REPORT

ON THE

GEOLOGICAL MAPPING, PROSPECTING AND

LITHOGEOCHEMICAL SAMPLING

KASAGIMINNIS LAKE PROPERTY

PATRICIA MINING DIVISION, DISTRICT OF KENORA

NORTHWESTERN ONTARIO

FOR

POWER EXPLORATIONS INC.

August 1987

Robert A.V. Higginson, B.Sc.

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1.0 SUMMARY

The Kasagiminnis Lake property held under a joint venture agreement between Moss Resources Ltd. and Power Explorations Inc. is located 16 miles south-southwest of the town of Pickle Lake in the Dempster-Pickle Lakes greenstone belt.

During the current mapping and prospecting program, potentially economic gold mineralization was encountered in a quartz vein and adjacent silicified and sheared mafic volcanics. Values from the vein ranged from 5,0560 to 18,520 ppb or approximately 0.25 ounces of gold per ton over 6.2 feet. The vein lies 400 feet west of drill hole KAS-87-3 which intersected 38.9 feet of gold mineralization.

A two-phase exploration program is recommended for the property. The program would involve 2,250 feet of diamond drilling to determine the depth and lateral extent of gold mineralization in Phase I. Phase II would involve additional surface work and diamond drilling contingent upon the results of Phase I.

2.0 INTRODUCTION

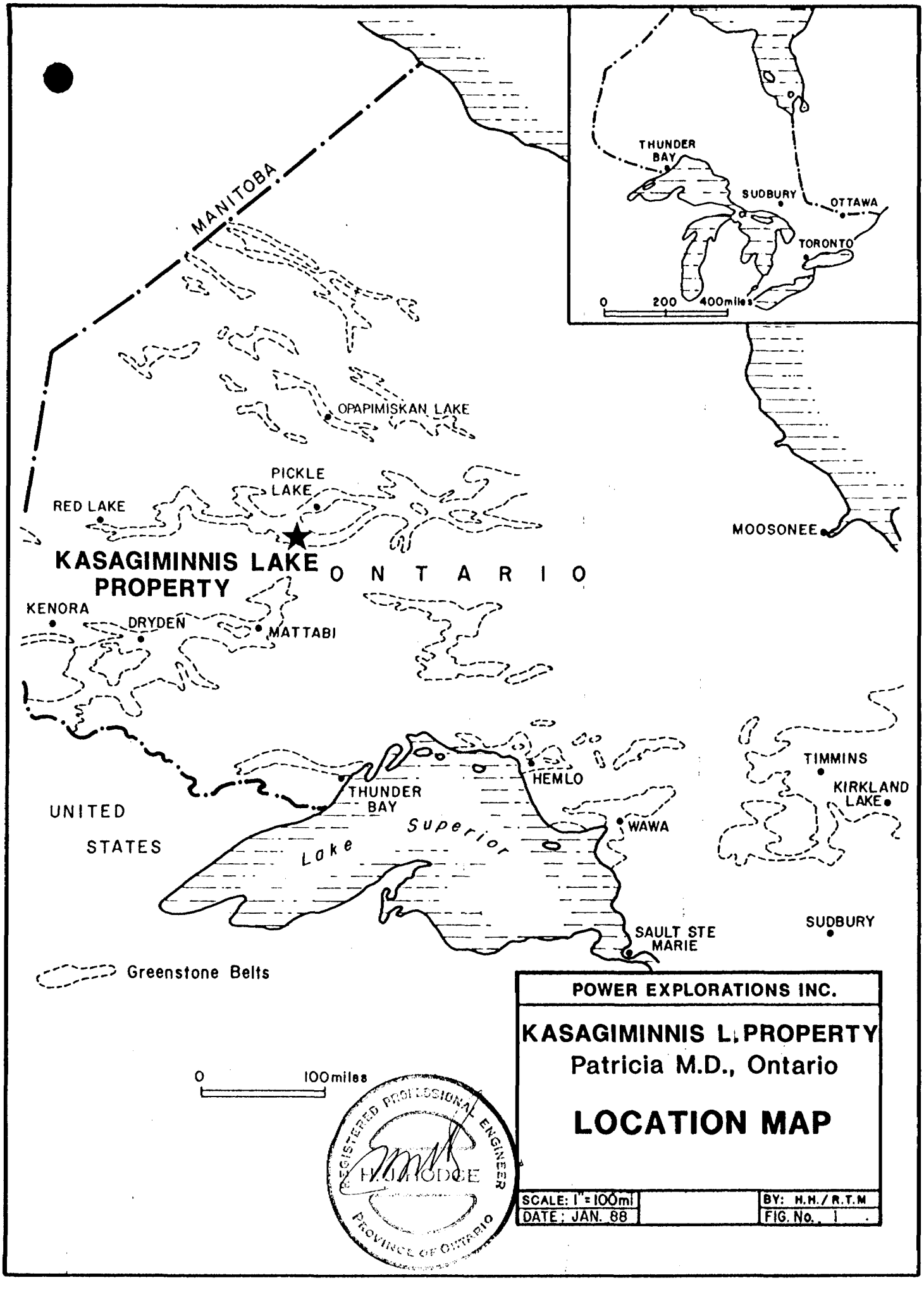
This report describes the results of a comprehensive field program on the Kasagiminnis Lake property in the Ochig Lake area. The program consisted of mapping, prospecting and lithogeochemical sampling over selected portions of the property as a follow-up to the 1986-87 drilling program (R. Higginson, 1987). The property consists of 80 contiguous unpatented mining claims, located 16 miles south-southwest of the town of Pickle Lake (Fig. No. 1) in the Patricia Mining Division, District of Kenora, northwestern Ontario.

The present program carried out by Geocanex Ltd. studied two areas of the property in detail with a 1 inch = 100 feet and 1 inch = 20 feet scale mapping, followed by trenching and lithogeochemical sampling. Concurrently, geophysical surveys including ground magnetics and induced polarization surveys were carried out.

All work on the property was done on a cut picket line grid. The grid has an east-west trending baseline with perpendicular lines cut at 100 foot intervals across the strike of the local stratigraphy. Several tie lines were cut to ensure control. Geological mapping was done at scales of 1 inch = 100 feet over detail areas and 1 inch = 20 feet over cleared sub-areas.

The personnel involved in the program were:

R. Higginson	Project Geologist	Oro Station, Ontario
J. Drew	Geologist	North Bay, Ontario
M. Bliss	Field Assistant	Fort Erie, Ontario
R. McKelvey	Field Assistant	Kirkland Lake, Ontario



REGISTERED PROFESSIONAL ENGINEER
H.H. HODGE
PROVINCE OF ONTARIO

POWER EXPLORATIONS INC.

KASAGIMINNIS L. PROPERTY
Patricia M.D., Ontario

LOCATION MAP

SCALE: 1"=100mi		BY: H.H./R.T.M
DATE: JAN. 88		FIG. No. 1

Area #1 (Drawing No. A-1) is bounded by BLO and the northern property boundary between L-8+00 and L28+00W. Area #2 (Drawing No. A-2) is bounded by BLO and L8+00S between L44+00W and L52+00W.

Two sub-areas of Area #1 (Drawing's No. A-1-1 and A-1-2) and one sub-area of Area #2 (Drawing No. A-2-1) were mapped at 1 inch = 20 feet, trenched and channel sampled.

Geophysical anomalies were prospected and quartz veins, mineralized volcanics, intrusives, sediments and iron formations were sampled during the program.

Selected sub-areas of the property were trench-stripped and channel sampled. All sample descriptions and assays are included in this report.

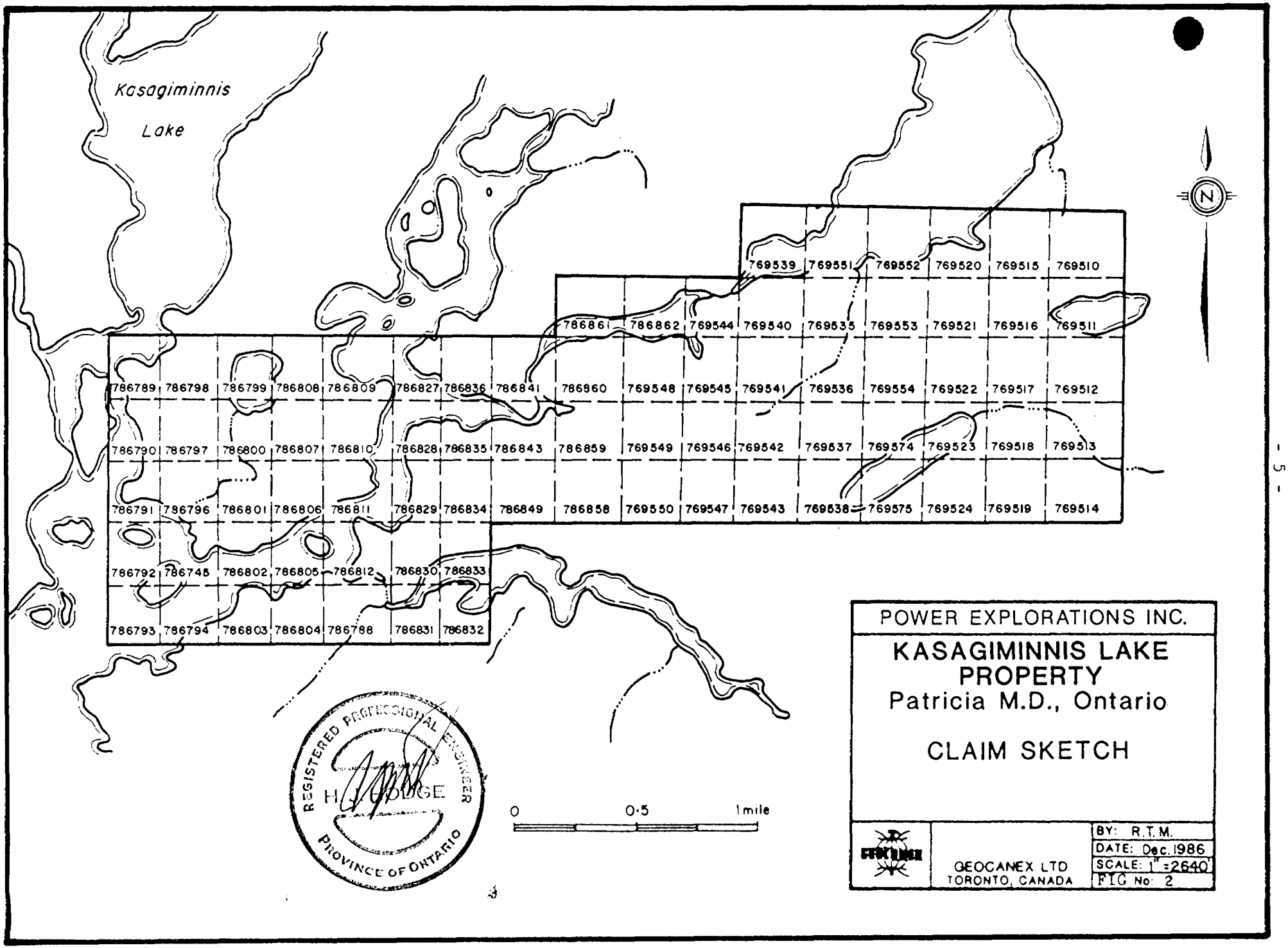
The work was performed between May 15, 1987 and June 13, 1987. The time breakdown for the work performed is as follows:

Man-Days	
Mapping/Prospecting	Trenching/Channel Sampling
27	58

Total 85 Man-Days

3.0 PROPERTY DESCRIPTION

The Kasagiminnis Lake property consists of 80 contiguous mining claims in the Ochig Lake area, Patricia Mining Division, northwestern Ontario (Fig. No. 2). The claim



POWER EXPLORATIONS INC.

KASAGIMINNIS LAKE PROPERTY

Patricia M.D., Ontario

CLAIM SKETCH

GEOCANEX LTD
TORONTO, CANADA

BY: R.T.M.
DATE: Dec. 1986
SCALE: 1" = 2640'
FIG No: 2

numbers and recording dates are as follows:

Claim Numbers		Recording Date
Pa 769510-769524 inclusive	(15)	April 30, 1984
Pa 769535-769554 inclusive	(20)	April 30, 1984
Pa 769574, 769575	(2)	April 30, 1984
Pa 786788-786812 inclusive	(25)	April 30, 1984
Pa 786827-786836 inclusive	(10)	April 30, 1984
Pa 786841	(1)	April 30, 1984
Pa 786843	(1)	April 30, 1984
Pa 786849	(1)	April 30, 1984
Pa 786858-786862 inclusive	(2)	April 30, 1984

Total 80 Claims

The claims are held under a joint venture agreement between Moss Resources Ltd. and Power Explorations Inc. of 1003-34 King Street East, Toronto, Ontario, M5C 1E5.

4.0 LOCATION, ACCESS AND SERVICES

The northernmost boundary of the property is approximately 16 miles south-southwest of the town of Pickle Lake. The eastern boundary is approximately 3.5 miles west of Highway 599 at the northern boundary of the Osnaburgh Indian Reserve (No. 63B) and 4.5 miles northwest of the Indian settlement of New Osnaburgh.

The property can be reached by float/ski plane or helicopter from Pickle Lake, or by winter road from Highway 599, four miles north of the boundary of the Osnaburgh Indian Reserve.

Pickle Lake is a mining and transportation centre with a population of approximatey 350. UMEX (Union Miniere) operates a 4,000 TPD copper-nickel mine and concentrator, seven miles northwest of Pickle Lake with 14,000 tons of ore grading 1.6% copper and 0.2% nickel. The mine is presently closed due to depressed base metal prices. Consequently, there is abundant vacant housing in town.

Pickle Lake is connected by paved Highway 599 to Savant Lake and the Canadian National Transcontinental railway line, 90 miles to the south, and Ignace and Trans Canada Highway 17, 180 miles south. Electricity is supplied by a hydro line connecting Pickle Lake to Ear Falls generating station. Air, ground and water transportation for local use are readily available in town. Pickle Lake is also serviced by regular NorOntair flights from Thunder Bay.

5.0 PHYSIOGRAPHY AND VEGETATION

Outcrop exposure constitutes 7 to 10% of the property, which is extensively covered with glacial/fluvial material consisting primarily of sand and boulders. Eskers, drumlinoid ridges and sandhills cover most of the property. Vegetation on the overburden varies from open poplar to thick birch, spruce and alder forests. Low-lying areas and submerged sand plains are poorly drained with muskeg, black spruce, or cedar and alder swamps.

A more detailed analysis of the surficial geology can be obtained from Paradis and Rampton, 1986 and the geology maps (map pocket).

6.0 PREVIOUS WORK

Little previous work has been done on the property. In the early 1970's, the property was covered by a regional airborne geophysical survey for UMEX. This company subsequently drilled two anomalies on the property. No assay results were reported.

In 1984, Moss Resources Ltd. staked the current claim group. An airborne VLF-EM and magnetics survey by Terraquest Ltd. covered the property in 1985.

In the spring of 1986, Moss Resources Ltd. signed a joint venture agreement with Power Explorations Inc. Subsequently, Geocanex Ltd. was contracted to complete mapping and geophysical programs which were undertaken during the summer of 1986 (Higginson, 1986 and Medd, 1986).

During the winter of 1986 to 1987, a thirty-nine hole, 12,424 foot diamond drilling program was contracted to Midwest Diamond Drilling of Winnipeg and supervised by Geocanex Ltd. The drilling encountered significant gold mineralization in three holes on the property. A synopsis of the intersections from Higginson (1987) is as follows:

1) A 38.9 foot intersection in Hole KAS-87-3 returned values ranging from 0.01 to 0.23 ounces of gold per ton...

2) A 13.9 foot intersection in Hole KAS-87-6 returned values of 0.58 ounces of gold per ton over 4.7 feet and 1.40 ounces of gold per ton over 4.2 feet...

3) An intersection in Hole KAS-87-31 returned values of 0.58 ounces of gold per ton over 4.2 feet...

As a result of the encouraging drilling results, Geocanex Ltd. was again contracted in the spring of 1987 to undertake the current detailed follow-up mapping and geophysical surveys.

7.0 REGIONAL GEOLOGY AND ECONOMIC MINERALIZATION

The Pickle Lake area is located within the Uchi Subprovince, a part of the Superior Province of the Canadian Shield. The area is characterized by several arcuate, highly deformed and coalescing greenstone belts, consisting of predominantly mafic to intermediate volcanic flows, which have been intruded by numerous granitic to ultramafic intrusive bodies. The metamorphic grade ranges from greenschist-to-amphibolite facies. The volcanics host subordinate amounts of felsic to mafic pyroclastics, sediments and iron formation. Felsic quartz-feldspar porphyry dykes are commonly found in all lithologies (Fig. No. 3).

Ultramafic rocks host copper-nickel mineralization at the Union Miniere Thierry Mine, seven miles northwest of Pickle Lake, with mined ore and mineral reserves totalling 14,000,000 tons grading 1.6% copper and 0.2% nickel.

Historically, gold production in the Pickle Lake area has been from structurally controlled vein type deposits or sulphide replacement bodies spatially associated with, or contained within, bands of Algoman (chert-magnetite) iron formation.

The former producing Pickle Crow and Central Patricia mines operated from 1935 to 1966 and 1934 to 1951, respectively, collectively producing 2,068,020 ounces of gold from

LOCATION MAP

MINES, PAST PRODUCER

- A Central Patricia No 1
- B Central Patricia No 2
- C Pickle Crow No 1
- D Pickle Crow No 2
- E Albany River
- F Crowshore
- G UMEX Thierry Mine

GOLD PRODUCTION

MINE PROPERTY	TONS	OZS GOLD	OZ/TON
Central Patricia	1,729,248	521,806	0·359
Pickle Crow	3,237,572	1,446,214	0·44
Total	4,966,820	2,068,020	0·416

90°30'

90°00'

51°30'

50°15'

Collishaw Lake

Hwy 808

Tarp Lake

Trebell L.

PONSFORD TWP

CONNELL TWP

McCULLAGH TWP

Pickle Lake

Pickle L.

Dona L.

Dona Lake Discovery
1,400,000 tons at 0·24 oz/ton Au

Ochig Lake

Kawinogans Lake

KASAGIMINNIS LAKE PROPERTY

Knuppl L.

Hasaga
200,000 tons at 0·19 oz/ton Au

LAKE ST. JOSEPH

Hwy 599

Osnaburgh I.R. 63B

A B C D E F G

REGISTERED PROFESSIONAL ENGINEER
H. G. HODGE
PROVINCE OF ONTARIO

0 2 4 6 8 10 miles
Scale 1 inch = 4 miles

POWER EXPLORATIONS INC.

KASAGIMINNIS LAKE PROPERTY
Patricia M.D., Ontario

PROPERTY LOCATION AND REGIONAL GEOLOGY

GEOCANEX LTD
TORONTO, CANADA

BY: R.T.M.
DATE: Dec 1986
SCALE: 1" = 4 mi
FIG. No: 3

91°00'

90°30'

51°30'

51°15'

GEOLOGY LEGEND

- Geological boundary
- Diabase dykes (Keewanawan) — 7
- Granitic intrusives — 6
- Mafics, ultramafic intrusives — 5
- Migmatites — 4
- Intermediate to felsic volcanics — 3
- Mafic volcanics — 2
- Sediments — 1
- Mineral occurrence
- Mine, past producer — ⚒A
- Iron formation

Geology from Ontario Geological Survey
Misc paper 199, 1984
Stott G.M. & Wallace H.
and Map 2218, Cat Lake - Pickle Lake,
Sage et al, 1972

LOCATION MAP

MINES, PAST PRODUCER

- A Central Patricia No 1
- B Central Patricia No 2
- C Pickle Crow No 1
- D Pickle Crow No 2
- E Albany River
- F Crowshore
- G UMEX Thierry Mine

GOLD PRODUCTION

MINE PROPERTY	TONS	OZS GO
Central Patricia	1,729,248	621,8
Pickle Crow	3,237,572	1,446,2
Total	4,966,820	2,068,0

Dobie Lake

RED LAKE M.D.
PATRICIA M.D.

Meen L.

Golden Patricia Discovery
860,000 tons at 0·58 oz/ton Au

Dorothy L.

Obaskaka Lake

Wright Lake

Kawinogans Lake

Trebell L.

Pickle L.

Ochig Lake

KASAGIMINNIS LAKE PROPERTY

Knuppi L.

Dempster L.

Hasaga
200,000 tons at 0·19 oz/ton Au

Teevin L.

Carpenter L.

LAKE ST. JOSEPH

Open

4,966,820 tons of ore for an average grade of 0.416 ounces of gold per ton. Gold was recovered from quartz veins, vein networks and sulphide replacement bodies which occupied shears, faults, fissures and fold axial plane fractures in highly deformed mafic volcanics and iron formation. Gold-bearing quartz veins were also mined within quartz-albite porphyry sills near the contact of mafic volcanics and iron formation.

Dome Mines and St. Joe Canada both recently announced their intentions to open new mines in the Pickle Lake area. Dome Mines' Dona Lake property has reported reserves of 1,500,000 tons grading 0.3 ounces of gold per ton. Gold mineralization occurs as sulphide replacement bodies within a band of highly deformed oxide facies iron formation (Northern Miner, September 1986). The mine is expected to produce approximately 40,000 ounces of gold per year over a ten year period.

St. Joe Canada's Golden Patricia property is reported to have an estimated 500,000 ounces of gold reserves with a grade of 0.58 ounces gold per ton. The gold mineralization occurs in a quartz vein at a contact between a mylonitized unit and sheared mafic volcanics in close proximity to banded iron formation (Northern Miner Magazine, September 1986).

8.0 PROPERTY GEOLOGY

8.1 General Geology

The Kasagiminnis Lake property is located in the Dempster-Pickle Lakes greenstone belt which trends roughly east-west and joins the Pickle Lake belt to the east, and the Meen-

Dempster Lakes belt to the west. The property is underlain by a complex sequence of southward younging mafic-to-intermediate flows, mafic-to-felsic pyroclastics, sediments and possible iron formation. This sequence has been intruded by numerous small gabbroic bodies, granite pegmatite dykes and minor felsite dykes. The portion of the belt exposed on the property has been compressed between two granitic bodies, the Kasagiminnis Lake and carling Granite Plutons on the north and south, respetively, resulting in a narrowing of the belt to approximtely one mile in width. High angle faults, interpreted from geological and geophysical data, crosscut the volcano-sedimentary sequence and trend northeast-southwest and northwest-southeast. Pervasive shearing and small scale folding is probably related to a regional tectonic event.

8.2 Volcanics

The volcanic sequence is dominated by basaltic-to-andesitic flows and tuffs with subordinate amounts of felsic (rhyolitic to rhyodacitic) tuff, rare lapilli tuff and possible iron formation. The basaltic to andesitic flows are generally fine-grained, light to dark green and massive to foliated. However, medium to coarse grained amphibolitic equivalents and pillowed flows occur commonly in some locations. Well formed to stretched pillows are exosed at L13+00W,18+00N and have southward facing top directions. Basaltic to andesitic tuffs are well foliated, finely laminated to banded and interbedded with cherty-quartz $\pm$ carbonate bands. Weathered surfaces vary in colour from buff to dark green. Rhyolitic-to-rhyodacitic tuffs are fine-grained, foliated and vary in colour from grey to buff on fresh and weathered surfaces, respectively. The felsics are usually interbedded with the basaltic-to-andesitic tuffs and are frequently

altered to quartz ± sericite ± chlorite ± amphibole schists containing cherty horizons with variable amounts of arsenopyrite, iron sulphides and magnetite.

8.3 Sediments

A thick sequence of sediments is intermittently exposed over a width of approximately 1,600 feet in the central portion of the property. The sediments have gradational to interfingering contacts with the volcanics to the north and west, as well as being interbedded with volcanics and granites in the contact zone of the Carling Granite to the south.

The sedimentary sequence consists of interbedded biotite ± garnet ± chlorite schist, probably representing alumina-rich mudstones, and quartz siltstone to sandstone. Minor magnetite-rich bands may occur as a result of breakdown of biotite or may possibly represent original lean, discontinuous bands of iron formation.

8.4 Iron Formation

Iron formation is exposed in three small outcrops in the western part of the property. Sulphide facies iron formation with 5 to 10% pyrite/pyrrhotite in cherty, chlorite schist is exposed at L21+00N,88+80E. Narrow, sheared oxide facies iron formation is exposed in two outcrops. These exposures are atypical of iron formation in the Pickle Lake area. An exposure at L20+20N,91+52E consists of 3 to 5% magnetite blebs in irregular chert and chlorite schist lenses. The other exposure at L24+40N,L11+10E consist of sediments (sandstone and mudstone) and cherty, felsic tuff with 3 to 5% magnetite in narrow biotite-garnet schist seams.

8.5 Intrusives

Several generations of felsic-to-mafic intrusives occur on the property. These intrusives range from the regional granitic plutons and associated marginal phases, to gabbroic/ dioritic sills which may be coeval with the volcanics.

The two prominent granitic intrusive bodies on the property are the Kasagiminnis Lake and the Carling Granite Plutons which are exposed on the northeastern and southern portions of the property, respectively.

Extensive exposures of the Kasagiminnis granite indicate that it is weakly foliated chloritic granite. Minor shearing and iron-enriched phases occur near the margins, along with diorite porphyry dykes, which probably formed due to the assimilation of minor amounts of mafic volcanics by the granite magma.

A felsic dyke exposed on the northwestern part of the property at 13+45N, 47+60W, may represent a late stage, marginal phase of the Kasagiminnis Lake Pluton. The dyke rock is zoned, probably due to shearing during emplacement, with graphic textured coarse-grained quartz-feldspar on the contacts and a fine to medium-grained, cream coloured, felsic core. The dyke contains minor amounts of lepidolite (lithium) mica and analyzed 1,386 ppb or approximately 0.04 ounces gold per ton.

The contact zone between the Carling Granite and the volcano-sedimentary sequence is well exposed over several hundred feet along (L4+00E and 18+00E) on the southern portion of the property. Volcanics, sediments and granite are discernable

as separate bands in the distal portion of the contact zone, and become more gneissic with crude banding (mineral segregations) proximal to the pluton. To the south of the contact zone, the granite is medium-grained, orange-buff coloured and massive with 3 to 5% biotite. Numerous albite ± quartz ± orthoclase ± biotite pegmatite dykes crosscut the granite, sediments and volcanics, following a distinct north-north-easterly (20° to 35°) trending set of fractures.

Small to medium sized, gabbroic-to-dioritic sills occur throughout the volcano-sedimentary sequence. The sills have coarse-grained amphibole and biotite clots in a fine-grained, amphibole plus chlorite ± quartz ground mass with widely spaced, hematite stained, quartz veins infilling narrow shears and fractures. A large, well exposed, gabbroic-to-dioritic sill hosted in sediments and tuffs, crosses L4+00E and L8+00E at L17+00S to 18+00S, and is traceable for over 1,500 feet along strike. The sill is crosscut by a wide pegmatite dyke, indicating that the sill predates the fracturing and intrusion of the pegmatitic dyke rocks.

8.6 Metamorphism

Abundant garnet metacrysts in the sediments and amphibolization of mafic-to-intermediate volcanics indicates regional amphibolite facies metamorphism.

8.7 Structure

The rocks on the property have been stretched and sheared erasing most primary textures such as pillows and bedding. The stratigraphy strikes roughly east-west and foliations dip steeply to the north. Existing pillow tops indicate a southward younging direction. Shear zones have a general north-

northwest to northwest trend. A strong set of north-northeast (20° to 35°) trending fractures, infilled with pegmatitic dyke rocks, may be small scale representations of regional fault structures. Small scale folds are present in several locations and generally plunge steeply to the east.

9.0 GEOPHYSICAL SUMMARY

Interpretation of airborne geophysical data suggests that the east-west trending volcanic sequence on the property may represent the same stratigraphic horizon that hosts gold mineralization on the Ben Lake property of Power Explorations Inc. and the Hasaga property of Lac Minerals.

Ground geophysical data suggests that the stratigraphy has been crosscut by several northeast-southwest and northwest-southeast trending fault zones. These interpreted fault zones may have served as conduits for mineralizing fluids which have created sulphide-enriched and silicified zones, within magnetite-rich volcanics, sediments, or iron formation in close proximity to the faults.

A more detailed discussion of the geophysical technique and interpretation of the data is given by S. Medd, 1986, and R. Gillick, 1987.

10.0 LITHOGEOCHEMICAL SAMPLING

During the mapping and prospecting program, grab and channel samples were taken from mineralized volcanics, quartz veins, intrusives and iron formation. A total of 38 grab samples and 156 channel samples were taken and analyzed for gold. Bondar Clegg & Co. Ltd. of Ottawa, assayed all samples using

standard fire assay-atomic absorption/mass spectrophotometry techniques.

All grab and channel samples are plotted on the geology maps (map pocket) and all sample descriptions and assay results are listed in Appendices C and D.

11.0 DISCUSSION OF RESULTS

Potential economic gold mineralization occurs in a package of sheared mafic volcanics and iron formation exposed along L24+00W and L25+00W between 11+00N and 12+00N (see Drawings No. A-1 and A-1-2). Numerous grab and channel samples returned anomalous gold values.

The most significant gold values were obtained from an isoclinally folded, northeast-southwest trending quartz vein and adjacent silicified mafic volcanics exposed at L24+00W, 11+50N. Visible gold occurs in association with fine to medium-grained pyrite in the core of the vein. The vein and adjacent volcanics returned the following values:

Assay #	Lithology	Assay in in ppb Au	Width in Feet
8354	Silicified mafic	5530	3.0
8355	Silicified mafic	5050	1.3
8356	Mylonitized quartz vein	18,520	0.9
8357	Cherty blue grey quartz	5440	1.0
	Average assay	8635 ppb	6.2

OR

0.25 OPT/6.2 feet

The vein crosscuts a sequence of sheared mafic volcanics and iron formation which is on strike and 400 feet west of diamond drill Hole KAS-87-3 which intersected 38.9 feet of gold mineralization with values ranging from 0.01 to 0.23 ounces of gold per ton.

Extensive channel sampling of the two remaining sub-areas failed to return values above background levels (5-25 ppb).

12.0 CONCLUSIONS

Potential economic gold mineralization occurs in surface exposures of a quartz vein hosted in and crosscutting sheared-silicified mafic volcanics and iron formation. The volcanic package is on strike with drill Hole KAS-87-3 which intersected a gold bearing horizon.

Additional work is required to determine the trend, tenor, depth and lateral extent of the gold bearing horizons.

13.0 RECOMMENDATIONS

A two-phase exploration program is recommended for the property and would involve the following:

13.1 Phase I

A total of 2,250 feet of diamond drilling to test potentially gold-bearing structures and horizons indicated by the current geological and geophysical surveys. Proposed drill collars for this Phase are listed in Appendix E.

13.2 Phase II

Additional surface work and diamond drilling contingent upon the results Phase I.

14.0 ESTIMATED COST OF RECOMMENDED PROGRAM

14.1 Phase I

Diamond Drilling: 9 holes for a total of 2,250 feet at a rate of $35/foot	$78,750.00
Contingency 20%	$15,750.00
Total Cost of Phase I	$94,500.00

14.2 Phase II

Surface Work and Diamond Drilling: Amount and costs to be contingent upon the results of Phase I.

Respectfully submitted,

Robert A.V. Higginson, B.Sc.
Geocanex Ltd.

15.0 REFERENCES

Gillick, R.E. Report on Induced Polarization and Detailed Magnetic Surveying on the Kasagiminnis Lake Property, District of Kenora, Patricia Mining Division, Northwestern Ontario for Power Explorations Inc. October 1987, unpublished report of Geocanex Ltd.

Higginson, R. Report on Diamond Drilling, Kasagiminnis Lake Property for Power Explorations Inc., March 1987, unpublished.

Higginson, R. Report on Geological Mapping, Prospecting and Geochemical Sampling, Kasagiminnis Lake Property for 669977 Ontario Ltd., December 1986, unpublished.

Medd, S. Report on Magnetic and VLF-EM Surveys on the Kasagiminnis Lake Property, District of Kenora, Patricia Mining Division, Northwestern Ontario, for 669977 Ontario Ltd.; unpublished report of Geocanex Ltd.

Ontario Geological Survey, 1986. Airborne Electromagnetic and Total Intensity Magnetic Survey, Pickle Lake Area, District of Thunder Bay, Ontario; by Geoterrex Ltd. for O.G.S. Geophysical/Geochemical series Map. 80916, Scale 1:20,000.

Ontario Geological Survey, Resident Geologists Files - Toronto and Sioux Lookout. Various unpublished assessment reports.

APPENDIX A

CERTIFICATE OF QUALIFICATIONS

CERTIFICATE OF QUALIFICATIONS

THIS IS TO CERTIFY THAT:

I am a resident of Oro Township, Ontario.

I am a graduate of the University of Waterloo, Waterloo, Ontario, with a degree in bachelor of Science, Earth Science; major (Geology).

I have worked as an exploration geologist in gold exploration in northwestern Ontario since 1984.

I supervised geological mapping and rock sampling programs on the Kasagiminnis Lake property, from May 15, 1987 to June 13, 1987.

The statements contained in this report, and conclusions reached, are based upon the study of all relevant assessment work records of the Ontario Geological Survey, and geological reports and maps published by the Ontario Ministry of Natural Resources.

In this report, I have disclosed all relevant descriptive and interpretive material, which is, to the best of my knowledge, necessary to gain a complete understanding of the viability of the project and the recommendations.

DATED THIS 2nd DAY OF December, 1987

Rob Higginson

Robert A.V. Higginson, B.Sc.
Geologist

APPENDIX B

TECHNICAL DATA STATEMENT

APPENDIX C

GRAB AND CHANNEL SAMPLE ANALYSES AND DESCRIPTIONS

KASAGIMINNIS LAKE MAPPING/PROSPECTING SAMPLES

Sample #	Assay #	Location	Description	Au ppb
KL-87-1	8130	20+00N,18+80W	3" QV, clean, Z folded, spotty gossan on WR contact	<5
KL-87-2	8131	19+97N,18+80W	4" zone with gossan and numerous hematite stained QVs <1" wide	10
KL-87-3	8132	19+98N,18+80W	8" wide zone with Z folded quartz stringers, tr-0.5% po in stringers	25
KL-87-4	8133	19+99N,18+80W	3" wide gossan zone, strong limonite stain, 1" concordant QV	20
KL-87-5	8134	20+15N,18+90W	10" x 4' irregular quartz bleb, chlorite inclusions, minor ochre in quartz, tr. molybdenite in WR	<5
KL-87-6	8135	20+30N,18+90W	Parallel 1' diorite dykes crosscutting mafic volcanics, sharp to irregular contacts marked by q-tl stringers and limonite staining, dykes cut by 'S' folded tl ± q ± py ± po stringers, 0.5-1% sulphides	10
KL-87-7	8136	20+40N,18+90W	6' wide vein swarm, anastomosing q + cc ± tl ± ep, tr. po, py	<5
KL-87-8	8137	20+45N,19+12W	4' wide diorite dyke extension of 8135	<5
KL-87-9	8138	20+50N,19+35W	16" QV crosscutting ochre limonite inclusions and fracture fill in WR	<5
KL-87-10	8139	18+25N,19+00W	3" QV in mafics, crosscutting	5
JD-01	8140	18+95N,26+00W	3" quartz-epidote pod in mafic volcanics. Minor limonite staining	10
JD-02	8141	18+30N,26+15W	10" wide zone of heavily limonitic mafic volcanics with 1-2% pyrite. Possible shearing present at 110°	15
KL-87-11	8142	17+20N,21+80W	6" fault zone, quartz-cc groundmass with tr-1% po, py, cpy, abundant mafic fragments	15
KL-87-12	8143	17+00N,22+35W	7' rusty buff coloured int-fel unit with minor quartz stringers, possibly mylonitic	10

KASAGIMINNIS LAKE MAPPING/PROSPECTING SAMPLES

Sample #	Assay #	Location	Description	Au ppb
KL-87-13	8144	17+39N,21+65W	Typical mafic flows with lim. stain on foliation	5
KL-87-14	8145	17+20N,21+55W	12" mafic dyke 85% chlorite 15% biotite crosscuts mafic flows	<5
KL-87-15	8146	17+50N,23+00W	4" QV minor hem. staining and coatings on fractures, concord. to crosscutting	160
KL-87-16	8147	15+68N,23+00W	+2' QV heavy lim.-hem. stain and fracture coatings, weathered iron carbonate or sulphide	5
KL-87-17	8148	11+70N,24+85W	4" to 1.2' QV crosscutting mafics, heavy lim.-hem. staining	295
KL-87-18	8149	12+25N,24+80W	6" to 1' mafic tuff horizon with 1-3% po, heavy lim. weathering	30
KL-87-19	8150	11+85N,24+85W	4" QV concordant, as per 8149	45
KL-87-20	8151	11+50N,24+85W	Fractured magnetic mafic flows, amphibolitized, heavy lim. stain	15
KL-87-21	8152	11+60N,24+00W	30" bull QV at fold nose of vein, 1-2% py, lim. after py, possible v.g.	715
KL-87-22	8153	11+60N,24+00W	35" minor mafic volc. with sugary quartz, abundant limonite pockets	2870
KL-87-23	8154	11+60N,24+00W	11" QV, blue-grey, cherty lim., pyrite	8995
KL-87-24	8155	11+65N,24+00W	62" as per 8153, abundant lim.-hem. pockets, cc.	255
KL-87-25	8156	9+75N,22+20W	Silicified intermed. breccia, lim. stain, buff coloured	30
KL-87-26	8157	9+75N,22+20W	4" QV-f lsic dyke, feldspar + quartz + green mica	15
KL-87-27	8158	7+60N,22+70W	1" to 6" QV, boudinaged, hem. stain, cc in mafic flows	10
KL-87-28	8159	7+60N,22+70W	as per 8158	10

KASAGIMINNIS LAKE MAPPING/PROSPECTING SAMPLES

Sample #	Assay #	Location	Description	Au ppb
KL-87-29	8160	7+60N,22+70W	As per 8158, blue-grey quartz, cherty	15
KL-87-30	8161	7+85N,L27W	12" QV boudinaged, heavy lim.-hem. stain	355
KL-87-31	8162	7+85N,L27W	Sil. mafic volc. on contacts of QV in 8161	25
KL-87-32	8163	6+00N,24+60W	2' wide int. (dacite?) tuff, cherty, agglomeratic, 1-2% py	5
KL-87-33	8164	5+70N,L18W	1" QV concord. in amphib., lim.-hem. stain, tr. py	5
KL-87-34	8165	5+65N,17+60W	1" QTV, 10-20% f.g. tl, tr. py, minor hem.-lim. stain in amphib.	<5

KASAGIMINNIS LAKE CHIP SAMPLES

NE DETAIL AREA

Assay #	Trench Location	Sample Length	Description	Au ppb
8253	NE-A-1	24"	f.g. basalt-andesite flow, 1-2% po, quartz stringers with lim.	10
8254	NE-A-2	41"	m.g. basalt flows, 1-2% magnetite, tr-0.5% po.	<5
8255	NE-A-3	23"	as above	<5
8256	NE-A-4	45"	as above with minor chert-epidote stringers	<5
8257	NE-A-5	50"	as above, minor q ± ep. stringers, heavy limonite stain, tr. cpy	5
8258	NE-A-7	45"	as above, with 0.5-1% magnetite, tr. py stringers, grades into f.g. flows as per 8260	5
8259	NE-A-6	30"	as above (8254), tr-0.5% py, q-ep. stringers	<5
8260	NE-A-8	45"	f.g. basalt flows, non-magnetic, tr-0.5% py, minor crosscutting q stringers	5
8261	NE-A-9	51"	as above, tr. py, minor q stringers	10
8262	NE-A-10	24"	as above, crosscut by 2" shear with biot-chl-amph. schist, tr-1% py, cpy, minor q stringers	15
8263	NE-A-11	30"	f.g. basalt, minor q-cc stringers, tr. py, non-magnetic	10
8264	NE-A-12	30"	as above, tr-0.5% py, po, cpy, discordant q stringers, carb. fracture coatings	<5
8265	NE-A-13	45"	as per 8263	<5
8266	NE-A-14	40"	as per 8263	<5
8267	NE-A-15	30"	pillowed f.g. basalt flows, discordant narrow shears and q-cc stringers	10
8268	NE-A-16	38"	as above	<5
8269	NE-A-17	45"	as above	<5

KASAGIMINNIS LAKE CHIP SAMPLES

NE DETAIL AREA

Assay #	Trench Location	Sample Length	Description	Au ppb
8270	NE-B-1	35"	sheared-fractured basalt flows, abundant q-cc infillings, tr. py, lim. coatings	20
8271	NE-B-2	15"	as above, q-cc lenses, biot-chl shear with 2-3% py, po	20
8272	NE-B-3	45"	f.-m.g. basalt, abundant q stringers, 2-3% po, py as blebs parallel to foln., magnetic	25
8273	NE-C-1	38"	m.g. basalt flows, minor boudinaged and "z" folded q stringers, lim. stain, tr. py	<5
8274	NE-C-2	24"	shear, biot-chl-amph. schist, 1-3% py, minor blue-grey carb. fracture fillings, abundant q lenses, lim. coatings	<5
8275	NE-C-3	45"	as per 8273 with tr-3% py, tr-1% po, tr sph, abundant q stringers, variable texture due to micro-shearing	5
8276	NE-C-4	35"	f.g. basalt flows, abundant q-cc stringers, heavy limonite weathering	<5
8277	NE-D-1	15"	folded QV in basalt flows, tr. limonite	<5
8278	NE-D-2	30"	f.g. basalt, chloritized, tr. py, minor q stringers	5
8279	NE-D-3	26"	as per 8278	5
8280	NE-D-4	24"	as per 8278, with 6" q bleb	<5
8281	NE-E-1	45"	as per 8278	<5
8282	NE-E-2	45"	as per 8278, minor q stringers and narrow shear	5
8283	NE-E-3	35"	as per 8278	5
8284	NE-E-4	45"	f.g. basalt-amphibolite, tr. py, abundant q-cc lenses and stringers, lim. stain	10
8285	NE-E-5	45"	as per 8284	<5
8286	NE-E-6	45"	as per 8284, sections to 6" wide with 2-3% py layered possibly tuffaceous q lenses and stringers	5

KASAGIMINNIS LAKE CHIP SAMPLES

NE DETAIL AREA

Assay #	Trench Location	Sample Length	Description	Au ppb
8287	NE-E-7	24"	as per 8284	5
8288	NE-E-8	30"	as per 8284	5
8289	NE-E-9	39"	laminated basalt flows or tuffs, q-cc stringers, tr-1% po, py	5
8290	NE-E-10	30"	as per 8289	10
8291	NE-F-1	35"	mafic pillows, f.g., stretched glassy selvages, lim. stain, q-cc stringers	10
8292	NE-F-2	24"	as per 8291 with 12" discordant shear and boudinaged QV (up to 4" wide)	<5
8293	NE-F-3	33"	as per 8291	<5
8294	NE-F-4	24"	mafic pillowed flows with narrow shears, q-cc stringers, tr-1% py blebs	<5
8295	NE-F-5	45"	mafic pillows, q-cc stringers parallel to foliation, lim. on cleavage-fracture planes	<5
8296	NE-F-6	50"	as per 8294	<5
8297	NE-K-1	24"	mafic pillows, stretched, sheared, 2-3% py, minor q-cc infillings in shear	5
8298	NE-K-2	30"	as per 8297	5
8299	NE-K-3	45"	as per 8297, 12" shear, 1/2" to 4" boudinaged QV, abundant biotite along foln. planes	<5
8300	NE-M	35"	pillowed mafics, narrow shear with en echelon q stringers with cc coatings and lim. stain	15
8301	NE-N-1	30"	f.g. mafic pillows, discordant shear with q-cc stringers, tr. py	<5
8302	NE-N-2	36"	as per 8301	<5
8303	NE-N-3	38"	as per 8301	<5
8304	NE-N-4	24"	massive to pillowed mafic with 4" discordant QV in shear	5

KASAGIMINNIS LAKE CHIP SAMPLES

NE DETAIL AREA

Assay #	Trench Location	Sample Length	Description	Au ppb
8305	NE-N-5	51"	as per 8301	<5
8306	NE-P-1	16"	m.g. mafic flows, massive, tr-0.5% po	<5
8307	NE-P-2	13"	as per 8306, discordant, irregular QV, minor epidote on contact with 8306	<5
8308	NE-P-3	31"	mafic flows, narrow q-cc lenses, 12" wide shear with boudinaged 1"-4" QV, lim. stain	<5
8309	NE-G-1	60"	m.g. mafic flows, 0.5-1% py, lim. stain, q ± cc ± ep stringers	<5
8310	NE-G-2	24"	f.g. mafic flows, 10" wide shear, tr. po, py, q ± cc ± ep stringers	<5
8311	NE-H-1	60"	f.g. mafic flow, minor q-cc stringers, tr. po, py, 1 1/2" x 6" q-ep pod	<5
8312	NE-H-2	30"	as per 8311 with 3" shear, q-cc infilling	<5
8313	NE-H-3	45"	as per 8311	<5
8314	NE-H-4	38"	as per 8311, sheared, q-cc stringers, tr. py, chloritic	10
8315	NE-H-5	30"	as per 8311	<5
8316	NE-H-6	15"	m.g. mafic flow with q-cc stringers, lim. staining	<5
8317	NE-J-1	48"	f.g. mafic flow, vuggy, sheared q-cc-ep. stringers, discordant diorite dykelet	<5
8318	NE-J-2	24"	mafic pillows, sheared, minor remnant selvages, abundant q-cc stringers	<5
8319	NE-J-3	45"	as per 8318	5
8320	NE-Q-1	45"	f.g. mafic pillows, abundant q-cc stringers, tr. py, lim. on cleavage planes	<5
8321	NE-Q-2	45"	as per 8320	<5
8322	NE-Q-3	15"	as per 8320	5

KASAGIMINNIS LAKE CHIP SAMPLES

NE DETAIL AREA

Assay #	Trench Location	Sample Length	Description	Au ppb
8323	NE-Q-4	23"	as per 8320, discordant shear and boudinaged q veins, cc	<5
8324	NE-Q-5	45"	as per 8320, numerous narrow shears, q-cc infill	5
8325	NE-Q-6	30"	as per 8320	5
8326	NE-Q-7	32"	m.g. mafic flows, sheared, q-cc infillings	<5
8327	NE-R	53"	mafic pillows, sheared, 6" QV, tr-0.5% po, abundant q-cc stringers.	<5

KASAGIMINNIS LAKE CHIP SAMPLES

SW DETAIL AREA

Assay #	Trench Location	Sample Length	Description	Au ppb
8328	SW-A-1	45"	sheared-crenulated fel.-int. tuff, tr-3% po, py, 15-20% gnt.	<5
8329	SW-A-2	45"	as per 8328, tr-2% gnt., tr-1% po, py	<5
8330	SW-A-3	28"	as per 8328, 1-2% f.g. po blebs, 3-5% gnt in some bands	<5
8331	SW-B-1	24"	as per 8328, tr-0.5% py, 10-15% gnt	<5
8332	SW-B-2	24"	as per 8331 with 5" wide shear, sil., heavy lim. stain	<5
8333	SW-B-3	45"	as per 8331, 3-5% gnt decreasing towards 8334, amph. increasing towards 8334	<5
8334	SW-B-4	24"	as per 8331	<5
8335	SW-B-5	38"	intermediate volcanic with vuggy lim. pockets with 3-5% tl in gnt-biot-chl. bands which constitutes 15-20% of rock	<5
8336	SW-B-6	30"	as per 8335 with q-tl stringers	<5
8337	SW-B-7	36"	as per 8335, lacking tl, minor q-ep. stringers	<5
8338	SW-C-1	48"	int. volcanic, minor q-cc bands	<5
8339	SW-C-2	10"	as above	<5
8340	SW-C-3	32"	as above, with lenses and bands of 3-5% gnt., limonite pockets and stain.	5

KASAGIMINNIS LAKE GRAB SAMPLES

Sample #	Assay #	Location	Description	Au ppb
KL-87-35	8166	L18N,14+50W	shear in amphibolitized mafic volc. (massive m.g.) chl-biot-schist with tl porphyroblasts, hem. or q.f. plates parallel to foln., q-cc stringers, lim. stain	5
SE-1	8167	5+30S,49+80W	clean 1" QV in sheared sil. int. volc.	<5

KASAGIMINNIS LAKE CHIP SAMPLES

CL DETAIL AREA

Assay #	Trench Location	Sample Length	Description	Au ppb
8341	CL-A-1	2.0'	mafic volc., foliated, sh., f.-m.g., heavy limonite staining	10
8342	CL-A-2	2.0'	as above, with massive bands and q-cc stringers, dissem. tl, lim-hem. pockets	10
8343	CL-A-3	2.0'	as above, tr-0.5% po/py, 1-2% cc	15
8344	CL-A-4	2.0'	as above, tr. py, po	20
8345	CL-A-5	2.0'	as above with carb/lim. pockets	20
8346	CL-A-6	1.5'	as above	35
8347	CL-A-7	3.0'	as above, lim. coatings on cleavages	<5
8348	CL-A-8	2.0'	as above, tr. po, py	<5
8349	CL-A-9	1.2'	as above	10
8350	CL-A-10	2.0'	foliated-massive mafic volcanic, q stringers, tr-1% po, heavy lim.-hem. staining, slightly magnetic	300
8351	CL-A-11	2.0'	as per 8350	40
8352	CL-A-12	2.0'	foliated-massive mafic volcanic, tr-0.5% py, po, cc	100
8353	CL-A-13	2.0'	as above	1110
8354	CL-A-14	3.0'	sil. mafic volc., q-lim. stringers, sil. inc. towards 8355, tr-1% po, py, tr asp in q stringers	5530
8355	CL-A-15	1.3'	as above, 1-3% po, q-cc stringers	5050
8356	CL-A-16	0.9'	vuggy lim.- q-cc zone on border of cherty QV in 8357, tr-0.5% m.g. dissem. py	18520
8357	CL-A-17	1.0'	blue-grey cherty QV banded with lim., tr-0.5% m.g. dissem. py, no cc	5440
8358	CL-A-18	2.5'	as per 8356, 1-2% dissem. py, tr-0.5% mt.	230

KASAGIMINNIS LAKE CHIP SAMPLES

CL DETAIL AREA

Assay #	Trench Location	Sample Length	Description	Au ppb
8359	CL-A-19	2.6'	banded lim.- q-cc vein with 1-3% wispy mt.	75
8360	CL-B-1	3.1'	massive-banded mafic volc. q, q-ep-cc stringers, 0.5-1% po as stringers with cc and as dissem. blebs	1360
8361	CL-B-2	2.2'	QV, lim., tr-1% dissem. po, 6" q-cc pod with lim. stain, 1-2% po ± asp? magnetic	2690
8362	CL-C-1	2.5'	foliated mafic volc., q stringers with lim. stain, tr-0.5% po	2480
8363	CL-C-2	1.7'	QV and sil-cc mafic volc., tr-1% po, tr-0.5% py, lim-hem stain	2100
8364	CL-C-3	2.5'	as per 8362 with tr-1% po/py, minor q stringers	1400
8365	CL-C-4	1.5'	as per 8362 with inc. cc-sil towards 8366	1980
8366	CL-C-5	1.2'	QV and sil. zone in mafic volc., clean, tr-0.5% po in mafics	120
8367	CL-D-1	2.5'	mafic volcanic, tr-1% dissem. po, py, lim-hem stain, minor q stringers	20
8368	CL-D-2	2.5'	as per 8367 with py coatings on cleavage planes	25
8369	CL-D-3	1.5'	as above	20
8370	CL-E-1	3.0'	sil-sh'd mafic-int. volc., f.-m.g., grey to green, 3-5% dissem. wispy magnetite, tr-0.5% po as blebs, minor q stringers, minor carb.	10
8371	CL-E-2	3.0'	as above	5
8372	CL-E-3	1.7'	as above with 0.2' shear with 3-5% cc	10
8373	CL-E-4	2.5'	as above with 0.2' chert pod, 3-5% dissem. mt., cc, q stringers with 0.5-1% py	.5
8374	CL-E-5	2.2'	as above	180

KASAGIMINNIS LAKE CHIP SAMPLES

CL DETAIL AREA

Assay #	Trench Location	Sample Length	Description	Au ppb
8375	CL-F-1	3.0'	mafic volcanic, sheared, q-cc stringers, minor grey chert bands with tr-1% mt.	30
8376	CL-F-2	2.3'	as above, tr. cc.	20
8377	CL-F-3	2.2'	mafic volc. sheared, cc, chert pods and stringers with lim. ± mt. or po, py, foliated to banded	45
8378	CL-F-4	3.0'	as above, q-cc stringers	5
8379	CL-F-5	2.6'	as above	<5
8380	CL-F-6	3.0'	sheared sil. mafic volc., 1-2% spotty mt. in cherty q stringers	10
8381	CL-F-7	3.0'	as above	5
8382	CL-F-8	3.0'	as above	40
8383	CL-F-9	3.0'	as above, 1-2% mt, 1-2% cc in cherty-lim. stained zones	15
8384	CL-F-10	3.0'	as above, minor q-cc lenses	25
8385	CL-F-11	2.1'	as above, increasing grain size towards 8386, 1-2% cc, tr-0.5% mt, discordant q-cc stringers	10
8386	CL-F-12	2.4'	c.g. mafic flow, lim. stain, non-magnetic amphibolitic, foliated	10
8387	CL-F-13	1.0'	c.g. amphibolite, tr. biot., mt.	5
8388	CL-H-1	3.0'	int.-mafic volcanic, sheared?, anastomosing amphib. bands with intermediate cores, py-lim. on cleavage-fracture planes.	15
8389	CL-H-2	3.0'	as above	10
8390	CL-H-3	3.0'	as above with lim. pockets	<5
8391	CH-H-4	3.0'	as above with minor q stringers	<5
8392	CH-H-5	3.0'	as above	5

KASAGIMINNIS LAKE CHIP SAMPLES

CL DETAIL AREA

Assay #	Trench Location	Sample Length	Description	Au ppb
8393	CL-H-6	3.0'	as above, increasingly laminated towards 8395	10
8394	CL-H-7	3.5'	as per 8393	200
8395	CL-H-8	3.5'	sheared maf. volc., highly laminated, friable, abundant q-cc, q-lim, q-py stringers and veins including 1.5' (at fold nose) S folded shear quartz vein, tr-0.5% magnetite blebs, abundant biotite-chlorite bands	215
8396	CL-H-9	3.0'	as above	365
8397	CL-H-10	2.5'	as above	110
8398	CL-I-1	3.0'	as above with 0.4' discordant sheared int. QFP, abundant lim. zones (bands, pods)	425
8399	CL-I-2	3.3'	shear zone with lenses of chloritized mafic volc., with tr-1% po, lim. stain, irregular and 'S' folded q stringers, cc, minor pockets 3-5% py	620
8400	CL-J-1	3.0'	as per 8393	1240
8168	CL-J-2	3.0'	mafic volc., sheared, q-cc stringers, minor grey chert bands with tr-1% mt., po, tr-0.5% py	30
8169	CL-J-3	2.5'	as above, 3-5% mt., tr-0.5% py	25
8170	CL-J-4	2.5'	as above	<5
8171	CL-J-5	3.1'	as above	<5
8172	CL-G-1	1.0'	fine grained foliated mafic volcanic with 1-2% py along cleavage, minor lim. staining	10
8173	CL-G-2	1.0'	sheared and foliated mafic volcanic as above with heavy limonite staining along fractures and cleavage	5
8174	CL-G-3	3.0'	as above with heavy hematitic and minor limonitic staining	5
8175	CL-G-4	2.5'	mafic volcanic with tr-0.5% disseminated po.	<5

APPENDIX D

GRAB AND CHANNEL SAMPLE ROCK ANALYTICAL CERTIFICATES

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K[illegible]S
Phone: (6[illegible]9-2220
Telex: 053-3233

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 017-2260 (COMPLETE)

REFERENCE INFO:

CLIENT: GEOCANEX LIMITED
PROJECT: KASAGIMINNIS

SUBMITTED BY: R. HIGGINS
DATE PRINTED: 1-JUN-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold	10	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ROCK	10	-200	10	CRUSH,PULVERIZE -200	10

REMARKS: < MEANS LESS THAN.

REPORT COPIES TO: H. HODGE
J. ADAMS

INVOICE TO: H. HODGE

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario
Canada K1J
Phone: (613)
Telex: 053-3233

BONDAR-CLEGG

Geochemical
Lab Report

REPORT: 017-2260

PROJECT: KASAGIMINNIS PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB
8130		<5
8131		10
8132		25
8133		20
8134		<5
8135		10
8136		<5
8137		<5
8138		<5
8139		5

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K[illegible]5
Phone: (6[illegible]9-2220
Telex: 053-3233

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 017-2415 (COMPLETE)

REFERENCE INFO:

CLIENT: GEOCANEX LIMITED
PROJECT: KASAGIMINNIS

SUBMITTED BY: P. HIGGINSON
DATE PRINTED: 12-JUN-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold	23	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ROCK	23	-200	23	CRUSH,PULVERIZE -200	23

REMARKS: < MEANS LESS THAN.

REPORT COPIES TO: H. HODGE
J. ADAMS

INVOICE TO: H. HODGE

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K1J 9G5
Phone: (613) 749-2220
Telex: 053-3233

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Geochemical Lab Report

REPORT: 017-2415

PROJECT: KASAGIMINIS File: PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB
8140		10
8141		15
8142		15
8143		10
8144		5
8145		<5
8146		160
8147		5
8148		295
8149		30
8150		45
8151		15
8152		715
8153		2870
8154		8995
8155		255
8156		30
8157		15
8158		10
8159		10
8160		15
8161		355
8162		25

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K1J 9G5
Phone: (613) 749-2220
Telex: 053-3233

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 017-2743 (COMPLETE)

REFERENCE INFO:

CLIENT: GEOCANEX LIMITED
PROJECT: KASAGIMINNIS

SUBMITTED BY: R. HIGGINSON
DATE PRINTED: 30-JUN-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold	131	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ROCK	131	-200	131	CRUSH,PULVERIZE -200	131

REMARKS: < MEANS LESS THAN.

REPORT COPIES TO: H. HODGE
R. HIGGINSON

INVOICE TO: H. HODGE

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada [illegible]X5
Phone: [illegible]749 2220
Telex: 053-3233

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 017-2743

PROJECT: KASAGIMINNIS PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	SAMPLE NUMBER	ELEMENT UNITS	Au PPB
8163		5	8284		10
8164		5	8285		<5
8165		<5	8286		5
8166		5	8287		5
8167		<5	8288		5
8168		30	8289		5
8169		25	8290		10
8170		<5	8317		<5
8171		<5	8318		<5
8253		10	8319		5
8254		<5	8320		<5
8255		<5	8321		<5
8256		<5	8322		5
8257		5	8323		<5
8258		5	8324		5
8259		<5	8325		5
8260		5	8326		<5
8261		10	8327		<5
8262		15	8328		<5
8263		10	8329		<5
8264		<5	8330		<5
8265		<5	8331		<5
8266		<5	8332		<5
8267		10	8333		<5
8268		<5	8334		<5
8269		<5	8335		<5
8270		20	8336		<5
8271		20	8337		<5
8272		25	8338		<5
8273		<5	8339		<5
8274		<5	8340		5
8275		5	8341		10
8276		<5	8342		10
8277		<5	8343		15
8278		5	8344		20
8279		5	8345		20
8280		<5	8346		35
8281		<5	8347		<5
8282		5	8348		<5
8283		5	8349		10

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K[illegible]
Phone: (6[illegible]9-2220
Telex: 053-3233

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Geochemical Lab Report

REPORT: 017-2743 PROJECT: KASAGIMINNIS PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	SAMPLE NUMBER	ELEMENT UNITS	Au PPB
8350		300	8390		<5
8351		40	8391		<5
8352		100	8392		5
8353		1110	8393		10
8354		5530	8394		200
8355		5050	8395		215
8356		18520	8396		365
8357		5440	8397		110
8358		230	8398		435
8359		75	8399		620
8360		1360	8400		1240
8361		2690			
8362		2480			
8363		2100			
8364		1400			
8365		1980			
8366		120			
8367		20			
8368		25			
8369		20			
8370		10			
8371		5			
8372		10			
8373		5			
8374		180			
8375		30			
8376		20			
8377		45			
8378		5			
8379		<5			
8380		10			
8381		5			
8382		40			
8383		15			
8384		25			
8385		10			
8386		10			
8387		5			
8388		15			
8389		10			

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K1J 9G1
Phone: (613) 749-2220
Telex: 053-3233

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 017-2496 (COMPLETE)

REFERENCE INFO: File:

CLIENT: GEOCANEX LIMITED
PROJECT: KASAGIMINNIS

SUBMITTED BY: R. HIGGINSON
DATE PRINTED: 1[illegible]-JUN-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold	26	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ROCK	26	-200	26	AS RECEIVED, NO SP	26

REMARKS: < MEANS LESS THAN.

REPORT COPIES TO: H. HODGE
J. ADAMS

INVOICE TO: H. HODGE

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada [illegible]5
Phone: ([illegible]49-2220
Telex: 053-3233

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 017-2496 | PROJECT: KASAGIMINNI |

SAMPLE NUMBER	ELEMENT UNITS	Au PPB
8291		10
8292		<5
8293		<5
8294		<5
8295		<5
8296		<5
8297		5
8298		5
8299		<5
8300		15
8301		<5
8302		<5
8303		<5
8304		5
8305		<5
8306		<5
8307		<5
8309		<5
8310		<5
8311		<5
8312		<5
8313		<5
8314		10
8315		<5
8316		<5
NE-P-3		<5

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.
Ottawa, Ontario,
Canada [illegible]8X5
Phone [illegible]49-2220
Telex 05[illegible]233

BONDAR-CLEGG

Certificate of Analysis

REPORT: 417-2743 (COMPLETE)

REFERENCE INFO:

CLIENT: GEOCANEX LIMITED
PROJECT: KASAGIMINNIS

SUBMITTED BY: J. ADAMS
DATE PRINTED: 8-JUL-87

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	-150WT Weight -150 Obtained	4	0.1 gms		
2	AU-150 Gold -150 Fraction	4	0.001 OPT		
3	AU+150 Gold +150 Fraction	4	0.001 OPT		
4	AU AV Gold Weight Average	4	0.001 OPT		
5	+150WT Weight +150 Obtained	4	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
OTHER	4	+150/-150	4	Sample Preparation	4

REMARKS: OTHER SAMPLE TYPE REFERS TO REJECT

REPORT COPIES TO: H. HODGE
JOHN H, ADAMS

INVOICE TO: H. HODGE

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada [illegible]8X5
Phone [illegible]749-2220
Telex: 053-3233

BONDAR-CLEGG

Certificate of Analysis

REPORT: 417-2743

PROJECT: KASAGIMINNIS PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	-150WT gms	AU-150 OPT	AU+150 OPT	AU AV OPT	+150WT gms
8354		899.6	0.132	0.318	0.134	10.37
8355		210.7	0.133	0.243	0.142	18.42
8356		190.8	0.460	0.297	0.450	12.15
8357		92.3	0.146	0.001	0.125	15.70

Chief Chemist

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K1J 9G5
Phone: (613) 749-2220
Telex: 053-3233

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 017-2790 (COMPLETE)

REFERENCE INFO:

CLIENT: GEOCANEX LIMITED
PROJECT: KASAGIMINNIS

SUBMITTED BY: R. HIGGINSON
DATE PRINTED: 20-JUN-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold	4	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ROCK	4	-200	4	CRUSH,PULVERIZE -200	4

REMARKS: < MEANS LESS THAN.

REPORT COPIES TO: H. HODGE
R. HIGGINSON

INVOICE TO: H. HODGE

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K[illegible]S
Phone: (61[illegible]9-2220
Telex: 053-3233

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 017-2790

PROJECT: KASAGIMINNIS PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB
8172		10
8173		5
8174		5
8175		<5

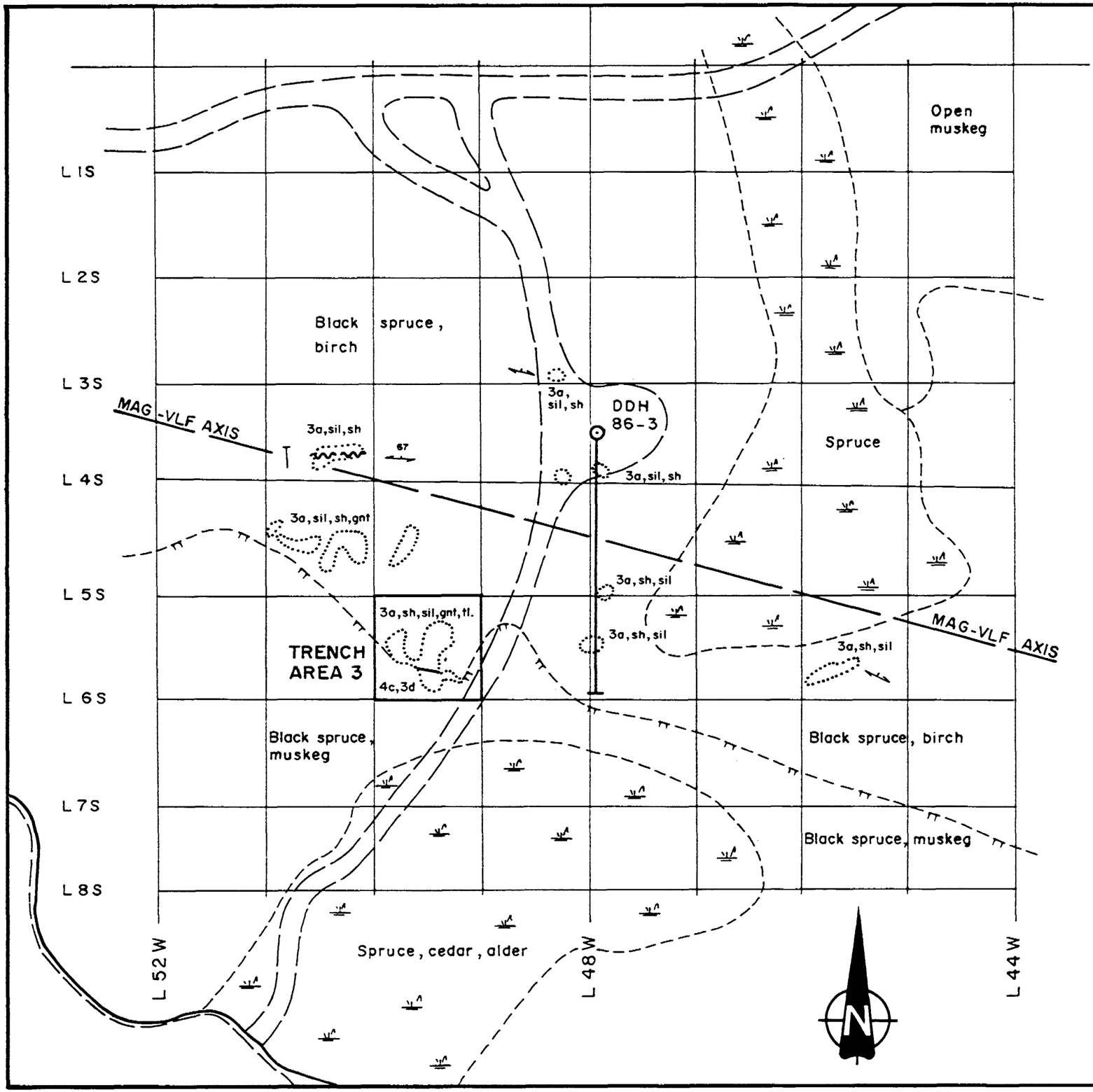
APPENDIX E

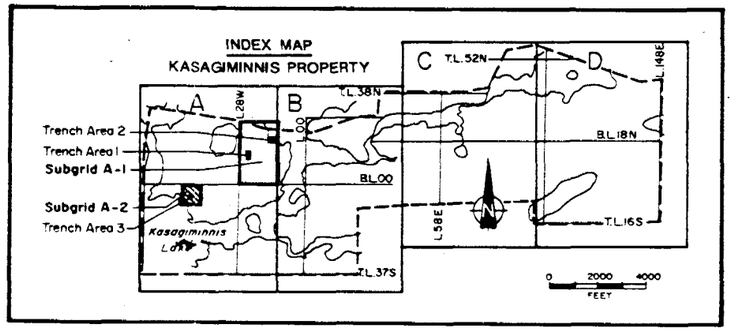
PROPOSED DRILL HOLE LOCATIONS

PROPOSED DRILL HOLE LOCATIONS

PROPOSED DRILL COLLARS

Collar	Azimuth	Inclination	Depth
L25+00W,12+65N	180°	-50°	225
L25+00W,12+65N	180°	-75°	325
L24+00W,12+65N	180°	-50°	200
L24+00W,12+65N	180°	-75°	250
L23+00W,12+65N	180°	-50°	200
L23+00W,12+65N	180°	-75°	250
L20+00W,13+55N	150°	-45°	250
L20+00W,13+55N	180°	-60°	300
L20+00W,13+55N	150	-45	250
			2250





FOR LEGEND REFER TO SUBGRID A-1

REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

0 50 100 200
feet

POWER EXPLORATIONS INC.

KASAGIMINNIS LAKE AREA
Patricia M.D., Ont.

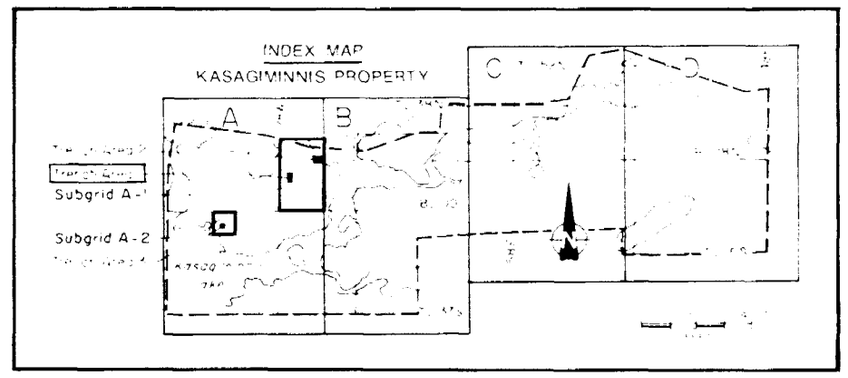
DETAIL GEOLOGY
Subgrid A-2

GEOCANEX LTD
TORONTO, CANADA

BY: R.T.M.
DATE: SEPT. 87
SCALE: 1" to 100'
DWG. No:

L 13 N

L 14 N



FOR LEGEND REFER TO SUBGRID A-1

REGISTERED PROFESSIONAL ENGINEER
R. T. MODGE
PROVINCE OF ONTARIO

0 10 20 40

feet

N

POWER EXPLORATIONS INC.

KASAGIMINNIS LAKE AREA
Patricia M.D., Ont.

DETAIL GEOLOGY
Trench Area 1

GEOCANEX

GEOCANEX LTD
TORONTO, CANADA

BY: R.T.M.
DATE: SEPT. 87
SCALE: 1" to 20'
DWG. No:

L 12 N

L 13 N

L 25 W

L 24 W

8170 - <5
8169 - 25
8168 - 30
8400 - 120
8150 - 45
8171 - <5
8a
8175 - <5
8174 - 5
8173 - 5
8172 - 10
8393 - 10
8148 - 295
qv
H
G
2a, sh
2a, sh, mt
E
I
J
62
8151 - 15
8388 - 15
8389 - 10
8390 - <5
8391 - <5
8392 - 5
8394 - 200
8395 - 215
8396 - 365
8397 - 110
8398 - 425
8399 - 620
8374 - 180
8373 - 5
8372 - 10
8371 - 5
8370 - 10
2a, 8a
72
80
76
8149 - 30
78
F
2h
8387 - 5
8386 - 10
8385 - 10
8384 - 25
8383 - 15
8382 - 40
8381 - 5
8380 - 10
8379 - <5
8378 - 5
8377 - 45
8376 - 20
8375 - 30
2h
8366 - 120
8365 - 1980
8364 - 1400
8363 - 2100
8362 - 2480
8347 - <5
8351 - 40
8352 - 100
8360 - 1360
8361 - 2690
4573 - 2
qv
C
B
COVER
2a
8152 - 715
8153 - 2870
8154 - 8995
8155 - 255
8369 - 20
8368 - 25
8367 - 20
A
A
72
72
2h
D
8359 - 75
8358 - 230
8357 - 5440
8356 - 18520
8355 - 5050
8354 - 5530
8353 - 1110
8350 - 300
8349 - 10
8348 - <5
8346 - 35
8345 - 20
8344 - 20
8343 - 15
8342 - 10
8341 - 10
2h
N

L 13 W

L 14 W

Kasagiminnis Lake

5
<5
<5
10
<5
<5

8309 - <5
8310 - <5

9672 - 135

8253 - 10
8254 - <5
8255 - <5
8256 - <5
8257 - 5
8259 - <5
8258 - 5
8260 - 5
8261 - 10

9671 - 404

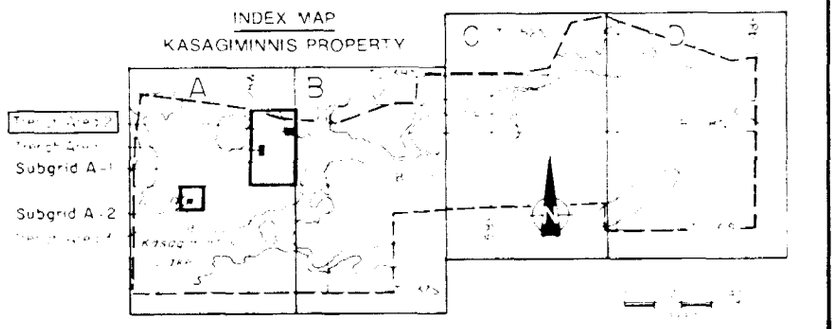
9670 - 420

8262 - 15
8263 - 10
8264 - <5
8265 - <5
8266 - <5
8267 - 10
8268 - <5
8269 - <5

9669 - 844

A
2h
76
qv
B
8272 - 25
8271 - 20
8270 - 20
KAS-87-4
2d
78
qcv
A
2d,sh
2d,sh
qv
C
8273 - <5
8274 - <5
8275 - 5
8276 - <5
Quartz pods
D
8277 - <5
8278 - 5
8279 - 5
8280 - <5
E
2d,sh
8284 - 10
8285 - <5
2h
?
8288 - 5
8289 - 5
8290 - 10
E 2k

INDEX MAP
KASAGIMINNIS PROPERTY



FOR LEGEND REFER TO SUBGRID A-1

REGISTERED PROFESSIONAL ENGINEER
H. G. RIDGE
PROVINCE OF ONTARIO

0 10 20 40
feet

POWER EXPLORATIONS INC.

KASAGIMINNIS LAKE AREA
Patricia M.D., Ont.

DETAIL GEOLOGY
Trench Area 2

GEOCANEX

GEOCANEX LTD
TORONTO, CANADA

BY: R.T.M
DATE: SEPT. 87
SCALE: 1" to 20
DWG. No:

L 14 W

L 13 W

L 14 W

L 18N

Kasagiminnis Lake

KAS-87-4

9675 - 44

8317 - <5
8318 - <5
8319 - 5

J

2d, sh

H

8311 - <5
8312 - <5
8313 - <5
8314 - 10
8315 - <5
8316 - <5

2h

K

8297 - 5
8298 - 5
8299 - <5

qv

G

8309 - <5
8310 - <5

9672 - 135

8301 - 5
8302 - <5
8303 - <5
8304 - 5
8305 - <5

M

8300 - 15

N

qv

Quartz pods

4551 - 1

P

8306 - <5
8307 - <5

2d, sh

qv

9674 - 463

76

4552 - 1508
9673 - 157

8291 - 10
8292 - <5
8293 - <5
8294 - <5
8295 - <5
8296 - <5

lim, cc

F

qv

2d

qv

8272 - 25
8271 - 20
8270 - 20

B

2h

A

76

qv

8253 - 10
8254 - <5
8255 - <5
8256 - <5
8257 - 5
8259 - <5
8258 - 5
8260 - 5
8261 - 10

9671 - 404

9670 - 420

8262 - 15
8263 - 10
8264 - <5
8265 - <5
8266 - <5

78

qcv

A

8267 - 10
8268 - <5
8269 - <5

9669 - 844

2h

8166 - 5

2d

Q

8320 - <5
8321 - <5
8322 - 5
8323 - <5
8324 - 5
8325 - 5
8326 - <5

2d, sh

qv

8327 - <5

qv

qv

2d, sh

Quartz pod

C

8273 - <5
8274 - <5
8275 - 5
8276 - <5

2d, sh

8281 - <5
8282 - 5
8283 - 5

E

Quartz pods

D

8277 - <5
8278 - 5
8279 - 5
8280 - <5

2d, sh

8284 - 10

2h

8285 - <5

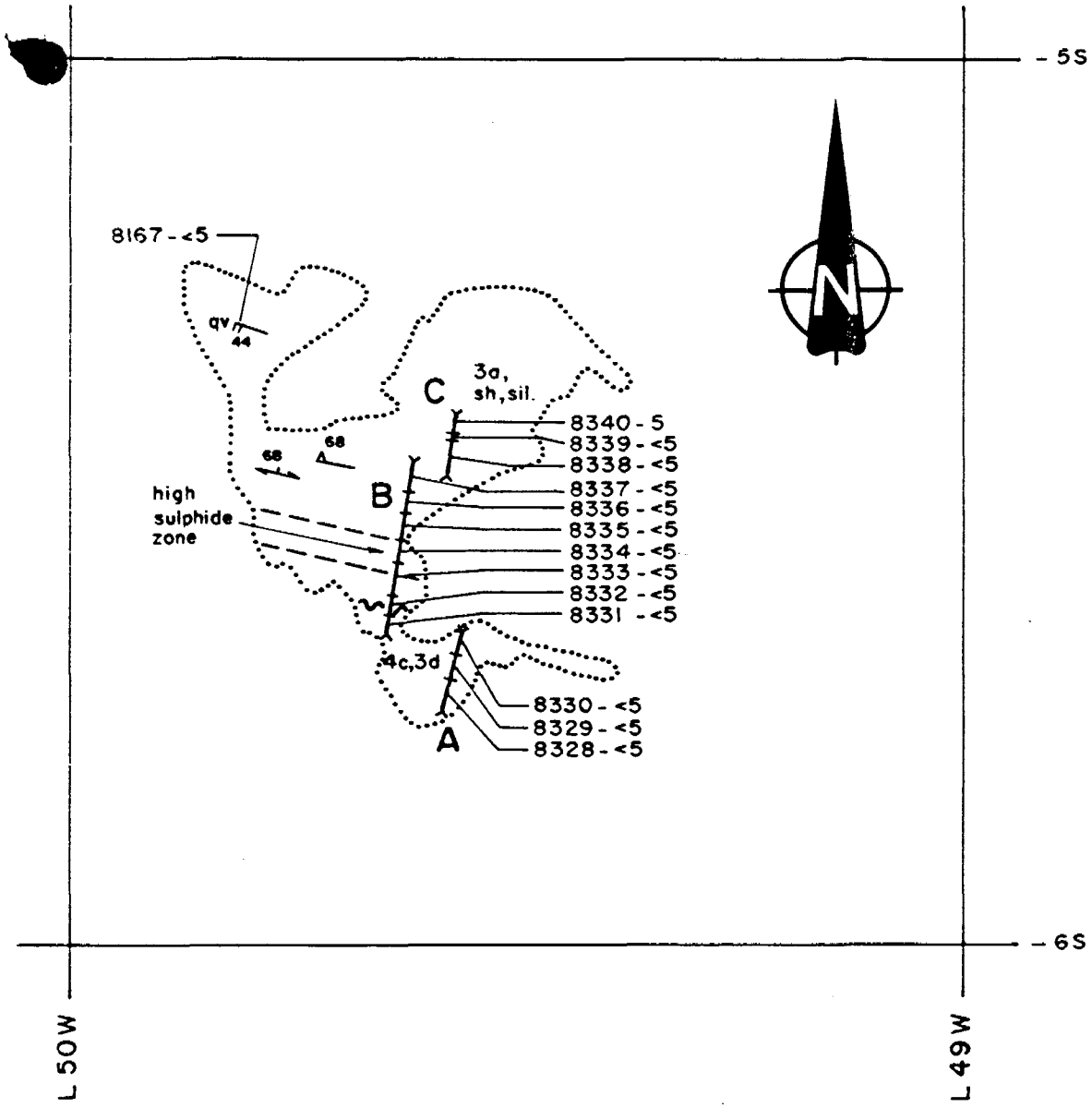
? ? ?

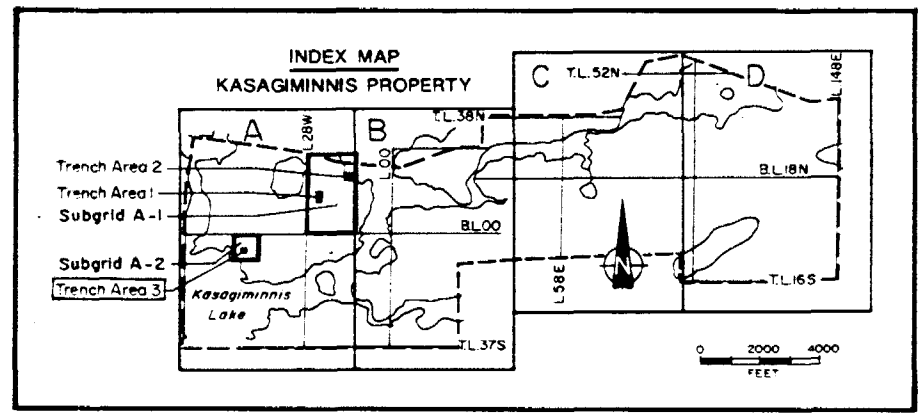
8286 - 5
8287 - 5

8288 - 5
8289 - 5
8290 - 10

E 2k

N





FOR LEGEND REFER TO SUBGRID A-1

REGISTERED PROFESSIONAL ENGINEER
H. J. PRIDGE
PROVINCE OF ONTARIO

0 10 20 40
feet

POWER EXPLORATIONS INC.

KASAGIMINNIS LAKE AREA
Patricia M.D., Ont.

DETAIL GEOLOGY
Trench Area 3

GEOCANEX LTD
TORONTO, CANADA

BY: R.T.M.
DATE: SEPT. 87
SCALE: 1" to 20'
DWG. No:

900

Ministry of
Northern Development
and Mines

Ontario

Ministère du
Développement du Nord
et des Mines

April 25, 1988

Your File: W8803-054
Our File: 2.10780

Mining Recorder
Ministry of Northern Development and Mines
Court House
P.O. Box 3000
Sioux Lookout, Ontario
P0V 2T0

Dear Sir:

RE: Geochemical Survey and Data for Assaying submitted under Section 77(19) of the Mining Act R.S.O. 1980 on Mining Claims Pa 786792 et al in the Area of Little Ochig Lake

The enclosed statement of assessment work credits for Data for Assaying has been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

W.R. Cowan, Manager
Mining Lands Section
Mines & Minerals Division

Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

RM:pl
Enclosure (2)

cc: Resident Geologist
Sioux Lookout, Ontario

Power Exploratons Inc.
Suite 1003
34 King Street East
Toronto, Ontario
M5C 1E5

Ministry of Northern Development and Mines

Ontario

Technical Assessment Work Credits

File 2.10780

Date April 25, 1988

Mining Recorder's Report of Work No. W8803-054

Recorded Holder: Power Explorations Inc.

~~XXXXXXX~~ Area: Little Ochig Lake Area

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	$3,834.36 SPENT ON GEOCHEMICAL SURVEY AND ASSAYING SAMPLES TAKEN FROM MINING CLAIMS:
Electromagnetic _____ days	Pa 786796 to 797 inclusive
Magnetometer _____ days	786807 to 810 inclusive
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days ☐ Airborne ☐	255.62 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT R.S.O. 1980.
Special provision ☐ Ground ☐	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

828 (85/12)

Ministry of Northern Development and Mines
Ontario

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

DOCUMENT No. W8803.054

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

Mining Lands 2.10780 Kasagiminnis Lake
Mining Act

Type of Survey(s): Expenditures

Township or Area: Little Ochig (G-2104)

Claim Holder(s): Power Explorations Inc.

Prospector's Licence No.: T 4642

Address: 1003-34 King St. East, Toronto, Ontario M5C 1E5

Survey Company: Geocanex Ltd.

Date of Survey (from & to): 15 05 87 to 03 06 87

Total Miles of line Cut:

Name and Address of Author (of Geo-Technical report): R.A.V. Higginson, R.R. #1, Oro Station, Ontario

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

RECEIVED
MAR 22 1988
MINING LANDS SECTION

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
Pa	786792	60
	786793	60
	786794	60

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

Expenditures (excludes power stripping)

Type of Work Performed: Geochemical Survey

Performed on Claim(s): 786796, 786797, 786807, 786808, 786809, 786810 SECTION 77-19

Calculation of Expenditure Days Credits

Total Expenditures			Total Days Credits
$ 3,834.36	÷ 15	=	255.62

Using 180 - 188-054 = 75.62 IN RESERVE

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

Total number of mining claims covered by this report of work: 3

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
255.62	FEB. 29, 1988	
	Date Approved as Recorded	Branch Director

Date: Feb. 24/88

Recorded Holder or Agent (Signature):

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying: H.J. Hodge 1003-34 king St. East, Toronto, Ontario M5C 1E5

Date Certified: Feb 24/88

Certified by (Signature):

1362 (85/12)

Ministry of Northern Development and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

File _____

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

Type of Survey(s) Geological/Geochemical

Township or Area Kasagiminnis Lake Area

Claim Holder(s) Power Explorations Inc.

Survey Company Geocanex Ltd.

Author of Report Robert A.V. Higginson

Address of Author R.R. #1, Oro Station, Ontario

Covering Dates of Survey May 15 to June 13, 1987
(linecutting to office)

Total Miles of Line Cut _____

SPECIAL PROVISIONS CREDITS REQUESTED

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

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
--Electromagnetic	
--Magnetometer	
--Radiometric	
--Other	
Geological	40
Geochemical	20

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

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

DATE: January 29/88 SIGNATURE: _____
Author of Report or Agent

Res. Geol. _____ Qualifications 2.9753

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
Pa	786792
Pa	786793
Pa	786794

If space insufficient, attach list

TOTAL CLAIMS 3

OFFICE USE ONLY

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS -- If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy -- Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

_____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

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

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

_____

Base station value and location _____

_____

Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

Instrument _____

Method ☐ Time Domain ☐ Frequency Domain

Parameters -- On time _____ Frequency _____

-- Off time _____ Range _____

-- Delay time _____

-- Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

_____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken Pa 786796, 786797, 786807, 786808, 786809, 786810

Total Number of Samples 215

Type of Sample Rock-Grab-Channel Samples
(Nature of Material)

Average Sample Weight 5 lbs.

Method of Collection Channel and Grab Sampling

Soil Horizon Sampled

Horizon Development

Sample Depth

Terrain

Drainage Development

Estimated Range of Overburden Thickness

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis -150

General

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☒

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others Gold

Field Analysis (____ tests)

Extraction Method

Analytical Method

Reagents Used

Field Laboratory Analysis

No. (____ tests)

Extraction Method

Analytical Method

Reagents Used

Commercial Laboratory (215 tests)

Name of Laboratory Bondar-Clegg & Co.

Extraction Method Aqua-Regia

Analytical Method FA-AA

Reagents Used

General

KAPKICHI LAKE AREA G-2081

CALEY LAKE AREA G-1975

COUCHEEMOSKOG LAKE AREA G-1996

DOGHOLE LAKE AREA G-2007

90°30'00"

51°22'30"

51°15'00"

Dog Hole River

Ochig Lake

Little Ochig Lake

Kasagumimis Lake

Annimwash Lake

Osnaburgh Indian Reserve No. 63B

TRANS-CANADA HIGHWAY

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC
- UNSURVEYED LINES
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	◓
" , MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	◨
" , MINING RIGHTS ONLY	◧
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	◔
CANCELLED	⊗
SAND & GRAVEL	◔

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

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
OCT. RIVER				
		Oct. 21/86		
		Feb. 10/87		
		Mar. 11/87		
		Apr. 1/87		
		87 12 08		
		Mar. 21/88		

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 (1 KM) 2000 (2 KM)

AREA
LITTLE OCHIG LAKE

M.N.R. ADMINISTRATIVE DISTRICT
SIOUX LOOKOUT

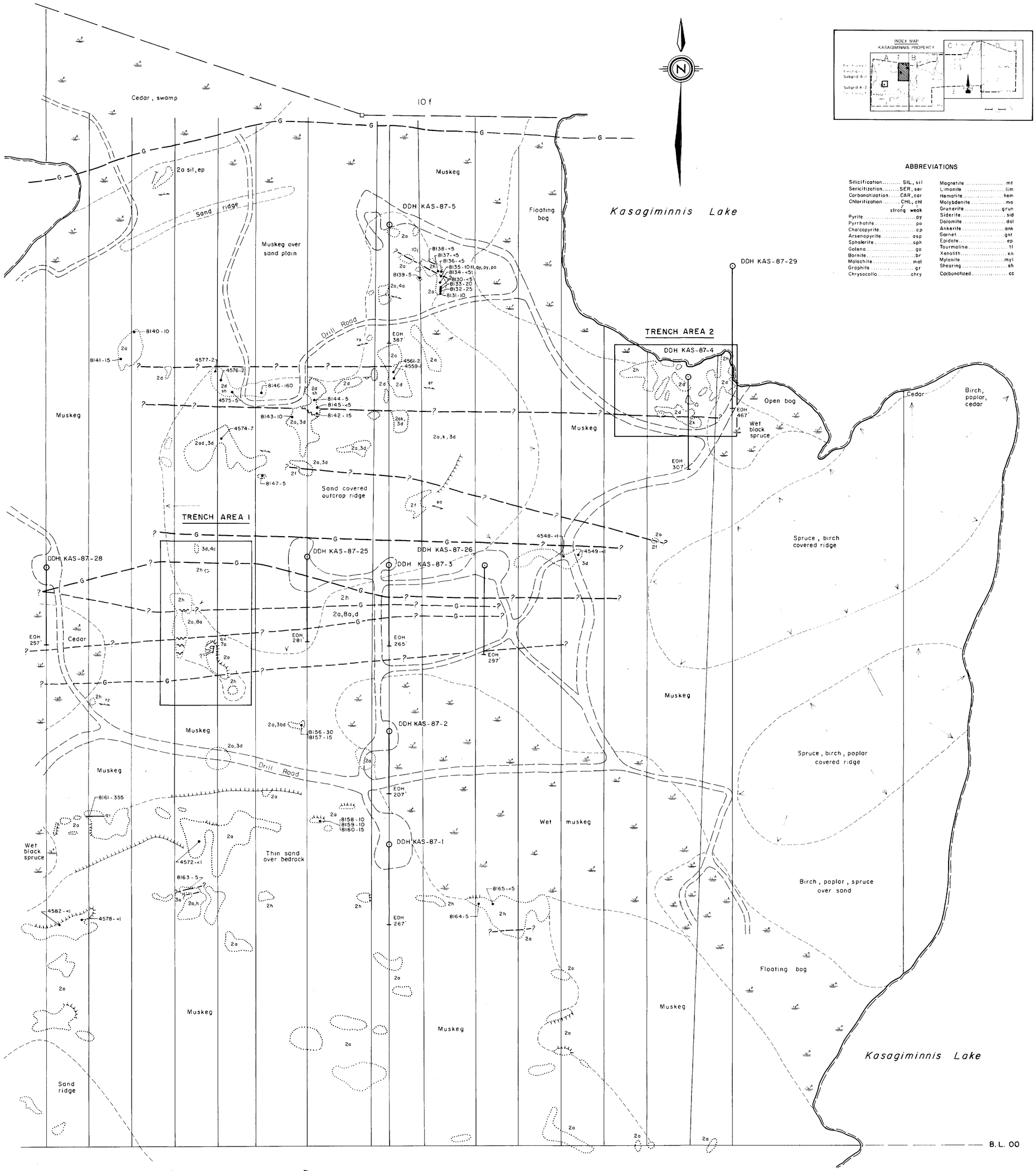
MINING DIVISION
PATRICIA

LAND TITLES / REGISTRY DIVISION
KENORA (PATRICIA PORTION)

Ministry of Natural Resources — Land Management Branch
Ontario

Date JANUARY, 1984

Number
G-2104



ABBREVIATIONS

Silicification	SIL, sil	Magnetite	mt
Sericitization	SER, ser	Limonite	lim
Carbonatization	CAR, car	Hematite	hem
Chloritization	CHL, chl	Molybdenite	mo
	strong weak	Grunerite	grun
Pyrite	py	Siderite	sid
Pyrrhotite	po	Dolomite	dol
Chalcopyrite	cp	Ankerite	ank
Arsenopyrite	asp	Garnet	gnt
Sphalerite	sph	Epidote	ep
Galena	ga	Tourmaline	tl
Bornite	br	Xenolith	xn
Malachite	mal	Mylonite	myl
Graphite	gr	Shearing	sh
Chrysocolla	chry	Carbonatized	cc

LEGEND

QUATERNARY

Stream, lake, bog deposits
Glacial, glaciofluvial lacustrine sediments

LATE PRECAMBRIAN (Keeweenawan?)

11 — 11a Diabase

EARLY PRECAMBRIAN

10 — Intermediate and Felsic Intrusives
- 10a Granite pegmatite
- 10b Aplite
- 10c Granite
- 10d Syenite
- 10e Quartz monzonite
- 10f Granodiorite
- 10g Trondjemite
- 10h Quartz diorite
- 10j Diorite
- 10k Unsubdivided gneiss
- 10l Granite gneiss

9 — Mafic Intrusives
- 9a Unsubdivided
- 9b Gabbro
- 9c Leucogabbro
- 9d Plagioclase-phyric gabbro
- 9e Peridotite
- 9f Pyroxenite

8 — Iron Formation
- 8a Oxide facies
- 8b Carbonate facies
- 8c Silicate facies
- 8d Sulphide facies

7 — Chemical Metasediments
- 7a Chert
- 7b Calcitic marble
- 7c Dolomitic marble

6 — Clastic Metasediments
- 6a Clast supported conglomerate
- 6b Matrix supported conglomerate
- 6c Oligomictic conglomerate
- 6d Polymictic conglomerate
- 6e Sandstone, unsubdivided
- 6f Wacke
- 6g Arenite
- 6h Mudstone, argillite
- 6j Feldspathic wacke
- 6k Feldspathic arenite
- 6l Quartz arenite
- 6m Schistose rock ± amphibole, ± biotite, ± garnet, ± chlorite of probable sedimentary origin

5 — Felsic and Intermediate Subvolcanic Rocks
- 5a Unsubdivided
- 5b Quartz-feldspar porphyry
- 5c Quartz porphyry
- 5d Feldspar porphyry

4 — Felsic Metavolcanics
- 4a Massive fine-medium grained flow
- 4b Pyroclastic breccia, tuff breccia
- 4c Tuff, lapilli tuff

3 — Intermediate Metavolcanics
- 3a Massive fine-medium grained flow
- 3b Flow breccia
- 3c Pyroclastic breccia, tuff breccia
- 3d Tuff, lapilli tuff

2 — Mafic Metavolcanics
- 2a Massive fine-medium grained flow
- 2b Amygdaloidal flow
- 2c Variolitic flow
- 2d Pillowed flow, pillow breccia
- 2e Flow breccia
- 2f Medium-coarse grained flow centres
- 2g Plagioclase-phyric flow
- 2h Amphibolite
- 2i Co-magmatic sills, dikes
- 2j Pyroclastic breccia, tuff breccia
- 2k Tuff, lapilli tuff
- 2l Chorite ± amphibole schist

1 — Ultramafic Metavolcanics
- 1a Massive fine-medium grained flow
- 1b Spinifex textured flow
- 1c Talc-carbonate ± magnetite ± amphibole ± serpentine ± chlorite schist

SYMBOLS

Shoreline
Creek, showing flow
Swamp
Beaver Dam
Break in slope
Claim post, line, witness post — WP
Township line
Trench, pit
Diamond drill hole
Highway, bush road
Power transmission line
Outcrop, outcrop area — x
Geological boundary, observed,
Inferred, inferred from geophysics — G — G
Surficial feature boundary
Rock sample location & number — •17501
Assay for Au(ppb), Ag(ppm) — -13-0.6
Pillow; tops known, unknown
Bedding; inclined, vertical — 70
Foliation, cleavage;
Inclined, vertical, unknown — 60, 50
Gneissosity; incl., vert., unknown
Lineation, plunge — 60, 70
Fracture; inclined, vertical
Shear zone; dip — 50
Shear fracture; inclined, vertical — 60, 70
Fault zone; dextral, sinistral
Anticline, syncline; plunge
Drag folds with plunge
Dyke; width, dip — 50, 90
Vein; width, dip, quartz, carbonate — 3, 50, qv, cv
Glacial striae — 10
Direction of slope

REGISTERED PROFESSIONAL ENGINEER PROVINCE OF ONTARIO H. [illegible] E

0 50 100 200 300
feet

POWER EXPLORATIONS INC.

KASAGIMINNIS LAKE AREA
Patricia M.D., Ont.

DETAIL GEOLOGY
Subgrid A-1 2.10180

GEOCANEX LTD
TORONTO, CANADA

BY: R.T.M.
DATE: SEPT 87
SCALE: 1" to 100'
DWG. No: