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GEOLOGICAL REPORT ON
THE KELLAR CLAIM GROUP
(Project 16.54)

RECEIVED
DEC 16 1981
MINING LANDS SECTION

Larry Ferguson
November 4, 1981

KELLAR CLAIM GROUP

INTRODUCTION

A group of 16 claims was staked early in 1980 for Esso Minerals to cover a known gold and copper-bearing quartz vein on Kellar Island in the northeast corner of Caribou Lake which is about 25 km. north of Armstrong (Fig. 1). The property is accessible by either boat or float plane from Armstrong. Minimum requirements for boating on Caribou Lake are a 16 foot boat and a 20 hp. motor. Fixed wing transport is available from the Sportsman's Air Service, Armstrong (ph. 583-2211, 583-2626). A cleared campsite initially used by the Ontario Geological Survey, is located in the southwest corner of claim 554045.

Work on the Kellar claim group has to date consisted of mapping, chaining and sampling. This was carried out from July 4 to July 13 by D. Parbery and R. May. L. Ferguson and A. Adamo carried out further mapping and sampling on September 3, 4, and 5. The claims are in good standing under an extension up to December 31, 1981. The Claim numbers are; 554044 to 554047, 534325 to 534330, 534304 to 534309.

GEOLOGY

Introduction

The claim group lies at the western end of a major volcanic-sedimentary belt which includes the Marshall Lake area 100 km to the east. The western portion of this belt appears to consist predominantly of mafic metavolcanics overlain to the north by and intercalated with clastic metasediments and oxide-lean sulphide facies iron formation. Scattered outliers of late Precambrian Nipigon diabase (Keweenawan) are present throughout the area. The geology on the claim group mirrors this regional geology and in addition there is a zone of semicontinuous quartz veining which locally contains gold and copper values. It is this zone that was the main target of our exploration effort. Exposure in the area and on the claim group is generally good overall averaging about 30 to 40%.

Previous Work

A memo dated March 26, 1980 (File: Ont 54-13) detailed some of the previous work on both the claim group and surrounding area. In summary, Central Manitoba Mines in 1956 carried out ground geophysics and drilling of several em conductors with no significant results. Copper-gold bearing quartz veins occur on the property and were extensively trenched prior to the 1940's. Central Manitoba Mines tested the veins by 4 drill holes which intersected spotty values in Cu and Au (F. Scott, pers. comm.).

Current activity includes a major base metals-precious metal exploration program throughout the western part of the belt by New Jersey Zinc.

Previous Work (Continued)

The area has been mapped by Gussow (1940) at a scale of one inch to one mile. Recce mapping has been carried out in the area by Thurston et al (1969), Thurston and Carter (1970) and Sage et al (1974). The area has been mapped at one inch to 1/4 mile by Sutcliffe et al (1981). An Ontario Government sponsored airborne em-mag survey of the entire area was carried out in 1980 and the data released in 1981. There are no strong em anomalies on the claim group. A moderate anomaly in claim 534304 appears to be due to pyrite based on drill testing in 1956. (Feb. 24, 1981 memo; 16.62A05).

Field Examination (Fig. 2,3)

a) Rock types

The predominant rock type on the claim group and surrounding area is fine to medium-grained, dark green mafic metavolcanics. Coarser-grained patches are rare. The metavolcanics are composed of variable mixtures of chlorite, amphibole and feldspar. Primary features other than the occurrence of quartz amygdules and tuffaceous layering were not noted. Detailed examination of part of the claim group has enabled delineation of an amygdaloidal mafic flow unit. Small garnet porphyroblasts were also noted in one location. Disseminated pyrite and pyrrhotite typically varies from nil up to about 2% and on rare occasions may reach 5%. Magnetite is rare.

Clastic and chemical sediments are overall uncommon. A major zone of chert-magnetite iron formation with subordinate amounts of interlayered iron-rich silicate material and rare pyrite-pyrrhotite is located in the western part of the claim group and is traceable in lenses for at least 5 km. Another much smaller zone of chemical metasediments consisting of quartz (chert) and semimassive pyrite is located in claim 534304. Other infrequent thin zones of chert with either weak magnetite or pyrite are present locally within the mafic volcanics. Probable clastic sediments consisting of biotite, quartz and feldspar with or without minor amounts of lean sulphide occur very infrequently within the mafic volcanics and may be interflow horizons.

Intrusive rocks are very uncommon being restricted to regional granitic gneisses (tonalite?) in the southeast corner of the group on claim 534307. Glassy quartz veins occur sporadically through the volcanics and are best developed through the central portion of the claim group.

b) Metamorphism and Alteration


Metamorphic grade appears to vary from amphibolite to upper greenschist. Alteration within the area consists of very mild carbonitization which appears to be associated with a major structural northeast trending break known as the Caribou Lake fault. Detailed mapping indicates that there is a 30 to 40 metre wide zone of strong chloritization with weak to strong carbonitization paralleling the more intense quartz veining on the property (Fig 3). Locally in the area there is a well developed foliation probably due primarily to shearing effects along this zone. It is probable that the strong development of quartz + calcite veins through the claim group is related to this fault zone.

Economic (Continued)

veins themselves. No Au values were obtained from sampling the host meta-volcanics. Similarly, copper values are restricted to the quartz veins and have no significant bearing on the potential of the property. It appears then that generally there are no economic mining widths indicated by the sampling and nor does there appear to be much potential for such. (Table 1, Figure 3).

CONCLUSIONS AND RECOMMENDATIONS

- 1) The Kellar claim group is underlain by mafic volcanics with subordinate zones of oxide and lean sulphide facies iron formation and clastic interflow sediments.
- 2) There is a zone of strong quartz:calcite veining cutting through the central part of the claim group in claims 534328 and 534329 with which is associated weak to strong chlorite and carbonate alteration of the host metavolcanics.
- 3) The veining generally consists of two main veins varying in width up to about 0.5 metres. This veining can be traced semi-continuously for up to about 600 metres.
- 4) Chalcopyrite and pyrite occur sporadically within the veins in combined amounts generally less than 10%. Gold values appear to be associated with the sulphides but generally are less than 0.2 oz/ton. Copper and silver values are not considered sufficient to significantly affect the potential of the veins.
- 5) Economic mining widths are localized and uncommon along the veining and the potential for a significant tonnage of economic grade appears to be small.
- 6) The base metal potential of the claim group is small.
- 7) It is recommended that claims 534328 and 534329 be maintained in good standing and that the remaining claims be allowed to lapse.


Larry Ferguson

b) Metamorphism and Alteration (Continued)

In one location on claim 534329 carbonate-talc-chlorite schist is developed and in the same area along the lake shore local angular float consisting of quartz, and carbonate (ankerite?) with subordinate sericite and talc were noted. This material does not appear to have a wide distribution. It is uncertain whether this is an alteration of mafics or ultramafics, although Sutcliffe et al (1981) have reported the minor occurrence of actinolite-rich ultramafics within the Caribou Lake area.

c) Structure

The stratigraphy and superimposed metamorphic-structural fabric trend about northeast which subparallels the major Caribou Lake fault zone. Dips of this fabric and probably the strata vary from moderate to vertical. There is a northeast trending fold axis subparallel to and in the vicinity of the strong quartz veining as defined by the foliation orientations. Sutcliffe et al (1981) has interpreted this structure as a syncline.

Economic

As mentioned previously the main objective of our exploration to date has been the assessment of a zone of strong quartz + calcite veining cutting through the central part of the claim group. Sampling of quartz veins and various phases of iron formation elsewhere on the claim group and in the surrounding area has not been encouraging (Table 1).

The zone of strong veining can be traced semi-continuously for at least 350 metres and possibly as much as 600 metres (Fig. 2). It appears to be open to the southwest (under the lake) but appears to pinch out in the northeast. However, the veining is of a lensoidal nature and may therefore reoccur farther to the northeast. The zone is "dominated" by two main quartz + calcite veins which vary in width up to about .5 metres. Gussow (1940) has reported that the vein reaches 1.5 metres although this may have been at a point where a vein was flat lying. The two veins are generally separated by about 7 to 8 metres of variably chloritized and carbonatized, generally unmineralized, mafic volcanics. Typically there are several quartz + calcite veinlets either associated with the main veins or locally constituting the main veins. The veins generally dip steep to moderate to the southeast and trend from 20 to 70° averaging about 40 to 50°. Although the veins are subparallel to the foliation in the host, there is generally sufficient difference (up to 20°) between respective strikes and dips to suggest that the veins post-date the formation of the pervasive structural fabric in the immediate area.

Mineralogically the veins and veinlets consist of milky to glassy quartz, with or without patches of medium to coarse-grained calcite and patches, blebs and fracture-fillings of pyrite and lesser chalcopyrite. Trace fuchsite was noted in two locations. Total sulphide content ranges from nil up to about 20% and generally is less than 10%. No visible gold was noted and silver and gold values appear to be generally associated with the sulphide. However, significant precious metal contents based on the current sampling appear to be very localized and are restricted to the quartz

REFERENCES

- 1) Gussow, W.C., 1940, Ont. Dept. Mines, V. 49 pt. 6, map 49 q
- 2) Sage, R.P., Breaks, F.W., Stott, G., MacWilliams, G. And Bowen, R.P., 1974
Ont. Div. Mines, P. Map p. 962
- 3) Sutcliffe, R.H., Bivi, A., Kavanagh, G.W., 1981, Ont. Geol. Survey,
P. Map P 2409
- 4) Thurston, P., Carter, M., Riley, R., 1969, Ont. Dept. Mines, P. Map
p. 564
- 5) Thurston, P., and Carter, M., 1970, Ont. Dept. Mines, M.P. 42

→ Larry Ferguson 24F



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TELEPHONE: (705) 642-3244
ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 52196 Date: August 28, 1981
Received August 19, 1981 29 Samples of Ore
Submitted by Esso Minerals Canada, Toronto, Ontario

SAMPLE NO.	GOLD PPM	COPPER PPM	LEAD PPM	ZINC PPM
7235	-	30	21	27
7236	0.01	69	15	22
7237	-	262	71	33
7238	0.03	131	77	41
7239	0.14	318	60	26
7240	1.12	8200	60	69
7241	-	80	60	104
7242	0.33	1800	56	51
7243	Nil	39	17	11
7244	0.01	117	48	63
7245	0.03	163	9	4
7246	Nil	5	30	15
7247	-	177	51	54
7248	0.02	172	133	143
7249	-	10	39	52
7250	0.01	28	62	28
7251	Nil	-	-	-
7252	Nil	38	37	26
7253	0.01	65	43	31

File:
16.54-C3



Certificate of Analysis

Certificate No. 52049

Date: August 24, 1981

Received August 1, 1981 88 Samples of Ore

Submitted by Esso Minerals Canada Limited, Toronto, Ontario Per: L. Ferguson

Page 1

Kellan

SAMPLE NO.	GOLD PPB	SILVER PPM	COPPER PPM	ZINC PPM	NICKEL PPM	TOTAL MOLYBDENUM PPM
7980	10	Nil	240	-	-	-
7981	690	1.2	2600	-	-	-
7982	120	0.4	538	-	-	-
7983	230	-	-	-	-	-
7984	* 1710	-	5600	-	-	-
7985	150	0.3	72	21	-	-
7986	60	-	13	23	-	-
7987	10	-	-	-	-	-
7988	10	-	-	-	-	-

↑

File: 16-62-



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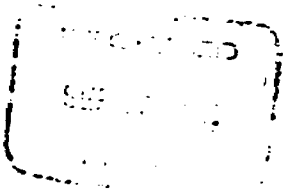
Certificate No. 52318 Date: Sept. 22, 1981
Received Sept. 8, 1981 54 Samples of ore and whole core
Submitted by Esso Minerals Canada, Toronto, Ontario Att: J. Ferguson
J. Pirie

"KELLAR-~~Vit~~"

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %
7866	0.02	0.24	0.81
7867	0.002	0.01	0.03
7868	0.01	0.13	0.31
7870	0.04	0.20	1.16
7872	0.15	0.34	1.10
7873	0.02	0.04	0.24
7874	0.03	0.22	0.61
7876	0.02	0.09	0.87
7880	0.04	0.43	2.22
7885	0.03	0.92	1.27
7886	0.01	0.47	0.27
7887	0.01	0.08	0.23
7888	0.02	0.11	0.53
7889	0.005	0.15	0.05
7890	0.12	0.15	0.24
7891	0.09	0.15	0.21
7892	0.03	0.10	0.50

File: 16.54-C.3

con't....



Per G. Lebel
G. Lebel, Manager



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Certificate No. 52318 Date: Sept. 22, 1981
Received Sept. 8, 1981 54 Samples of ore and whole core
Submitted by Esso Minerals Canada, Toronto, Ontario Att: L. Ferguson

SAMPLE NO.	GOLD PPB	SILVER PPM	COPPER PPM
7854	30	0.2	80
7855	40	0.3	163
7856	160	0.2	---
7857	10	NIL	---
7858	10	0.4	314
7859	20	0.2	112
7860	30	0.2	104
7861	30	NIL	89
7862	110	0.6	510
7863	NIL	NIL	132
7864	30	0.2	114
7865	20	0.2	122
7869	160	2.5	4200
7871	40	0.7	290
7875	40	0.3	147
7877	30	0.5	212
7878	440	2.3	2200
7879	20	0.3	143
7881	30	0.5	232
7882	160	1.2	1300
7883	40	0.2	149
7884	30	1.1	40
7893	90	0.7	299
7894	20	0.2	153
7895	10	NIL	36
7896	30	---	---
7897	30	NIL	169
7898	30	0.4	---
7899	40	0.2	---
7900	90	0.2	---

G. Lebel

Caribou
Lake

claim
Group

Armstrong

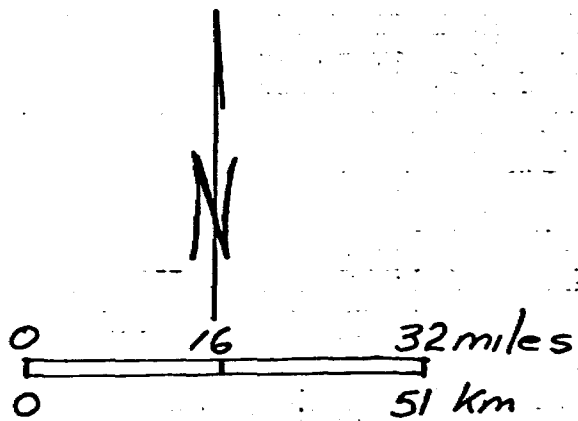
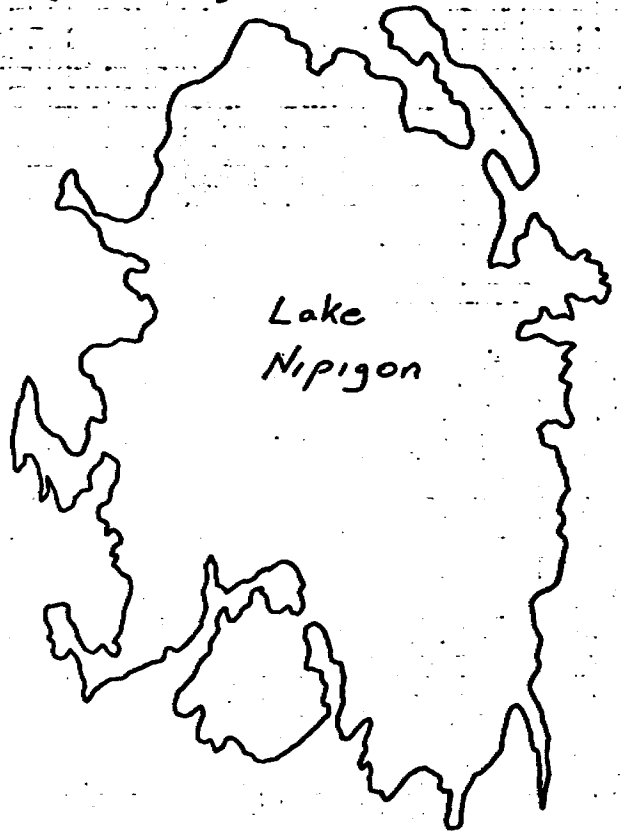


Fig. 1

Thunder Bay

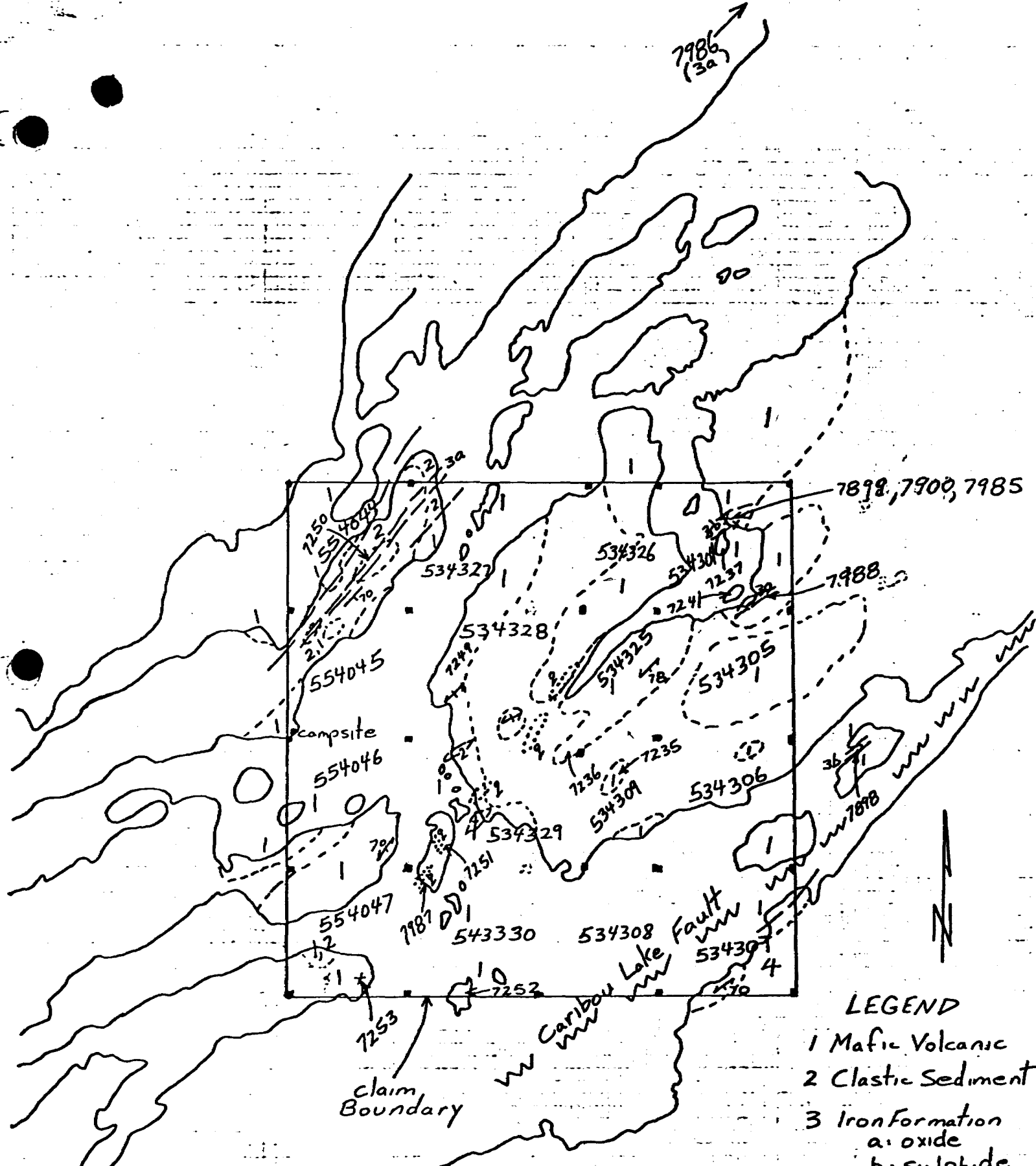
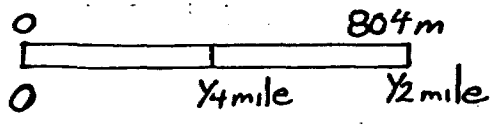


FIG. 2



- LEGEND
- 1 Mafic Volcanic
 - 2 Clastic Sediment
 - 3 Iron Formation
a: oxide
b: sulphide
 - 4 Granitic Intrusion
 - † talc alteration
 - ⋯⋯⋯ quartz vein
 - - - - - outcrop Area
 - Claim Post

SAMPLE DATA SHEET

Table

LOCATION	SAMPLE TYPE AND NUMBER	DIMENSIONS OF MINERALIZED ZONE	MINERALOGICAL DESCRIPTION	STRUCTURAL DATA	ANALYSIS					COMMENT
					Cu ppm	Zn ppm	Ag ppm	Au ppb	Pb	
cellar	Grab 7958		Late calcite splashes in unaltered matrix with assoc. mag. - bearing sed.				det	10		
cellar	Grab 7957		White, sugary qtz vein 2' cc x cutting sed & volc; No visible min.		100			10		
cellar min - host area	Grab 7986		Chert iron ore with minor oxide & patchy py & py stringers		138	23		60		
cellar	Grab 7985		Massive - semimassive py with some interlayered qtz; host rock by prob. sed.		72 5600	21	0.3	150		
cellar	Grab 7984		calcite vein cut by qtz vein both with patchy cpy		5600			1710		
cellar	Grab 7983		Dissem. py in chertic - biotitic volc. or sed					230		
cellar	6' Chip-Grab 7982		3' either side of 1' qtz vein; mafic, chertic volc.		538		0.4	120		
cellar	1' Chip 7981		1' wide milky white qtz vein with cpy, py & calcite patches		2600		1.2	690		
cellar	6' Chip-Grab 7980		Qtz-calcite veinlets & lenses with cpy, py in mafic volc.		240		nil	10		

SAMPLE DATA SHEET

Tab 1

LOCATION: LOCAL	SAMPLE TYPE AND NUMBER	DIMENSIONS OF MINERALIZED ZONE	MINERALOGICAL DESCRIPTION	STRUCTURAL DATA	ANALYSIS					COMMENTS
					Cu ppm	Zn ppm	Ag ppm	Au ppm	Pb ppm	
	7235		aphanitic mafic min. qtz - cel. Volcanic		30	27		-	21	
	7236		quartz - rich sediment		69	22		.01	15	
	7237		carbonate - qtz - silicate sediment?		26	33			71	
	7238		f.g. mafic volcanic		131	41		.03	77	
	7239		"		318	26		.14	60	
	7240		showing: ^{qtz vein} in mafic volc.		8200	69		1.12	60	
	7241		qtz - silicate - graphite? sediment?		80	104			60	
	7242		aphanitic mafic volc qtz veins with py		1800	51		.33	56	
	7243		quartz - rich sediment		39	11		n.i	17	
	7244		f.g. mafic volcanic		117	63		.01	48	
	7245		qtz vein: 1/4" wide		163	4		.03	9	
	7246		talc - chlorite schist		5	15		n.i	30	
	7247		f.g. mafic py Volc.		177	54		-	51	
	7248		quartz - silicate weak rgn; iron fm?		172	143		.02	133	
	7249		f.g. mafic volcanic		10	52		-	39	
	7250		Banded iron fm. (oxide)		28	28		.01	62	

SAMPLE DATA SHEET

Table 1

LOCATION: LOCAL	SAMPLE TYPE AND NUMBER	DIMENSIONS OF MINERALIZED ZONE	MINERALOGICAL DESCRIPTION	STRUCTURAL DATA	ANALYSIS					COMMENT
					Cu ppm	Zn ppm	Ag ppm	Au ppm	Pb ppm	
	7251		quartz vein: 2 meters wide		-	-	-	nil	-	
	7252		qtz-rich sediment		38	26	-	nil	37	
	7253		siliceous sed. volc.		65	31	-	.01	43	
	7854 Grab		clastic interflow sediment? trace py.		80		.2	30		
	7855 Grab		as for 7854; trace py, cpy		163		.3	40		float
	7856 Grab		qtz-carbonate shear with secondary sericite, talc				.2	160		float
	7857 Grab		as for 7856; more qtz - cc				nil	10		float
	7858 Grab		chlitic mafic with trace dissemin. py, cpy		314		.4	10		
	7859 Grab		minor py, cpy in chlitic mafic		112		.2	20		
	7860 Grab		qtz-calcite veinlets in chlitic mafic with trace py - cpy		104		.2	30		
	7861 Grab		as for 7860		89		nil	30		

ESSE MINERALS CANADA
 SAMPLE DATA SHEET

Table 1

LOCATION: + LOCAL	SAMPLE TYPE AND NUMBER	DIMENSIONS OF MINERALIZED ZONE	MINERALOGICAL DESCRIPTION	STRUCTURAL DATA	ANALYSIS					COMMENTS
					Cu ppm	Zn	Ag ppm	Au ppb	Pb	
	7862 Grab		as for 7860		510		.6	110		
	7863 Grab		mafic with minor cpy, py		132		nil	nil		
	7864 Grab		mafic volc. with matrix calcite & qtz-calcite patches tr. c.py		114		.2	30		
	7865 Grab		mafic with trace cpy-py & minor matrix calcite		122		.2	20		
	7866 Grab	vein 4" to 8"	white to dark glassy qtz vein; 5% cpy & local calcite		.81%		.24 3/11	.02 3/11		
	7867 4' chip grab	2' either side of 7866	mafic schist, minor matrix calcite		.05%		.01 3/11	.002 3/11		
	7868 1' chip grab		sugary qtz vein minor calcite; < 2% cpy		.31%		.13 3/11	.01 3/11		
	7869 6' chip grab		mafic schist includes 6" qtz vein		4200		2.5	160		
	7870 2.5' chip grab		glassy qtz vein with 3% cpy & minor calcite		1.16%		.20 3/11	.04 3/11		
	7871 5' chip grab		mafic schist + 6" qtz-calcite vein		290		.7	40		

SAMPLE DATA SHEET

Tal 1

LOCATION: LOCAL	SAMPLE TYPE AND NUMBER	DIMENSIONS OF MINERALIZED ZONE	MINERALOGICAL DESCRIPTION	STRUCTURAL DATA	ANALYSIS				COMMENTS	
					Cu ppm	Zn	Ag ppm	Au ppb		Pb
	7872 chip grab	3' chip-grab	8" qtz-calcite vein with 5% cpy in mafic rocks		110?		.34 3/T	.15 3/T		
	7873 5' chip grab		one vein 10" to 12" + a few qtz-calcite veinlets with cpy in mafic		.24?		.04 3/T	.02 3/T		
	7874 2' chip-grab		6" qtz-calcite-cpy veinlets in mafic		.61?		.22 3/T	.03 3/T		
	7875 3' chip grab		hanging wall mafic; no sulphide		147		.48 3/T	.40 3/T		
	7876 grab		from qtz vein muck; glassy with 1-2% cpy		.87%		.09 3/T	.02 3/T		
	7877 grab		sheared, chl., calcitic mafic		212		.5	30		
	7878 5' chip grab		6" zone of disseminated cpy-py + rare qtz-calcite in mafic		2200		2.3	440		
	7879 10' chip grab		well foliated, chl., calcite mafic volcanic with trace py		143		0.3	20		
	7880 1' chip grab		main qtz vein with 37-5% cpy		2.22%		.43 3/T	.04 3/T		
	7881 6' chip grab		3' either side of 7880; rare py in mafic		30		.5	232		

SAMPLE DATA SHEET

Table 1

LOCATION	SAMPLE TYPE AND NUMBER	DIMENSIONS OF MINERALIZED ZONE	MINERALOGICAL DESCRIPTION	STRUCTURAL DATA	ANALYSIS					COMMENTS
					Cu	Zn	Ag	Au	Pb	
					ppm	ppm	ppm	ppb		
	7882 3' chip grab		8" qtz-calcite vein in altd mafic host; No sulphide		1300		1.2	160		
	7883 3' chip grab		Several qtz-calcite veinlets with cpy in altd host		144		.2	40		
	7884 5' chip grab		intense shear zone with chlorite & calcite; Tr. Fuchsite		30		1.1	40		
	7885 7" chip grab		qtz vein with coarse calcite & 1-2% cpy		9%		3/4	3/4		
	7886 10' chip grab		3/8" to 3" cpy-qtz veins in altd sheared mafic volc.		1.27		.92	.03		
	7887 Grab		qtz-calcite-cpy veinlets in mafic volc.		.25		.47	.01		
	7888 7' chip grab		includes 2 veins each about 1' with 1% cpy; also several veinlets		.53		.11	.02		
	7889 4.5' chip grab		18" qtz (-calcite) vein with minor cpy in mafic		.05		.15	.005		
	7890 6' chip grab		4" qtz vein with 25% cpy in mafic		.24		.15	.12		
	7891 4' chip grab		6" to 8" qtz vein with 4% cpy in altd mafic (calcite-chl).		.21		.15	.09		

SAMPLE DATA SHEET

Table 1

LOCATION:	SAMPLE TYPE AND NUMBER	DIMENSIONS OF MINERALIZED ZONE	MINERALOGICAL DESCRIPTION	STRUCTURAL DATA	ANALYSIS				COMMENTS
					Cu	Zn	Ag	Au	
					ppm	ppm	ppm	ppb	
	7882 3' chip grab		8" qtz-calcite vein in altd mafic host; No sulphide		1300		1.2	160	
	7883 3' chip grab		Several qtz-calcite veinlets with cpy in altd host		149		.2	40	
	7884 5' chip grab		intense shear zone with chlorite & calcite; rr. Fuchsite		30		1.1	40	
	7885 7" chip grab		qtz vein with coarse calcite & 1-2% cpy		9%		3/4	3/4	
	7886 10' chip grab		3 1/2" to 8" cpy-qtz veins in altd shear mafic volc.		1.27		.92	.03	
	7887 Grab		qtz-calcite-cpy veinlets in mafic volc.		.25		.08	.01	
	7888 7' chip grab		includes 2 veins each about 1' with 1% cpy; also several veinlets		.53		.11	.02	
	7889 4.5' chip grab		18" qtz (-calcite) vein with minor cpy in mafic		.05		.15	.005	
	7890 6' chip grab		4" qtz vein with 25% cpy in mafic		.24		.15	.12	
	7891 4' chip grab		6" to 8" qtz vein with 4% cpy in altd mafic (calcite-chl).		.21		.15	.09	

SAMPLE DATA SHEET

Tal

LOCATION	SAMPLE TYPE AND NUMBER	DIMENSIONS OF MINERALIZED ZONE	MINERALOGICAL DESCRIPTION	STRUCTURAL DATA	ANALYSIS					COMMENTS
					Cu ppm	Zn	Ag ppm	Au ppb	Pb	
	7892 5' chip-grab		8 to 12" vein with 1 to 2% cpy in alt mafic		50 ⁹⁷		.10 3/11	.03 2/11		
	7893 8' chip-grab		scattered qtz-calcite veinlets in alt mafic; minor cpy		299		.7	90		
	7894 2' chip-grab		Strongly sheared calcite, chl. mafic with scattered qtz veinlets		153		.2	20		
	7895 grab		Sugary unmineralized qtz veins in mafics		36		nil	10		
	7896 grab.		brown-weathering mafic with calcite & minor py		-		-	30		
	7897 Grab		tr cpy, py in silicified mafic		169		nil	30		
	7898 Grab		weak sulphide iron fm; py.		-		.4	30		
	7899		} massive py-qtz iron fm.		-		.2	40		
	7900 Grab					-		.2	90	

Statement of Qualifications of Author

Larry J. Ferguson attended Carleton University from 1970 to 1974 and graduated with a B.Sc. Honours degree in geology. Mr. Ferguson attended the University of Western Ontario from 1975 to 1977 and graduated with a M.Sc. in geology. He has worked from 1978 to the present with Esso Minerals Canada as a field geologist in exploration. He is a member of the Prospectors and Developers Association, CIMM (National and Toronto Branch) and the Geological Association of Canada.

A handwritten signature in cursive script, appearing to read 'L.J. Ferguson', written in black ink.

L.J. Ferguson



52110SW0010 2.4417 LINKLATER LAKE

900

File _____

RECEIVED

DEC 16 1981

MINING LANDS SECTION

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey GEOLOGICAL

Township or Area LINKLATER LAKE - G 69

Claim holder(s) ESSO RESOURCES CANADA

Author of Report L. FERGUSON

Address ESSO MINERALS Box 4029 Station A Toronto

Covering Dates of Survey 04-07-81 to 25-11-81

Total Miles of Line 3.29
(line cutting to office)
chained chaining

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

534328

534329

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS
per claim

ENTER 40 days (includes
line cutting) for first
survey.

ENTER 20 days for each
additional survey using
same grid.

Geophysical
--Electromagnetic _____
--Magnetometer _____
--Radiometric _____
--Other _____
Geological 22
Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Dec 8/81 SIGNATURE: L. Ferguson
Author of Report or Agent

PROJECTS SECTION

Res. Geol. _____ Qualifications on this file

Previous Surveys _____

Checked by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

TOTAL CLAIMS 2

OFFICE USE ONLY

If space insufficient, attach list

Show instrument technical data in each space for type of survey submitted or indicate "not applicable"

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations _____ Number of Readings _____

Station interval _____

Line spacing _____

Profile scale or Contour intervals _____
(specify for each type of survey)

MAGNETIC

Instrument _____

Accuracy - Scale constant _____

Diurnal correction method _____

Base station location _____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: Fixed transmitter Shoot back In line Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION – RESISTIVITY

Instrument _____

Time domain _____ Frequency domain _____

Frequency _____ Range _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

2.4417

1982 09 27

~~2.4417~~

Mr. L.J. Ferguson
B.O. Box 4029
Station "D"
Toronto, Ontario
M5W 1K3

Dear Sir:

RE: Geological Survey and Data for Assaying
submitted on Mining Claims TB 534328-29
in the Linklater Lake Area

Upon receipt of your maps with the claim lines drawn it is obvious that your claims were not completely and systematically covered. Therefore, they do not qualify for Special Provisions credits.

Enclosed are two copies of the "Assessment Work Breakdown" form. Please complete both copies and return them to this office.

For further information, please contact Mr. F.W. Matthews at 965-1380.

Yours very truly

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone 416/965-1380

A. Barrisc

Encl.

cc: Mining Recorder
Thunder Bay.



Ministry of Natural Resources

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

J. Matthews

#040

FILE 110554528

Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

The Mining Act 2.4417

Type of Survey(s) GEOLOGICAL		Township or Area LINKLATER LAKE G-69	
Claim Holder(s) Esso Resources Canada		Prospector's Licence No. T872	
Address P.O. Box 4029 Station "A" Toronto, ON M5W 1K3			
Survey Company Esso Minerals Canada		Date of Survey (from & to) 4 7 81 25 11 81 Day Mo. Yr. Day Mo. Yr.	Total Miles of line 3.29 chained
Name and Address of Author (of Geo-Technical report) L.J. Ferguson P.O. Box 4029 Station "A" Toronto, ON M5W 1K3			

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	22
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	Days per Claim
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
	534328				
	534329				
	534328	38			
	534329	3938			

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DEC 22 1981
MINING LANDS SECTION

Expenditures (excludes power stripping)

Type of Work Performed *Beneficiation Analyses Studies*

Performed on Claim(s)
534328, 534329

Calculation of Expenditure Days Credits

Total Expenditures **\$ 1149.50** ÷ **15** = **76** Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded **120** Date Recorded *December 16/81* Mining Recorder *J. Matthews*

Date Approved *82:12:01*

Total number of mining claims covered by this report of work. **2**

Date *Dec 8/81* Recorded Holder or Agent (Signature) *L.J. Ferguson*

Certification Verifying Report of Work
I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying
L.J. Ferguson Esso Minerals Canada P.O. Box 4029 Station "A" Toronto, ON

M5W 1K3 Date Certified *Dec 8/81* Certified by (Signature) *L.J. Ferguson*



ESSO MINERALS CANADA
 120 ADELAIDE STREET WEST, P.O. BOX 4029, STATION "A"
 TORONTO, ONTARIO M5W 1K3

FENTON SCOTT
Vice President Exploration
 S. B. MACFACHERN
Regional Exploration Manager

October 8, 1982

File: 16.54.A04

Mr. E.F. Anderson
 Director
 Land Management Branch
 Whitney Block, Room 6450
 Queen's Park
 Toronto, ON
 M7A 1W3

RECEIVED	
Land Management Branch	
CIRCULATE <input type="checkbox"/>	<input type="checkbox"/>
COMMENTS PLEASE	<input type="checkbox"/>
BY	
OCT 14 1982	
E. F. ANDERSON	<input type="checkbox"/>
J. R. MORTON	<input type="checkbox"/>
J. C. SMITH	<input checked="" type="checkbox"/>
G. SHERMAN	<input type="checkbox"/>
J. M. SMALL	<input type="checkbox"/>
RETURN TO R. 6450	

Dear Sir:

As requested please find enclosed two completed copies of the "Assessment Work Breakdown" form for claims TB534328 and 534329 in the Linklater Lake Area. I trust this will help in your evaluation of our work filed for assessment.

Yours truly,

Larry Ferguson
 Geologist, Esso Minerals Canada

LF:mao
 Enclosure
 c.c. J. Pirie

Mining Lands Comments

- need cancelled cheques or receipts ✓
- no qualifications ✓
- map not coloured ✓
- no overburden ✓
- map not signed ✓

To: Geophysics

Comments

Approved Wish to see again with corrections

Date _____ Signature _____

To: Geology - Expenditures *Mr. Kustra*

Comments

approval subject to above

Approved Wish to see again with corrections

Date *June 18/82* Signature *E. Kustra*

To: Geochemistry

Comments

Approved Wish to see again with corrections

Date _____ Signature _____

To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

1. Type of Survey Geological
2. Township or Area Linklater Lake - G69
3. Numbers of Mining Claims Traversed by Survey 534328, 534329
-
-
-
4. Number of Miles of ^{Chained} ~~Line-Cut~~ 3.29 ~~Flown~~
- *5. Number of Stations Established
- *6. Make and type of Instrument Used
- *7. Scale Constant or Sensitivity
- *8. Frequency Used and Power Output

9. Summary of Assessment Credits (details on reverse side)

Total 8 hour Technical Days (Include Consultants, Draughting etc.) 6

Total 8 hour Line-Cutting Days 2

Calculation

$$\frac{6}{\text{Technical}} \times 7 = \frac{42}{\text{Line-cutting}} + \frac{2}{\text{Line-cutting}} = \frac{44}{\text{Line-cutting}} \div \frac{2}{\text{Number of claims}} = \frac{22}{\text{Assessment credits per claim}}$$

The dates listed on this form represent working time spent entirely within the limits of the above listed claims Check

If otherwise, please explain Draughting, Tabulating (Oct 28, 29/81) and Typing (Nov. 4/81) were carried out in the office. The field dates listed include time spent on other claims in the area. The numbers of 8 hour days on claims 534328, 534329 are totals of times spent on these claims during the listed dates.

Dated: October 27/82

Signed: [Signature]

- Note: (A) * Complete only if applicable.
 (B) Complete list of names, addresses and dates on reverse side.
 (C) Submit separate breakdown for each type of survey.
 (D) Submit in duplicate.

Details of Assessment Work Breakdown

FIELD WORK

<u>Type of Work</u>	<u>Name & Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days or claims</u>
Geological Survey	L. Ferguson Esso Minerals Box 4029, Toronto	Sept. 3, 4, 5, 1981	1
Geological Survey	D. Parbery 621 Kipp's Lane London	July 4 to 13, 1981	1
Geological Survey	R. May 1780 Harbour Dr. Cognit Ham, B.C.	July 4 to 13, 1981	1
Geological Survey	A. Adams 42 Cronin Dr. Islington	Sept. 3, 4, 5, 1981	1

CONSULTANTS

<u>Name & Address</u>	<u>Dates Worked (specify in field or office)</u>	<u>Number of 8 hour days</u>

DRAUGHTSMAN, TYPING, OTHERS (specify)

<u>Name & Address</u>	<u>Type of Work</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>
L. Ferguson (as above)	Drafting, Tabulating	October 28, 29, 1981	1.5
M. Oates Esso Minerals Box 4029 Toronto	Typing	November 4, 1981	0.5

TOTAL 8 HOUR TECHNICAL DAYS 6

LINE-CUTTING

<u>Name</u>	<u>Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>
D. Parbery	621 Kipp's Lane London	July 4 to 13, 1981	1
R. May	1780 Harbour Dr., Cognit Ham	July 4 to 13, 1981	1

TOTAL 8 HOUR LINE-CUTTING DAYS 2



ESSO MINERALS CANADA

120 ADELAIDE STREET WEST, P.O. BOX 4029, STATION "A"

TORONTO, ONTARIO M5W 1K3

FENTON SCOTT
Vice President Exploration

S. B. MACEACHERN
Regional Exploration Manager

2.4417

August 31, 1982

File: 16.54.A04

Mr. E.F. Anderson
Director
Land Management Branch
Ministry of Natural Resources
Whitney Block
Queen's Park, Toronto
M7A 1W3

Dear Sir:

Please find enclosed the data requested in your letter of July 16
pertaining to the assessment requirements on Mining Claims TB 534328-29
in the Linklater Lake area.

Yours truly,

L.J. Ferguson
Geologist

LJF:mao
Enclosure
c.c. J. Pirie

RECEIVED	
Land Management Branch	
CIRCULATE	<input type="checkbox"/>
COMMENTS PLEASE	<input type="checkbox"/>
BY	
SEP -7 1982	
E. F. ANDERSON	
J. R. MORTON	
J. C. SMITH	<input checked="" type="checkbox"/>
G. SHERMAN	
J. M. SMALL	
RETURN TO R.6450	



ESSO RESOURCES CANADA LIMITED
 ESSO RESSOURCES CANADA LIMITEE
 BOX 2356, EDMONTON, ALTA.

OPERATING ACCOUNT
 COMPTE D'EXPLOITATION

PAY TO THE ORDER OF
 PAYEZ À L'ORDRE DE

SWASTIKA
 LABORATORIES
 P O BOX 10
 SWASTIKA ONT

THE ROYAL BANK OF CANADA
 10025 JASPER AVE.,
 EDMONTON, ALTA. T5J 1S6

DO NOT WRITE BELOW THIS LINE
 NE PAS ÉCRIRE SOUS CETTE LIGNE

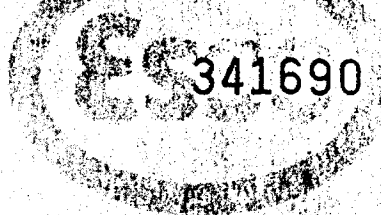
BY
 PAR

ATTORNEY
 PROCUREUR

⑈0341690⑈ ⑈04159⑈00⑈000⑈003⑈4⑈⑈

⑈0000050582⑈

CHEQUE NO. / CHEQUE	DATE	PAY THIS AMOUNT - MONTANT À PAYER
341690	09/24/81	*****505.82



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04159 003
 THE ROYAL BANK OF CANADA
 10025 JASPER AVE. BR
 EDMONTON ALBERTA
 T5J 1S6
 POK 140

0 6 1 0 1 9 8 1

10025 JASPER AVE.
 EDMONTON ALTA. T5J 1S6

John

SWASTIKA LABORATORIES LIMITED

FOR DEPOSIT ONLY IN
ACCOUNT NO. 133-373-T

1815110, 1815110
65972 - 003

ST 06

ROYAL BANK
ONTARIO CPC

434.250066



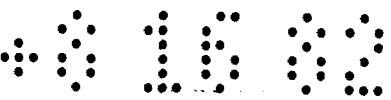
SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0 TELEPHONE: (705) 642-3244

483

SOLD TO

Esso Minerals Canada
Box 4029 Terminal A
Toronto, Ontario
M5W 1K3



SHIPPED TO

Att'n: Dr. J. Pirie

DATE	SHIPPED VIA	FED LICENCE NO	PROV LICENCE NO	YOUR ORDER NO	OUR ORDER NO	TERMS	Net	SALESMAN
Aug. 31/81						30 days		
QUANTITY	DESCRIPTION				UNIT PRICE	AMOUNT		
15	Au Assays PPM				\$ 7.25	\$ 108.75		
28	Cu Pb Zn Assays PPM				10.50	294.00		
29	Sample Handling				2.50	72.50		
	Cert. No. 52196 Aug. 28/81							
	Purolator charges for August 1981 - 05807475							
	05807470							
	05807466							
	05807469							
	<div data-bbox="598 941 987 1197" data-label="Text"> <p>APPROVED FOR PAYMENT: <i>[Signature]</i> CHARGE TO: ONT GEN S&M MGR 02 0905 3213 ME07</p> </div> <div data-bbox="1113 991 1386 1172" data-label="Text"> <p>RECEIVED SEP 9 1981 MINERALS</p> </div> <div data-bbox="1449 792 1932 1214" data-label="Text"> <p>Checked with Index to Payments Invoice # 341690 DATE 09/24/81 OUR YOU No. 09-0364 AMT. OF CHECK \$505.82</p> </div>							
	VOUCHER 09 0364 ITEM 012							
	TOTAL					\$ 505.82		

MOORE BUSINESS FORMS 3 7060E

FACTURE / INVOICE

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS
ESTABLISHED 1928





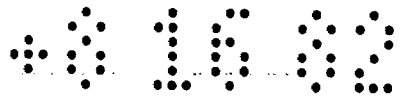
SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0 TELEPHONE: (705) 642-3244

4775

SOLD TO

Esso Minerals Canada
Box 4029 Terminal A
Toronto, Ontario
M5W 1K3



SHIP TO

URGENT
DO NOT HOLD

Att'n: Dr. J. Pirie

DATE	SHIPPED VIA	FED LICENCE NO	PROV LICENCE NO	YOUR ORDER NO	OUR ORDER NO	TERMS	SALESMAN
Aug. 25/81						Net 30 days	
QUANTITY	DESCRIPTION					UNIT PRICE	AMOUNT
1	As Assay Cert. No. 52037-A Aug. 21/81					\$16.00	\$ 16.00
64	Au Assays PPB					7.25	464.00
23	Ag Assays PPM					3.50	80.50
49	Cu Assays PPM					3.50	171.50
44	Zn Assays PPM					3.50	154.00
34	Pb Assays PPM					3.50	119.00
8	Ni Assays PPM					3.50	28.00
1	Mo Assay PPM					5.00	5.00
2	Co Assays PPM					3.50	7.00
88	Sample Handling Cert. No. 52049					2.50	220.00
1	As Assay PPM Cert. No. 52049 Aug. 24/81					5.00	5.00
TOTAL							\$1270.00

APPROVED FOR PAYMENT
to Payments

Checked with Invoice
INVOICE

PAID CHARGE TO:
02-0905 3223 M658

DATE 09/18/81
339980
CHECK No.

OUR VOUCHER No. 09-0362
\$1815.75

AMT. OF CHEQUE
Aug. 24/81

RECEIVED
SEP 2 1981
MINERALS

VOUCHER 095564 ITEM 027

MOORE BUSINESS FORMS 3 7080E

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

FACTURE / INVOICE

ESTABLISHED 1928





ESSO RESOURCES CANADA LIMITED
 ESSO RESSOURCES CANADA LIMITEE
 BOX 2356, EDMONTON, ALTA. T5J 2R5

OPERATING ACCOUNT
 COMPTE D'EXPLOITATION

PAY TO THE ORDER OF
 PAYEZ À L'ORDRE DE

SWASTIKA
 LABORATORIES LIMITED
 P O BOX 10
 SWASTIKA ONT

THE ROYAL BANK OF CANADA
 10025 JASPER AVE.,
 EDMONTON, ALTA. T5J 1G6

DO NOT WRITE BELOW THIS LINE
 NE PAS ÉCRIRE SOUS CETTE LIGNE

TRQUE No. / N ^o TR	DATE	PAY THIS AMOUNT - MONTANT À PAYER
350076	0/27/81	*****1,703.00

350076

John

ATTORNEY
 PROCUREUR

⑈0350076⑈ ⑈04159⑈003⑈ 000⑈003⑈ ⑈0000170300⑈

CANADA
 JASPER AVE
 EDMONTON ALBERTA
 T5J 1G6
 04159
 003
 0411198
 0159003
 THE ROYAL BANK OF CANADA
 OF
 JASPER AVE
 EDMONTON ALBERTA
 T5J 1G6
 04159
 003
 0411198

SWASTIKA LABORATORIES LIMITED

FOR DEPOSIT ONLY IN
ACCOUNT NO. 333-3733

05972 - 003
THE ROYAL BANK OF CANADA
KING & YONGE
TORONTO, ONTARIO
05972 - 003

0347

1954

1954

1954



ESSO RESOURCES CANADA LIMITED
 ESSO RESSOURCES CANADA LIMITEE
 BOX 2356, EDMONTON, ALTA. T5C 2R5

OPERATING ACCOUNT
 COMPTE D'EXPLOITATION

PAY TO THE ORDER OF
 PAYEZ À L'ORDRE DE

SWASTIKA
 LABORATORIES LIMITED 0 9 1 9 8 1
 P O BOX 10
 SWASTIKA ONT

THE ROYAL BANK OF CANADA
 10026 JASPER AVE.,
 EDMONTON, ALTA. T6J 1S6

DO NOT WRITE BELOW THIS LINE
 NE PAS ÉCRIRE SOUS CETTE LIGNE

CHEQUE NO DU BILLET	DATE	PAY THIS AMOUNT - MONTANT À PAYER
339980	09/18/81	*****1,815.75

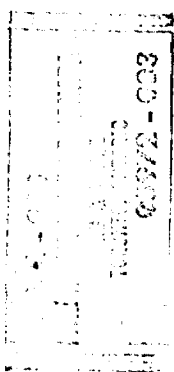
339980

J. E. Johnson

ATTORNEY
 PROCUREUR

⑈0339980⑈ ⑆04159⑈003⑆ ⑆000⑈003⑆ ⑆0000181575⑆

SWASTIKA LABORATORIES LIMITED



SWASTIKA
LABORATORIES
LIMITED
60872-003



SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0 TELEPHONE: (705) 642-3244

SOLD TO

Esso Minerals Canada
Box 4029 Terminal A
Toronto, Ontario
M5W 1K3

Att'n: Dr. J. Pirjevic

SHIP TO

DATE	SHIPPED VIA	FED LICENCE NO	PROV LICENCE NO	YOUR ORDER NO	OUR ORDER NO	TERMS	SALESMAN
Sept. 24/81			OCT 1 1981			Net 30 days	
QUANTITY	DESCRIPTION			UNIT PRICE	AMOUNT		
32	Au Assays PPB			7.25	\$ 232.00		
31	Ag Assays PPM			3.50	108.50		
24	Cu Assays PPM			3.50	84.00		
32	Sample Handling			2.50	80.00		
	Cert. No. <u>52318</u> Sept. 22/81						
22	Au Assays			7.25	159.50		
22	Ag Assays			7.25	159.50		
17	Cu Assays			5.50	93.50		
22	Sample Handling			2.50	55.00		
	Cert. No. <u>52318</u> Sept. 22/81						
2	Au Assays PPB			7.25	14.50		
2	Sample Handling			2.50	5.00		
	Cert. No. <u>52390</u> Sept. 21/81						
TOTAL						\$ 991.50	

FORWARDED
OCT 3 1981

APPROVED FOR PAYMENT:

CHARGE TO:

ANT 58 - 905

020905 3123 M658

MOORE BUSINESS FORMS 3 7060C

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANT

FACTURE / INVOICE

ESTABLISHED 1928

1982 07 16

2.4417

Mr. L.J. Ferguson
P.O. Box 4029
Station "D"
Toronto, Ontario
M5W 1K3

Dear Sir:

RE: Geological Survey and Data for Assaying
submitted on Mining Claims TB 524328-29
in the Linklater Lake area.

Enclosed is a copy of "Qualification of Author of Geotechnical Survey Report submitted for assessment work credits." Please submit a brief resume stating your qualifications to this office for our records.

Enclosed also are the maps (in duplicate) for the above mentioned survey. In order to complete your submission the following information is required by this office:

- a) maps must be signed.
- b) outcrop must be designated by colour and by a letter or number.
- c) the character of the overburden (boulder clay, gravel, sand, clay) and distribution of swamp, muskeg and forest cover.
- d) all claim lines and claim numbers must be shown.

We also require cancelled cheques or receipts to support your expenditures of \$1,149.50.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

A. Barr/sc

Encls:

cc: Mining Recorder, Thunder Bay.

Mining Recorder
Ministry of Natural Resources
435 James Street South
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6

2.4417

Dear Sir;

We have received data for Assaying submitted under Section 77(19) of the Mining Act R.S.O. 1980, and we have received reports and maps for a Geological survey submitted under Special Provisions (credit for Performance and Coverage) on mining claims TB 534328 et al in the Linklater Lake Area.

Also enclosed is the "report of work" which was sent to us by mistake.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone 416/965-1380

J. Skura

cc: Esso Resources Canada
Toronto, Ontario

Breakdown of Analyses, Assays

Total Samples: 62

<u>Analyses Breakdown</u>	<u>Cost</u>
29 Cu ppm at \$3.50 per	\$ 101.50
14 Cu, Zn, Pb ppm at \$10.50 per	\$ 147.00
29 Ag ppm at \$3.50 per	\$ 101.50
42 Au ppm at \$7.25 per	\$ 304.50
17 Cu % at \$5.50 per	\$ 93.50
17 Ag oz/ton at \$7.25 per	\$ 123.25
17 Au oz/ton at \$7.25 per	\$ 123.25
62 handling at \$2.50 per	<u>\$ 155.00</u>
TOTAL	\$1149.50



ESSO MINERALS CANADA

120 ADELAIDE STREET WEST, P.O. BOX 4029, STATION "A"

TORONTO, ONTARIO M5W 1K3

FENTON SCOTT

Vice President Exploration

S. B. MACEACHERN

Regional Exploration Manager

December 8, 1981

File: 16.54.A.04

Mr. E.F. Anderson
Director Lands Management Branch
Room 6450
Whitney Block
Queen's Park
Toronto, ON
M7A 1W3

RECEIVED

DEC 16 1981

MINING LANDS SECTION

Attention: Mining Lands Section

Dear Sir:

Please be informed that Esso Minerals is filing sufficient work on claim 534328 and 534329 in the Linklater Lake area to keep these claims in good standing until February 8, 1983. With respect to this recording please find enclosed in duplicate: 1) report of work form 2) technical data statement 3) geological report including map 4) four tables of sample analyses and 5) three invoices for cost of analyses. In addition, a claim map of the Linklater Lake area is attached. Copies of this data have also been sent to Mr. W. Mathew, Mining Recorder in Thunder Bay.

A total of 60 days is being applied to claim 534328 and 60 days to claim 534329. These two claims are currently under an extension until December 31, 1981.

Yours truly,

L.J. Ferguson
Geologist, Esso Minerals Canada

LJF:mao
Enclosures
c.c. J. Pirie

Names, Addresses and Qualifications
of Persons Involved in the Survey

- L. Ferguson, M.Sc.: Esso Minerals Canada, P.O. Box 4029, Station "A",
Toronto, Ontario M5W 1K3
- D. Parbery, B.Sc.: 621 Kipp's Lane, Apartment 101, London, Ontario
- R. May, B.A.: 1780 Harbour Drive, Coquitlan, British Columbia
- A. Adamo, B.Sc.: 42 Cronin Drive, Islington, Ontario

SCALLOP LAKE G-122

TOPOGRAPHY
LAKES, RIVERS, ETC., FROM FOREST RESOURCES
INVENTORY SHEET NO. 505884

DATE OF ISSUE
NOV 30 1981
Ministry of Natural Resources
TORONTO



DISPOSITION OF CROWN LANDS

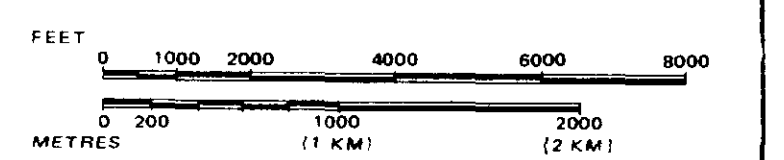
TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
.. SURFACE RIGHTS ONLY	○
.. MINING RIGHTS ONLY	◐
LEASE SURFACE & MINING RIGHTS	■
.. SURFACE RIGHTS ONLY	◑
.. MINING RIGHTS ONLY	◒
LICENCE OF OCCUPATION	◔
ORDER-IN-COUNCIL	OC
RESERVATION	⊙
CANCELLED	⊘
SAND & GRAVEL	⊗

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

LEGEND

MAIN ROAD	—
OTHER ROADS	- - -
TRAIL OR PATH	⋯
HIGHWAY ROUTE NO.	⑦
ELECTRIC POWER LINE	—●—
RAILROAD LINE	—+—+—+—
RAILROAD & RIGHT OF WAY	—+—+—+—+—+—
HARBOR PORTAGE	—x—x—x—
NON-PERENNIAL STREAM	~ ~ ~
EDGE OF CLEARING	⋈
TREELESS MISHKES OR MARSH	⋈
BRIDGE, BUILDINGS	—

SCALE: 1 INCH = 40 CHAINS

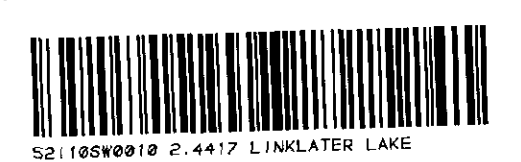


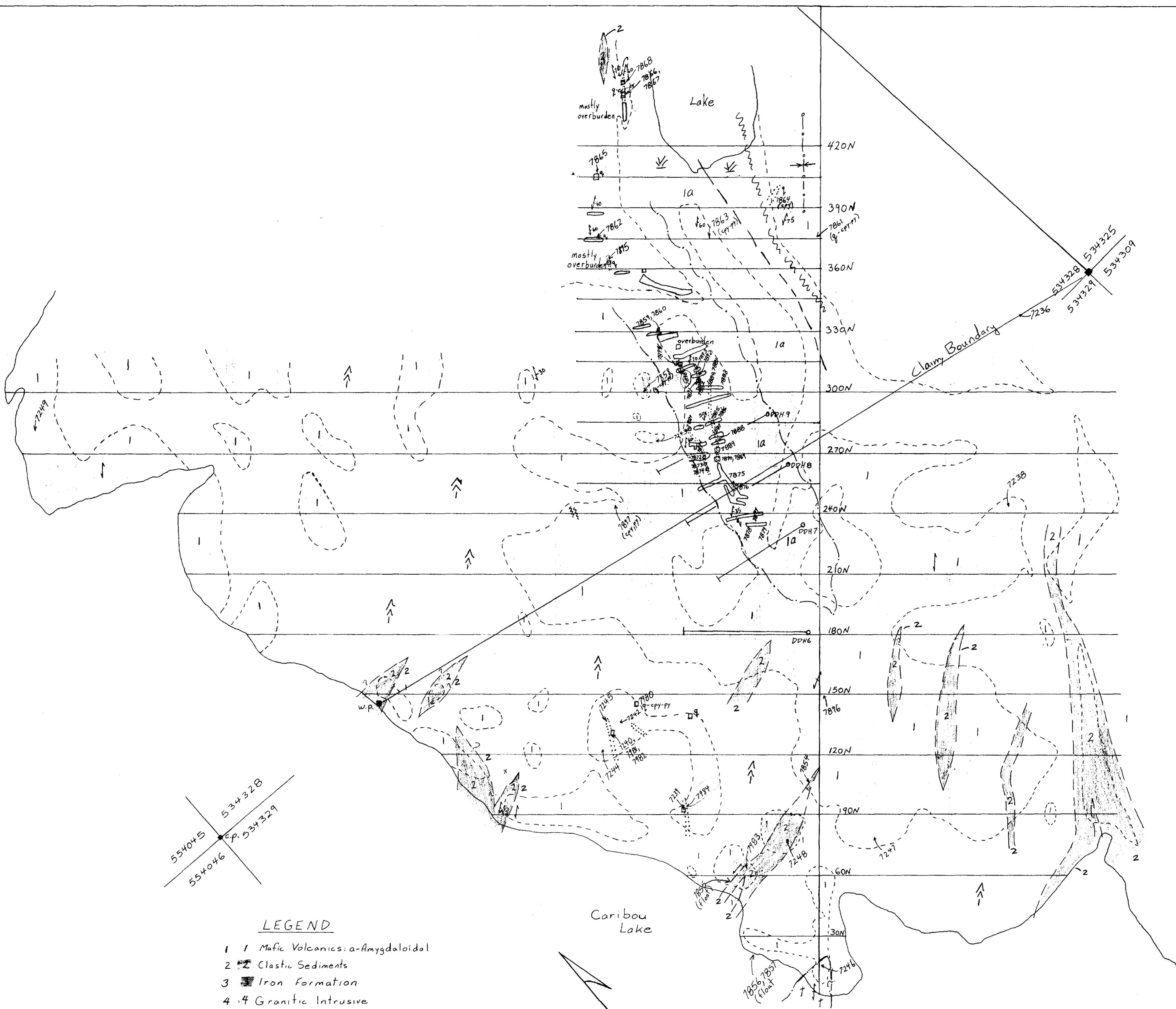
AREA
LINKLATER LAKE

M.N.R. ADMINISTRATIVE DISTRICT
NIPIGON
MINING DIVISION
THUNDER BAY
LAND TITLES / REGISTRY DIVISION
THUNDER BAY

Ministry of Natural Resources
Land Management Branch
Ontario

Date: MARCH 1981
Number: **G-69**



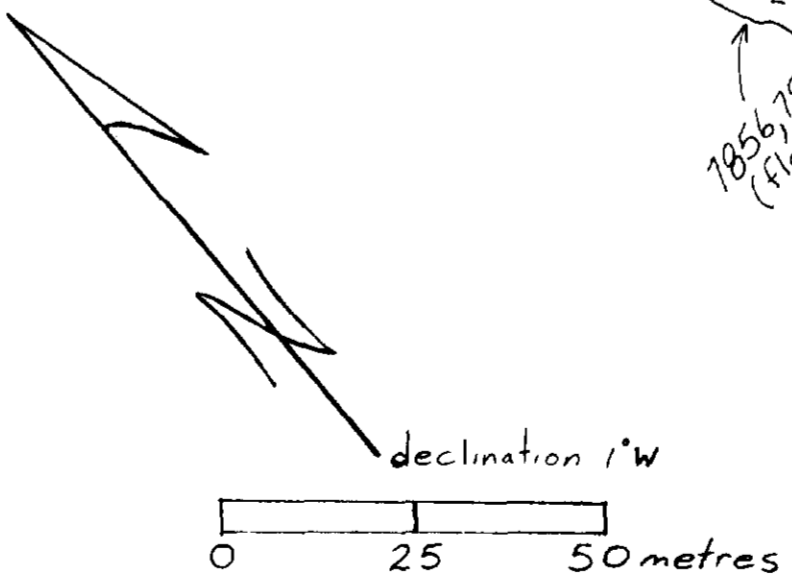


LEGEND

- 1 Mafic Volcanics: a-Amygdaloidal
- 2 Clastic Sediments
- 3 Iron Formation
- 4 Granitic Intrusive

SYMBOLS

- ⊞ Outcrop Area
- Geological Contact: approximate, assumed
- ~ Fault
- Alteration Boundary (carbonate, chlorite)
- x- Fold Axis: Syncline
- Trench
- Pit
- ⋯ Quartz Vein
- ▲ Foliation
- Claim Post
- 7889 Sample Number
- q Minor Quartz Veining
- cpy, py Chalcopyrite, Pyrite
- † Talc
- Central Manitoba Mines (location approximate) DRILL HOLE
- ⌵ Swamp
- ↑ Conifer Forest on clay-sand overburden



ESSO MINERALS CANADA DIV. OF ESSO RESOURCES CANADA LIMITED			
PROSPECT: KELLAR			
GEOLOGY - SAMPLING			
ACCOUNT NO	FILE NO 16.54	TORONTO	
SCALE 1:1000	DATE 1981 October 29		
AUTHOR D. Parbery L. Ferguson	NTS	DWG NO	Fig. 3

[Signature] 2.4417

