

## Report on the **GEOLOGICAL MAPPING** and LITHOGEOCHEMICAL & MMI SAMPLING PROGRAM for SYNERGY EXPLORATIONS LTD.

#### **CENTREFIRE CREEK PROPERTY**

## PATRICIA MINING DIVISION, ONTARIO

52F/16NW 52K/01SW

2.19873

RECEIVED

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GEOSCIENCE ASSESSMENT OFFICE

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#### **SUMMARY AND RECOMMENDATIONS**

Synergy Exploration Ltd.'s ("Synergy") 1998 exploration program focussed largely on preliminary geological mapping and sampling of the Centrefire Creek Property in the Sioux Lookout area in Northwestern Ontario, Canada. Synergy's initial exploration program, completed in August, 1998, entailed linecutting, geological mapping, lithogeochemical and MMI sampling. Further lithogeochemical sampling and geological reconnaissance mapping was conducted in 1999. Results from this evaluation indicate a high potential for the discovery of volcanogenic massive sulfide deposits.

The property comprises a total of 16 claim units (248 ha) in the Patricia Mining Division. Synergy has an option to purchase agreement with Stuarton Resources Ltd., the claim holder.

The property is near the top of the Abram Lake Greenstone Belt, where a succession of basalt is overlain by rhyolites, which are in turn truncated and overlain by alluvial sedimentary rocks. The lower basalt formation is host to disseminated and massive sulfide mineralization as well as iron formation. Between the rhyolite and basalt there are disseminated sulphides in a tuffaceous member. The upper rhyolites contain previously drill-intersected, base-metal massive sulphide horizons. The overlying coarse sediments contain sulphide clasts presumably derived from an eroded sulphide source.



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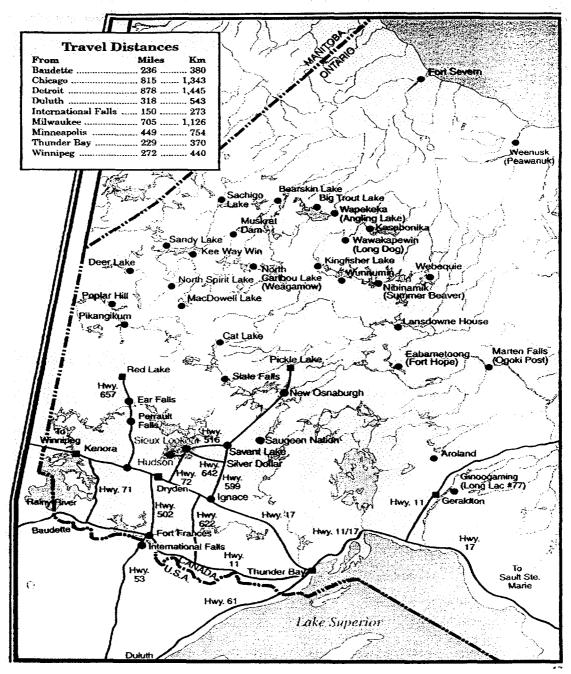
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Map I Centrefire Property

#### 1.0 INTRODUCTION

This report summarizes results and provides recommendations for future work based on the 1998 and 1999 exploration program completed for Synergy Explorations Ltd. ("Synergy") on its Sioux Lookout properties. The exploration targets are volcanogenic massive sulphide deposits, similar to economic deposits mined by Noranda Mines and Falconbridge Ltd. in the Mattabi Camp (total production, 18.38 million tons of 8.48% Zn, 1.05% Cu, 0.91% Pb).

Synergy engaged Andreas Lichtblau of Touchstone Consulting (an independent consulting geologist) to carry out its 1998 exploration program and Terrence Bottrill of Bottrill Geological Services to carry out its 1999 exploration program. Previous exploration and research data available in the public record were reviewed.



map courtesy of Town of Sioux Lookout

Fig. 1. Location Map, Sioux Lookout area, Ontario, Canada

#### **2.0** LOCATION, ACCESS AND PHYSIOGRAPHY

The property is situated in Lomond Township, Patricia Mining Division, Ontario. The towns of Dryden (to the SW) and Hudson (to the NE) are situated approximately 30 km equidistant from the properties. Thunder Bay is approximately 360 road-km to the southeast (Fig. 1).

The property is easily accessed either by forestry roads southwest from Hudson (at the termination of Hwy #664); or from the Kathlyn Lake Road, which terminates in the south at Hwy #72, the Sioux Lookout Highway.

The area is in generally underlain by glacial deposits of sand and gravel, with outcrop exposures not exceeding 10%. On the Centrefire Property, Centrefire Creek flows in a major valley between two areas of outcrop, both of which are bounded in the south by approximately 10 m high cliffs.

The entire area has been logged over, probably twice, since the mid-forties and prior to that in the south, perhaps in the mid 1970's. The latest logging on the Centrefire Property would appear to have been before the 1970's, since tree cover is extensive.

#### 3.0 CLAIM STATUS AND OWNERSHIP

The claim number 1077327 (16 units) is recorded 100% under Stuarton Resources Ltd. The claims are subject to an Option to Purchase Agreement between Synergy Explorations Ltd. and Stuarton Resources Ltd.

#### 4.0 EXPLORATION HISTORY

Drilling by previous operators was confined to overburden covered areas below cliff exposures of generally fresh rhyolite. No casings or evidence of drill setups were found. Drilling by Selco in 1979 (hole #30-4-1, located approximately at Synergy's L4+20E/9+40N,) intersected significant alteration (highly sericitized rhyodacite tuff) underlying (ie. north of) massive sulphide mineralization (two bands of pyrite-pyrrhotite, 1.5 m and 2.1 m thick, respectively). While Cu and Zn were insignificant, these intersections demonstrate the presence of a mineralizing hydrothermal system. Up dip projection of the favourable stratigraphy is in the overburden covered area parallel to L4+00E, south of BaseLine 10+00N. MMI samples were taken along the length of the favourable stratigraphy to 7+25S. The only outcrop in this area occurs a further 75 m south, above Centrefire Creek (Sample #2496: weakly chloritic rhyolite tuff, Table 1)

Drilling in 1979 by Rio Tinto Canadian Exploration (hole #79-G3, located at Synergy's L8+65E/9+75N) about 450m east of Selco's hole, intersected footwall graphitic, argillaceous beds, followed by sericitized and chloritized dacite (rhyolite?) cut by pyrite-pyrrhotite stringers, and including a 5cm vein of 30% Galena and 15% Sphalerite. The hole terminated in variably biotite-chlorite altered andesite/dacite breccia (with occasional garnets) cut by pyrite-pyrrhotite stringers. Again, up dip projection of the altered and mineralized package is in the overburden covered area below unaltered rhyolite cliffs.

Government Airborne Electromagnetic and Total Intensity Magnetic surveys were published for the region in 1987. The following Geophysical/Geochemical Series maps cover the Centrefire Property and surrounding area: 80953, 80954, 80955, 80956 and 80957.

Ground geophysical surveys were conducted by the following companies in the vicinity of the Centrefire property: Asarco Exploration Company of Canada Limited (1967); Phelps Dodge Corporation of Canada Ltd. (1968); and Sulpetro Minerals Ltd (1981). None of this work is directly applicable to the Centrefire property.

#### 5.0 SYNERGY 1998 PRELIMINARY PROGRAM

During the period August 19, 1998 to August 31, 1998, Synergy performed a preliminary program of limited linecutting, lithogeochemical and MMI sampling, and geological mapping. A total of 2,350 m of line were cut, chained and picketed; 10,358 m were blazed and flagged only; a total of 44 rock samples were taken for lithogeochemical analysis, and 287 soil samples were taken for MMI analysis.

Locations of all lithogeochemical sample points were determined with a Trimble Geoexplorer GPS unit (Appendix 3). Points on base and grid lines, claim posts and topographic features were also referenced. Field data was reduced and plotted on 1:5000 scale maps by Geo-Sat Enterprises, Thunder Bay, Ontario. Field data spreadsheets are appended

Contract personnel involved during this period were:

Andreas Lichtblau, Geologist

(807)473-8172

RR#1, Nolalu, Ontario, POT 2K0 Prospector's Licence #E33626

James Martin, Linecutter, Prospector (807)475-9138 RR# 7, Site 1, Comp. 12 Thunder Bay, Ontario, P7C 5V5

Ben Whitney, Geological Assistant Box 250 21 Classic Ave. Toronto, Ontario, M5S 2Z3

Contract personnel for the 1999 reconnaissance geological mapping and lithogeochemical sampling were:

Terrence Bottrill, Senior Geologist

192 Weldon Ave.

Oakville, ON L6K 2H6

(416)842-9884

Peter Eunson, Geological Assistant

99 Harbour Square, Suite 130B

Toronto, ON M4J 2H2

(416)861-1469

#### **5.1** LINECUTTING

An east-west baseline (BL) and two crosslines were cut, chained and picketed. BL10N was started at the west side of the Kathlyn Lake Road and extended for 1200 m to the east (0+00E to 12+00E). Crosslines at L4+00E and L9+00E were extended north and south, for a total of 2,350 m.

BL10+00N 0+00E-12+00E Azimuth N090°E L4+00E 7+00N-14+00N L9+00E 9+00N-13+50N

#### 5.2 LITHOGEOCHEMICAL SAMPLING

A total of 22 rock samples were collected on the property (Table 1). All were of varying rhyolite facies with little mineralization.

Geochemical data for the Centrefire property are presented in Figures 2 to 5. Data are plotted as Na<sub>2</sub>O +K<sub>2</sub>O vs SiO<sub>2</sub> (Figure 2) and as SiO<sub>2</sub> vs Log (Zr/TiO<sub>2</sub>) (Figure 3). These classification diagrams indicate that the Centrefire Creek samples belong to the following groups: Basaltic Andesite, Andesite, Dacite and Rhyolite. One sample (# 2494), described as a strongly gossanous boulder, cannot be classified on either of these diagrams. Figure 4 is an Y vs Nb comparison diagram for several of the Centrefire Creek samples. Samples analyzed for these elements plot primarily within the subalkaline field with only one sample (# 2494) plotting within the alkaline field. Figure 5 is a Log Zr/Y vs Log Zr tectonic discrimination diagram which indicates that the majority of samples analyzed for these elements fall within the Ocean Floor Basalt and Within-Plate Basalt fields. Again, sample 2494 cannot be classified according to this scheme.

TABLE 1: CENTREFIRE CREEK CLAIM BLOCK SAMPLE DATA

Sample #	UTM E	UTM N	<b>DESCRIPTION</b>
2488	542353	5539067	Litho #2488: Rhyolite, mass, hairline Se, tr Py
2489	542642	5539027	Litho #2489: Rhyolite, mass, rusty hairline fractures
2490	542799	5538989	Litho #2490: Rhyolite, flow or tuff?
<b>249</b> 1	542953	5539049	Litho #2491: FP-Rhyolite, incipient Se alt
2492	543135	5539141	Litho #2492: Rhyolite, FP-tuff, rare chl hairline veinlets
2493	543136	5539036	Litho #2493: Rhyolite tuff, mod chl
2494	543151	5539025	Litho #2494: melon-sized boulder, strongly gossanous, SMS?-Po, Mag
2495	543246	5539025	Litho #2495: Rhyolitic tuff, weakly chl
2496	542656	5538666	Litho #2496: Rhyolitic tuff, weakly chl
2988	542300	5539372	Litho #2988: Rhyolite, foliated, mod chl, 5% Py
BGS/8-99/001	542520	5538160	Int. tuff (?) from cliff, unit 2c
BGS/8-99/002	542367	5537081	Biotite-quartz-feldspar schist; Int. tuff, unit 2e
BGS/8-99/003	542385	5537330	Felsic layered lapilli tuffs, unit 2c
BGS/8-99/004	542370	5538057	Felsic, massive lapilli tuff, Cliff rhyolite, unit 3cd
BGS/8-99/005	542155	5538576	Felsic, fine grained tuff; upper cliff, unit 3dc
BGS/8-99/006	542155	5538579	Felsic, angular tuff breccia; flattened pumice, Unit 3dc
BGS/8-99/007	542165	5539323	Felsic feldspar porphyry (south); Town line zone: unit 3cd
BGS/8-99/008	542165	5539323	Cherty exhalite, Town line zone
BGS/8-99/009	542165	5539323	Felsic agglomerate, lapilli tuff, Town line zone: unit 3cd
BGS/8-99/010	542165	5539300	Intermediate massive tuff; Town line, to south, unit 2a
BGS/8-99/011	542125	5539363	Intermediate massive tuff; Town line, to north, unit 2a
BGS/8-99/012	542100	5539375	Intermediate massive tuff; Town line, to north, unit 2a

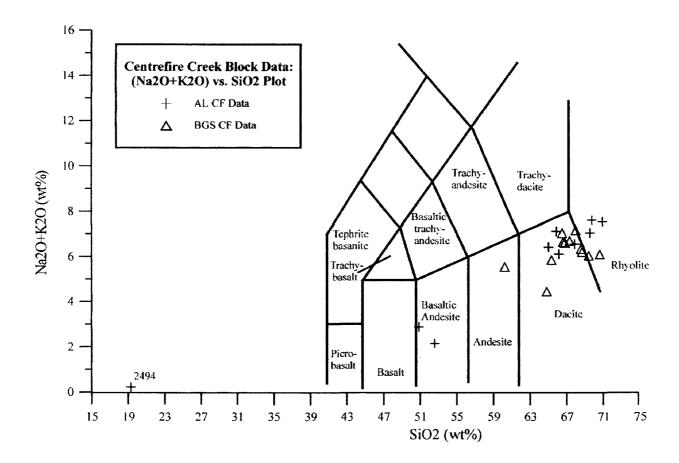


Figure 2.  $(Na_2O + K_2O)$  vs  $SiO_2$  plot of Samples collected from the Centrefire property

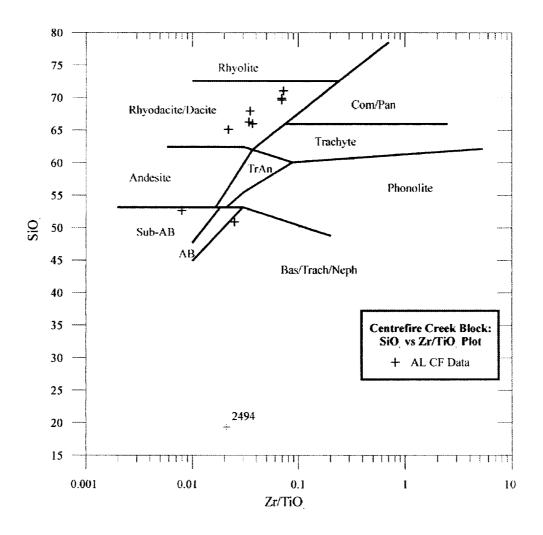


Figure 3. SiO<sub>2</sub> vs Log Zr/TiO<sub>2</sub> Plot of samples taken from the Centrefire property

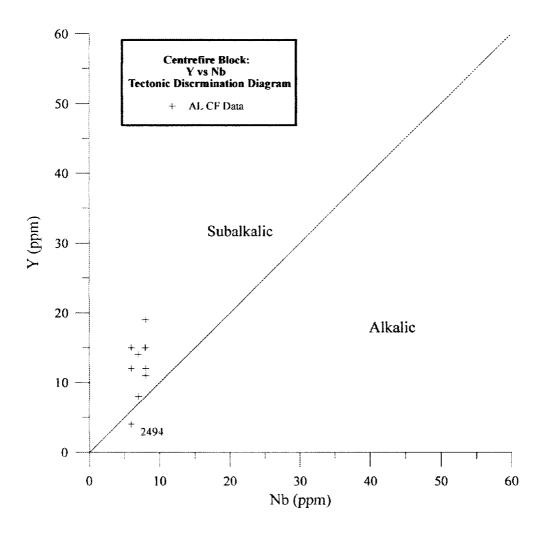


Figure 4. Y vs. Nb Tectonic Discrimination Diagram for samples taken from the Centrefire property.

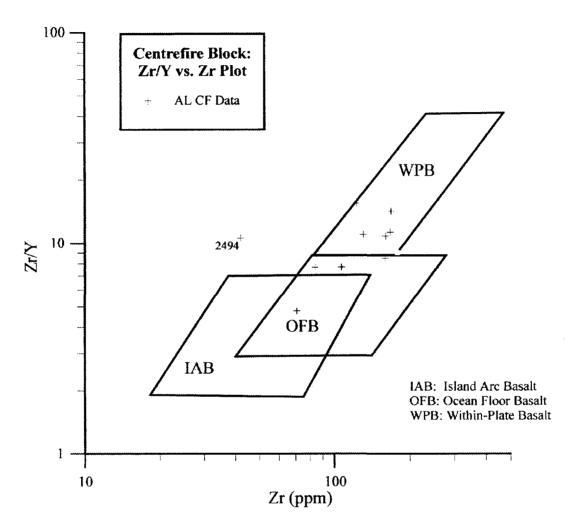


Figure 5. Log Zr/Y vs Log Zr Discrimination Diagram for samples taken from the Centrefire property

#### 5.3 MMI SAMPLING & PROCEDURE

A total of 13 soil samples were collected for eventual MMI (Mobile Metal Ion) analysis (Appendix 2). The MMI geochemical soil survey can be an effective tool over deep, glacially derived overburden. Sampling was done of the soil layer at a constant depth of 10 cm-15 cm, below the whitish leached layer ('Ae') situated at the base of the 'A' horizon. A minimum 500 g (1 lb) sample was collected, if possible every 50 m along the grid line. Samples were kept in securi-sealed plastic bags, and stored before processing, along with the lithogeochemical samples, at the facilities of Clark-Eveleigh Consulting, Thunder Bay, Ontario.

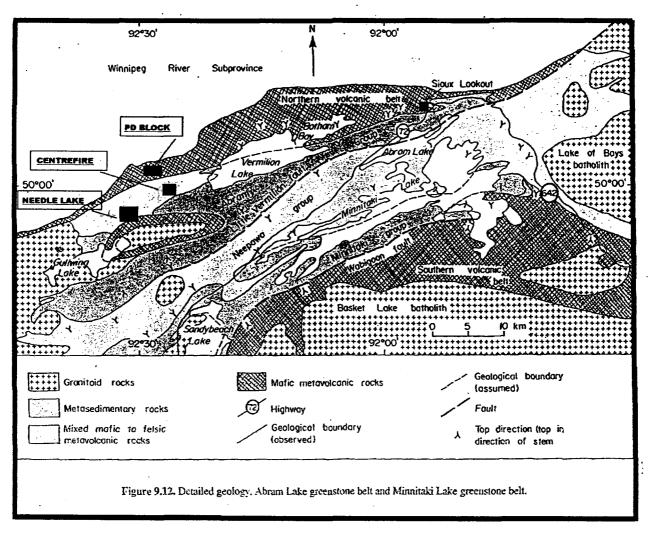
Particular care was paid to MMI sampling techniques. A stainless steel shovel (which had all traces of paint and preservative removed) was used to dig the hole and collect the sample at a constant depth of 10 cm-15 cm. The soil was sieved through a coarse plastic mesh, allowing for passage of 5 mm soil clumps, but retaining all leaves and forest litter, root matts, etc. The site was assessed according to vegetation type (ie. tree species, thickness of moss or other cover) sometimes moss cover was too thick (»20 cm) so that sampling was aborted. No samples were taken in clear-cut areas since no soil was available. Mechanized tree harvesting techniques were such that the first 20 cm consisted of powdered and mixed dead moss/organics in a jumble of decaying tree roots and newly sprouting shrubs.

It was subsequently recognized that the MMI samples had been collected in areas of relatively thin overburden. The MMI technique is not applicable for shallow overburden areas and it was determined that the samples would not be analyzed.

#### 6.0 REGIONAL GEOLOGY

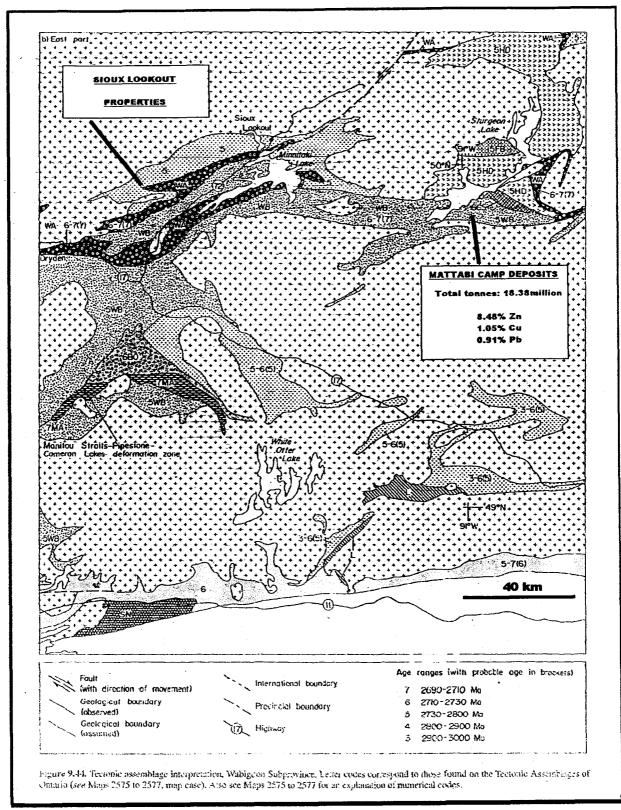
The property is underlain by rocks of the Wabigoon Subprovince of the Canadian Shield. This is a 900 km long by 150 km wide granite-greenstone terrain in the NW Superior Province. The greenstone belt has been mapped on many occasions (cited in Turner and Walker, 1973). Particular attention was paid by early researchers to the sedimentary stratigraphy of the area, within the context of defining terms such as Keewatin and Coutchiching. Later authors (cited by Blackburn et al, 1992) defined stratigraphic relationships within belts and, using geochronology, relationships between belts within the subprovince.

In the area of Sioux Lookout, granitoid gneisses of the 3.00 Ga Winnipeg River Subprovince are basement to the lowermost volcanic stratigraphy of the Abram Lake Greenstone Belt, dated at between 2.73 Ga and 2.80 Ga (Blackburn et al, 1992). All of the Synergy properties lie within the Northern Volcanic rocks of the Abram Lake Belt (Fig. 6).



from Blackburn et al (1992)

Fig. 6. Property Location, Abram Lake Greenstone Belt, Sioux Lookout, Ontario



from Blackburn et al. (1992)

Fig. 7. Sioux Lookout-Mattabi Belt, Wabigoon Subprovince

Development of volcanic belts within the eastern portion of the Wabigoon Subprovince, particularly the Sioux Lookout portion and South Sturgeon Lake-Mattabi Camp area 100 km (Fig. 7), was essentially coeval. At Sturgeon Lake, predominantly mafic volcanic rocks overlie the Central Wabigoon Gneiss terrain; felsic ash flow tuffs hosting the VMS Deposits of the Mattabi Camp are dated at 2.73 Ga. The volcanic rocks are overlain by the Sturgeon Lake sedimentary package, indicating a cessation of volcanic activity. A similar sequence of events is recorded in Sioux Lookout, at similar times.

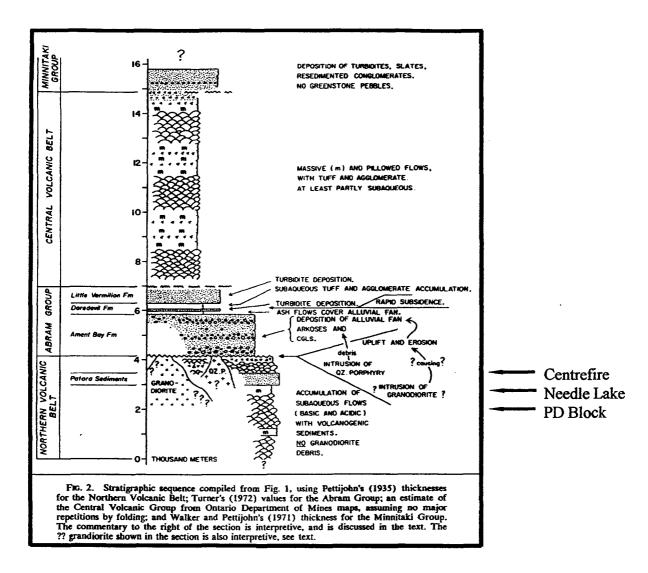
The Sioux Lookout succession begins with a mafic volcanic sequence (lower Northern Volcanics) in fault (?) contact with underlying Winnipeg River gneiss. The southward facing mafic volcanic rocks are overlain by an upper mixed unit of intermediate and felsic units. Minor felsic intrusive activity was followed by erosion and deposition of alluvial sediments of the Ament Bay formation (Turner and Walker, 1973). The Sioux Lookout properties are underlain by the prospective mafic and felsic portions of the succession (Fig. 8).

The most recent mapping in the Sioux Lookout area was by Page and Christie (1980). Of structural importance to the current exploration program is their interpretation of an overturned, westerly plunging syncline parallelling the east-west line between McIllraith and Lomond Townships to the north, and Webb and Echo Townships to the south. The Centrefire property lies on the northern limb. The core of the syncline is occupied by late alluvial fan sediments: erosional products of the underlying volcanic pile.

#### 7.0 PROPERTY GEOLOGY

The Centrefire claims are underlain by felsic volcanic rocks comprising massive flows to weakly laminated tuffs and rhyolite breccia. The units are sometimes weakly feldspar phyric. Deformation is limited to a weak foliation, which can be confused with bedding in the tuffaceous rocks.

Strike and dip are a uniform N100°E/60°-65°N. It was not possible to determine bedding tops. Breccia units were not exposed over sufficient widths to determine graded bedding, nor did tuffaceous beds exhibit obvious grading. Page and Christie (1980) mapped south facing, overturned conglomerate beds (see further below) immediately south of the present claim boundary. Turner and Walker (1973) and Page and Christie (1980) believe the conglomerates ('Ament Bay Formation', Fig. 8) overlie the volcanic sequence and form the core of an overturned, northerly dipping syncline, whose axis runs N100°E, one kilometre south of the property.



from Turner and Walker (1973)

Fig. 8. Stratigraphic location of Sioux Lookout Properties

The Centrefire property essentially straddles the rhyolitic package that extends through parts of McIllraith, Webb, Lomond and Echo Townships. A sample of chloritic, foliated rock (#2988, Table 1) from the extreme northwest corner of the property could represent the stratigraphically underlying mafic units exposed to the north. The presence of two drillholes (possibly Rio Tinto or Canadian Nickel) testing a geophysical conductor in this area indicates that this may be the basalt/rhyolite contact. Dense bush and very small, unstripped outcrops in the area precluded tracing the weakly mineralized horizon.

Rhyolites are exposed for approximately 2200 m across the property. They are presumably stratigraphically overlain by the polymictic conglomerates of the Ament Bay formation (Page and Christie, 1980). Exposures along the Kathlyn Lake Road are of thickly bedded (approximately 1 m), clast-supported conglomerates, containing fragments of sub-angular mafic and felsic volcanic rocks and granitoids. Sulphide 'burns' (centimetre sized gossans) on outcrops are commonly due to pyrite aggregates in the finer portions of the beds. Unequivocal graded bedding was not observed. The provenance of the sulphide clasts is unknown, except that exhalative sulphides were intersected in drilling by Selco (see below), near the top of the rhyolite package, immediately below the sedimentary unit. Possibly, the sulphide clasts were derived by erosion of an exhalative horizon, after cessation of volcanic activity.

#### Mineralization & Alteration

Very little mineralization and alteration were observed in outcrop. Some samples (Table 1) exhibited wisps of sericite and chlorite along bedding planes. Only one was classified as weakly chloritized (#2988), but it is uncertain whether this sample is of rhyolite, or relatively less altered basalt. The presence of 5% disseminated pyrite also makes it the most mineralized in situ sample found. A round, cobble-sized erratic of highly oxidised, semi- to massive sulphides (# 2494: pyrrhotite, pyrite) was found sitting on top of mossy ground cover, on a topographic high on the cliffs above Centrefire Creek. Immediately adjacent outcrops of weakly chloritic to fresh rhyolite tuff, exhibited no mineralization or sulphide 'burns'.

Drilling by previous operators was confined to overburden covered areas below cliff exposures of generally fresh rhyolite. No casings or evidence of drill setups were found. Drilling by Selco in 1979 (hole #30-4-1, located approximately at Synergy's L4+20E/9+40N) intersected significant alteration (highly sericitized rhyodacite tuff) underlying (ie. north of) massive sulphide mineralization (two bands of pyrite-pyrrhotite, 1.5 m and 2.1 m thick, respectively). While Cu and Zn were insignificant, these intersections demonstrate the presence of a mineralizing hydrothermal system. Up dip projection of the favourable stratigraphy is in the overburden covered area parallel to L4+00E, south of BaseLine 10+00N. MMI samples were taken along the length of the favourable stratigraphy to 7+25S. The only outcrop in this area occurs a further 75 m south, above Centrefire Creek (Sample #2496: weakly chloritic rhyolite tuff, Table 1)

Drilling in 1979 by Rio Tinto Canadian Exploration (hole #79-G3, located at Synergy's L8+65E/9+75N) about 450m east of Selco's hole, intersected footwall graphitic, argillaceous beds, followed by sericitized and chloritized dacite (rhyolite?) cut by pyrite-pyrrhotite stringers, and including a 5cm vein of 30% Galena and 15% Sphalerite. The hole terminated in variably biotite-chlorite altered andesite/dacite breccia (with occasional garnets) cut by pyrite-pyrrhotite stringers. Again, up dip projection of the altered and mineralized package is in the overburden covered area below unaltered rhyolite cliffs.

On-strike extrapolation to the east crosses Centrefire Creek where the first outcrops are located at 400 m from Rio Tinto's drillhole, according to mapping by Page and Christie (1980); no alteration nor mineralization was described for these "intermediate" rocks.

#### **8.0 CONCLUSIONS**

The geological setting of the Centrefire Creek property is prospective in terms of its potential for hosting volcanogenic massive base metal sulphide deposits. The Mattabi Camp exhibits a similar succession of volcanic units deposited at a similar time in the development of this portion of the eastern Wabigoon Greenstone Belt. The nature and scale of alteration and mineralization in this area indicate the presence of a significant VMS-style hydrothermal system.

Lateral flow, confined to permeable volcanic units has been well documented in the Snow Lake Camp, Manitoba (Galley et al., 1990). These semi-conformable zones of alteration may attain a thickness of 300 m-700 m and a length of up to 12 km. Break-out eventually occurs at local synvolcanic structures, and a more typical cross-cutting relationship is established. The semi-conformable zone of alteration may be found within 500 m to 3000 m stratigraphically below the ore-producing horizon.

### 9.0 RECOMMENDATIONS

Work on the Centrefire Property should include a detailed mapping program to define potential horizons unrecognised by the cursory nature of previous surveys. The Centrefire Property needs an additional grid in the southern portion of the claims.

Geophysical surveying (HLEM or TEM) of selected targets is recommended. Targets would be defined by anomalous base metals in MMI samples in overburden covered areas, probably on strike with a known conductor, possibly drill-tested (at a distance of over one kilometre away) in the past. Broad-scale lithogeochemical alteration and/or base metal enrichment anomalies would define the larger setting for potential mineralization.

#### 10.0 REFERENCES

- Blackburn, CE, Johns, GW, Ayer, J and DW Davis
  - 1992 Wabigoon Subprovince, in "Geology of Ontario", Ont. Geol. Surv. Spec. Vol. 4, Pt. 1, ed. Thurston, P.C. et al.
- Bottrill, T.
  - 1999 Lithogeochemical Sampling Program for Synergy Explorations Ltd. Centrefire Creek and PD Block Properties, Patricia Mining Division, Ontario
- Galley, AG, Bailes, AH, Syme, EC, Bleeker, W, Macek JJ and TM Gordon
  1990 Geology and Mineral Deposits of the Flin Flon and Thompson Belts, Manitoba
  Geol. Surv. Can. Open File 2165, 8th IAGOD Symposium, Field Trip #10
- Lichtblau, A.
  - 1998 Geological Mapping and Lithogeochemical and MMI Sampling Program for Synergy Explorations Ltd. Needle Lake, Centrefire Creek and PD Block Properties, Patricia Mining Division, Ontario
- Morton, RL, Hudak, GJ, Walker, JS and JM Franklin
  - 1990 Physical Volcanology and hydrothermal Alteration of the Sturgeon Lake Caldera Complex, pp74-94, in "Mineral Deposits of the Western Superior Province, Ontario", ed. Franklin, J.M., et al. Geol. Surv. Can. Open File 2164, 8<sup>th</sup> IAGOD Symposium, Field Trip #9.
- Page, RO and BJ Christie
  - 1980 Lateral Lake Area (East & West Halves), District of Kenora Ont. Geol. Surv. Prelim. Maps P2371 & P2372, 1":1/4 mile
- Turner, CC and RG Walker
  - 1973 Sedimentology, Stratigraphy and Crustal Evolution of the Archean Greeenstone Belt near Sioux Lookout, Ontario, pp 817-845, Can. J. Earth Sci., v.10, no.6

### APPENDIX 1: CENTREFIRE LITHOGEOCHEMICAL DATA

APPENDIX 1: CENTREFIRE CREEK CLAIM BLOCK LITHOGEOCHEMICAL DATA

Sample #	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	TiO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	MnO	Cr <sub>2</sub> O <sub>3</sub>	LOI	TOTAL.
2488	71.12	14.54	2.03	0.84	1.26	5.27	2.25	0.23	0.08	0.04	<0.01	1.27	98.93
2489	69.94	15.4	1.83	1.16	1.51	4.37	3.2	0.23	0.07	0.04	<0.01	1.47	99.22
2490	69.64	14.92	2.11	1.32	1.95	3.78	3.23	0.24	0.09	0.06	< 0.01	1.71	99.05
2491	67.98	14.81	3.09	1.54	2.83	5.12	1.42	0.35	0.16	0.04	< 0.01	1.89	99.23
2492	66.25	15.73	2.99	1.55	2.95	2.74	3.35	0.39	0.17	0.04	< 0.01	3.32	99.48
2493	50.9	10.83	16.66	3.8	5.86	0.24	2.63	0.33	0.1	0.38	< 0.01	7.11	98.84
2494	19.34	3.9	48.22	1.43	1.92	0.14	0.09	0.2	0.04	0.1	< 0.01	23.06	98.44
2495	65.12	14.74	3.71	1.72	3.39	3.49	2.91	0.49	0.12	0.07	< 0.01	3.6	99.36
2496	65.98	15.76	3.44	1.6	2.6	2.64	4.43	0.43	0.29	0.06	< 0.01	2.19	99.42
2988	52.68	14.48	17	2.88	4.45	1.65	0.52	0.93	0.09	0.24	< 0.01	4.65	99.57
BGS/8-99/001	60.36	14.95	4.35	2.41	6	3.13	2.4	0.43	0.19	0.11	< 0.01	4.27	98.6
BGS/8-99/002	64.92	13.86	7.22	3.25	3.5	2.66	1.78	0.66	0.13	0.11	< 0.01	1.34	99.43
BGS/8-99/003	65.46	17.01	3.44	1.32	3.58	3,44	2.37	0.51	0.22	0.07	< 0.01	1.44	98. <b>86</b>
BGS/8-99/004	70.74	14.99	2.04	0.83	2.11	3.25	2.83	0.31	0.08	0.06	< 0.01	1.58	98.82
BGS/8-99/005	67.37	16.78	1.79	1.29	1.97	3.33	3.34	0.43	0.16	0.03	< 0.01	2.14	98.63
BGS/8-99/006	66.6	15.67	2.39	1.52	2.55	4.93	2.06	0.41	0.17	0.06	< 0.01	2.76	99.12
BGS/8-99/007	68.65	15.19	2.88	1.35	2.54	4.51	1.78	0.35	0.14	0.04	<0.01	1.8	99.23
BGS/8-99/008	66.92	17.45	2.81	1.19	1.33	4.49	2.09	0.41	0.11	0.02	< 0.01	1.72	98.54
BGS/8-99/009	68.07	16.3	2.76	0.96	1.65	4.59	2.52	0.38	0.15	0.03	< 0.01	1.68	99.09
BGS/8-99/010	66.71	15.39	3.5	1.67	2.86	4.27	2.35	0.42	0.15	0.05	< 0.01	2.05	99.42
BGS/8-99/011	68.78	14.62	3.31	1.29	2.26	3.99	2.18	0.36	0.13	0.05	< 0.01	1.75	98.72
BGS/8-99/012	69.46	15.28	3.55	1.21	1.65	4.13	1.9	0.35	0.17	0.02	< 0.01	1.71	99.43

APPENDIX 1: CENTREFIRE CREEK CLAIM BLOCK LITHOGEOCHEMICAL DATA

Sample #	Ag ppm	Al %	<b>As</b> Ppm	<b>B</b> ppm	Ba ppm	Be ppm	<b>Bi</b> ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	<b>Ga</b> Ppm	Hg ppm	<b>K</b> %	La ppm	Mg %	Mn ppm	Me ppm
2488					1075							1 ,8 111								1
2489					1600															
2490	ŀ				1250															ŀ
2491					596															ŀ
2492					627															1
2493					241															
2494					22															
2495	ł				460															
2496	1				1050															
2988	ł				136															
BGS/8-99/001 BGS/8-99/002 BGS/8-99/003 BGS/8-99/004 BGS/8-99/005 BGS/8-99/006 BGS/8-99/007																				
BGS/8-99/008 BGS/8-99/009 BGS/8-99/010 BGS/8-99/011	<0.2	1.17	<2	<10	190	<0.5	<2	0.68	<0.5	6	81	6	1.57	<10	<1	0.6	30	0.56	140	<1
BGS/8-99/012	0.2	2.3	2	<10	10	2	<2	2.14	<0.5	17	142	1175	3.8	<10	1	0.22	<10	0.95	600	1

APPENDIX 1: CENTREFIRE CREEK CLAIM BLOCK LITHOGEOCHEMICAL DATA

Sample#	Na %	Nb ppm	ppm	Ppm	Pb ppm	Rb	<b>S</b> %	Sb ppm	Šč ppm	Sr ppm	Ti %	PPIL	ppm	Ppm	<b>ppm</b>	<b>y</b>	Zn ppm	Zr ppm	Cu ppm aqua	Zn ppm aqua
2488		8			34 6	72		¥-: 30-4	the Become - Cam	467	8441 . 1 . 451		THE REST			15		168	:.\$5, <del>7</del> ,#3r :	Yan t
2489		8				88				289						15		161		
2490		8				93				228						12		169		
2491		7				33				569						8		123		
2492		6				72				357						12		131		
2493		8				70				216						11		84		
2494		6				22				<2						4		42	1155	4170
2495		7				82				379						14		107		
2496		8				96				218						19		160		
2988		6				26				142						15		71		
BGS/8-99/001 BGS/8-99/002 BGS/8-99/003 BGS/8-99/004 BGS/8-99/005 BGS/8-99/006 BGS/8-99/007																				
BGS/8-99/009 BGS/8-99/010 BGS/8-99/011	0.07		19	610	4		<0.01	<2	1	45	0.06	<10	<10	20	<10		40			
BGS/8-99/012	0.25		33	170	<2		0.49	4	11	12	0.2	<10	<10	97	40		28			



Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd., Mississauga Ontario, Canada L4W 2S3 PHONE: 905-624-2806 FAX: 905-624-6163

To: ANALYTICAL SOLUTIONS LTD.

1214 - 3266 YONGE ST. TORONTO, ON M4N 2L6

Page Number :2 Total Pages :2 Certificate Date: 06-SEP-199 Invoice No. :19926703 P.O. Number :

:PIE Account

Project : Comments: ATTN: LYNDA BLOOM FAX: ANDREAS LICHTBLAU

										CE	RTIF	ICATE	OF /	ANALY	'SIS	Α	9926	703		
	SAMPLE	PREP CODE	A1203 % XRF	CaO Cr203		K20 % XRF	MgO % XRF	Mno % XRF	Na20 % XRF	P205	8102 % XRF	TiO2	LOI % XRF	TOTAL	Ba ppm	Rb ppm	Sr ppm	Nb ppm	Zr ppm	y ppm
Looker	2988 2989 2991 2992 2993	208 226 208 226 208 226 208 226 208 226	15.50 15.13 14.25	4.45 < 0.01 5.36 < 0.01 3.90 0.01 9.91 0.01 6.91 < 0.01	17.00 14.19 7.47 14.49 4.51	0.52 0.87 0.63 0.28 0.37	2.88 3.50 4.01 6.24 2.19	0.24 0.17 0.11 0.21 0.10	1.65 2.54 3.43 2.19 3.45	0.09 0.11 0.12 0.15 0.12	52.68 50.51 60.59 47.74 62.73	0.93 1.49 0.61 1.36 0.54		99.57 99.22 99.07 99.23 99.26	136 312 102 46 83	26 37 20 10 15	142 108 168 83 188	6 8 10 7 6	71 87 134 76 129	15 22 16 29 16
	2994 2995 2996 2997 2998	208 226 208 226 208 226 208 226 208 226	12.52 10.68	9.65 0.02 10.66 0.03 10.39 < 0.01 1.74 < 0.01 0.78 < 0.01	11.99 11.76 10.37 2.29 9.99	0.22 0.16 0.35 1.43 1.13	7.65 7.95 6.97 0.46 3.08	0.21 0.19 0.16 0.04 0.34	1.87 1.51 1.63 2.62 0.78		49.37 49.17 44.26 77.36 68.74	0.93 0.88 0.75 0.22 0.48		99.11 99.17 99.27 98.34 99.19	34 56 19 252 175	9 12 9 46 28	99 103 55 77 18	6 7 6 10 9	64 58 53 151 105	20 18 19 15
	2999 3000 3001 3002 3003	208 226 208 226 208 226 208 226 208 226	14.11 13.33	2.00 < 0.01 1.74 < 0.01 10.97 0.01 1.73 < 0.01 10.08 < 0.01	8.01 1.08 11.85 1.69 13.37	0.98 0.87 0.29 0.94 0.20	3.69 0.49 7.42 0.21 7.14	0.21 0.02 0.19 0.02 0.21	4.02 5.22 1.82 4.90 1.89		61.59 75.55 49.95 75.50 48.24	0.59 0.08 0.86 0.12 0.98	1.47	99.29 99.10 99.03 99.08 99.26	153 174 55 207 25	31 21 8 20 10	144 61 86 111 103	7 7 6 12 7	138 113 57 145 64	13 13 19 20 20
	3004 3005 3006 3007	208 226 208 226 208 226 208 226	14.93 15.32	1.92 < 0.01 4.41 < 0.01 5.17 < 0.01 3.64 < 0.01	6.80 5.47 6.16 4.10	0.95 0.98 0.92 0.96	3.84 3.03 3.25 1.80	0.10 0.15 0.14 0.06	3.28 2.91 3.12 4.43	0.14 0.12 0.14 0.15	63.71 64.30 61.81 66.81	0.55 0.55 0.57 0.48	2.43	98.50 99.31 99.03 99.27	256 199 296 157	27 31 27 25	82 174 162 216	8 11 11 10	133 143 139 131	14 18 16 15
<b>†</b>																				
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CERTIFICATION:\_



Analytical Chemists \* Geochemists \* Registered Assayers 5175 Timberlea Blvd., Mississauga Ontario, Canada L4W 2S3 PHONE: 905-624-2806 FAX: 905-624-6163

To: ANALYTICAL SOLUTIONS LTD.

1214 - 3266 YONGE ST. TORONTO, ON M4N 2L6

Page Number :1 Total Pag :2 Certificate :e:0

e: 06-SEP-1999 Invoice No. P.O. Number :19926703

:PIE Account

Project:
Comments: ATTN: LYNDA BLOOM FAX: ANDREAS LICHTBLAU

31 Stike	Point /	10 Co.	ntrefo	ie/	18	PD				CE	RTIF	CATE	OF A	ANAL	/SIS	Δ	99267	703		
SAMPLE	PREP CODE	A1203 % XRF	CaO	Cr203	Fe2O3	K20 % XRF	MgO % XRF	Mno * XRF	Na20	P205	sio2	TiO2	LOI % XRF	TOTAL	Ba ppm	Rb ppm	sr ppm	Nb ppm	Zr ppm	Y ppm
2481 2482 2483 2484 2485	208 226 208 226 208 226 208 226 208 226 208 326	9.01 13.95 12.18 13.16 16.95	5.18 9.50 8.80	< 0.01 < 0.01 0.02 0.01 < 0.01	11.73 10.38 9.78 12.19 4.09	0.21 1.37 0.46 0.71 1.59	5.88 2.86 8.44 6.45 2.02	0.37 0.17 0.16 0.17 0.06	0.12 0.46 1.26 1.41 4.32	0.08 0.09 0.06 0.07 0.12	54.29 61.00 46.30 45.71 63.48	0.31 0.57 0.57 0.81 0.46	3.52 2.63 9.88 9.27 2.34	99.04 98.66 98.61 98.76 99.31	70 217 48 116 370	12 53 17 22 35	43 71 70 102 207	5 7 5 7 9	68 67 39 57 151	15 19 15 14 17
2486 2488 2489 2490 2491	208 226 208 226 208 226 208 226 208 226 208 226	15.86 14.54 15.40 14.92 14.81	1.26 1.51 1.95	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	5.83 2.03 1.83 2.11 3.09	0.81 2.25 3.20 3.23 1.42	3.98 0.84 1.16 1.32 1.54	0.09 0.04 0.04 0.06 0.06	4.71 5.27 4.37 3.78 5.12	0.13 0.08 0.07 0.09 0.16	62.46 71.12 69.94 69.64 67.98	0.63 0.23 0.23 0.24 0.35	2.37 1.27 1.47 1.71 1.89	98.69 98.93 99.22 99.05 99.23	111 1075 1600 1250 596	20 72 88 93 33	104 467 289 228 569	10 8 8 8 8 7	127 168 161 169 123	15 15 15 12 8
2492 2493 2494 2495 2496	208 226 208 226 208 226 208 226 208 226	15.73 10.83 3.90 14.74 15.76	5.86 1.92 3.39	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	2.99 16.66 48.22 3.71 3.44	3.35 2.63 0.09 2.91 4.43	1.55 3.80 1.43 1.72 1.60	0.04 0.38 0.10 0.07 0.06	2.74 0.24 0.14 3.49 2.64	0.17 0.10 0.04 0.12 0.29	66.25 50.90 19.34 65.12 65.98	0.39 0.33 0.20 0.49 0.43	3.32 7.11 23.06 3.60 2.19	99.48 98.84 98.44 99.36 99.42	627 241 22 460 1050	72 70 22 82 96	357 216 < 2 379 218	6 8 6 7 8	131 84 42 107 160	12 11 4 14 19
2497 2498 2499 2500 2501	208 226 208 226 208 226 208 226 208 226	11.44 14.73 24.40 12.46 15.55	9.57 10.54 12.06	< 0.01 < 0.01 < 0.01 0.02 < 0.01	12.07 13.83 6.48 13.45 11.44	0.16 0.16 0.53 0.15 0.21	6.99 8.77 4.13 8.34 4.51	0.20 0.15 0.10 0.22 0.22	1.59 2.21 3.12 1.90 1.99	0.05 0.06 0.04 0.07 0.08	56.11 47.80 47.72 47.94 50.55	0.60 0.81 0.39 0.71 0.96	0.81 1.24 1.51 1.43 3.04	99.16 99.33 98.96 98.75 99.16	41 27 234 59 104	10 12 23 10 11	71 94 141 89 121	7 5 5 5 7	42 48 32 50 57	17 18 11 14 16
2502 2503 2504 2505 2506	208 226 208 226 208 226 208 226 208 226	15.49 16.12 14.92 16.64 15.65	14.46	0.02 < 0.01 0.01 < 0.01 0.01	11.25 4.91 13.36 13.28 11.99	0.60 1.65 0.38 1.08 0.36	7.19 2.88 2.87 3.45 6.72	0.22 0.09 0.22 0.25 0.17	1.89 4.45 < 0.01 2.44 1.56	0.07 0.31 0.06 0.09 0.06	48.46 62.28 46.43 49.13 49.09	0.81 0.54 0.96 1.08 0.76	0.89 0.91 1.28 1.59 0.62	99.18 99.48 94.95 99.09 99.31	44 348 161 162 38	32 100 26 38 21	89 809 124 157 118	5 11 6 6 4	49 160 51 62 43	18 16 19 20 17
2507 2508 2509 2510 2511	208 226 208 226 208 226 208 226 208 226	13.10	8.71 10.65 11.73 10.42 12.75	0.02	25.26 13.47 12.56 12.39 11.34	0.48 0.37 1.04 0.83 0.56	5.69 5.50 7.33 7.49 6.78	0.20 0.23 0.20 0.22 0.19	0.12 2.85 1.76 2.43 1.71	0.13 0.14 0.07 0.07 0.08	41.07 49.07 47.28 49.99 48.01	0.45 1.45 0.72 1.07 0.77	4.69 0.68 1.75 0.76 0.61	96.31 99.26 98.52 98.78 99.06	47 37 100 50 50	34 14 81 59 31	33 89 92 92 106	3 8 4 5 4	31 94 45 60 46	11 27 16 21 18
2512 2513 2514 2981 2982	208 226 208 226 208 226 208 226 208 226	14.92 15.17 14.46 15.81 13.78	3.57	0.02 0.02 < 0.01 < 0.01 < 0.01	11.92 11.40 18.70 4.55 2.26	0.66 0.67 0.72 2.05 1.45	6.66 6.34 4.31 2.01 1.07	0.21 0.25 0.21 0.06 0.05	2.69 2.05 1.87 4.02 4.41	0.08 0.09 0.06 0.22 0.14	49.89 50.79 43.82 63.69 70.82	0.81 1.01 0.80 0.57 0.39	0.66 0.58 5.25 2.02 1.86	99.20 99.40 99.44 98.57 98.71	69 46 83 935 645	45 45 87 73 55	76 60 50 711 544	5 5 5 6 7	50 57 48 132 122	18 20 16 14 12
2983 2984 2985 2986 2987	208 226 208 226 208 226 208 226 208 226	13.75 16.42 12.68 11.09 8.99	3.20 8.18	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	2.13 4.99 3.66 4.45 8.29	1.40 2.66 1.73 1.96 1.19	0.99 2.05 1.63 2.05 6.34	0.05 0.05 0.09 0.10 0.30	4.47 3.50 2.74 2.33 2.19	0.12 0.23 0.19 0.21 0.19	70.85 63.65 61.47 67.59 38.21	0.36 0.61 0.38 0.45 0.37	1.99 1.51 5.93 4.00 19.05	98.63 98.87 98.68 99.18 99.21	614 1150 949 725 440	53 109 69 70 39	564 792 864 616 917	8 9 7 7 6	119 135 101 99 95	12 15 12 13 17

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ANALYTICAL SOLUTIONS LTD.

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Page Numb<sup>/</sup> 1
Total Pages | 1
Certificate Daw: 20-SEP-1999
Invoice No. : 19927928
P.O. Number :

Account :PIE

Project: CENTREFIRE CCK-03 Comments: ATTN: LYNDA BLOOM

CC: TERRY BOTTRIU

Catrefin /	70							CERTII	FICATE	OF AN	ALYSIS	5 /	1992792	28	
SAMPLE	PREP CODE	A1203 % XRF	CaO % XRF	Cr203	Fe2O3	K20 % XRF	MgO % XRF	MnO % XRF	Na20 % XRF	P205 % XRF	sio2 % XRF	TiO2	LOI % XRF	TOTAL	
BGS/8-99/001 BGS/8-99/002 BGS/8-99/003 BGS/8-99/004 BGS/8-99/005	205 226 205 226 205 226 205 226 205 226	14.95 13.86 17.01 14.99 16.78	6.00 3.50 3.58 2.11 1.97	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	4.35 7.22 3.44 2.04 1.79	2.40 1.78 2.37 2.83 3.34	2.41 3.25 1.32 0.83 1.29	0.11 0.11 0.07 0.06 0.03	3.13 2.66 3.44 3.25 3.33	0.19 0.13 0.22 0.08 0.16	60.36 64.92 65.46 70.74 67.37	0.43 0.66 0.51 0.31 0.43	4.27 1.34 1.44 1.58 2.14	98.60 99.43 98.86 98.82 98.63	
BGS/8-99/006 BGS/8-99/007 BGS/8-99/008 BGS/8-99/009 BGS/8-99/010	205 226 205 226 205 226 205 226 205 226 205 226	15.67 15.19 17.45 16.30 15.39	2.55 2.54 1.33 1.65 2.86	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	2.39 2.88 2.81 2.76 3.50	2.06 1.78 2.09 2.52 2.35	1.52 1.35 1.19 0.96 1.67	0.06 0.04 0.02 0.03 0.05	4.93 4.51 4.49 4.59 4.27	0.17 0.14 0.11 0.15 0.15	66.60 68.65 66.92 68.07 66.71	0.41 0.35 0.41 0.38 0.42	2.76 1.80 1.72 1.68 2.05	99.12 99.23 98.54 99.09 99.42	
BGS/8-99/011 BGS/8-99/012 BGS/8-99/013 BGS/8-99/014	205 226 205 226 205 226 205 226	14.62 13.51 15.28 2.33	2.26 9.82 1.65 1.70	< 0.01 < 0.01 < 0.01 < 0.01	3.31 12.42 3.55 4.11	2.18 0.58 1.90 0.13	1.29 4.64 1.21 0.92	0.05 0.24 0.02 0.06	3.99 1.75 4.13 0.25	0.13 0.06 0.17 0.03	68.78 53.97 69.46 88.48	0.36 0.73 0.35 0.20	1.75 1.29 1.71 0.71	98.72 99.01 99.43 98.92	
·															
														1	

CERTIFICATION:\_



Analytical Chemists \* Geochemists \* Registered Assayers

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To: ANALYTICAL SOLUTIONS LTD.

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Total Pages :1-A Certificate 22-S

Account

22-SEP-1999 : I 9928471 Invoice No. P.O. Number

:PIE

Project: CENTREFIRE CCK-03 Comments: ATTN: LYNDA BLOOM CC: TERRY BOTTRIU

	a	<i>tre</i>	fire/	PD	199	San	ylin	1-			CE	RTIFI	CATE	OF A	NAL	YSIS	/	<b>19928</b>	471		
SAMPLE	PREF		Ag ppm	A1 %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cđ ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
BGS/8-99/009 BGS/8-99/012 BGS/8-99/013 BGS/8-99/014	299 2 299 2 299 2	229	< 0.2 0.2 < 0.2 < 0.2	1.17 2.30 1.32 0.38	< 2 2 < 2 < 2 < 2 < 2	< 10 < 10 < 10 < 10	190 10 110	< 0.5 2.0 < 0.5 < 0.5	< 2 < 2 < 2 < 8	0.68	< 0.5 < 0.5 < 0.5 < 0.5	6 17 7 4	81 142 108 274	6 1175 6 353	1.57 3.80 2.16 2.12	< 10 < 10 < 10 < 10	< 1 1 < 1 < 1 < 1	0.60 0.22 0.59 0.06	30 < 10 10 < 10	0.56 0.95 0.66 0.24	140 600 105 170
																		$\cap$		-{	

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# APPENDIX 2: MMI SAMPLING DATA

		SYNER	RGY EXPLORATIONS LTD.
		CF	NTREFIRE PROPERTY
			THE THOLENT
			MMI SAMPLING
	Northing	Easting	Description
3343 IS	1000 1000		Spruce, thin cover, brown sand Outcrop just below surface
is	1000		Outcrop just below surface
IS	1000		Outcrop just below surface
S	1000		Outcrop just below surface
3344	1000	300	Spruce & poplar, thin cover, brown sand, near outcrop
IS	1000		Outcrop just below surface
S	1050		Outcrop
S	1100		Outcrop
SS	1150 1200		Outcrop
S	1200		Outcrop Outcrop
3347	1300		Spruce, medium spaghnum, dark brown sand
IS	1350		Outcrop
3348	1400		Alders, thin cover, brown sand
S	1450	400	Outcrop
3349	950		Spruce & poplar, shallow outcrop, gray sand
3350	900		Spruce & alder, thick compost, gray clay
3351	850		Poplar & alder, thick compost, compost sample
3384	800		Spruce & poplar, medium compost, dark clay/soil
3386	750		Spruce, thin cover, brown sand
3387 S	700 1000		Spruce, thin cover, brown sand Outcrop
s	1000		Outcrop
s s	1000		Outcrop
s s	1000		Outcrop
S	1000		Outcrop
s	1000	650	Outcrop
S	1000		Outcrop
S	1000		Outcrop
S	1000		Outcrop
<u>s</u>	1000		Outcrop
S S	1000 950		Outcrop Outcrop
<u>s</u>	900		Alders, grassy bog, near stream
S	1000		Outcrop
is	1000		Outcrop
IS	1000		Outcrop
3388	1000	1180	Grassy bog, near stream, black soil-maybe mostly compost
<u> </u>	1000		Flatland grasses, shallow outcrop
S	1000		Outcrop
3389			Spruce & poplar, thick compost, black clay/soil
3390			Spruce & poplar, medium compost, gray clay
<u>s</u>	1250		Outcrop
<u>s</u>	1300		Outcrop
<u>s</u>	1350	900	Spruce bog
OTAL 13	SAMPLES	<u> </u>	
	T		

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### APPENDIX 3: GPS DATA FILE

The second secon

Feature Name	Comment 1	Comment 2	GPS File #	GRID E	GRID N	UTM EAST	UTM NORTH	DESCRIPTION
GPS FILE DATA				FIELD DATA	& DESCRIPT	IONS		
						00000000	2.022	
Cantura Nama	S	0	ODG File #	CDID E	GDID N	CORRECTE		PECONITION
Feature Name	Comment 1	Comment 2	GPS File #	GRID E	GRID N	UTM EAST	UTM NORTH	DESCRIPTION
LITHOGEOCHEI	MICAL SAMPLI	ES	. ,,,,,,,					
SampleS	2488		A082914a.cor	125	1000	542353	5539067	Litho #2488: Rhyplite, mass, hairline Se, tr Py
SampleS	2489	BL10/400	A082914a.cor	400	1000	542642	5539027	Litho #2489: Rhyplite, mass, rusty hairline fractures
SampleS	2490	DE10/400	A082914a.cor		1000	542799	5538989	Litho #2490: Rhyolite, flow or tuff?
SampleS	2491	<u> </u>	A082914a.cor	675	1000	542953	5539049	Litho #2491: FP-Rhyolite, incipient Se alt
Campies	900	1125	A082914a.cor	910	1110	543135	5539141	Litho #2492: Rhyplite, FP-tuff, rare chl hairline veinlets
SampleS	2493	1123	A082914a.cor	900	1012	543136	5539036	Litho #2493: Rhyplite tuff, mod chl
	2493	DI 40/040E	A082914a.cor	910	995	543151	5539035	Litho #2494: melon-sized boulder, strongly gossanous, SMS?-Po, Mag
SampleS	<del></del>	· · · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·	
SampleS	2495	BL10/1013	A082914a.cor	1012	1000	543246	5539025	Litho #2495: Rhyplitic tuff, weakly chl
SampleS	2496	<del> </del>	A082914a.cor	400	650	542656	5538666	Litho #2496: Rhyplitic tuff, weakly chl
SampleS	2988		A082914a.cor	<u> </u>	-	542300	5539372	Litho #2988: Rhyolite, foliated, mod chl, 5% Py
CLAIM INFORMA	TION							
Line Post	1076662		A082914a.cor			542610	5538769	Line Post 800m N Post 3, #1078662
1077327	4	CL Post	A082914a.cor	<del>-</del>	-	542010	5539519	Post 4, #1077327
Point Feature	4	CL POST	A082914a.cor		-	542300	5539319	Claim Line and road intersection
Point Feature		CL.RD	A082914a.cor		-	542108	5539494	II II
Point Feature		1		-	-	542521	5537977	8.8
Point Peature		CL.RD	A083017a.cor	-	-	542521	003/9//	
GRID LINES					·			
Grid Pt	400	700	A082914a.cor	400	700	542651	5538747	End of Line
Grid Pt	1025	1000	A082914a.cor	1025	1000	543263	5539022	Line Position
Grid Pt	900	1125	A082914a.cor	900	1125	543135	5539141	Litho #2492 at L9+10E/11+10N had too much cover for GPS
Grid Pt	675	1000	A082914a.cor	675	1000	542914	5539027	Line Position; photos down to CF Creek
Grid Pt	0	1000	A082914a.cor	0,0		542247	5539026	Start of Grid on W side of main road
TOPOGRAPHY/I	MISCELLANEC	ous .						
Tana Cachina		05 05 55	A002044			£40000	5538579	Mathlem Lake Del 9 Controller Create
Topo Feature			A083014a.cor		-	542230	5538579	Kathlyn Lake Rd & Centrefire Creek
Topo Feature		REDHAT.CH	A083014a.cor A083014a.cor		-	542459 542416	553/6/9	Kathlyn Lake Rd & Redhat Creek  Kathlyn Lake Rd and good forestry road going E (on air photo)
Topo Feature		<del></del>		<u>-</u>	-		H	
Topo Feature	······	RD RD	A083014a.cor		-	542640	5536165	Kathlyn Lake Rd and "new" Dryden-Hudson Rd intersection
Topo Feature		TP.RD	A083014a.cor	-	-	542200	5536268	McIllraith/Lomond N-S Township Line
Topo Feature		RD.RD	A083014a.cor	•	<b>-</b>	538054	5536679	Ghost Lake Rd and "new" Dryden-Hudson Rd intersection



52K01SW2003 2.19873

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#### 5.0 SYNERGY 1998 PRELIMINARY PROGRAM

During the period August 19, 1998 to August 31, 1998, Synergy performed a preliminary program of limited linecutting, lithogeochemical and MMI sampling, and geological mapping. A total of 2,350 m of line were cut, chained and picketed; a total of 22 rock samples were taken for lithogeochemical analysis, and 13 soil samples were taken for MMI analysis.

Locations of all lithogeochemical sample points were determined with a Trimble Geoexplorer GPS unit (Appendix 3). Points on base and grid lines, claim posts and topographic features were also referenced. Field data was reduced and plotted on 1:5000 scale maps by Geo-Sat Enterprises, Thunder Bay, Ontario. Field data spreadsheets are appended

Contract personnel involved during this period were:

Andreas Lichtblau, Geologist

(807)473-8172

RR#1, Nolalu, Ontario, P0T 2K0 Prospector's Licence #E33626

James Martin, Linecutter, Prospector (807)475-9138 RR# 7, Site 1, Comp. 12

Thunder Bay, Ontario, P7C 5V5

Ben Whitney, Geological Assistant

Box 250

21 Classic Ave.

Toronto, Ontario, M5S 2Z3

Contract personnel for the 1999 reconnaissance geological mapping and lithogeochemical sampling were:

Terrence Bottrill, Senior Geologist

192 Weldon Ave.

Oakville, ON L6K 2H6

(416)842-9884

Peter Eunson, Geological Assistant

99 Harbour Square, Suite 130B

Toronto, ON M4J 2H2

(416)861-1469



## Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd., Mississauga Ontario, Canada L4W 2S3 PHONE: 905-624-2806 FAX: 905-624-6163

To: ANALYTICAL SOLUTIONS LTD.

1214 - 3266 YONGE ST. TORONTO, ON M4N 2L6

Page Number :1-A .
Total Pages :1
Certificate Date: 22-SEP-1999
Invoice No. :19928471 P.O. Number :

:PIE Account

Project : CENTREFIRE CCK-03 Comments: ATTN: LYNDA BLOOM

CC: TERRY BOTTRIU

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CERTIFICATION:	:
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# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd., Ontario, Canada

Mississauga L4W 2S3

PHONE: 905-624-2806 FAX: 905-624-6163

To: ANALYTICAL SOLUTIONS LTD.

1214 - 3266 YONGE ST. TORONTO, ON M4N 2L6

Project: CENTREFIRE CCK-03 Comments: ATTN: LYNDA BLOOM

CC: TERRY BOTTRIU

Page Number :1-B Total Pages :1 Certificate Date: 22-SEP-1999 Invoice No. : [9928471

P.O. Number Account :PIE

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SAMPLE	PREP	Mo ppm	Na %	Ni ppm	ppm P	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	T1 ppm	U ppm	V ppm	ppm W	Zn ppm	
BGS/8-99/009 BGS/8-99/012 BGS/8-99/013 BGS/8-99/014	299 229 299 229 299 229 299 229	1 < 1	0.07 0.25 0.08 0.04	19 33 22 11	610 170 580 60	< 2 8	< 0.01 0.49 0.40 0.10	< 2 4 2 < 2	1 11 2 3	45 12 29 3	0.06 0.20 0.06 0.07	< 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10	20 97 22 26	< 10 40 < 10 30	40 28 44 14	
		<u>.</u>															

CERTIFICATION:	
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Contrefice

#### Profit & Loss Statement 01/01/98 Through 09/12/99 (in Canadian Dollars)

Page 1

09/12/99

01/01/98-**Category Description** 09/12/99 EXPENSES Accomodation 699.54 **Assaying** 599.95 Field Supplies 658.14 Gas And Mileage 296.88 Geochemical Sampling 350.00 **Geological Mapping** 2,617.50 Lineculting 450.00 Maps and Geological Reports 31.23 Meals & Ent 502.53 **Prospecting** 562.50 Report Writing 2,301.73 Travel Expenses 2,175.35 Vehicle Rental 259.43 **TOTAL EXPENSES** 11,504.78 **TOTAL INCOME - EXPENSES** -11,504.78



#### **Declaration of Assessment Work Performed on Mining Land**

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (offi-	ce use)
119930 000	94
Assessment Files Resear	

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52K01SW2003

2.19873

LOMOND

900

tion 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, this lent work and correspond with the mining land holder. Questions about this evelopment and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario.

2.19873

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240.

- Please type or print in ink.

lame Stuarton Resources L	imited	Client Number 30 1184		
ddress		Telephone Number		
	race	905 - 845 - 3650 Fax Number		
	K 2H6	905 - 844 - 4107 Client Number		
lame				
Address		Telephone Number		
		Fax Number		
2. Type of work performed: Ch	neck (✓) and report on only ONE of the folio	owing groups for this declaration		
Geotechnical: prospecting, assays and work under section	surveys, Physical: drilling	stripping,		
Vork Type	ion to (regs) trending and as	Office Use		
mapping, prospecting, line	cotting, assaying	Commodity		
		Total \$ Value of Work Claimed // 505		
Partes Work From & 23 OB Conformed Day Month	역용 To 31 한용 역용 역식 To 30 한용 역약 Year Day Month Year	NTS Reference		
Global Positioning System Data (if available)	Township/Area Lonond, & Mc I with	Mining Division Salucia		
	M or G-Plan Number 6-2876	Resident Geologist District		
- provide pro - complete a - provide a r	ork permit from the Ministry of Natural Reso oper notice to surface rights holders before and attach a Statement of Costs, form 0212 map showing contiguous mining lands that a	starting work;		
- provide pro - complete a - provide a r - include two	oper notice to surface rights holders before and attach a Statement of Costs, form 0212 map showing contiguous mining lands that a copies of your technical report.	starting work; ; are linked for assigning work;		
- provide pro complete a - provide a r - provide a r - include two	oper notice to surface rights holders before and attach a Statement of Costs, form 0212 map showing contiguous mining lands that a	starting work; ; are linked for assigning work; st if necessary)		
- provide pro complete a - provide a r - include two  B. Person or companies who p  Hame  Lynda Bloom	oper notice to surface rights holders before and attach a Statement of Costs, form 0212 map showing contiguous mining lands that a copies of your technical report.	starting work; ; are linked for assigning work; st if necessary)  Telephone Number 416 - 696 - 0918		
- provide pro complete a - provide a r - provide a r - include two  B. Person or companies who p	oper notice to surface rights holders before and attach a Statement of Costs, form 0212 map showing contiguous mining lands that a copies of your technical report.  orepared the technical report (Attach a list	starting work; ; are linked for assigning work; st if necessary)  Telephone Number		
- provide pro complete a - provide a r - provide a r - include two  B. Person or companies who p  Hame Lynda Bloom  Address 1214 - 3266 Yonge	oper notice to surface rights holders before and attach a Statement of Costs, form 0212 map showing contiguous mining lands that a copies of your technical report.	starting work; ; are linked for assigning work; st if necessary)  Telephone Number  416 - 696 - 0918  Fax Number		
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vork was do mining land olumn the l	m Number. Or if ne on other eligible show in this ocation number the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of we to be distributed at a future date
g	TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
g	1234567	12	0	\$24,000	0	0
9	1234568	2	\$ 8,892	\$ 4,000	0	\$4,892
	PA 1077327	16	11504.80	6400	D	5104 80
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# Statement of Costs for Assessment Credit

Transaction Number (office use)	
W9930,00094	
	_

Personal information collected on this form is obtained under the authority of subsection 6 (1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, this information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to a Provincial Mining Recorder, Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury. Ontario, P3E 6B5.

2 • 19873

Work Type	Units of work  Depending on the type of work, list the number of hours/day worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Geological Mapping & Report	13 days	\$ 378.40 /day	\$4919.25
Linecutting	2350 m	\$191.50/Km	\$450.00
Geochemical Sampling	2 days	\$175/day	\$350.00
Assaying	22 samples	\$ 27.27 / Sample	\$599.95
Prospecting	2 days	\$281.25/day	\$562.50
, <u>J</u>			
Associated Costs (e.g. supp	lies, mobilization and demobilization).		
Field Supplies			\$658.14
Maps and leparts			\$31.23
Trans	portation Costs		\$ 2731.66
Food a	nd Lodging Costs		\$1202.07
	Total	Value of Assessment Work	\$11504.80
Calculations of Filing Discounts:			
2. If work is filed after two years ar	erformance is claimed at 100% of the above T nd up to five years after performance, it can on his situation applies to your claims, use the cal	ly be claimed at 50% of the To	
TOTAL VALUE OF ASSESSMENT	WORK x 0.50	Total \$ value of v	vorked claimed.

#### Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a
  request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the
  Minister may reject all or part of the assessment work submitted.

0212 (03/97)

RECEIVED

NOV 17 (000)

GEOSCIENCE ASSESSMENT
OFFICE

Signature	Date Nov. 15/1999

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

March 29, 2000

STUARTON RESOURCES LTD. 178 SHANLEY TERRACE OAKVILLE, ON L6K-2H6



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

Telephone: (888) 415-9845 Fax: (877) 670-1555

Visit our website at:

www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

Dear Sir or Madam:

Submission Number: 2.19873

Status

Subject: Transaction Number(s):

W9930.00094 Approval After Notice

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact BRUCE GATES by e-mail at bruce.gates@ndm.gov.on.ca or by telephone at (705) 670-5856.

Yours sincerely,

ORIGINAL SIGNED BY

Blair Kite

Supervisor, Geoscience Assessment Office

Mining Lands Section

### **Work Report Assessment Results**

Submission Number:

2.19873

Date Correspondence Sent: March 29, 2000

Assessor: BRUCE GATES

**Transaction** 

First Claim

Number

Township(s) / Area(s)

Status

**Approval Date** 

W9930.00094

1077327

LOMOND, LOMOND, MCILRAITH

Approval After Notice

March 25, 2000

Section:

Number

12 Geological GEOL

The revisions outlined in the Notice dated February 9, 2000 have been corrected.

Assessment work credit has been redistributed, as outlined on the attached Distribution of Assessment Work Credit sheet.

Correspondence to:

Resident Geologist

Sioux Lookout, ON

Assessment Files Library

Sudbury, ON

Recorded Holder(s) and/or Agent(s):

Lynda Bloom

TORONTO, ON, CAN

STUARTON RESOURCES LTD.

OAKVILLE, ON

## **Distribution of Assessment Work Credit**

The following credit distribution reflects the value of assessment work performed on the mining land(s).

Date: March 29, 2000

Submission Number: 2.19873

Transaction Number: W9930.00094

Claim Number

Value Of Work Performed

1077327

11,155.00

Total: \$

11,155.00

Page: 1

Correspondence ID: 14723

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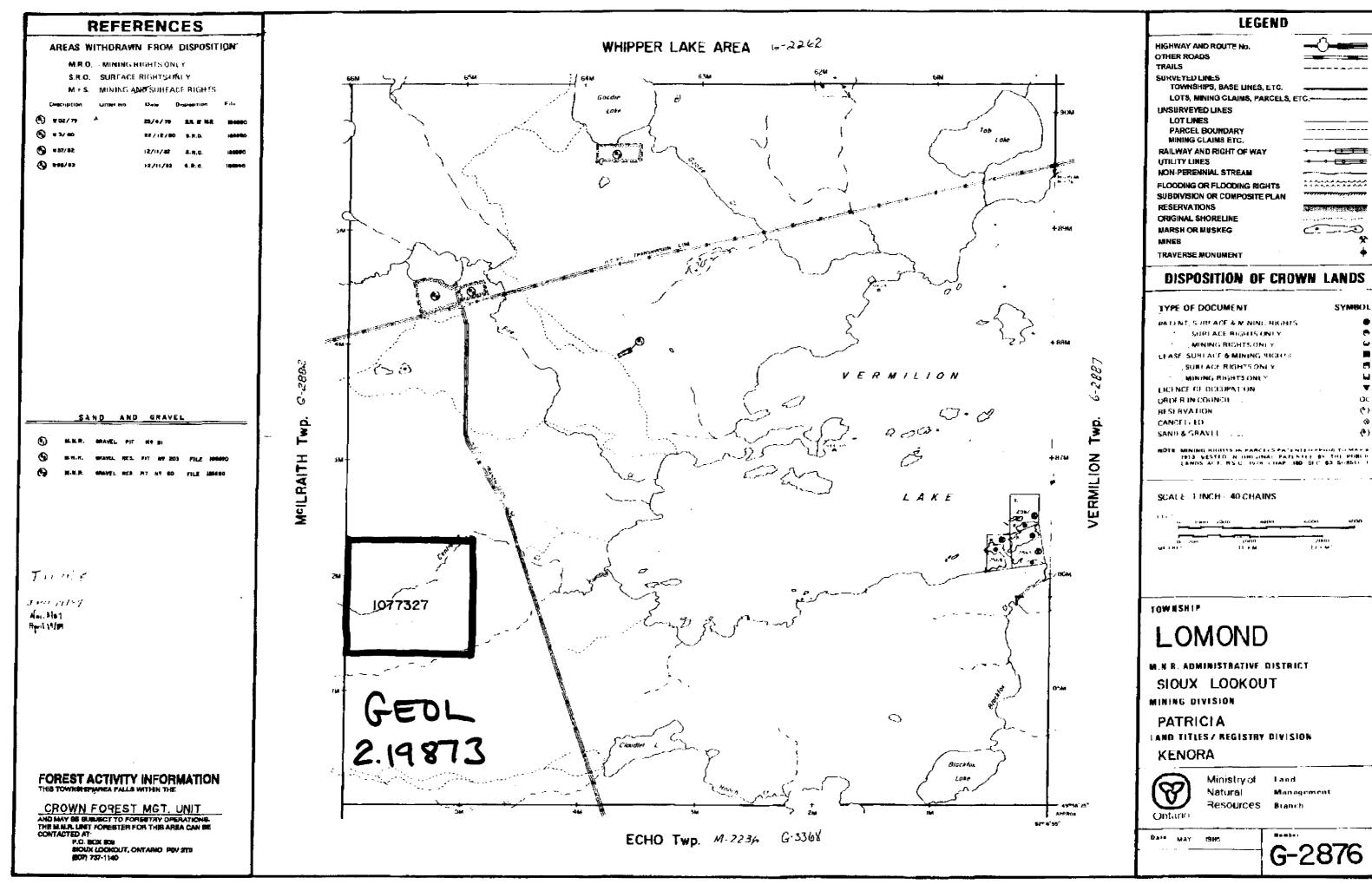
91 Feb. 3

91Feb. 1

LOMOND

6-5876

52K015W2003 2.19873 LOMOND 200



THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS BOUFCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOP MENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

