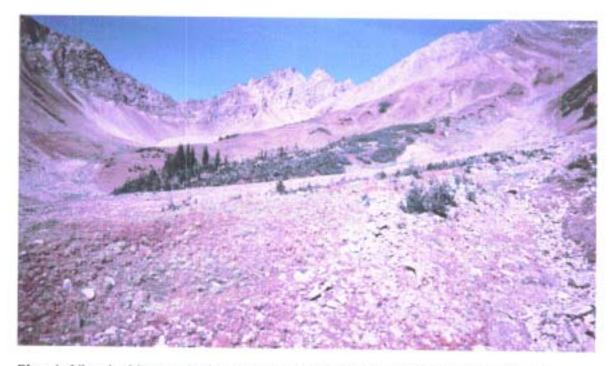


Plate 1: View looking northerly towards headwaters of Moose Creek from a locality near south end of claims.



Plate 2: View looking northeasterly from a locality near south end of claims.

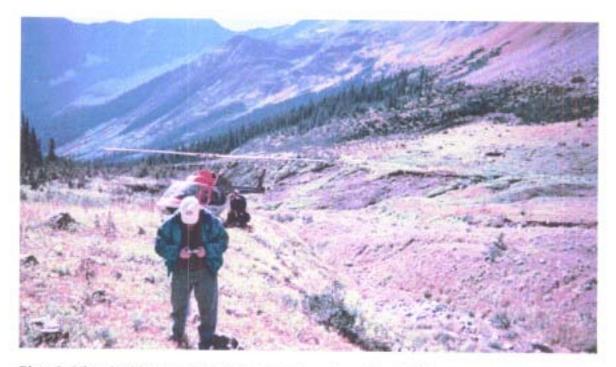
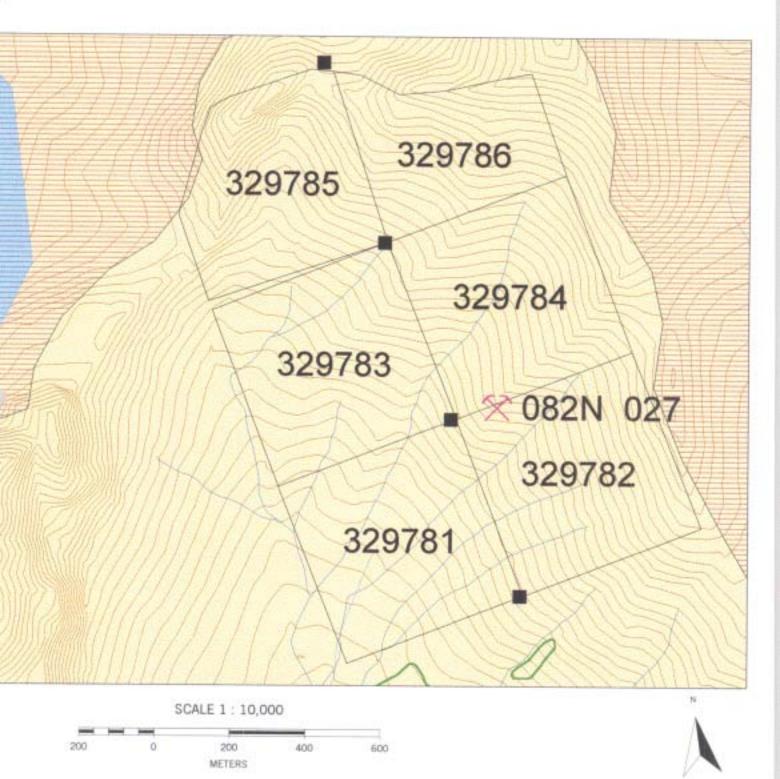


Plate 3: View looking southerly from a location at south end of property.

FIGURE 2: GUST CLAIMS



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TABLE 1: Tenure Details

Tenure Number	Claim Name	Work Recorded To	Status *	Mining Division	Units	Tag Number
329781	GUST #3	20020812	Good Standing 20020812	Golden	1	601582M
329782	GUST #4	20020812	Good Standing 20020812	Golden	1	601583M
329783	GUST #5	20020812	Good Standing 20020812	Golden	1	601584M
329784	GUST #6	20020812	Good Standing 20020812	Golden	1	601585M
329785	GUST#7	20020812	Good Standing 20020812	Golden	1	601586M
329786	GUST #8	20020812	Good Standing 20020812	Golden	1	601587M

*Pending acceptance of this report.

The registered owner of these claims is Magtite Minerals Ltd., NPL (100%) of Elkford, B.C.

HISTORY:

The history of the Moose Creek area dates back to the early 1900's. In 1914 J.A. Allan first described the geology of the area but gave no indication as to its economic potential.

In 1929 (Rickert, 1929) this area was investigated for its iron ore potential. The potential for significant deposits of magnetite and ilmenite was recognized at this time. It was also recognized that this area may have some rare-earth potential.

Moose Creek was further investigated in 1971 by Albany Oil and Gas (Gallant, 1971). Their work confirmed the presence of titaniferous magnetite. Because they were primarily interested in the titanium potential no further work was done by the company.

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Paul Demcoe acquired this area in the early 1990's. His efforts were directed towards proving up reserves for the magnetite. In 1990 CANMET completed a study on the viability of using this magnetite as a heavy media agent in the coal industry. Material for this study was supplied by Paul Demcoe. He subsequently did his own ore reserve for the property (Demcoe, 1990).

Magtite Minerals Ltd. acquired the property in 1993 and re-staked the GUST claims in August, 1994. They completed further bulk sampling utilizing a Kubota KH-007 excavator. Utilizing their samples Kilborne Engineering completed an ore reserve for the property. In addition a sample was sent to the Western Research Centre for metallurgical testing.

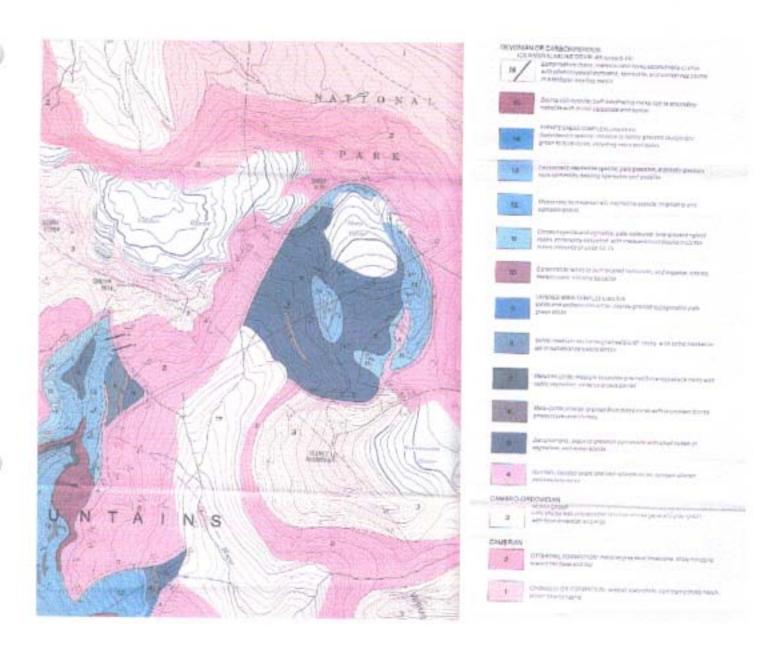
In 1998, Toklat Resources Inc. (Termuende, 1998) completed assessment work on behalf of Magtite Minerals Ltd. To date, Magtite Minerals Ltd. has spent approximately \$180,000 on exploration on the property.

GEOLOGY:

The Moose Creek area is underlain by nepheline syenite and related rocks of the Ice River Complex that have intruded limestone and shales of the Cambrian Ottertail Formation (Figure 3). Contact metamorphism in the form of hornfels and skarns was developed in these rocks around the intrusion. Detailed descriptions of the Ice River Complex are provided by Currie (1975) and Pell (1987).

Within both the Ice River Complex and the surrounding sedimentary formations there are certain rock types that contain variable amount of magnetite and other titanium bearing minerals. Analyses completed by Albany Oil and Gas (Gallant, 1971) indicated titanium and iron content up to 13.2% TiO_2 and 20.6% Fe respectively. Their work also indicated the presence of titanium in the gravels in amounts up to 8.2% TiO_2 . Jacupirangite which forms the main mass of the Ice River Complex in the Moose Creek valley, has titaniferous magnetite as its second most abundant mineral (Currie, 1975). Its abundance ranges from 7.4-18.5%.

Within the surrounding area there has been exploration done on a zinc prospect (Waterloo-Minfile). There has also been some cursory exploration of the sodalite and nepheline syenite that occurs in the Ice River Complex. The Moose Creek region is considered to have high mineral potential as shown by the cross-hatched area in Figure 4.



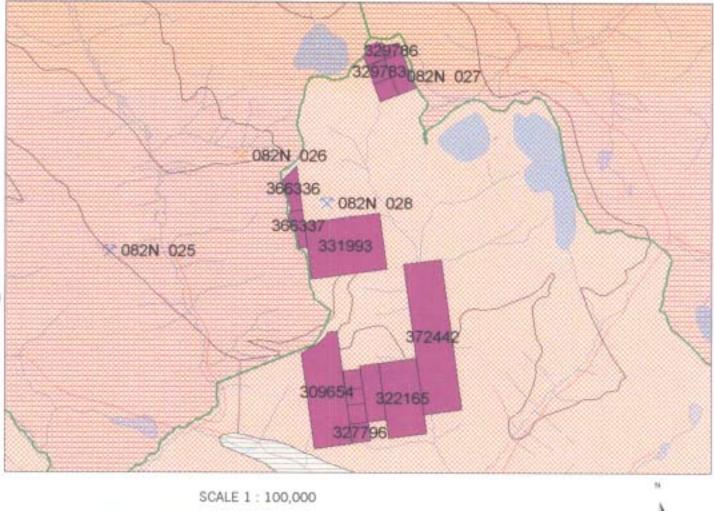
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Figure 3: Regional geology (from Currie, 1975)

FIGURE 4: MOOSE CREEK AREA SHOWING TENURE AND MINERAL POTENTIAL

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ECONOMIC GEOLOGY:

Mineralization:

The presence of magnetite near the headwaters of Moose Creek was first recognized in the early 1900's. Magnetite was observed in both mafic units of the Ice River Complex and in the surrounding sedimentary rocks. Subsequently, it was recognized that the alluvium along Moose Creek also contained significant amounts of magnetite and ilmenite.

The alluvium deposits, which appear to be some form of debris flow, have been the main focus of exploration. This exploration has been limited because of the location of this deposit. Strict environmental regulations have been imposed including no road access. All exploration to date has relied upon helicopter access.

Fine to very fine disseminated magnetite occurs in what can best be defined as a debris flow near the headwaters of Moose Creek. Overburden is not a factor as the magnetite is also present in the soil overlying fine to coarse sand and gravel. There is also a thin veneer of small unmineralized boulders on surface. Within this veneer there are scattered boulders contained magnetite and ilmenite (approximately 5% by volume).

No samples were collected by the author at the time of his visit. However, visual estimates using a small hand-held magnet indicates magnetite to be present in amounts of 2-10% by volume. Albany Oil and Gas reported visual estimates of 10-30% magnetics in the coarse sand. Increased volumes are generally present in the gullies where there has been some concentration of the heavy minerals. These gullies range in depth from 1-6 metres.

The surface over which magnetite is present measures at least 500,000 square metres (Figure 5). Based on the depth of the gullies, and previous sampling, it is believed that the deposit has a minimum thickness of 6 metres. Previous exploration indicated depths in excess of 9 metres (Gallant, 1971). A ground penetrating radar (Surface Search Inc., 1993) survey, while inconclusive, did indicate a minimum depth of 10 metres for the debris flow. The majority of the deposit is located on the east side of the main stream of Moose Creek. Therefore, potential mining could be done without seriously affecting any fish habitat in Moose Creek down stream.

Previous work by Kilborne Engineering (Termuende, 1998) calculated an estimated resource of 4,973,000 tonnes grading 5.35% magnetite. This represents approximately 266,000 tonnes of in situ magnetite. The author has not seen a complete copy of Kilborne's report and therefore is not in a position to comment on the accuracy of their resource calculation.

Ilmenite, with lesser amounts of rutile, are also associated with the magnetite in the alluvium. Both of these minerals are titanium bearing. Albany Oil and Gas recognized the titanium potential of the property. Their work indicated TiO_2 content ranging from 4.5-8.2%. Since Albany's work, little has been done with respect to evaluating the titanium potential of the deposit.

Markets:

In western Canada the major market for magnetite is in the heavy medium processing of coal (Hancock, 1988). This market is estimated to consume 50,000 to 70,000 tonnes annually. At present this market is primarily supplied by Craigmont Mines. Some magnetite is imported from the United States. Reserves at Craigmont are being depleted and therefore coal companies will need to look for other Canadian sources or increase imports from the United States. Prices for magnetite are in the \$60 to \$90 Cdn. per tonne range f.o.b. the minesite. Transportation costs to the processing plants are estimated to be approximately \$72 per tonne.

To the best of the author's knowledge, Magtite Minerals presently has no contracts for the sale of its magnetite or any other commodity that may be present on the GUST claims. Consumers are generally unwilling to undergo any contractual obligations unless they know the commodity can be produced according to specification and in sufficient quantities.

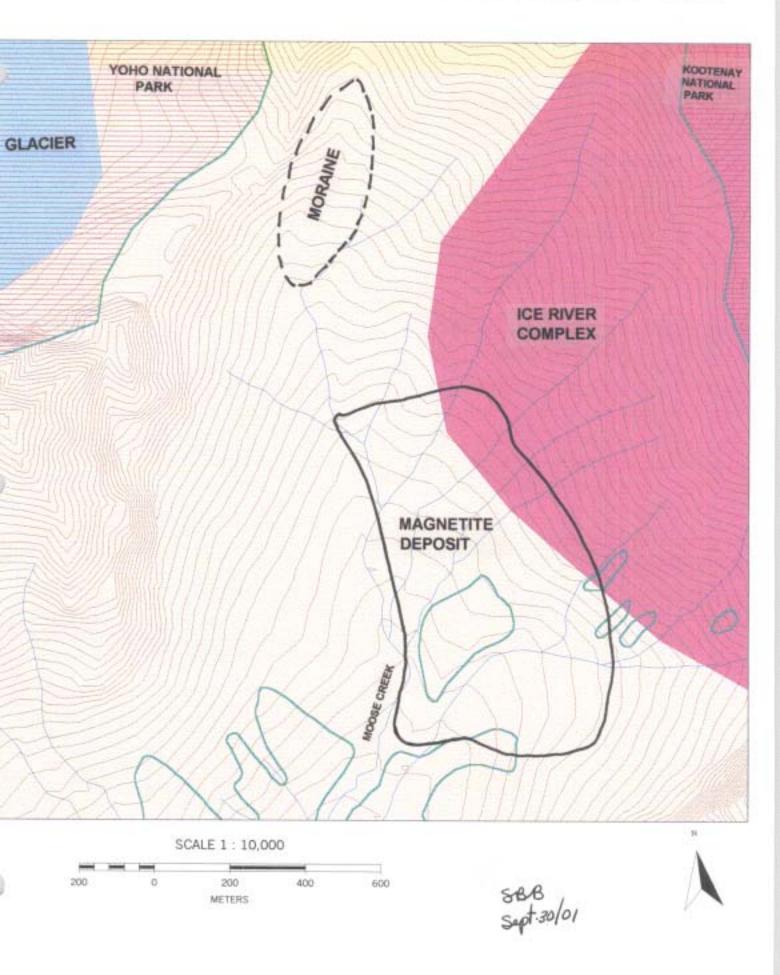
Based on present tonnage estimates, Magtite Minerals Ltd. would have a 5-10 year supply of magnetite depending upon production rates. With further exploration the resource potential of this deposit could be increased.

The economic status of this deposit depends upon Magtite Minerals capturing a major share of the coal market for magnetite. Any competition in this regard would seriously affect its profitability. At least two companies are exploring similar deposits in Alberta.

The largest market for titanium is in the form of TiO₂ white pigment used in paper, paints and plastic. Most of these consumers are located in the United States and eastern Canada. The TiO₂ pigment market is expected to increase at approximately 3% over the next 10 years. Published prices for ilmenite in the second quarter of 2001 were \$90-\$110 U.S. per tonne f.o.b. Australian ports (U.S.G.S. 2001) Ilmenite deposits worldwide are plentiful. Therefore, Magtite Minerals Ltd. would have serious competition for its ilmenite.



FIGURE 5: MOOSE CREEK MAGNETITE DEPOSIT



CONCLUSIONS:

The Moose Creek and Beaverfoot River valleys are considered to have high biological diversity. This same region is also considered to have high mineral potential. In order for this project to proceed it will have to demonstrate that its economic value justifies disturbance to the biological environment, specifically, grizzly bears.

Exploration has identified a magnetite deposit on the GUST claims located near the headwaters of Moose Creek. This deposit is estimated to contain a resource of approximately 250,000 tonnes of in situ magnetite. The reliability of this calculation has not been verified by the author. While the general outline of the deposit has been ascertained, its thickness has not. This aspect of the exploration has been hampered by lack of adequate road access. The potential for extending the depth potential of the deposit appears to be good. There is also potential for expanding the surficial boundaries of the deposit.

Because of the property's location any future mining activity will be heavily scrutinized and subject to a number of environmental restrictions. Mining will have to be seasonal both because of snow conditions and because of environmental concerns (grizzly bears in particular). Access to and from the property will probably be restricted to a few months in the summer and to only a few disturbances during the day. It is doubtful that permanent structures will be allowed.

Based on a value of \$60 per tonne and sale of the product the potential in situ value of the presently calculated resource is \$15,000,000. This does not account for any potential value derived from the ilmenite or potential increase in reserves and/or prices for the magnetite. Based on a market share of 25,000 tonnes per annum the mine life would be in the order of 10 years.

While the author is cautiously optimistic about this project, he does have some concerns. In order for this project to proceed, the magnetite resource has to be increased and property delineated. There also has to be some assurance that the company will indeed be able to sell 25,000-50,000 tonnes of magnetite per annum. Serious consideration must be given for locating potential consumers and markets for the ilmenite in addition to confirming sales to magnetite consumers.

Probably the most critical aspect of this project is accessibility. If the company is required to build a 7 kilometre road the cost of such may be too high for the project to be economical. If the forest companies construct part of the road to facilitate logging along Moose Creek then the cost of road construction to the company may not be prohibitive to the economic viability of this project.



RECOMMENDATIONS:

In order to better define the economic viability of this deposit the following are recommended:

- 1. Resource boundaries have to be properly defined both areally and depth. The resource will have to be recalculated based on this new data. To accomplish the above the property will have to be systematically grid sampled accompanied by geological mapping. In part, some of this work can be done without road access.
- 2. A pilot plant is required to assess mining costs and prepare a bulk sample for marketing and metallurgical studies. This will necessitate road access to allow for heavy equipment to be transported onto the property. The author realizes that some metallurgical studies have already been completed.
- 3. A market study is required to assure that the magnetite is suitable for, and can be sold to the coal industry. There may be potential for some smaller markets such as the organic community. This study should identify potential future competition and should also ascertain the remaining production life of Craigmont Mines.

The author recognizes that some of the above work has been done. However much of this work does not appear to have been done in a systematic manner. It is imperative that all studies be property done and documented as they will be subject to a great deal of scrutiny and discussion.

Report by:

_ B. R.

Stephen B. Butrenchuk, P. Geol

September 30, 2001

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STATEMENT OF QUALIFICATIONS

I, STEPHEN B. BUTRENCHUK, of 34 Temple Crescent West, Lethbridge, Alberta, T1K 4T4, do hereby certify that:

- 1. I am a Professional Geologist, registered in the Province of Alberta.
- 2. I am a graduate of the University of Manitoba with a B.Sc. in Geology (1966) and a M.Sc. in Geology (1970).
- 3. I have been practicing my profession in British Columbia, Quebec, Labrador, northwestern United States, Yukon and Northwest Territories. Since 1986 I have specialized in Industrial Minerals.
- 4. I am a Fellow of the Geological Association of Canada.
- 5. I have no beneficial interest, either directly or indirectly, in the GUST property, nor do I beneficially own, directly or indirectly, any securities of Magtite Minerals Ltd. NPL.
- 6. This report is based upon knowledge of the GUST property gained from evaluation of private and public documents and from personal knowledge gained from a visit to the property.

B. K

Stephen B. Butrenchuk, P. Geol.

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STATEMENT OF EXPENDITURES *

SALARIES:

S.B. BUTRENCHUK - 3 days @ \$400/day		\$ 1,200.00
	TOTAL:	\$ 1,200.00

* for assessment purposes