1995 Geology Report on the Oxbow Lake Property, South Lorrain Township, Ontario, Canada

An OPAP funded survey
carried out for
Mr. J.A. Gore
of
Cobalt, Ontario, Canada

R.V. Zalnieriunas
Larder Lake, Ontario
Anal. # 2.3914
January 6, 1996

SUMMARY:

A geological mapping survey and lithogeochemical sampling program was carried out on the 1995 grid of the Oxbow Lake property. The survey outlined a series of coarse to fine grained tholeiitic extrusive flows which interfinger with felsic and intermediate calc-alkaline metavolcanics. The metavolcanics were deposited in a submarine environment. A number of tuffaceous horizons were delineated. These tend to carry disseminated sulfides and are anomalous in base metal values. Soda depletion was noted for an intermediate crystal tuff horizon. Further work is recommended on the property.

1.0 Introduction:

A geological survey was carried out by the author on the Oxbow Lake property in South Lorrain Township, Ontario, Canada. The work was carried out in October 1995, at the request of the property owner, Mr. J.A. Gore of Cobalt, Ontario. This survey was funded as part of Mr. Gore's 1995 OPAP exploration program. The purpose of the work was to establish the base metal mineralizing potential of the property by examining in detail a well exposed area with known sulfide mineralization.

2.0 Property; Description and Location:

The Oxbow Lake property consists of two (2) unsurveyed claims . The claims are located in the southern half of the northeast quarter of South LorrainTownship, Ontario. These claims are:

	Claim Number	Units	Size (hectares)
	1118544	6	96
	1118450	10	160
Total =	2 claims	16 units	256 ha

The property is located south and east of Oxbow Lake. The claim group's western boundary is approximately 800 metres east of the Montreal River. The property forms part of a larger land holdings package in the immediate area, informally referred to as the "Southern Claims".

As noted by McIlwaine (1970) the topography of the township is rugged, with a maximum relief of 259m (850 ft). Hills in areas of Archean terrain are generally more rounded. Many of the ridges and swamps are structurally fault and contact controlled. Bedrock knolls and hills are commonly of one rock type with covered contacts located in the intervening valleys.

The property is covered by a mature stand of mixed forest consisting of spruce, balsam fir, some pine (both red and white) and white birch, poplar and minor quantities of oak, maple and larch. Minor amounts of water are available from the local beaver ponds. The best water source would be Oxbow Lake to the northwest.

2.1 Access:

The claim group is accessed via a 4 km ATV / snowmachine trail which follows an old established mine property road. This trail originates at Hwy. 567, a few kilometers south of the turn-off to Maidens Bay. A series of foot paths stem off this trail. These have been estalished to gain access to various parts of the property. Access time by foot at a brisk pace is approximately 20 minutes.

figure 1 Location

3.0 Survey Procedures and Parameters:

Personnel: R.V. Zalnieriunas, Box 214, Larder Lake, Ontario. P0K 1L0

Survey Dates: Field: October 12 to 16, 1995 (inclusive)
Office: October 23, 24 and December 31, 1995

Survey Control: Mapping on cut, chained and 25 metre picketted cross lines and baseline, with traverses run between lines by pace and compass.

Grid: 1.1 km baseline, azimuth at 270 degrees
4.025 km lines from L4E to L7W at 100m spacings
Established by J.A. Gore, Ruby Street, Cobalt, Ontario, P0J 1C0

Sampling: Representative hammer grab samples collected over entire grid, of which 11 samples submitted for lithogeochemical whole rock analysis .

4.0 Exploration History:

The South Lorrain township area has seen a thorough exploration effort directed towards the discovery of silver mineralization. The Oxbow Lake property claims have been extensively prospected for silver. This is well evidenced by the numerous pits, trenches and exploration shafts which are present. Much of this wok is undocumented, and the workings are now caved and covered. The majority of this work was probably carried out by Clifton Consolidated ML and earlier claim holders, prior to 1926.

The property is situated in a classic "Cobalt" style setting, having within it's boundaries potential silver hosting lithologies (Nipissing Diabase, Huronian sediments and greenstone basement) and is also located adjacent to some strong structures such as the Bulldog and Montreal River faults. The property, because of it's favourable location, has been intermittantly worked over a long period of time and has been held by numerous owners as part of various land packages.

A summary of known exploration activities, for this claim group is as follows:

a) date unknown: A.H. Sequin Estate

McIlwaine (1970) notes that the estate held two patented claims immediately southwest of Oxbow lake in the area now covered by the western half of claim 1118544. No information was available for this holdings.

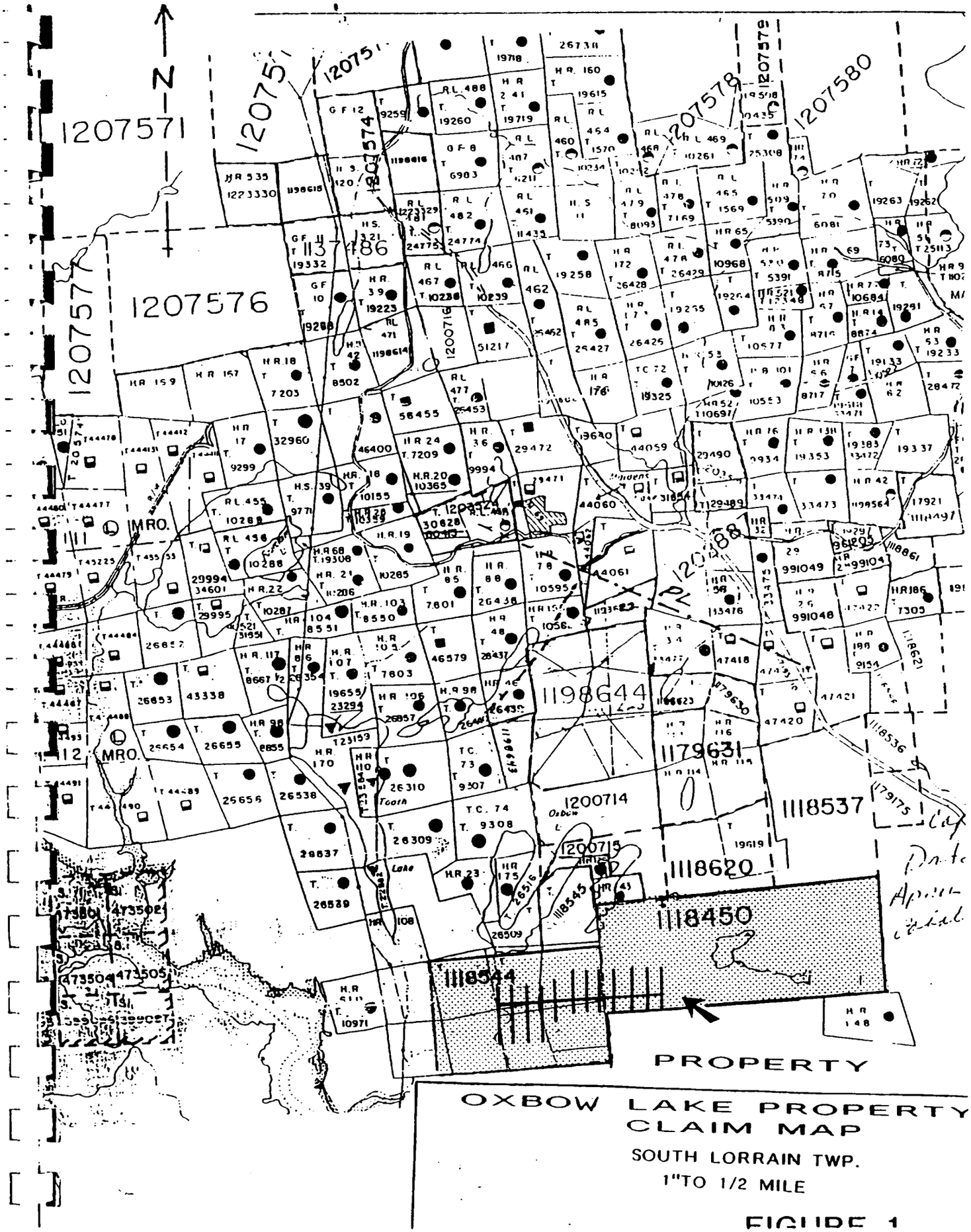
b) date unknown: Bulldog

The Bulldog shaft is located in the east central half of claim 1118450, east of the present grid. McIlwiane (1970) notes that the "Bulldog Shaft was put down in the early days, ... on a a brecciated area of the [Bulldog] fault. Considerable trenching was done to the northwest along the fault zone ..."

c) 1906: claim HS 46 (west of Bulldog shaft)

The claim survey map, dated June 21st, 1906, indicates that the discovery post for this claim was 12.5 chains S51W degrees from the claim's No.1 post. This is on the southwest corner of a shallow pond, approximately 200m west of the Bulldog Shaft.

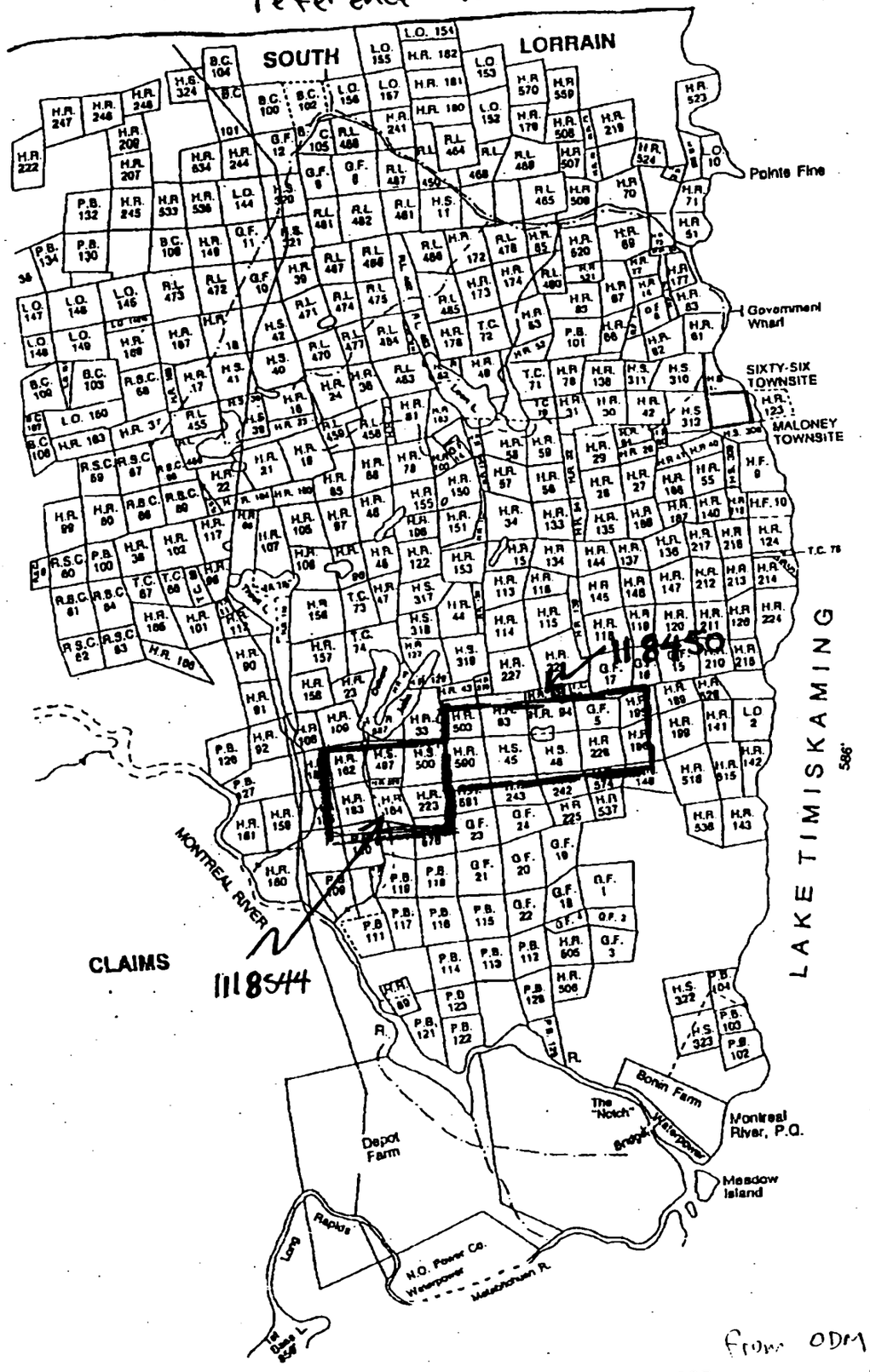
Figure 2 Location of proprty relative to old claim fabric



OXBOW LAKE PROPERTY
CLAIM MAP
SOUTH LORRAIN TWP.
1"TO 1/2 MILE

FIGURE 1

APPROXIMATE Location of the Oxbow Lake Property with reference to historical land holdings.



from ODM 10131 pt2, 1922

d) circa 1922: unknown (later Ox-Bow Silver ML property)

Knight (1922, p. 236 and repeated in McIlwaine, 1970, p.70) on reporting on a shaft located on claim T26507 (formerly HS500) stated; "There is a shaft on the property reported to be 38 feet deep in the Keewatin. On the dump beside the shaft, there is a calcite vein about half an inch in width. The shaft is about 400 to 500 feet south of the Nipissing diabase." (ODM vol 31, pt 2, pg 236)

e) circa 1925: Clifton Consolidated ML (later Ox-Bow Silver ML property)

The company aquired the property and carried out operations during April to December, 1925. Work consisted of road building, camp erection, 2,000 feet of stripping, sinking 6 pits through 25 feet of overburden, sinking 3 pits 10 feet into bedrock, sinking a shaft to a depth of 30 feet, and the complettion of 980 feet of diamond drilling. (ODM, vol 34, pt 1, pg 150)

f) 1946 - 1967: Ox-Bow Silver Mines Limited

Diamond drilling was reported to have been carried out in 1946 and 1953. Work in 1946 consisted of 14 diamond drill holes, 7 of which found cobalt mineralization. A vein 100 feet long and open at both ends was reported to have been outlined. Work in 1953 was supervised by E.B.E. Decamps. Cobalt mineralization was reported as occuring in ddh 53-7 and 53-8. (ODM GR 83, assessment files Cobalt RGO, Oxbow/Mensilvo/Elite ML, clippings file).

g) circa 1949: Oslund-Hermiston claim group (later Silver Tower ML)

R.Thompson noted the presence of galena in a prospect pit in the south-central area of the property. The galena and minor pyrite is hosted by a chlorite schist and is present as irregular streaks over a width of 5 feet. Carbonate is also present. A small fracture 80 feet west of this pit was noted to contain pink carbonate, galena and minor cobalt bloom. (R.Thompson notes, assessment files Cobalt RGO)

h) 1956: Elite Cobalt ML (later Silver Tower ML)

The company completed 4 diamond drill holes, of which 3 holes intersected galena mineralization in metavolcanics. Other sulfides noted in the logs were pyrite, chalcopyrite and pyrrhotite.

i) 1965-1966: Silver Tower Mines Limited

The company completed 4 diamond drill holes in 1965, which returned only minor silver values. A property report by L.J. Cunningham was completed in the following year.

j) circa 1970: claim T26517 (Ox-Bow Silver ML property)

McIlwaine (1970) shows the presence of a pit in the northwest quarter of this claim, marked with a "q" and eastward striking vein symbol, indicating a quartz vein being present.

k) 1992: A. Chitaroni (Elite Cobalt Base Metal Project)

An airborne magnetometer and VLF-EM survey covered the claims 1118450 and 1179175 and surrounding areas as part of an OPAP funded exploration program for Albert Chitaroni, by H.Ferderber Geophysics Ltd.. The property was subsequently prospected, sampled and drilled. Drilling consisted of the completion of 5 short holes for geological information. Three of these drill holes (AC-1-92 to AC-3-92) are in the vicinity of the present grid. A property and modelling review was completed by D. Robinson at year's end.

figure 3 : grid sketch relative to property outline

FIGURE 2

Air photo Grid location

l) !995: J.A. Gore

A reconnaisance VLEM survey was carried out in July 1995, centered over the galena pit of Clifton(?)-Oslund-Elite. A weak conductor, corresponding to a zone of weak disseminated sulfide mineralization and gossan development was defined 5m north of the pit, for a strike length of 300m. This zone is open on strike in both directions. The property, in conjunction with other claims was visited and reviewed by A.W. Beecham later that year. In addition to extensive prospecting and sampling, J.A. Gore completed a metric grid and ran a VLF-EM survey over an area identified as having base and precious metal mineralization potential. A geological survey was completed in October (this report) and a magnetometer survey was run at year's end.

5.0 General Geology:

The bulk of South Lorrain Township is classified as occuring in the Southern Province. Inliers of Archean basement occur in the notheastern quarter of the township. These areas most likely belong to the Superior structural province. The southeast corner of the township lies within the Grenville province. All bedrock exposures are Precambrian in age.

McIlwaine (1970) considered the township to be underlain by five (5) major lithological groups as follows:

1. Archean basement consisting of deformed and isoclinally folded greenstone metavolcanics and associate mafic intrusions cut by later felsic intrusives

2. The flat-lying Huronian aged Cobalt Group sediments which unconformably overlie the Archean.

3. Intrusive Nipissing diabase sheets, sills and dykes which intrude all older lithologies.

4. Unclassified metasediments of unknown age characterized by the presence of open folds.

5. Paragneisses of the Grenville Front tectonic zone.

Mineral exploration in the past concentrated on the development and exploitation of the well known Ag-Co+/- Cu-Ni style of vein mineralization found associated with the Nipissing diabase, particularly in the vicinity of Silver Centre. Exporation in parts of the township was halted in the 1970's with the imposition of the Temagami Land Caution and which was only lifted recently on the periheral land base and in a few selected townships. Current exploration is being carried out in the township for silver, cobalt, base metals and diamonds.

Figure 4: General Geology

A table of lithological units for the region is as follows:

CENOZOIC

RECENT: Swamp, lake and stream deposits.
PLEISTOCENE: Glacial deposits.
Unconformity

PRECAMBRIAN

GRENVILLE PROVINCE

Metasediments: Feldspathic paragneiss
Fault contact

UNCLASSIFIED

Metasediments: *Quartzoses and quartzose feldspathic paragneiss*
Fault contact

SOUTHERN PROVINCE

PROTEROZOIC

Late Mafic Intrusives: Diabase (Nipissing)
Intrusive contact

HURONIAN

Cobalt Group

Lorrain Formation; sandstones, quartzites and arkose
Firstbrook Formation; laminated mudstones and quartzite
Coleman Formation; wacke, siltstone, mudstone, conglomerate and tillite

Unconformity

SUPERIOR PROVINCE

ARCHEAN

Felsic to Intermediate Intrusives; granitoids
Early Mafic Intrusives; lamprophyre
Matavolcanics and Metasediments; intermediate to mafic flows, minor felsic metavolcanics, metasediments and occassional mafic intrusives

6.0 Property Geology:

Geological field work consisted of the mapping and reconnaisance sampling on and within the 1995 metric grid. This grid was established to examine and provide control on the exposed western third of an Archean greenstone window in the Proterozoic, in an area of historical pitting. Grid lines were pushed north to cross over and define the contact with the Nipissing Diabase, and south to define the contact with the Huronian sediments.

The upper contact of the Nipissing diabase sill crosses through the northwest corner of the 1995 grid. While diabase was mapped as occuring at the northern limits of lines 3E and 4E, the outcrop at L3E, 2+00N may only be an exteremly large boulder which has been glacially transported south from the main diabase sill to the north, and the bedrock outcrops found at L4E, 2+00N are more likely to be a coarser grained phase of the grabbroic lithologies found to the south. Both of these outcrops should be re-examined next year, as the exposures were freshly stripped of moss during this season and were quite dirty.

The greenstone mapped within the 1995 grid, can be subdivided into two lithological domains; that of an eastern coarse grained tholeiite gabbro sequence which some previous workers have regarded as being intrusive and a western fine grained extrusive volcanic zone. The approximate contact between these two domains trends 055 degrees to the northeast, from the southern end of L6W; 3+00s to the northern extent of L1E; 2+00N.

The eastern gabbroic domain consists of a series of northeast trending, medium to coarse grained, gabbroic flows or sills 40m to greater then 80m thick. The gabbros are tholeiitic in composition and are intercalated with a 40m to 60m thick band of mafic to intermediate calc-alkaline volcanics, showing massive, pillowed and tuffaceous textures, located between stations L0; 0+25N and L3E; 1+75N. A second, fine grained volcanic band passes through the domain from L1W, 0+37S to L4E, 0+75N. This band for the most part exhibits a schistose or tuffaceous texture and contains a moderate quantity of disseminated sulfides, mainly pyrite and possibly pyrrhotite. The sulfides may be primary in origin. Chemically the unit is tholeiitic, similar in composition to the surrounding gabbroic units. The zone probably represents a tuffaceous flow top and chill zone, probably to the southern gabbroic band. A pillow textured lens of mafic volcanics is located at L1E, 0+25S. A distintic band of bimodal, mixed intermediate and mafic crystal tuffs containing "blue" quartz eyes is developed on strike to this mafic band at L5W, 3+00S to L4W, 1+50S. The tuffs are a homogeneous mass of dacitic crystal tuffs which contain a variable amount of mafic lapilli sized chlorite clasts, streaks and zones oriented parallel to foliation.

The western domain consists of a central core of mafic massive and pillowed flows and related flow tops and pillow breccias. Minor barren sulfides were noted in the tuffaceous flow tops and rimming pillow selvages. These mafic volcanics are probably high iron tholeiites, but were not analysed during this exploration phase, except for one sample of pyritic hyaloclastite or mafic tuff. This sample proved to be metaliferously enriched in base metals and falls within the calc-alkaline field. The mafic volcanic core strikes approximately east-west and is bound to the north and south by zones of intermediate to felsic calc-alkaline metavolcanics. These would appear to be mainly flows and related tuffs showing good flow banding and auto-brecciation textures.

Typical , flat lying Coleman Formation tillite consisting of pebbly mudstone and minor conglomerate is found at the southern extermities of the grid, at L4W, 2+50S and from L1+00E, 1+00S to L4E, 0+50S.

7.0 Lithogeochemistry:

During the mapping program, eleven (11) bedrock samples were collected and submitted for whole rock analysis of major and minor elements plus sulfur and FeO. This work was carried out by Swastika Laborarories, a division of TSL / Assayers Inc., located at P.O. Box 10, Swastika, Ontario, P0K 1T0.

Copies of the analytical certificates of this sampling are presented in Appendix A. Sample preparation and analysis procedures are described in Appendix B. Data was entered into and analysed using the NewPet (c) version 94.01.07 software available from the Department of Earth Sciences at Memorial University of Newfoundland. Data was recalculated to an anhydrous state, FeO was used as reported while Fe2O3 was recalculated prior to data entry from total iron as Fe2O3* to only Fe2O3 by subtracting the value FeO*1.11135.

Selected bedrock grab samples were collected during mapping, by hammer and chisel from available ledges or knolls. Samples were subsequently trimmed by hammer to remove weathering rinds, organic material or traces of any visable alteration or veining and only such "fresh" material was submitted for analysis. material submitted ranged from one to two fists in size, which would represent about 0.5 to 1 kg in weight.

Samples and results are tabulated below. The anhydrous re-calculated Newpet database and resulting plots are presented in Appendix C.

Sample No.	Easting (m)	Northing (m)	Description and Code	Plotting Symbol
301	L4+03E	0+25N	cg massive gabbro (3G)	solid circle
305	L0+94W	1+05S	cg gabbro (3G)	solid circle
302	L4+48E	0+62N	cg sheared gabbroic mafic volcanic with sulfides (V7/3G)	solid square
303	L3+40E	0+35N	fg sheared mafic volcanic with 1% py, tr pink calcite (V7)	solid square
307	L4+01W	1+92S	massive / tuffaceous, mg chloritic intermediate volcanic (V5-7t)	open square
309	L5+10W	2+75S	mg intermediate crystal tuff with 3% py, tr cp(?) and qtz eyes (V5t)	open square
304	L1+00E	0+89N	fg mass mafic volcanic (V7)	solid diamond
308	L4+70W	1+40S	mafic volcanic tuff, sulfides (V7)	solid diamond
306	L2+55W	0+20S	felsic to intermeriate tuff, qtz eyes (V2/5t)	solid triangle up
310	L6+52W	1+98S	m-fg, intermediate to felsic, flow banded massive flow (V5/2m)	solid triangle, down
311	L6+95W	2+65S	mg, intermediate volcanic, sulfides (V5,sulf)	solid tiangle, down

8.0 Discussion:

8.1 Whole Rock Analysis Results (see also Appendicies A, B and C)

Two populations were defined by the current sampling program; a low silica group which has values less than 55% SiO2 and is tholeiitic in character and; a high sillica group (>65% SiO2) which is calc-alkaline. The following discussion reviews how individual lithologies fall within these two groups.

a) Gabbroic flow samples 301 and 305

Analytical results for these two samples are not clear, as the two sample can be clearly seen to be straddling the tholeiitic-calc-alkaline trend lines of Irvine and Baragar (fig.5) and Jensen (fig.10) plots. The Miyashiro plot of SiO2-FeO*/MgO (fig.6) indicates that these samples are tholeities and sample 305 is likely pulled into the calc-alkaline field due to the effects of Na2O+K2O alkaline enrichment (alteration). This is clearly seen by sample 305 falling within the alkaline field in a Na2O+K2O vs SiO2 plot (fig.7). The Le Maitre plots (fig's 8 & 9) show that sample 301 is a high-K basalt, while sample 305 now falls within the medium-K basaltic trachyandesite field, probably indicating therefore some Na2O additions. On the Jensen cation plot, sample 301 plots as a tholeiitic andesite while sample 305 falls within the calc-alkaline andesite field.

Sample 301 would appear to be moderately enriched in vanadium (494), and weakly enriched in copper (93) and zinc (185) values. Sample 305 shows a moderate zinc enricment (332).

b) Eastern domain, southern volcanic band, samples 302 & 303

These two samples fall within the high iron tholeiite fields of all plots. Sample 302 is alkaline as defined by the Irvine and Baragar Na2O+K2O vs SiO2 plot, probably due to alteration, and falls within Le Matre's high-K basanite field while sample 303 plots as a basaltic andesite. The Jensen plot only identifies these samples as high iron tholeiite basalts. Both samples have chemistries similar to the surrounding gabbros.

Both samples 302 and 303 show moderate zinc enrichment values (221 and 501).

c) Mixed bimodal, intermediate crystal tuffs, samples 307 and 309

These samples possibly represent the distal strike extension of the southern tholeiite volcanic band, the samples of which were discussed above. As with the previous samples, these tuffs fall clearly within the tholeiite field of Irvine and Baragar (fig.5) and Jensen (fig.10) plots but plot as calc-alkaline volcanics using the Miyashiro plot of SiO2 vs FeO*/MgO. Sample 309 plots as a medium-K dacite while sample 307 is a low-K dacite using the Le Maitre plots. The Jensen plot places both samples within the high iron tholeiite basalt range.

Sample 309 shows signs of a weak copper enrichment (114 ppm) and a strong Na2O depletion anomaly of 0.05% (anhydrous). Sodium values in sample 307 are slightly higher at 0.31% (anhydrous) with no significate base metal enrichment.

d) Other mafic and intermediate volcanics, samples 304 and 308

Sample 304 was taken from within the narrow northern mafic volcanic band in the eastern half of the grid, while sample 308 , a pyritic mafic tuff or hyaloclastite, came from the west half of the grid. The samples are calc-alkaline, with sample 308 straddling the calc-alkaline tholeiite boundary. The Le Maitre plots indicate that sample 304 is a medium-K rhyolite and sample 308

is a low-K basaltic andesite or basaltic trachyandesite. The Jensen plot shows sample 304 as a calc-alkaline dacite and 308 as a high iron or high magnesium tholeiitic basalt.

Sample 304 shows no metal gains, while sample 308 shows weak to moderate enrichment in Cr (129), Ni (114), Cu (129) and Zn (114).

e) Felsic to intermediate volcanics, samples 306, 310 and 311

All three samples fall within the calc-alkaline field. The Le Maitre plots indicate that all three samples are medium-K rhyolites, while on the Jensen diagram sample 306 falls within the calc-alkaline dacite field and samples 310 and 311 lie within the calc-alkaline andesite field.

All three samples show no signs of metal gain.

8.2 Economic Geology

As noted previously, there are numerous old surface workings throughout the property. The more significant are outlined below and are labled with the names now used by Mr. Gore:

a) Western Shaft (6+65W, 2+30S)

This shaft or exploration pit is no longer visable, having been filled in by the MNR a few years ago. It was located approximately in the centre of a small bulldozered clearing. A certain quantity of blasted muck is still present, which appears to be rhyolitic in composition. A minor amount of malachite staining was seen on some foliation planes from a few samples here. A small pit containing some base metal sulfides was shown to the author by Mr. Gore prior to mapping. It is located a few tens of meters east or east-southeast of this clearing but was not tied in during the course of mapping due to incleament weather conditions.

b) Copper Pit, (4+45W, BL0)

As with the shaft mentioned above, this pit has also been filled in by the MNR using a bulldozer. Some minor copper staining is present on foliation slip planes of muck samples found at the site. This pit is centred in an area of unusually deep overburden trenching. No bedrock was noted in the bottom of these workings as they are mostly caved.

c) Clifton / Ox-bow Shaft (2+87W, 0+07N)

This is at present a very dangerous hazard, as the lip of this shaft consists of loose overburden and blasted mine muck with the opening partly obscured with rotten timbers and vegetation debris. This feature was extensively drill tested by Oxbow ML in at least two diamond drilling campaigns ad were it is reported that a 100 foot long vein of cobalt mineralization was outlined. Some of the old drill casing can still be seen, but no cobalt mineralization was noted in a brief examination of the area.

d) Clifton Pit (1+40E, 0+80S)

This would appear to be a deep exploration pit or shaft, possibly 20 to 40 feet deep or more based on the apparent muck pile. It is located at th contact of the greenstones with the Huronian sediments.

e) Galena Pit (3+50E, BL0)

This is the feature that is most noted in the historical records of the property. It is a rather nondescript, 6-sided pit sunk in bedrock, about 2m by 1m in dimension. It is located within moderately to weakly foliated, medium to fine grained gabbro or mafic volcanic at the contact with a fine grained intermediate rock. This unit has been previously described as a sediment, but may also be an intermediate intrusive sill / dyke. The contact strikes east-west and dips steeply north at 80 degrees. The galena is not readily visable on weathered surfaces and is found as disseminated slips on the foliation planes in the gabbro. It appears to range in content from 1% to locally 5% galena.

9.0 Conclussions and Recomendations:

Mapping on the 1995 grid began to outline and delinate the lithologies present in the Archean inlier located south of Oxbow Lake. Mapping indicates that the stratigraphy srikes at 060 to 090 degrees and dips moderately to steeply north. Two foliations were noted to be present, the first lies sub-parallel to bedding and the second foliation is subvertical and strikes easterly. A certain amount of deformation is present as pillows have been streatched in an east-west direction into molar tooth patterns. The volcanic flows appear to form a north dipping homocline, but a probably are arrange as a series of exteremly tight isoclinal folds which trend east-west and are slightly overturned. A series of medium to coarse grained, gabbroic textured flows found on the eastern half of the grid, interdigitates with fine grained tholeiitic mafic flows and calc-alkalic intermediate to felsic metavolcanics to the west. The flows were deposited in a submarine environment, based on the presence of pillow textured flows. The tuffaceous and hyalocastite bands represent minor flow tops and basinal deposits. They are frequently associated with barren disseminated sulfide mineralization. They appear to be geochemically preferentially enriched in base metal elements as are all the tholeiitic flows. The reconnaisance lithogeological sampling also apears to have defined a sodium depletion zone within a band of intermediate crystal tuffs, located at the southern ends of lines 5W and 4W.

Because of the favourably defined environment and lithogeochemical results, further work is recommended on the property. This would consist of extending the grid to cover the balance of the claims, additional prospecting, geological mapping, preliminary geophysical coverage and the continuation of the lithogeochemical sampling program. In addition to working within the Archean inlier, it is suggested that an attempt be made to follow-up results in areas of thin Proterozoic cover, either by using deep sensing geophysical methods or by diamond drilling.

R.V. Zalnieriunas
Larder Lake, Ontario
January 6, 1996

10.0 References:

Knight, C.W., 1922: "Geology of the mine workings of Cobalt and South Lorrain silver areas", Ontario Department of Mines, Vol. 31, part 2, 374p (published in 1924), and accompanying maps.

McIlwaine, W.H., 1970: "Geology of South Lorrain Township", Ontario Department of Mines and Northern Affairs Geological Report 83, 95p., accompanied with Map 2194 "South Lorrain Township, District of Timiskaming. Scale, 1 inch to 1/2 mile" and Charts A and B

11.0 Qualifications:

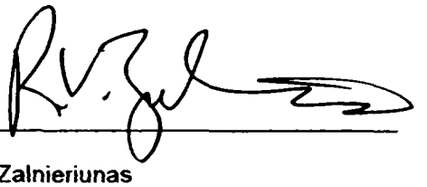
I, Rimant (Ray) Victor Zalnieriunas, of Larder Lake, Ontario, Canada, do hereby certify,

a) That I am a geologist, who has been contiuously practising his trade since graduation from Queen's University, at Kingston, Ontario, from which I received a degree of B.Sc. (Hon) in geology in 1979, and

b) That I currently reside at 14 MacDonald Street, P.O. Box 214, Larder Lake, Ontario, P0K 1L0, tel: (705) 643-2258, and

c) That I have no vested interest in this property,

Signed on this day of January 6, 1996,

x 

R.V. Zalnieriunas

File Name C:\NEWPET\GORE95.ROC Anhydrous
01-01-1996 11:39:52

Sample	301	302	303	304	305	306	307	308	309	310
Locality 1										
Locality 2										
Plot Symbol	3	6	6	15	3	8	4	15	4	10
Plot Colour	4	5	5	15	4	14	6	15	6	10
Rock Type										
Anhyd Coeff	1.02836	1.02644	1.07785	1.04069	1.03634	1.01426	1.05630	1.03258	1.03665	1.02557
SiO_2	50.03	43.95	52.85	70.91	52.75	70.51	72.21	53.89	73.93	77.55
TiO_2	2.05	1.52	2.27	0.44	0.58	0.23	0.72	1.08	0.74	0.25
Al_2O_3	16.71	11.85	13.39	14.81	21.03	16.16	10.84	15.59	10.88	12.24
Fe_2O_3	5.59	16.37	3.56	0.75	1.55	0.29	1.25	3.48	1.26	0.26
FeO	8.84	14.80	15.23	3.64	7.70	2.52	8.15	7.37	7.40	3.44
MnO	0.31	0.27	0.23	0.05	0.37	0.05	0.06	0.20	0.06	0.03
MgO	3.98	2.28	7.64	2.10	4.53	1.92	5.05	6.32	3.84	2.93
CaO	8.77	4.25	2.85	0.56	4.50	0.32	0.08	6.60	0.09	-
Na_2O	2.04	3.47	1.51	3.55	5.79	5.67	0.31	5.15	0.05	0.10
K_2O	1.58	0.39	0.32	3.04	1.08	2.21	1.20	0.21	1.55	3.12
P_2O_5	0.10	0.86	0.15	0.15	0.12	0.12	0.13	0.10	0.19	0.08
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
LOI	2.22	1.73	4.79	1.86	2.85	1.48	3.50	1.89	3.11	2.34
Mg #	33.83	12.09	42.48	46.46	47.02	55.18	49.24	51.73	44.47	58.73
Cr	93	46	38	1	16	1	58	129	114	36
Ni	57	31	1	31	36	10	16	114	73	36
Co	41	21	27	10	21	20	16	31	26	10
Sc	41	23	44	8	30	3	14	47	11	2
V	494	36	366	57	166	51	69	305	47	26
Cu	93	46	38	1	16	1	58	129	114	36
Zn	185	221	501	57	332	51	48	114	62	31
S	0.14	0.23	0.96	-	0.01	0.01	0.01	0.14	0.28	0.01
Rb	0	0	0	0	0	0	0	0	0	0
Ba	380	123	97	572	529	345	222	114	145	349
Nb	1.0	1.0	1.1	1.0	1.0	1.0	1.1	1.0	1.0	1.0
Zr	51	133	75	146	114	101	433	52	487	544
Y	16	103	45	19	31	10	137	14	114	197
Density	2.65	2.76	2.72	2.39	2.56	2.37	2.48	2.59	2.45	2.37

File Name C:\NEWPET\GORE95.ROC
01-01-1996 11:39:53

Sample	311
Locality 1	
Locality 2	
Plot Symbol	10
Plot Colour	10
Rock Type	
Anhyd Coeff	1.02664
SiO_2	76.37
TiO_2	0.27
Al_2O_3	11.28
Fe_2O_3	1.48
FeO	3.74
MnO	0.04
MgO	2.16
CaO	0.69
Na_2O	1.84
K_2O	2.07
P_2O_5	0.06
Total	100.00
LOI	2.15
Mg #	43.10
Cr	56
Ni	31
Co	21
Sc	3
V	21
Cu	56
Zn	56
S	0.73
Rb	0
Ba	452
Nb	1.0
Zr	534
Y	133
Density	2.38

Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting - Representation

Established 1928

Assay Certificate

5W-4177-RA1

Company: **J.A. GORE**
Project: 1995 OPAP
Attn: J. A. Gore/R. Zalnieriunas

Date: NOV-02-95

We hereby certify the following Assay of 11 Grab samples submitted OCT-25-95 by .

Sample Number	Feo %	S %	WRA -
301	8.60	0.14	Results
302	14.42	0.22	to
303	14.13	0.89	follow
304	3.50	<0.01	
305	7.43	0.01	
306	2.48	0.01	
307	7.72	0.01	
308	7.14	0.14	
309	7.14	0.27	
310	3.35	0.01	
311	3.64	0.71	

Certified by _____

P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 642-3244 FAX (705)642-3300

TSL/ASSAYERS Laboratories

1270 FOSTER DRIVE. UNIT 3 MISSISSAUGA,ONTARIO L4W-1A4
PHONE #: (905)602-8236 FAX #: (905)206-0513

J.A. GORE
ATTN: R. V. ZALNIERIUNAS
PROJ: 1995 OPAP

SW-4177-RAI

REPORT No. : M5915
Page No. : 1 of 1
File No. : NV01RB
Date : NOV-01-1995

I.C.A.P. TOTAL OXIDE ANALYSIS

Lithium MetaBorate Fusion

SAMPLE #	SiO2 %	Al2O3 %	Fe2O3 %	CaO %	MgO %	Na2O %	K2O %	TiO2 %	MnO %	P2O5 %	Ba ppm	Zr ppm	Y ppm	Sc ppm	Nb ppm	Be ppm	Ni ppm	Cr ppm	Cu ppm	V ppm	Co ppm	Zn ppm	Rb %	LOI %	TOTAL %
301	48.65	16.25	14.99	8.53	3.87	1.98	1.54	1.99	0.30	0.10	370	50	16	40	< 30	< 1	55	370	90	480	40	180	<0.05	2.22	100.41
302	42.82	11.54	31.97	4.14	2.22	3.38	0.38	1.48	0.26	0.84	120	130	100	22	< 30	< 1	30	170	45	35	20	215	<0.05	1.73	100.78
303	49.03	12.42	19.01	2.64	7.09	1.40	0.30	2.11	0.21	0.14	90	70	42	41	< 30	< 1	< 5	200	35	340	25	465	<0.05	4.79	99.16
304	68.14	14.23	4.61	0.54	2.02	3.61	2.92	0.42	0.05	0.14	550	140	18	8	< 30	2	30	410	< 5	55	10	55	<0.05	1.86	98.34
305	50.90	20.29	9.75	4.34	4.37	5.59	1.04	0.56	0.36	0.12	510	110	30	29	< 30	1	35	340	15	160	20	320	<0.05	2.85	100.18
306	69.52	15.93	3.04	0.32	1.89	5.59	2.18	0.23	0.05	0.12	340	100	10	3	< 30	1	10	445	< 5	50	20	50	<0.05	1.48	100.34
307	68.36	10.26	9.76	0.08	4.78	0.29	1.14	0.68	0.06	0.12	210	410	130	13	< 30	< 1	15	230	55	65	15	45	<0.05	3.50	99.05
308	52.19	15.10	11.31	6.39	6.12	4.99	0.20	1.05	0.19	0.10	110	50	14	46	< 30	< 1	110	520	125	295	30	110	<0.05	1.89	99.51
309	71.32	10.50	9.15	0.09	3.70	0.05	1.50	0.71	0.06	0.18	140	470	110	11	< 30	< 1	70	665	110	45	25	60	<0.05	3.11	100.36
310	75.62	11.93	3.98	<0.01	2.86	0.10	3.04	0.24	0.03	0.08	340	530	192	2	< 30	1	35	695	35	25	10	30	<0.05	2.34	100.19
311	74.39	10.99	5.49	0.67	2.10	1.79	2.02	0.26	0.04	0.06	440	520	130	3	< 30	2	30	565	55	20	20	55	<0.05	2.15	100.02

SIGNED :

SL/95

Appendix B: Analytical Proceedures

Swastika Laboratories
A Division of TSL/Assayers Inc.
Assaying - Consulting - Representation
Established 1928

ROUTINE SAMPLE PREPARATION

1) Dry samples if required.
2) Crush total sample to 1/2 inch (Jaw Crusher)
3) Crush total sample to 10 mesh (Rolls Crusher)
4) Split Approximately 350 grams using a Jones riffle.
5) The remaining reject is placed in a plastic bag, and packed in cartons with sample numbers listed on the outside.
6) Pulverize the 350g sample using a disc pulverizer. Ring mill pulverization is optional.
7) Homogenize the pulp, it is then ready for assay.

Sample preparation quality is assured by regular inspection, maintenance of crushing equipment, training and supervision of our staff to ensure that proper technique is utilized.

We prepare and analyze second pulps from stored rejects. The resulting data is compared with original results to verify sample sequence and also that repeatability is within acceptable limits.

To ensure that there is no dilution or concentration of various minerals, dust loss is kept at a minimum. For the critical pulverizing step, we have equipped our pulverizers with automatic draft shut off damper to eliminate sample pulp loss.

To prevent cross contamination, we use compressed air jets to clean the equipment between samples. The rolls crusher is cleaned using a wire brush combined with air jets. this system does a thorough cleaning. Also barren abrasive material is crushed between batches as an extra precaution.

P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705)642-3244 FAX (705)642-3300

Swastika Laboratories
A Division of TSL/Assayers Inc.
Established 1928
Assaying - Consulting - Representation

Element	Detection Limit	Threshold
Sc	1 PPM	25 %
Be	1 PPM	25 %

DETERMINATION OF TOTAL SULPHUR IN A ROCK

Total sulphur is determined titrimetrically following combustion in a leco induction furnace. A sample size of 1 gram or less is used (in the case of high sulphur content 0.1 gram of sample is used.) Iron chip, copper and tin accelerators are added. The sample is fused and the S02 formed is titrated with K103 in the present of starch as indicator until S02 (sulphur dioxide) ceases to be evolved.

Detection Limit is .01% with an upper threshold of 60%.

An analytical run consists of 10 samples, a blank, control (standard) sample and repeat.

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Telephone (705)642-3244 FAX (705)642-3300

Swastika Laboratories
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WHOLE ROCK DISSOLUTION AND ANALYSIS BY ICAP

Dissolution:

Previously pulverized (<200 mesh) sample is dried overnight at 105C. The sample is weighed into a graphite crucible containing a mixture of lithium carbonate and boric acid. The sample is fused by a proprietary method and added to a dilute nitric acid solution containing an internal standard. This mixture is further diluted and an aliquot is taken for analysis.

Analysis:

The determinations of all metals are performed by an Inductively Coupled Argon Plasma with a 34 channel direct-reading, background, corrected, spectrometer. Calibration is performed using international rock standards and reagent blanks for the major oxides and synthetic standards for the minor elements. For every ten samples tested a reagent blank and an additional international rock standard is fused and run to verify accuracy. One sample is repeated for every 10 samples analyzed. The long term precision of the method for rock material has been demonstrated to be below 2% for elements significantly above detection limits. Spectral interference correction is automatically performed using a matrix subtraction technique for each concomitant.

Element	Detection Limit	Threshold
SiO2	.01 %	100 %
Al2O3	.01 %	50 %
CaO	.01 %	100 %
MgO	.01 %	100 %
Na2O	.01 %	100 %
K2O	.02 %	100 %
Fe2O3	.01 %	75 %
MnO	.01 %	100 %
TiO2	.01 %	75 %
P2O5	.02 %	100 %
Cr2O3	5 PPM	50 %
LOI	.01 %	100 %
S	.01 %	60 %
Y	2 PPM	25 %
Zr	10 PPM	25 %
Cu	5 PPM	25 %
Zn	5 PPM	25 %
Ni	5 PPM	25 %
Co	5 PPM	25 %
Nb	30 PPM	25 %
Rb	.05 %	25 %
Sr	10 PPM	25 %
Ba	10 PPM	25 %
V	5 PPM	25 %

P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 642-3244 FAX (705) 642-3300

Appendix C: Re-calculated Whole Rock Data and Plots

Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting - Representation

Established 1928

Assay Certificate

5W-4177-RA1

Company: **J.A. GORE**
Project: 1995 OPAP
Attn: J. A. Gore/R. Zalnieriunas

Date: NOV-02-95

We hereby certify the following Assay of 11 Grab samples submitted OCT-25-95 by .

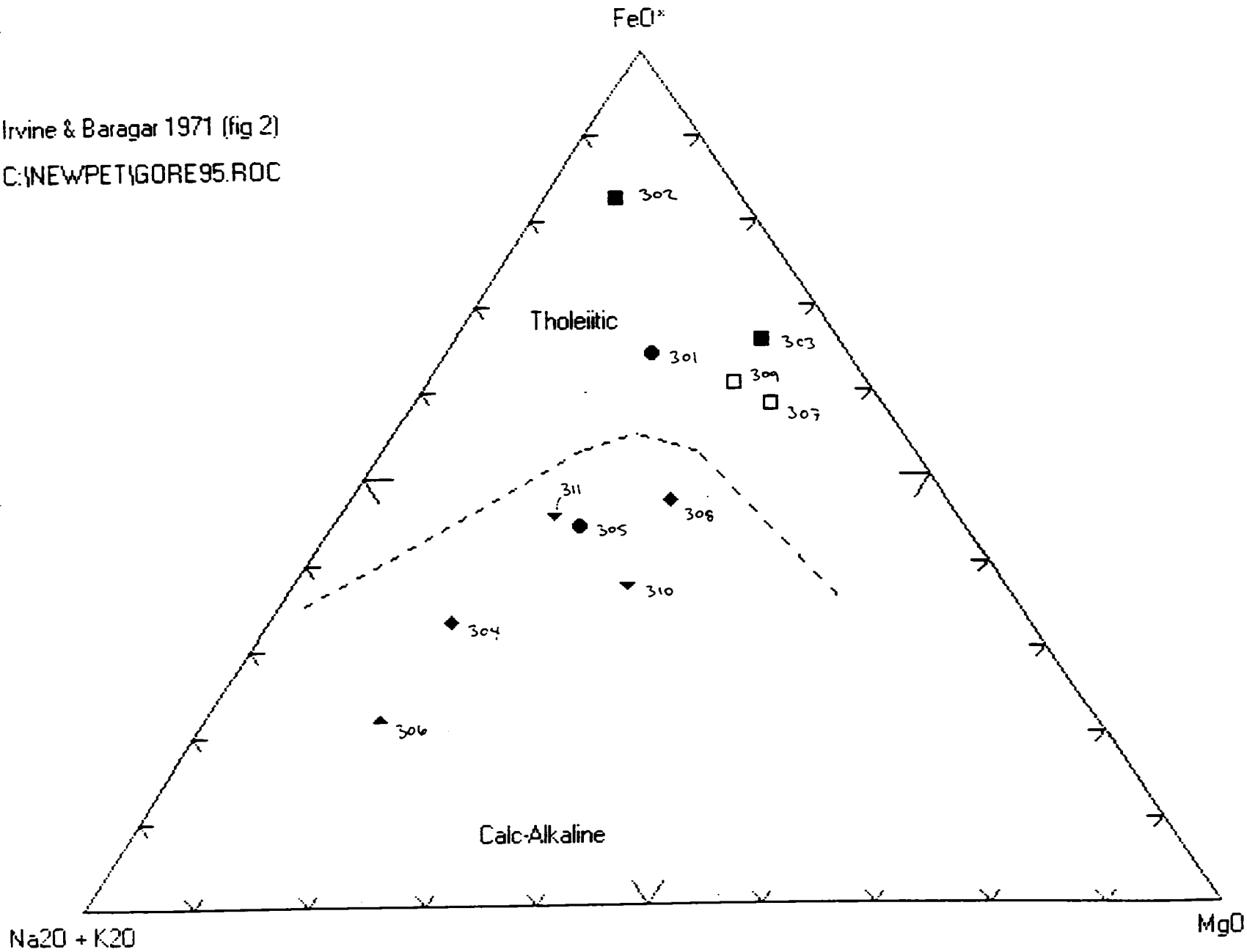
Sample Number	FeO %	S %	WRA -	Fe2O3 %	Corr. Fe2O3
301	8.60	0.14	Results	14.99	5.432351
302	14.42	0.22	to	31.97	15.944353
303	14.13	0.89	follow	19.01	3.306245
304	3.50	<0.01		4.61	0.720475
305	7.43	0.01		9.75	1.492669
306	2.48	0.01		3.64	0.285852
307	7.72	0.01		9.76	1.180318
308	7.14	0.14		11.31	3.374961
309	7.14	0.27		9.15	1.214961
310	3.35	0.01		3.98	0.256975
311	3.64	0.71		5.49	1.444656

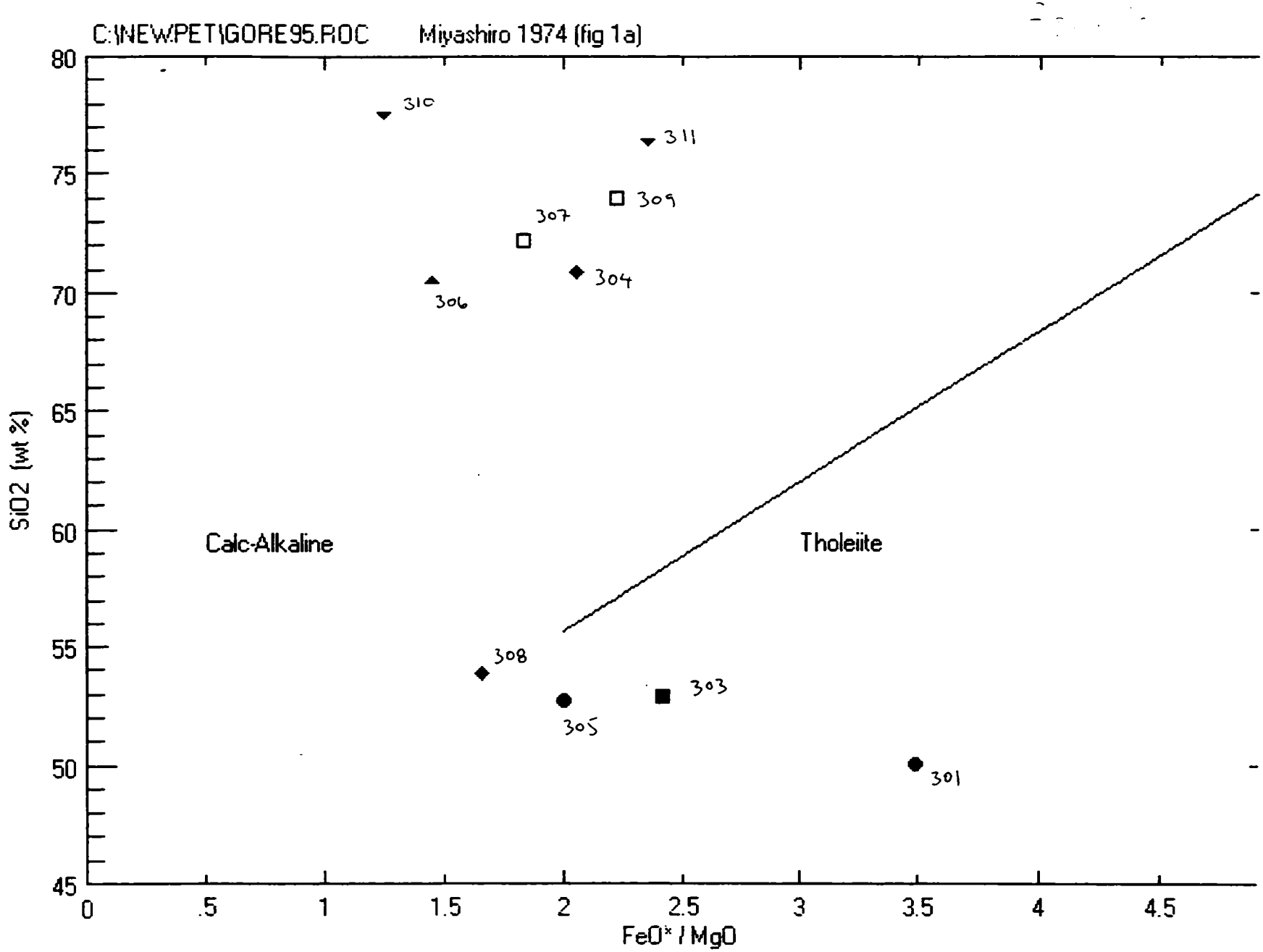
Certified by _____

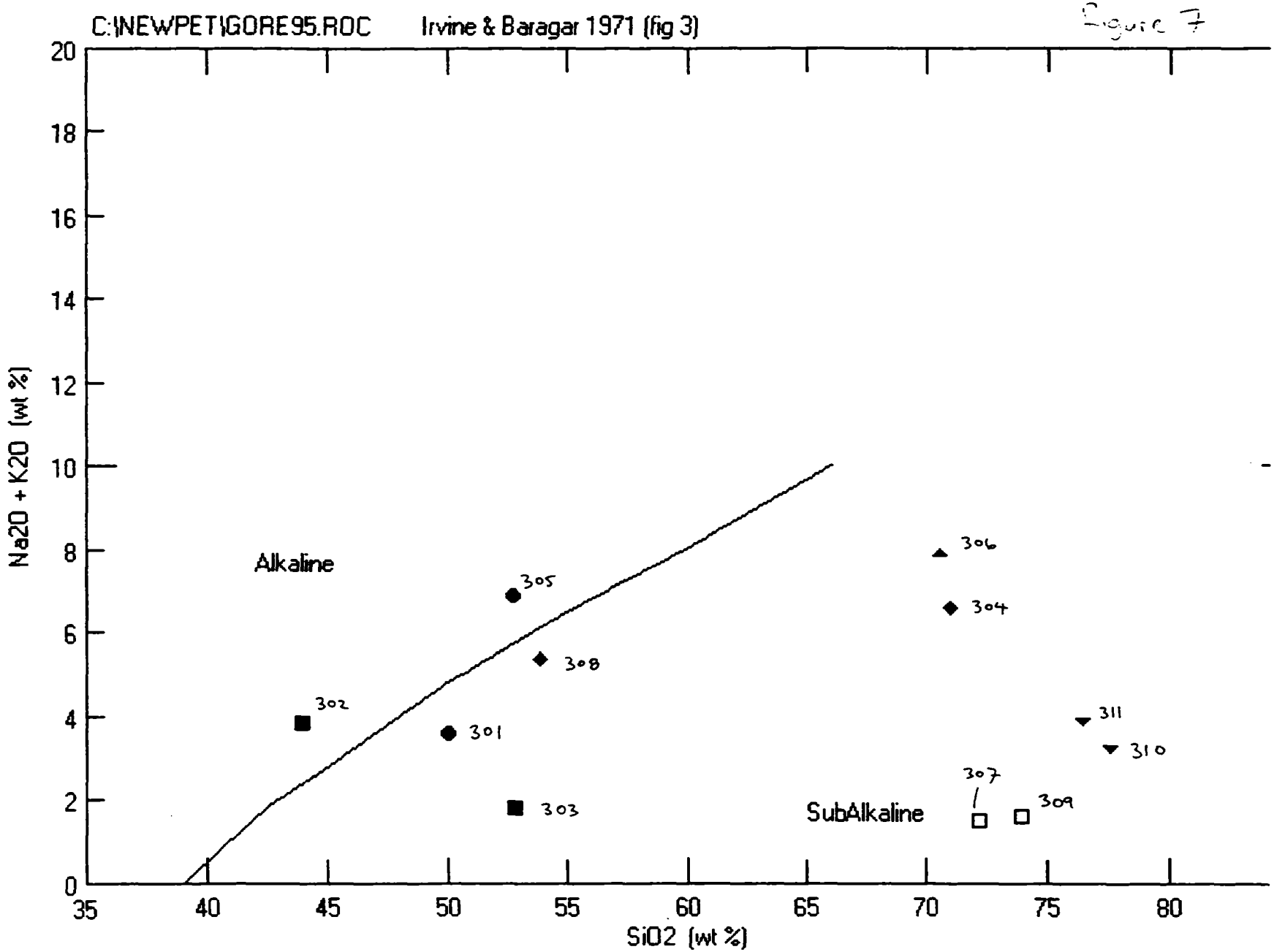
P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705)642-3244 FAX (705)642-3300

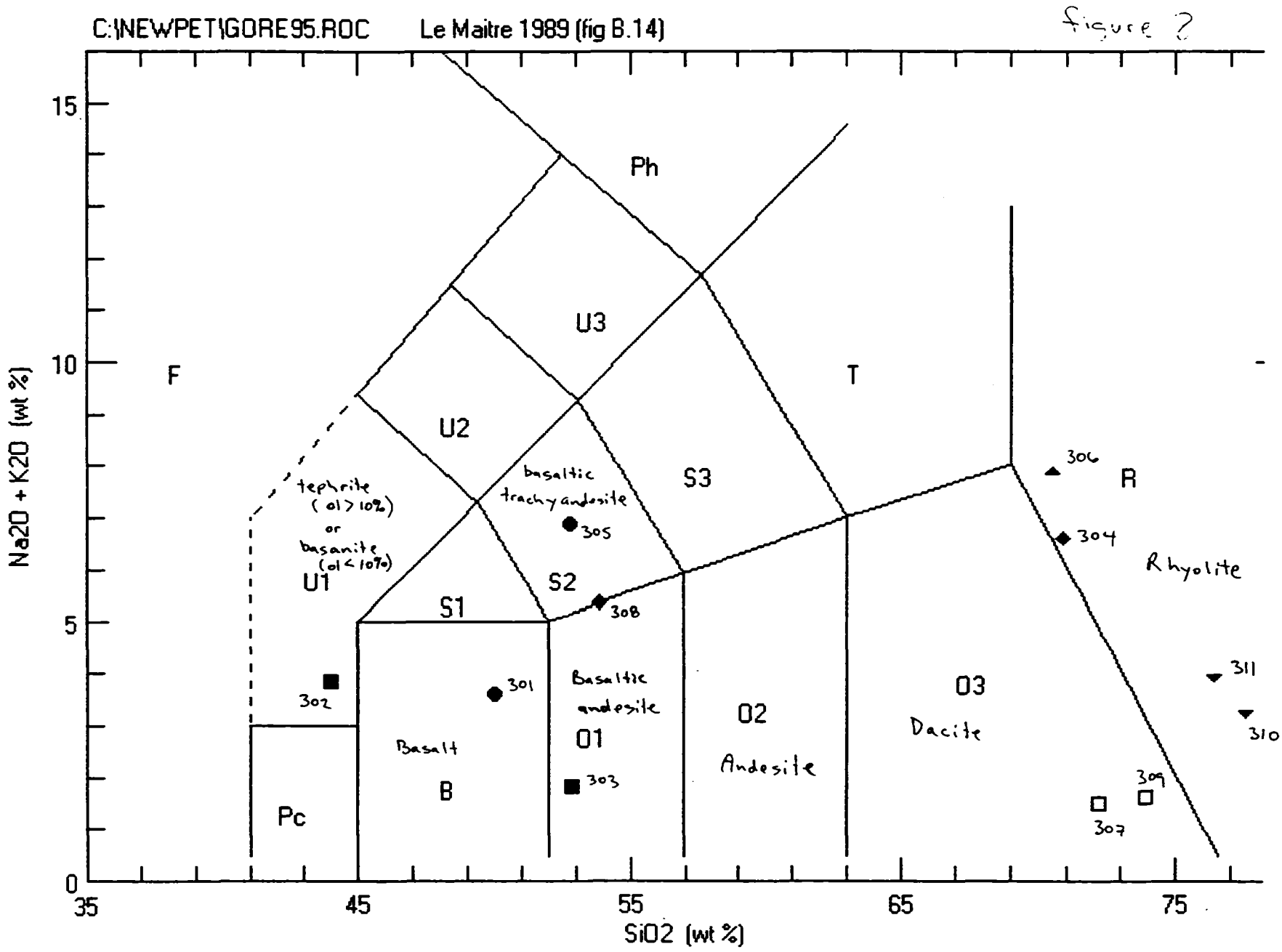
Irvine & Baragar 1971 (fig 2)

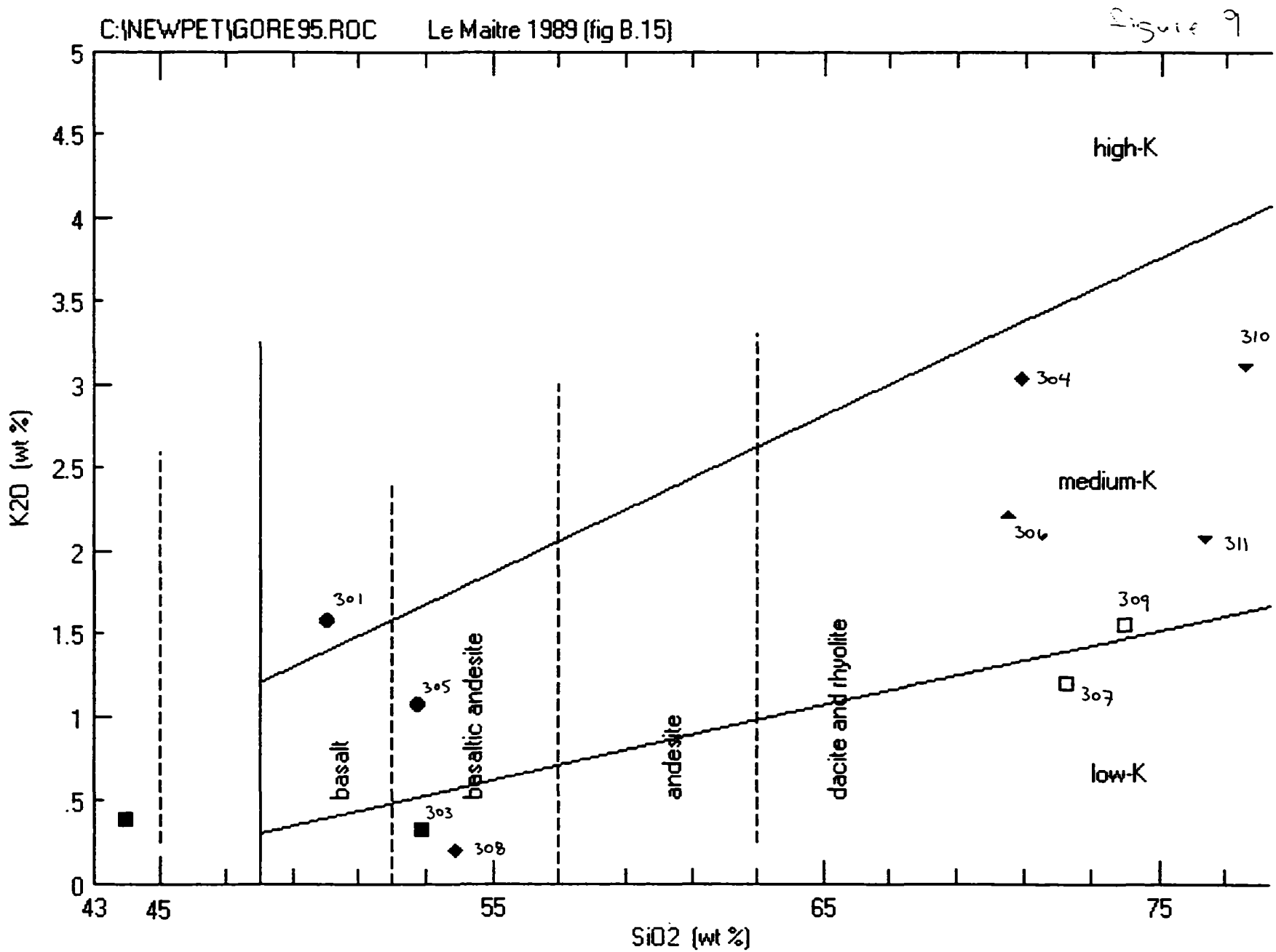
C:\NEWPET\GORE95.ROC




C:\NEWPET\GORE95.ROC Miyashiro 1974 (fig 1a)
80
75
70
65
60
55
50
45
SiO2 (wt %)
0
.5
1
1.5
2
2.5
3
3.5
4
4.5
FeO* / MgO
Calc-Alkaline
Tholeiite
310
311
309
307
304
306
308
303
305
301


C:\NEWPET\GORE95.ROC
Irvine & Baragar 1971 (fig 3)
Figure 7
Na2O + K2O (wt %)
SiO2 (wt %)
Alkaline
SubAlkaline
301
302
303
304
305
306
307
308
309
310
311


C:\NEWPET\GORE95.ROC
Le Maitre 1989 (fig B.14)
figure 2
Na2O + K2O (wt %)
SiO2 (wt %)
15
10
5
0
35
45
55
65
75
Ph
U3
U2
U1
F
T
S3
S2
S1
R
Rhyolite
tephrite (ol > 10%) or basanite (ol < 10%)
basaltic trachyandesite
Basaltic andesite
Basalt
Andesite
Dacite
Pc
B
O1
O2
O3
301
302
303
304
305
306
307
308
309
310
311


C:\NEWPET\GORE95.ROC
Le Maitre 1989 (fig B.15)
Figure 9
high-K
medium-K
low-K
basalt
basaltic andesite
andesite
dacite and rhyolite
301
303
304
305
306
307
308
309
310
311
K2O (wt %)
SiO2 (wt %)
0
.5
1
1.5
2
2.5
3
3.5
4
4.5
5
43
45
55
65
75

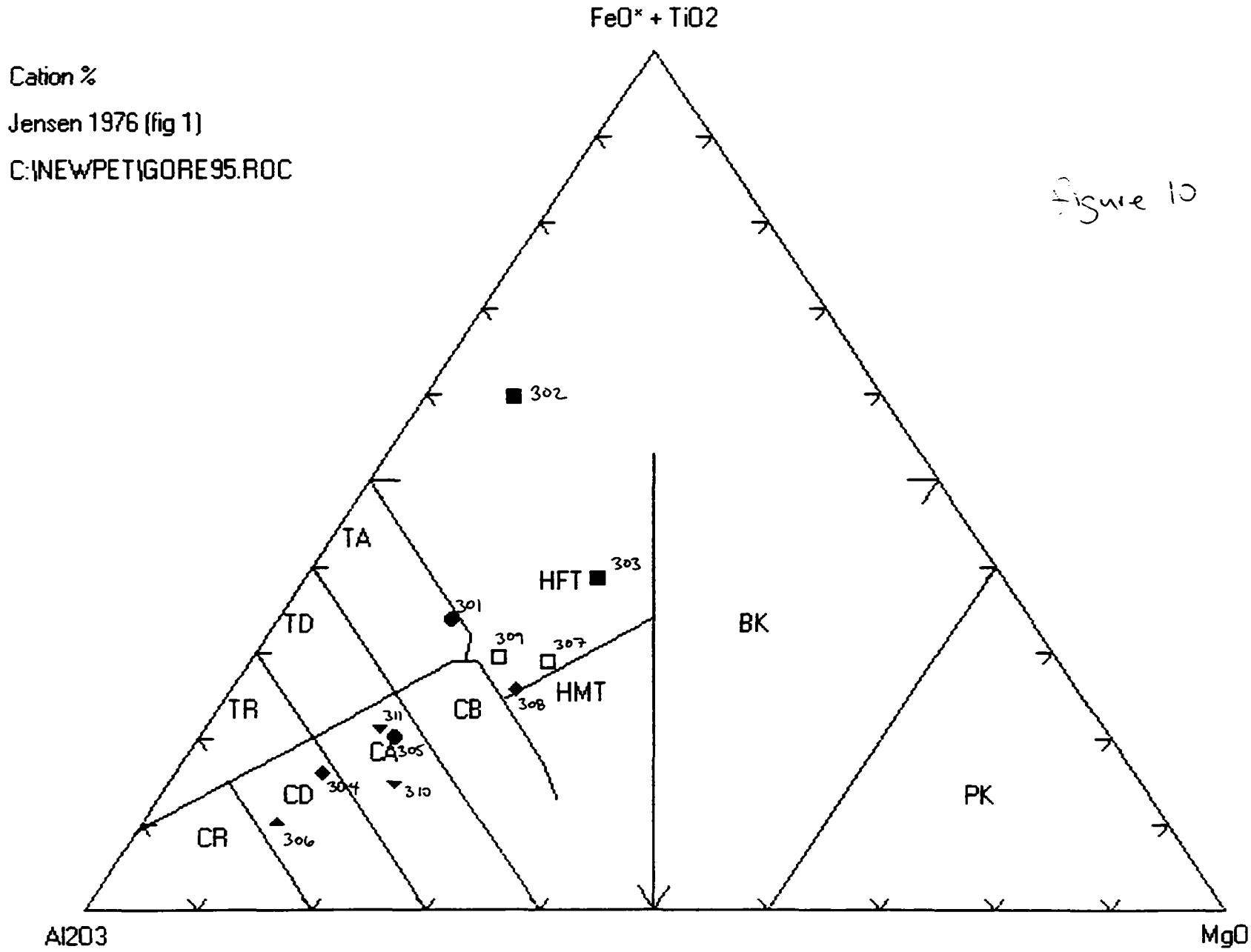
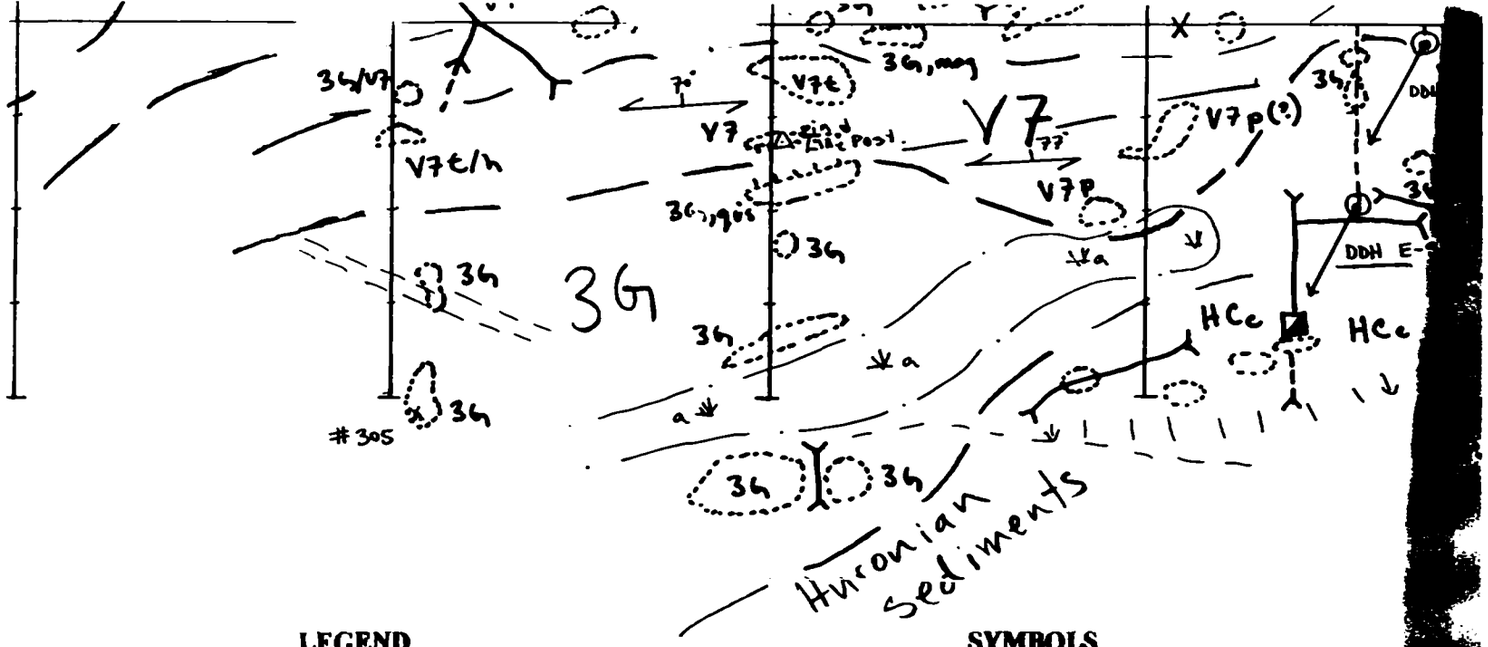

FeO* + TiO2
Cation %
Jensen 1976 (fig 1)
C:\NEWPET\GORE95.ROC
302
TA
HFT
303
301
TD
BK
309
307
HMT
308
TR
CB
311
CA
305
CD
304
310
CR
306
PK
Al2O3
MgO

Figure 10



LEGEND

PROTEROZOIC

- ND — Nipissing Diabase

Huronian

- HC — Coleman Formation
  - a — arkose
  - c — conglomerate / tillite
  - s — schist
  - m — mudstone
  - l — pebbly

ARCHEAN

Felsic to Intermediate Intrusive Rocks

- fG — Granite
- FP — Feldspar Porphyry

Mafic Intrusive Rocks

- 3D — Diabase
- 3G — Gabbro

Sedimentary Rocks

- S4 — Mudstone
- S3 — Greywacke

Metavolcanics

- V7 — Mafic
- V5 — Intermediate
- V2 — Felsic

Modifiers

- m — massive
- fb — flow banded
- p — pillowed
- pb — pillow breccia
- h — hyaloclastite
- t — tuff, tuffaceous
- t1 — ash tuff
- t2 — crystal tuff
- t3 — lapilli tuff
- ◘ — porphyritic (qtz eyes)

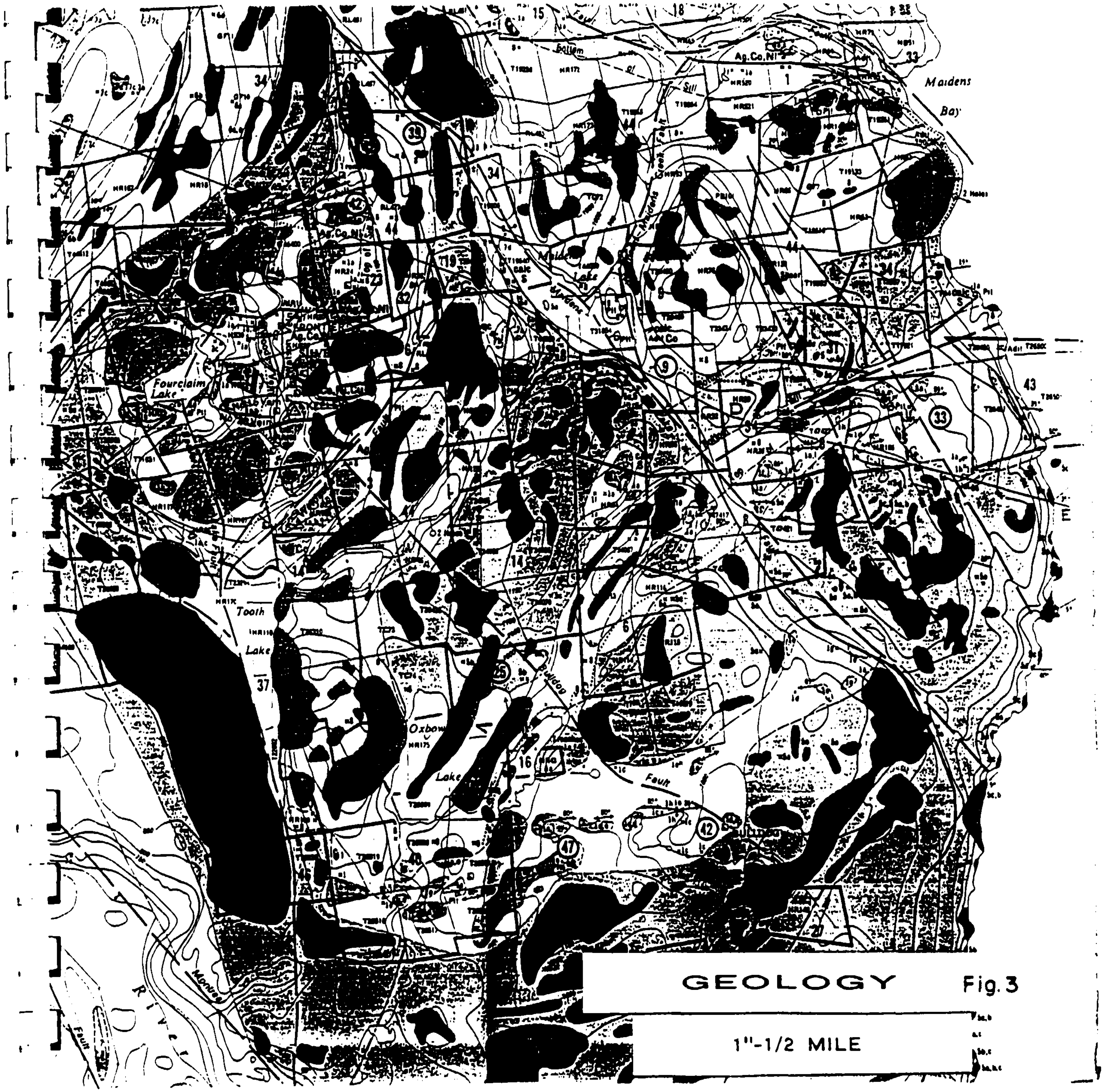
SYMBOLS

- × — Small bedrock outcrop
- Large Bedrock outcrop
- Road / trail
- Path / blazed line
- Swamp / marsh
- Stream, beaver pond
- Bedding, inclined
- Volcanic pillow flow tops
- Foliation, inclined, vertical
- Geological contact, assumed, observed
- Fault, assumed
- Inclined Drill Hole, assumed, located
- Shaft / exploration pit
- Pit
- Trench
- #302 — bedrock sample site

MINERALIZATION

- py — pyrite
- gn — galena
- mal — malachite
- sulf — sulfides
- qtz — quartz
- calc — calcite

2.16625



GEOLOGY Fig.3

1"-1/2 MILE

T i m i s k a m i n g

11 Quartzose and quartzose feldspathic paragneisses, characterized by open folds.

FAULT CONTACT

SUPERIOR PROVINCE

PROTEROZOIC

LATE MAFIC INTRUSIVE ROCKS

10 Olivine diabase (Keweenawan).

9 Diabase, undifferentiated (may be Matachewan age in part).
9a Quartz diabase.

8 Quartz diabase (Nipissing).

INTRUSIVE CONTACT

HURONIAN

COBALT GROUP

LORRAIN FORMATION[a]

7 Undifferentiated.
7a Grey feldspathic quartzite.
7b Pale green to white quartzite.
7c Arkose.
7d Red quartzite.

FIRSTBROOK FORMATION[a]

6 Undifferentiated.
6a Laminated quartzite.
6b Quartzite.

COLEMAN FORMATION[a]

5 Undifferentiated.
5a Quartzose siltstone and greywacke.
5b Arkose.
5c Conglomerate.
5d Schistose rocks.
5e Laminated argillite.

UNCONFORMITY

ARCHEAN

FELSIC TO INTERMEDIATE INTRUSIVE ROCKS[a]

4 Quartz diorite.

3 Granitic rocks, undifferentiated.
3a Hornblende granite.
3b Gneissic granite.
3c Granodiorite.
3d Quartz monzonite.

INTRUSIVE CONTACT

EARLY MAFIC INTRUSIVE ROCKS[a]

2 Lamprophyre, undifferentiated.
2a Hornblende lamprophyre.
2b Biotite lamprophyre.

INTRUSIVE CONTACT

METAVOLCANICS AND METASEDIMENTS[a]

1 Undifferentiated.
1a Intermediate to mafic metavolcanics.
1b Amygdaloidal basaltic rocks.
1c Metadiabase, metagabbro, or diabasic flows.
1d Quartzite and greywacke.
1e Felsic metavolcanics with or without interbedded quartzite.
1f Pyroclastic rocks.
1g Quartz-feldspar porphyry.

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number
W9680.00321
(O.P.A.P. File# O.P.95-039)

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

2.16625

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for Recorder.
- A separate copy of this form must be compl
- Technical reports and maps must accompan
- A sketch, showing the claims the work is as

31M03NW0037 2 16625 SOUTH LORRAIN

900

Recorded Holder(s) JOHN A.GORE			Client No. 138273
Address 31 Ruby Street,P.O.Box #212 Cobalt,Ont. POJ 1CO			Telephone No. (705) 679-5710
Mining Division Larder Lake	Township/Area South Lorrain		M or G Plan No. G-3448
Dates Work Performed From: October 12/95		To: October 22/95	

Work Performed (Check One Work Group Only)

	Work Group	Type
	Geotechnical Survey	Geological Mapping
	Physical Work, Including Drilling	
	Rehabilitation	
	Other Authorized Work	
	Assays	
	Assignment from Reserve	

RECEIVED
JUN 20 1996
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs $ 2,390.00

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
R.V.Zalnieriunas	Box#214 Larder Lake,Ontario POK 1LO
Geologist	

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date June,5/96	Recorded Holder or Agent (Signature) John A. Gore

Certification of Work Report

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

Name and Address of Person Certifying: John A.Gore,31 Ruby Street,Box#212 Cobalt,Ont.POJ 1CO

Telepone No. (705) 679-5710	Date June,5/96	Certified By (Signature) John A. Gore

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
2390	96 Jun 6		
	Deemed Approval Date Sept 4	Date Approved	
	Date Notice for Amendments Sent		

0241 (03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	1118450	10	1195.00	—	—	1195.00
	1118544	6	1195.00	—	—	1195.00
	Total Number of Claims: 2		Total Value Work Done: 2390.00	Total Value Work Applied: NiL	Total Assigned From: NiL	Total Reserve: 2390.00

0241 (03/91)

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

1. ☑ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature N.A.	Date

Ministry of Northern Development and Mines

Ontario

Ministère du Développement du Nord et des mines

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction

(O.P.A.P.File# O.P.95-039)

Personal information collected on this form is obtained under the authority of the **Mining Act**. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule son recueillis en vertu de la **Loi sur les mines** et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour 10 days00 Main-d'oeuvre @200.	00 2000.	2000.00
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type		
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
	Total Direct Costs Total des coûts directs		2000.00

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JUN 20 1996
MINING LANDS BRANCH

2. Indirect Costs/Coûts indirects

** **Note:** When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport By S.Wagon 575 km.@ .35/km	Type		
	575 kmx35	201.00	201.00
	Motel	152.00	152.00
Food and Lodging Nourriture et hébergement	Food	36.00	36.00
Mobilization and Demobilization Mobilisation et démobilisation			
	Sub Total of Indirect Costs Total partiel des coûts indirects		389.00
	Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)		389.00
	Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs) / **Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles**		2389.00

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.

2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
x 0.50 =	

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.

2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Évaluation totale demandée
x 0,50 =	

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as Recorded Holder (Recorded Holder, Agent, Position in Company) I am authorized

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ (titulaire enregistré, représentant, poste occupé dans la compagnie) je suis autorisé

à faire cette attestation.

Signature	Date
John C. Gore	June, 5/96

0212 (04/91)

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

Ontario

Ministry of Northern Development and Mines
Ministère du Développement du Nord et des Mines

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

August 26, 1996

Our File: 2.16625
Transaction #: W9680.00321

Mining Recorder
Ministry of Northern Development & Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Mr. Spooner:

SUBJECT: APPROVAL OF ASSESSMENT WORK CREDIT ON MINING LAND, CLAIM(S) 1118450 & 1118544 IN SOUTH LORRAIN TOWNSHIP

Assessment work credit has been approved as outlined on the Declaration of Assessment Work Form accompanying this submission. The credit has been approved under Section 12, Geology, of the Assessment Work Regulation.

The approval date is August 26, 1996. Please indicate this approval on the claim record.

If you have any questions regarding this correspondence, please contact Steven Beneteau at (705) 670-5855.

Yours sincerely,
ORIGINAL SIGNED BY:

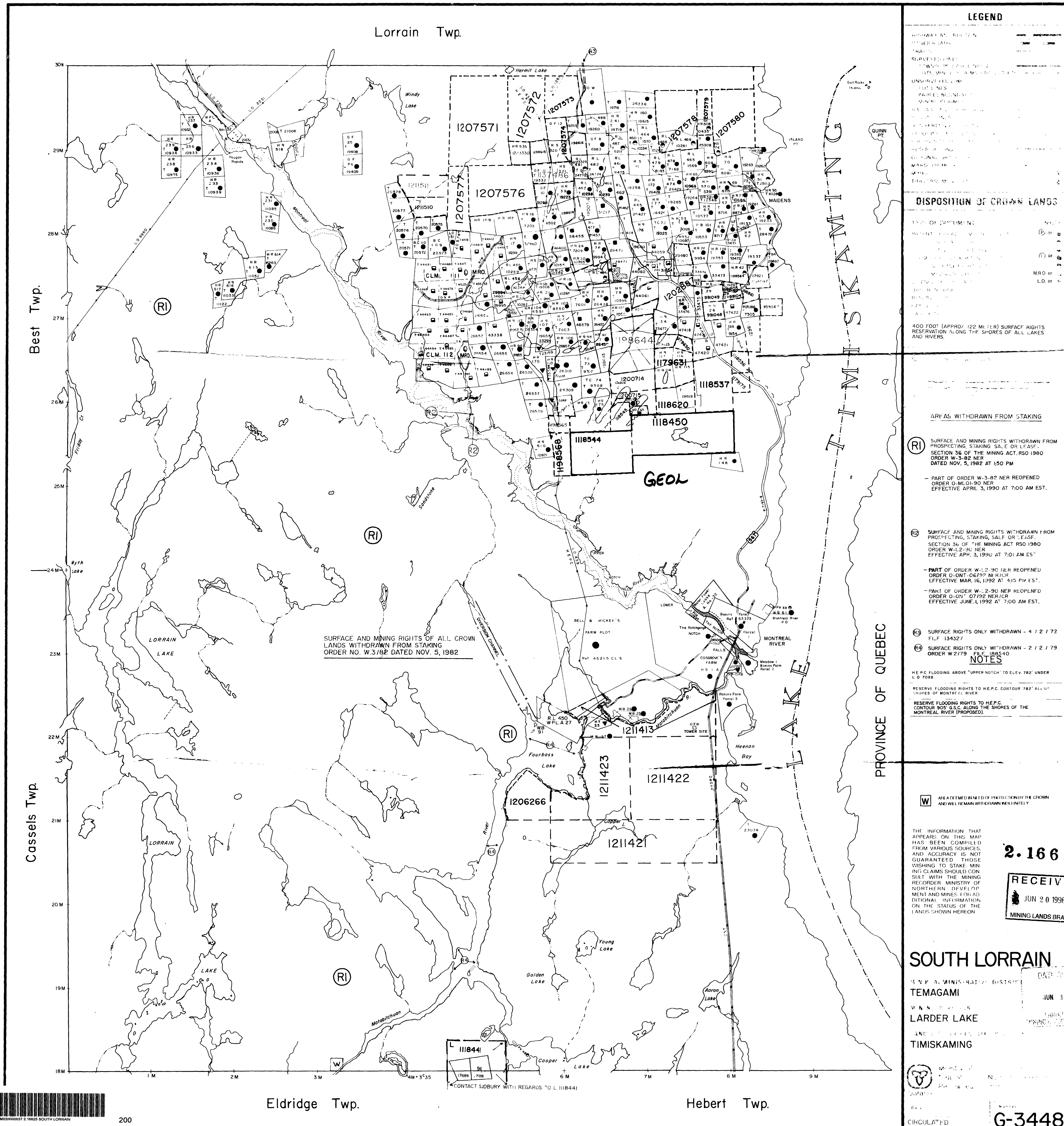
Ron C. Gashinski
Senior Manager, Mining Lands Section
Mines and Minerals Division

SBB/jf

cc: Resident Geologist
Cobalt, Ontario

Assessment Files Library
Sudbury, Ontario

COBALT RESIDENT
GEOLOGIST DISTRICT



31M03NW0037 2.16625 SOUTH LORRAIN 200

ARCHIVED ON JUNE 6/95

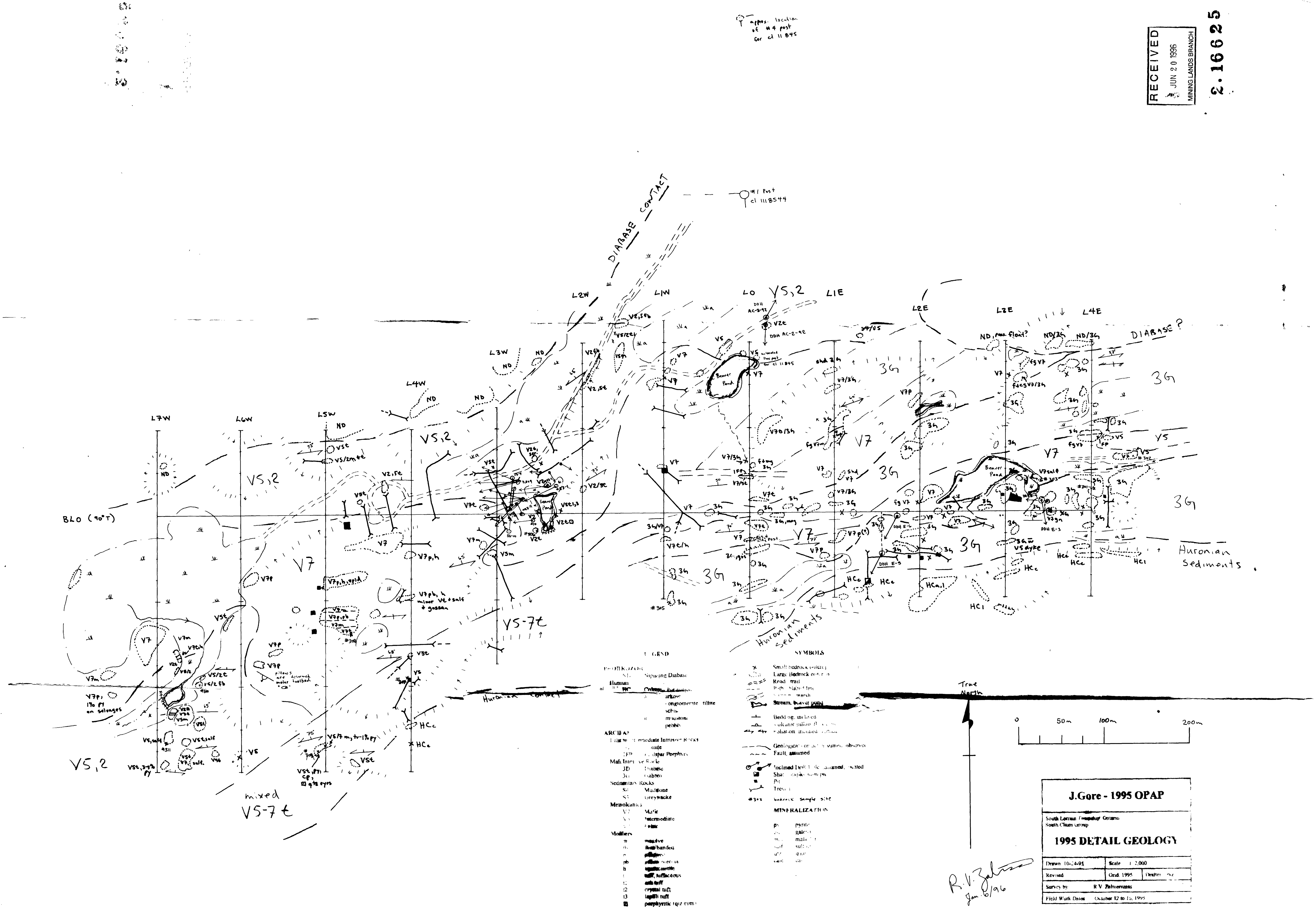
"THIS MAP SHOWS THE APPROXIMATE LOCATION OF THE BOUNDARIES OF THE AREA WHICH IS THE SUBJECT OF CURRENT LITIGATION. THE EXACT LOCATION WILL BE SHOWN FOLLOWING CONFIRMATION BY THE PARTIES TO THE ACTION."

3448

SOUTH LORRAIN TWP.

G-3448

2.16625



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