GEOLOGICAL REPORT ON THE OFF-LAKE PROPERTY, SENN AND FLEMING TOWNSHIPS, ONTARIO.

PAUL A. STUDEMEISTER
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SUITE 1602
65 QUEEN STREET WEST
TORONTO, ONTARIO M5H 2M5

JULY 1, 1985

INTRODUCTION

The property is centered on Off Lake 50 km (30 miles) northwest of Fort Frances in the Kenora Mining District of Ontario (Figure 1). The property consists of 35 contiguous unpatented claims owned 100% by Agassiz Resources Ltd. of Toronto. The claim numbers are: K771991-99, K728022-23, K728025-27, K728029-33, K751001-15, and K772000.

The best access to the Off-Lake property is by road via Highway 615 which branches off Highway 71 north of Emo. Highway 615 crosses the north part of the claim block. The south part is reached via gravel roads leading off Highway 615. Cabin and boat rentals are available on Off Lake at the Spring Lake Lodge.

A geological survey of the property was done between June 1 and June 20, 1985. The Precambrian bedrock was mapped on a grid of parallel lines spaced 122 m (400 ft) apart. The outcrops along the shores of Off Lake and Preacher Lake were mapped by canoe. A gold occurrence on claim #728026 was mapped at 1:600 scale and sampled for gold assay.

HISTORY

Evidence for early prospecting, for which no record exists, is seen in the old trenches and pits at the north end of Off Lake. The first record of exploration in the area was in 1956 on the A. F. Young property of three patented claims. Claims FF10201 and

FF10199 adjoin the Agassiz Resources claim block on the west shore of Off Lake. Three diamond-drill holes totalling 347 m (1138.5 ft) were drilled in 1956, and another two holes totalling 73 m (240 ft) were subsequently drilled in 1960. All five holes encountered minor disseminations of pyrite, chalcopyrite, and magnetite.

In 1967 a block of 50 unpatented claims covering Preacher Lake and the north end of Off Lake was optioned to Noranda Exploration Company Ltd. The company carried-out a combined magnetometer, induced polarization, and resistivity survey over the claim block to explore for base metals. In 1968 three diamond-drill holes totalling 234 m (768 ft) were drilled to test geophysical conductors. The holes encountered disseminations of pyrite, pyrrhotite, and chalcopyrite; core samples from two holes assayed ≤0.17 g/t Au (≤0.005 oz/ton Au). Noranda Exploration Company has since dropped the option, and the claims were allowed to lapse.

In 1983 Agassiz Resources Ltd. staked, survayed, and prospected its block of 35 unpatented claims on Off Lake (Christie, 1983; 1984); about 60% of the property is under lake waters. Grab samples taken in 1984 from a gold occurrence on claim #728026 assayed up to 9.01 g/t Au (0.26 oz/ton Au). In 1984 a grid of 54 line-km (33.5 line-miles) with parallel lines at 122 m (400 ft) intervals was cut over the claim block. In winter 1985 Agassiz Resources conducted

a magnetic and VLF-EM survey over the grid (Boniwell, 1985). The survey found magnetic anomalies due mainly to mafic/felsic lithology, and a complex pattern of VLF anomalies of speculative origin. Power lines crossing the claim block interfered with the geophysical measurements.

PROPERTY GEOLOGY

The geology of an 800 km^2 (300 square mile) area that includes the claim block held by Agassiz Resources was mapped in reconnaisance by the Ontario Division of Mines (Blackburn, 1976). The area is underlain by an Archean assemblage of mafic to felsic metavolcanic rocks invaded by plutonic rocks of mixed composition. The metavolcanic rocks generally strike north-northeast, dip 50^{o} to 20^{o} east, and young to the east. The Archean rocks are partly mantled by glacial tills and other sediments of Pleistocene age.

The Archean rocks underlying the Off-Lake property are in the lower-greenschist to lower-amphibolite facies of metamorphism. The mineral assemblage varies from quartz + plagioclase + biotite + epidote + hornblende to quartz + albite + calcite + white mica + chlorite + actinolite. Epidote + hornblende rocks are harder, massive, and have a dark-brown amphibole whereas equivalent chlorite + actinolite rocks are softer, foliated, and have instead a pale-green amphibole. The chlorite + actinolite assemblage prevails in the metavolcanic rocks at the north end of the property (Figure 3). Elsewhere

on the property, the Archean rocks have an epidote + hornblende or a mixed assemblage; e.g. have a paucity of chlorite, calcite, actinolite, and white mica. The metamorphic transition is gradational across tens or hundreds of meters along the power line north of Off Lake.

Mafic Suite

The mafic metavolcanic rocks are green coloured, fine to medium grained assemblages of amphibole, epidote, plagioclase, chlorite, calcite, and accessory biotite, magnetite, pyrite, sphene, and quartz. Four general types were mapped in the field: massive lava or sill, debris flow-breccia, pillowed lava, and lithic tuff. The massive lava or sill (unit 1a & 1b) is characterized by an ophitic-like texture on weathered surface caused by feldspar laths set in a mafic matrix of amphibole + epidote + chlorite. These rocks vary from fine grained ($\leq$1 mm) to medium grained (>1-4 mm), sometimes across a single outcrop. Porphyritic-like textures, amphibole laths in an ophitic-like textured matrix, were observed in some outcrops of units 1a & 1b. The massive lava or sill has the appearance of gabbro or diabase in the field, but evidence for an intrusive origin (xenoliths, cross-cutting relations) was not observed. Structures to suggest an extrusive origin are also lacking in the field.

The debris flow-breccia (unit 1c) has felsic clasts supported by an ophitic-like textured matrix of amphibole + epidote + plagioclase +

chlorite. The felsic clasts are lapilli to block sized, angular to subangular shaped, and chaotic in distribution. The clasts are mainly massive fine grained with up to 10% quartz $\pm$ feldspar porphyroids, resembling felsic unit 2b; some clasts are medium grained quartz-feldspar porphyry like unit 2a. The unit is exposed with massive lava or sill on the power line east of Off Lake.

The pillowed lava (unit 1d) was only observed at the northwest part of the property together with massive lava or sill. The pillows are irregular to round in shape and have pale-green salvages bearing epidote. The lithic tuff (unit 1e) refers to a fine grained, green to gray-green coloured rock that may be laminated or non-laminated. The lithic tuff commonly has lapilli-sized clasts of mafic, felsic, and locally siliceous rock.

Felsic Suite

The felsic rocks are gray coloured, fine to medium grained assemblages of quartz, plagioclase, epidote, white mica, and accessory biotite, amphibole, chlorite, pyrite, calcite, and sphene. Three general types were mapped in the field: quartz-feldspar porphyry, quartz felsite, and pelitic tuff. The quartz-feldspar porphyry (unit 2a) is a granular textured rock of 1 to 4 mm grain size. The proportion of quartz to feldspar blasto-phenocrysts varies and an attempt to map variations in the field proved futile. The mafic minerals are 10% to 25% with biotite, and to a lesser extent, amphibole and chlorite;

pyrite is <1%.

The following suggest an intrusive origin for the quartz-feldspar porphyry (unit 2a):

1) the granular texture and lack of volcanic lapilli or banding suggestive of an extrusive origin;
2) scattered block-sized xenoliths of mafic rock (Preacher Lake, Off Lake, along the power line);
3) dikes traverse the mafic suite (Preacher Lake and east of Off Lake);
4) contacts exposed on outcrop tend to be irregular in shape and attitude;
5) scattered outcrops of intrusive breccia occur on the power line east of Off Lake.

The intrusive breccia has a granular textured, quartz-feldspar matrix enclosing lapilli to block-sized clasts of mafic rock resembling unit 1; stringers of porphyry from the matrix intrude many of the mafic clasts.

The quartz felsite (unit 2b) is an aphanitic felsic rock with 1% to 20% quartz porphyroids of 1-4 mm size. The groundmass is an assemblage of fine grained quartz + epidote + plagioclase with minor white mica, biotite, chlorite, and up to 10% pyrite. These rocks are locally traversed by stockworks with 5% to 10% pyrite and <1% chalcopyrite. Many outcrops of quartz felsite have granular textures on weathered surfaces, resembling unit 2a. However, on fresh surfaces the quartz felsite has an aphanitic texture unlike unit 2a, with disseminated quartz porphyroids.

The quartz felsite lacks textures or structures to prove an extrusive or an intrusive origin. It is thought that the quartz felsite is partly extrusive because it occurs intercalated with pelitic tuff (unit 2c) and clasts resembling it occur in the debris flow-breccia (unit 1d). It appears from its distribution that the quartz felsite is a volcanic or subvolcanic phase of the quartz porphyry that experienced hydrothermal alteration, possibly capping a felsic dome or stock.

The pelitic tuff (unit 2c) is a fine grained, foliated rock of quartz + white mica + plagioclase with up to 10% disseminated pyrite. Other minerals found locally are fuchsite, talc, carbonate, and trace chalcopyrite. The pelitic rock locally appears banded and has felsic clasts; it occurs near the north end of Off Lake. Samples of pyrite-bearing quartz felsite and pelitic tuff were assayed for gold during the 1984 and 1985 field season. The two felsic units are generally slightly anomalous in gold content around Off Lake; gold content ranged from 1 ppb to 100 ppb Au. These values are not economic, but represent concentrations up to 50 times background (Christie, 1984; Table 1).

GOLD OCCURRENCE

The only known gold occurrence on the property is on Off Lake in claim #728026 (Figure 4). Gold occurs concentrated in a band of foliated felsic rock that strikes northeast, dips steeply to the

west, is 0.2 to 1 m (0.5 - 3 ft) wide, and traced along strike for 11 m (35 ft). The northeast tip plunges into the lake waters; the southwest end could not be traced along strike. The foliated band consists of fine grained quartz + white mica + pyrite rock with stringers and pods of sugary-textured quartz bearing pyrite. The band also has minor (≦5%) chlorite, plagioclase, and trace (≦1%) chalcopyrite. Pyrite is disseminated from 1% to 20%. The host rock is quartz-feldspar porphyry, medium grained granular textured quartz + plagioclase + biotite + epidote + white mica assemblage; there is no alteration phenomena associated with the contact between the foliated and host rock.

Samples were taken across the zone and its wallrocks; attempts to find the southwest continuation of the zone failed. The gold tenor across widths of 0.6 to 1.1 m (2 to 3.5 ft) varies from 2.06 to 4.30 g/t Au (0.06 to 0.13 oz/ton Au); an average along a 11 m (35 ft) strike lenght is 2.06 g/t Au (0.06 oz/ton Au). The wallrocks to the foliated zone are not auriferous (Table 1). The 1985 results confirm the erratic tenor of the foliated zone suggested by the assay results of grab samples taken in 1984 by Agassiz Resources (Christie, 1984).

CONCLUSION

The Archean geology of the Off-Lake property is summarized as follows. A mafic volcanic sequence is intruded by a quartz-feldspar porphyry pluton with a margin of quartz felsite and pelitic tuff. The margin is a partly extrusive phase of the pluton affected by hydrothermal alteration. The only known gold occurrence on the property appears to be a xenolithic band of the marginal phase engulfed by the porphyry during intrusion.

The economic potential of the property is low given the low, erratic gold tenor of the marginal phase. The gold occurrence on claim #728026 is narrow (≦1 m wide), low in gold tenor (∿2.06 g/t Au), discontinuous in strike lenght (≦10 m ?), and has barren wallrocks (≦0.17 g/t Au).

At this stage the recommendation is Agassiz Resources carry-out no further work on the Off-Lake property.

REFERENCES

Blackburn, C. E.(1976): Geology of the Off Lake - Burditt Lake area, Ontario Division of Mines, Geoscience Report 140, 62 p.

Bonivell, J. B. (1985): Interpretation of geophysical data from the Off Lake grid, Kenora Mining Division, Ontario, Excalibur International Consultants Ltd., Company report, 12 p.

Christie, B. J. (1983): The Off Lake - Burditt Lake area reconnaisance project - a summary of field work, Agassiz Resources Ltd., Company report.

Christie, B. J. (1984): Preliminary report on the geology of the Off Lake claim group, Senn and Fleming Townships, Northwestern Ontario, Agassiz Resources Ltd., Company report, 31 p.

CERTIFICATE

I, PAUL ALEXANDER STUDEMEISTER, of Sudbury in the Province of Ontario, certify as follows with respect to my report on the Off-Lake property dated July 1, 1985:

1) I graduated from the University of California at Berkeley in 1977 with a B. A. degree in geology, and from the University of Western Ontario in 1982 with a Ph.D. degree in geology.

2) I carried-out the geological survey between June 1 and June 30, 1985 and was assisted in the field by Mr. John Ferguson of London, Ontario.

Paul Studemeister

July 1, 1985
Sudbury, Ontario

Paul A. Studemeister
Geologist, Ph.D.
Agassiz Resources Ltd.
Suite 1602
65 Queen Street
Toronto, Ontario M5H 2M5

TABLE 1: Gold Assays of Samples from the Off-Lake Property (1985)

SAMPLE NUMBER	TYPE	DESCRIPTION	GOLD ASSAY[1] (OZ PER TON/FT)	(GM PER TONNE/MT)
3827	Grab	Mafic pyritic rock	nil	nil
3828	Grab	Mafic pyritic schist	0.005	0.17
3829	Grab	Pyritic quartz-felsite	nil	nil
3830[2]	Chips	Pyritic (5%) felsic rock	0.07/3.5	2.40/1.1
			0.05/3.5	1.71/1.1
3831[2]	Chips	Pyritic (2%) felsic rock	0.06/2	2.06/0.6
3832	Chips	Pyritic (2%) felsic rock	0.01/1.5	0.34/0.5
3833	Grab	Pyritic (1-3% Py) quartz felsite	nil	nil
3834	Grab	Pyritic mafic rock with trace (<1%) Po + Cpy	nil	nil
3835	Grab	Pyritic (5% Py) mafic rock	nil	nil
3836	Grab	Pyritic (5% Py) mafic rock	nil	nil
3837	Grab	Pyritic felsic rock	0.01	0.34
3838	Float	Quartz felsite with 1-3% Py	0.002	0.07
3839	Float	Pyritic (5-10% Py) mafic schist	0.005	0.17
3840	Float	Pyritic (5% Py) mafic schist	nil	nil
3841[2]	Grab	Pyritic felsic rock	0.02	0.67
			0.02	0.67
3842[2]	Chips	Quartz-felsdpar porphyry (wallrock)	0.005/8	0.17/2.4
3843[2]	Chips	Pyritic (1-3% Py) felsic rock	0.03/3	1.03/0.9
3844[2]	Chips	Quartz-feldspar porphyry (wallrock)	0.002/∿5	0.07/∿1.5
3845[2]	Chips	Pyritic (1-5% Py) felsic rock	0.13/2.5	4.46/0.8
			0.12/2.5	4.11/0.8
3846[2,3]	Chips	Pyritic felsic rock	0.06/35	2.06/10.7
3847[2]	Grab	Quartz-feldspar porphyry (wallrock)	0.005	0.17
3848[2]	Grab	Quartz-feldspar porphyry	0.005	0.17

SAMPLE NUMBER	TYPE	DESCRIPTION	GOLD ASSAY[1] (OZ PER TON/FT)	GOLD ASSAY[1] (GM PER TONNE/MT)
3852	Grab	Pyritic (3-5% Py) quartz felsite	0.005	0.17
3853	Grab	Pyritic (3-5% Py) quartz felsite	nil	nil
3864	Grab	Pyritic felsic rock	0.002	0.07
3865	Grab	Pyritic (10% Py) felsic rock with fuchsite	0.002	0.07

(1) Gold assay in oz/ton by Swastika Laboratories Ltd (June 1985).

(2) Sample from gold occurrence on claim #728026.

(3) Chips taken along strike of pyritic felsic band, distance refers to strike length.

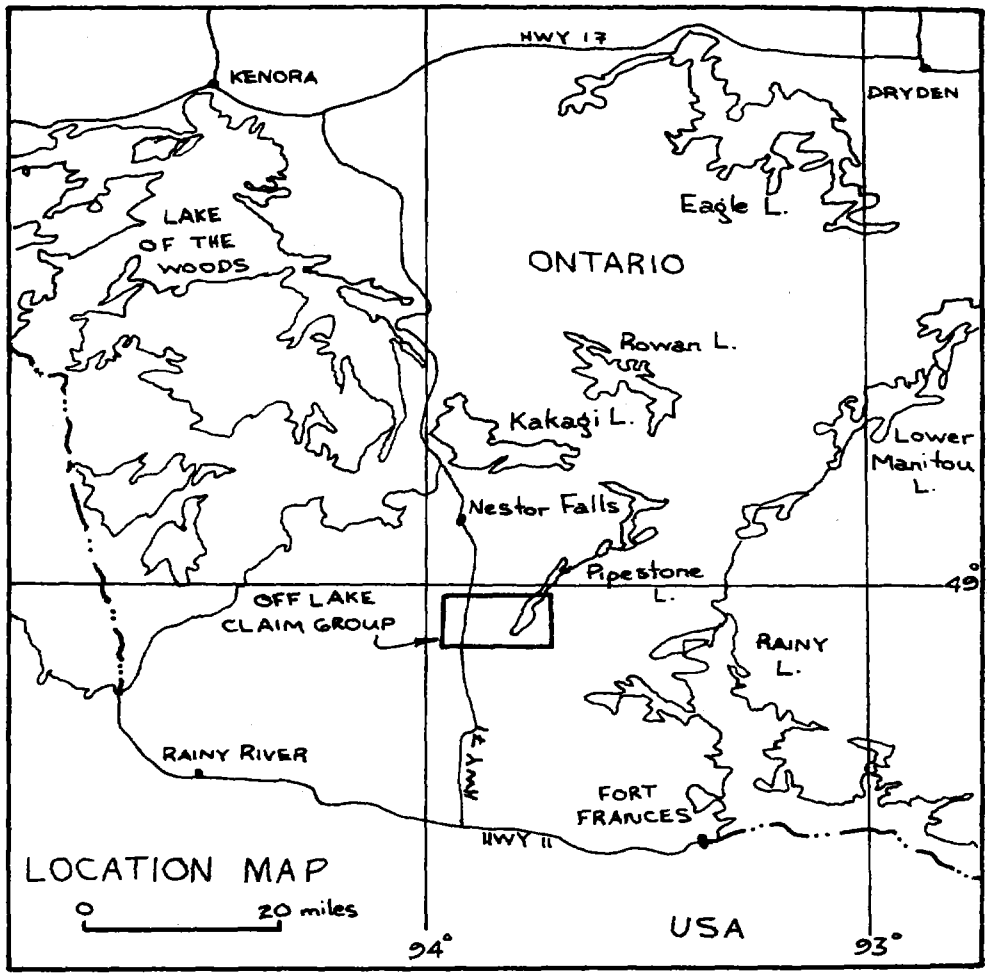


FIGURE 1: Location of the Off-Lake Property near Fort Frances, Ontario, Canada

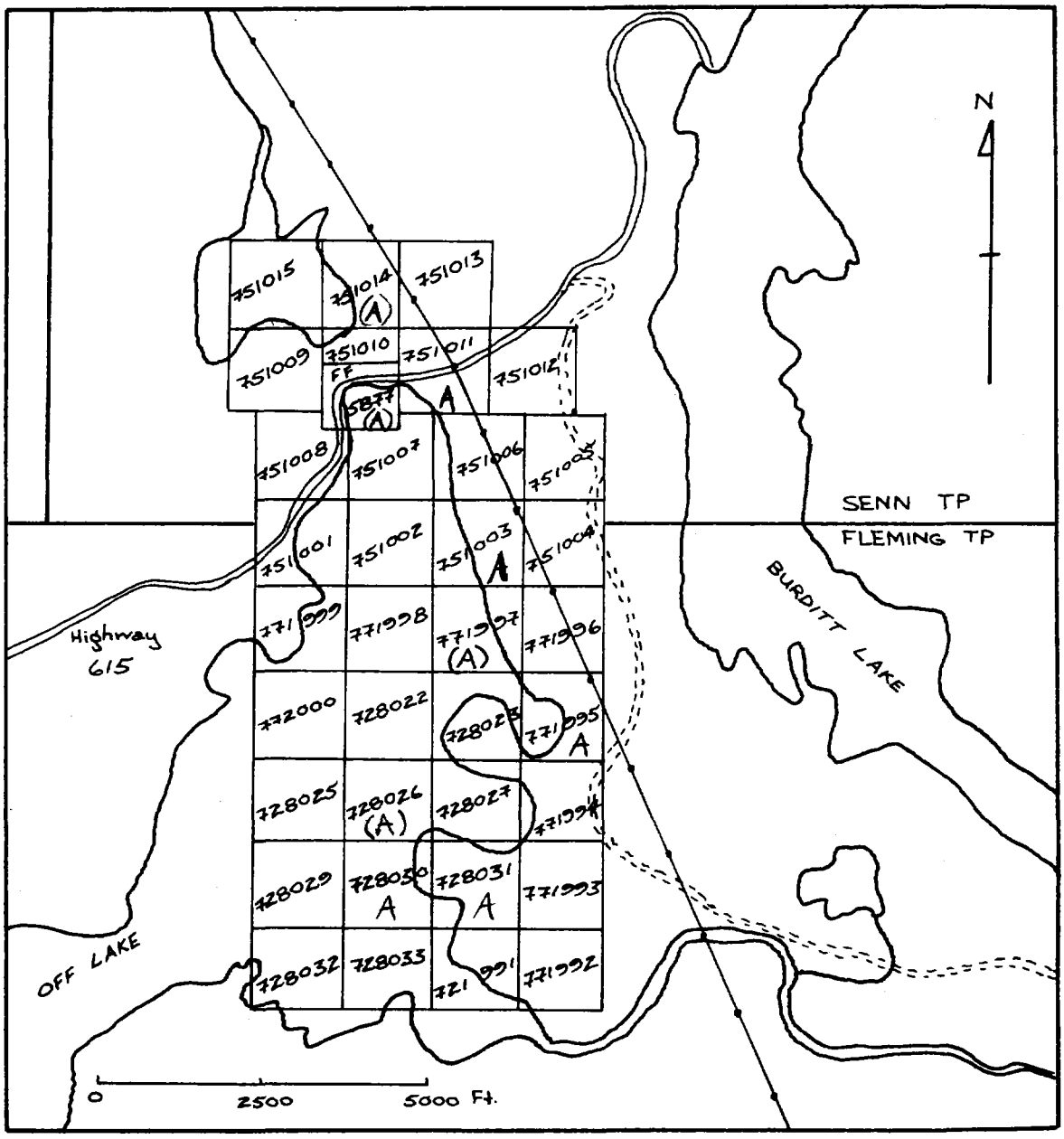


FIGURE 2: Detailed Location of the Off-Lake Property

Ministry of Natural Resources
Ontario

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

RP

#174-85

52C13NW0002 2.8357 FLEMING

900

Mining Act

Do not use shaded areas below.

Type of Survey(s): GEOLOGICAL SURVEY

Township or Area: SENN + FLEMING TWP

M-2083

M-2068

Claim Holder(s): ABASSIZ RESOURCES LIMITED

Prospector's Licence No.: T 1421

Address: 1602 - 65 QUEEN STREET W., TORONTO, ONTARIO M5H 2M5

Survey Company: ABASSIZ RESOURCES LIMITED

Date of Survey (from & to): Day 01 Mo. 06 Yr. 85 — Day 20 Mo. 06 Yr. 85

Total Miles of line Cut: 38.5

Name and Address of Author (of Geo-Technical report): P. A. STUDEMEISTER 1602 - 65 QUEEN ST. W., TORONTO M5H 2M5

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	
	Geophysical - Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	20
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geological	8
	Geochemical	

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

RECEIVED
SEP 03 1985
MINING LANDS SECTION

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.
K	771991.	1
	771992.	1
	771993.	1
	771994.	1
	771995.	1
	771996.	1
	771997.	1
	771998.	1
	771999.	1
	728022.	1
	728023.	1
	728025.	1
	728026.	1
	728027.	1
	728029.	1
	728030.	1
	728031.	1
	728032.	1
	728033.	1
	751001.	1.25
	751002.	
	751003.	
	751004.	

Prefix	Mining Claim Number	Expend. Days Cr.
K	751005	
	751006	
	751007	
	751008	
	751009	
	751010	
	751011	
	751012	
	751013	
	751014	
	751015	
	772000	

KENORA MINING DIV.
RECEIVED
AUG 14 1985
11.05 am
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

See revised work statements.

Expenditures (excludes power stripping)

Type of Work Performed: ASSAY (ROCK + CHIP)

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures: $ 303.75 ÷ 15 = Total Days Credits: 20.25

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.

728022

Total number of mining claims covered by this report of work: 35

For Office Use Only

Total Days Cr. Recorded: 1000.25

Date Recorded: Aug 14/85

Mining Recorder: [signature]

Date Approved as Recorded:

Branch Director

Date	Recorded Holder or Agent (Signature)
AUGUST 11, 1985	Paul Studemeister

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: P. A. STUDEMEISTER 1602 - 65 QUEEN ST. W., TORONTO M5H 2M5

Date Certified	Certified by (Signature)
AUGUST 11, 1985	Paul Studemeister

1362 (81/9)

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey: GEOLOGICAL

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
40	X	7	=	280	+	-	=	280	÷	35	=	8

Type of Survey

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Type of Survey

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Type of Survey

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Ministry of Natural Resources
Ontario

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

Mining Act

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.

Type of Survey(s): GEOLOGICAL SURVEY

Township or Area: SENN + FLEMING TWPS.

Claim Holder(s): AGASSIZ RESOURCES LIMITED

Prospector's Licence No.: T 1421

Address: 1602 - 65 QUEEN STREET W TORONTO ONTARIO M5H 2M5

Survey Company: AGASSIZ RESOURCES LIMITED

Date of Survey (from & to): 01 06 85 (Day Mo. Yr.) – 20 06 85 (Day Mo. Yr.)

Total Miles of line Cut: 33.5

Name and Address of Author (of Geo-Technical report): P.A. STUDEMEISTER 1602 - 65 QUEEN ST. W. TORONTO M5H 2M5

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	
	Geophysical - Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	20
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	8
	Geochemical	

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
K	771991	
	771992	
	771993	
	771994	
	771995	
	771996	
	771997	
	771998	
	771999	
	728022	
	728023	
	728025	
	728026	
	728027	
	728029	
	728030	
	728031	
	728032	
	728035	
	751001	
	751002	
	751003	
	751004	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
K	751005	
	751006	
	751007	
	751008	
	751009	
	751010	
	751011	
	751012	
	751013	
	751014	
	751015	
	772000	

Total number of mining claims covered by this report of work: 35

Expenditures (excludes power stripping)

Type of Work Performed: ASSAY (ROCK AND CHIP)

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures			=	Total Days Credits
$ 303.75	÷	15	=	20.25

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.

Date	Recorded Holder or Agent (Signature)
JULY 2 1985	Paul Studemeister

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
	Date Approved as Recorded	Branch Director

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: P.A. STUDEMEISTER 1602 - 65 QUEEN ST. W. TORONTO M5H 2M5

Date Certified	Certified by (Signature)
JULY 2 1985	Paul Studemeister

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken SEE ATTACHED SAMPLE LOC. MAP

Total Number of Samples 27
Type of Sample ROCK + CHIP (Nature of Material)
Average Sample Weight ~1LB
Method of Collection MANUAL

Soil Horizon Sampled –
Horizon Development –
Sample Depth SURFACE
Terrain

Drainage Development
Estimated Range of Overburden Thickness
OUTCROPS

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

Mesh size of fraction used for analysis 180

General

ANALYTICAL METHODS

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

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

Others Au (OZ/TON)

Field Analysis (____ tests)
Extraction Method
Analytical Method
Reagents Used

Field Laboratory Analysis
No. (____ tests)
Extraction Method
Analytical Method
Reagents Used

Commercial Laboratory (27 tests)
Name of Laboratory SWASTIKA LAB. LTD.
Extraction Method
Analytical Method
Reagents Used

General GOLD ANALYSES BY SWASTIKA LAB. LTD. OF SWASTIKA, ONT.

OFFICE USE ONLY

Ontario

Ministry of Natural Resources

File

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

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 + EXPENDITURES
Township or Area SENN + FLEMING TWPS
Claim Holder(s) ABASSIZ RESOURCES LTD.
1602 – 65 QUEEN ST. W, TORONTO
Survey Company ABASSIZ RESOURCES LTD.
Author of Report P. A. STUDEMEISTER
Address of Author 1602 – 65 QUEEN ST. W, TORONTO
Covering Dates of Survey 01/06/85 30/06/85 (linecutting to office)
Total Miles of Line Cut 33.5

SPECIAL PROVISIONS CREDITS REQUESTED	DAYS per claim.
ENTER 40 days (includes line cutting) for first survey.	Geophysical
	–Electromagnetic
	–Magnetometer
	–Radiometric
ENTER 20 days for each additional survey using same grid.	–Other
	Geological 20
	Geochemical

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer ____ Electromagnetic ____ Radiometric ____ (enter days per claim)

DATE: August 11, 1985 SIGNATURE: Paul Studemeister
Author of Report or Agent

Res. Geol. ____ Qualifications 2.5812

Previous Surveys

File No.	Type	Date	Claim Holder

837 (5/79)

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

K-771991 – 771999
K-77200
K-728022 – 23
K-728025 – 27
K-728029 – 33
K-751001 – 015

If space insufficient, attach list

TOTAL CLAIMS 35

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 _____

SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
TELEPHONE: (705) 642-3244
ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 60284 Date: June 20 1985

Received June 14/85 37 Samples of ore

Submitted by Agassiz Resources Ltd., Toronto, Ontario Att'n: Mr. P. Studemeister

SAMPLE NO.	GOLD Oz./ton
3827	Nil
3828	0.005
3829	Nil
3830	0.07
	0.05
3831	0.06
3832	0.01
3833	Nil
3834	Nil
3835	Nil
3836	Nil
3837	0.01
3838	0.002
3839	0.005
3840	Nil
3841	0.02
	0.02
3842	0.005
3843	0.03
3844	0.002
3845	0.13
	0.12
3846	0.06
3847	0.005
3848	0.005

SAMPLE NO.	GOLD Oz./ton
3849	Nil
> 3852	0.005
3853	Nil
[redacted]	
3864	0.002
3865	0.002

Per G. Lebel
G. Lebel — Manager

ESTABLISHED 1928

11191

SWASTIKA LABORATORIES LIMITED

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

SOLD TO

Agassiz Resources Limited
1904 - 372 Bay Street
Toronto, Ontario
M5H 2W9
Att'n: Mr. P. Studemeister

SHIP TO

1.5% late charge over 30 days
(annual rate 18%)

SHIPPED VIA	REFERENCE NO.	PROV. LICENCE NO.	PURCHASE NO.	PURCHASE NO.	TERMS	SALESMAN
June 21/85						

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
36	Au Assays	$ 8.50	$ 306.00
36	Sample handling	2.75	99.00
	Cert. No. 60284 June 20/85		

OFF LAKE-PROPERTY : 27 OF 36

27 x 8.50 = $ 229.50

27 x 2.75 = 74.25

TOTAL: $303.75

SWASTIKA LABORATORIES LTD.

RECD

JUL 29/85

WITH THANKS

Total PER $ 405.00

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

FACTURE / INVOICE

ESTABLISHED 1928

1985 10 18

Your File:174-85
Our File:2,8357

Mining Recorder
Ministry of Northern Affairs and Mines
808 Robertson Street
Box 5080
Kenora, Ontario
P9N 3X9

Dear Sir:

RE: Notice of Intent dated October 1, 1985
Geological Survey and Data for Assaying
on Mining Claims K 771991, et al, in
Fleming and Senn townships

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

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

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

DK/mc

cc: Agassiz Resources Limited
Toronto, Ontario

P.A. Studemeister
Toronto, Ontario

Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Resident Geologist
Kenora, Ontario

Encl.

Ontario Ministry of Northern Affairs and Mines

Technical Assessment Work Credits

File	
2.8357	
Date	Mining Recorder's Report of Work No.
1985 10 01	174-85

Recorded Holder: AGASSIZ RESOURCES LIMITED

Township or Area: FLEMING AND SENN TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	$303.75 SPENT ON ANALYSES OF SAMPLES TAKEN FROM MINING CLAIMS:
Electromagnetic _____ days	K 771995
Magnetometer _____ days	771997
Radiometric _____ days	728026•
Induced polarization _____ days	728030 - 31 •
Other _____ days	751003•
Section 77 (19) See "Mining Claims Assessed" column	751010 - 11
Geological _____ days	751014
Geochemical _____ days	
Man days ☐ Airborne ☐	20 1/4 ASSESSMENT WORK DAYS ARE ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT.
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.

Ministry of Northern Affairs and Mines
Ontario

Technical Assessment Work Credits

File: 2.8357

Date: 1985 10 01

Mining Recorder's Report of Work No.: 174-85

Recorded Holder: AGASSIZ RESOURCES LIMITED

Township or Area: FLEMING AND SENN TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	K 771991 to 97 inclusive 771999 728023 728026 - 27 728030 - 31 751001 751003 to 06 inclusive 751008 to 15 inclusive 772000
Electromagnetic _____ days	
Magnetometer _____ days	
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 16 days	
Geochemical _____ days	
Man days ☐ Airborne ☐	
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

K 771998
728022
728025
728029
728032 - 33
751002
751007

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.

Ministry of Natural Resources

Ontario

Oct 11/85

1985 10 01

Your File: 174-85
Our File: 2.8357

Mining Recorder
Ministry of Natural Resources
808 Robertson Street
Box 5080
Kenora, Ontario
P9N 3X9

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

RD:KDK/mc

Encls.

cc: Agassiz Resources Limited
Suite 1602
65 Queen Street West
Toronto, Ontario
M5H 2M5

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

cc: P.A. Studemeister
Suite 1602
65 Queen Street West
Toronto, Ontario
M5H 2M5

Ministry of Natural Resources
Ontario

Notice of Intent

for Technical Reports

1985 10 01

2.8357/174-85

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

1985 08 23 File: 2.8357

Mining Recorder
Ministry of Natural Resources
808 Robertson Street
Box 5080
Kenora, Ontario
P9N 3X9

Dear Sir:

We received reports and maps on August 13, 1985 for a Geological Survey submitted under Special Provisions (credit for Performance and Coverage) and Data for Assaying on Mining Claims K 771991, et al, in Senn and Fleming Townships.

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

We do not have a copy of the report of work which is normally filed with your office prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

A. Barr:mc

cc: Agassiz Resources Limited
Suite 1602
65 Queen Street West
Toronto, Ontario
M5H 2M5
Attention: P.A. Studemeister

Mining Lands Section

File No 28357

Control Sheet

TYPE OF SURVEY _____ GEOPHYSICAL

_____ GEOLOGICAL

_____ GEOCHEMICAL

_____ EXPENDITURE

MINING LANDS COMMENTS:

(Sean Fleming)

Signature of Assessor

Date

NOTES

400' surface rights reservation along the shores of all lakes and rivers

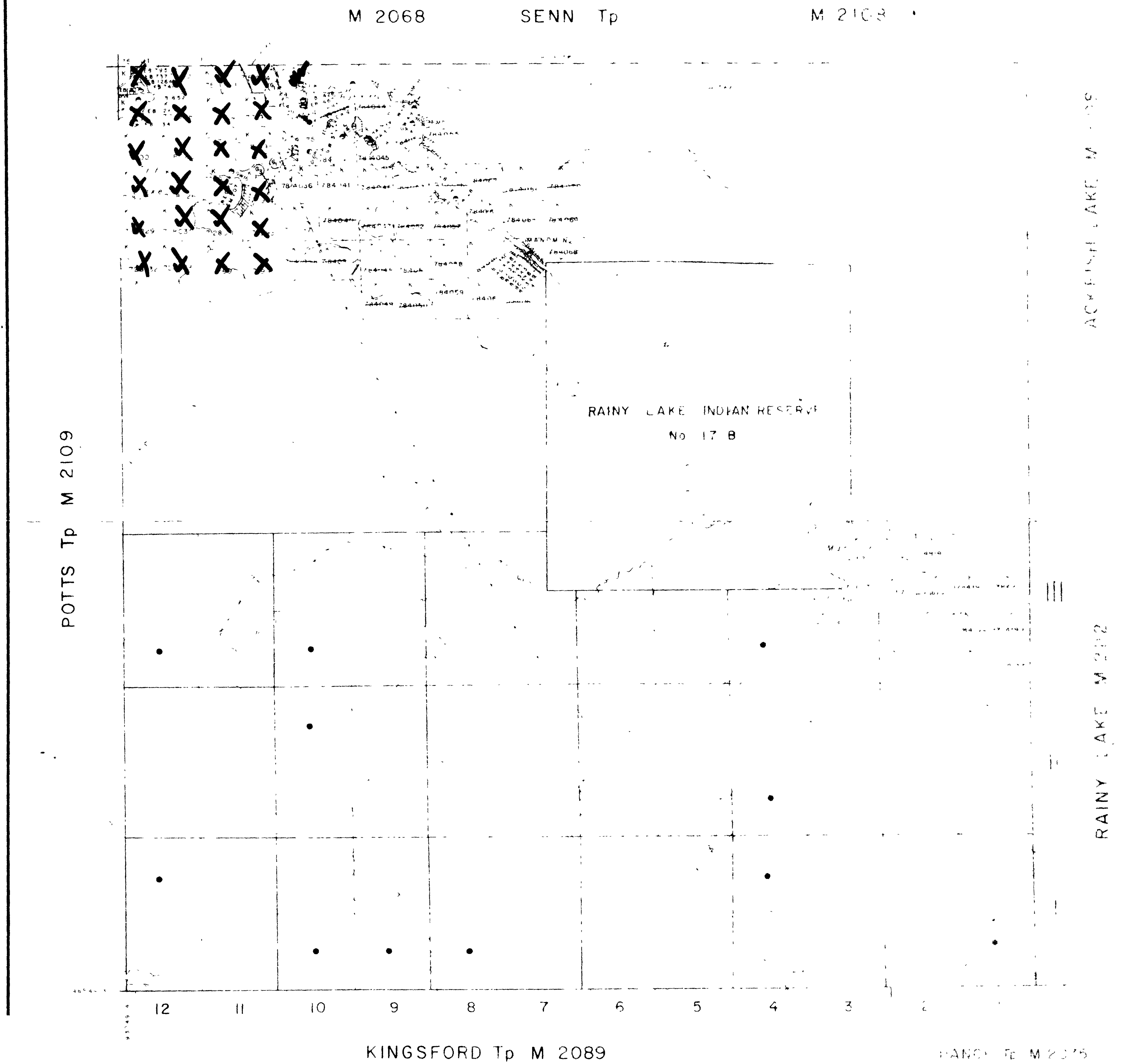
SAND & GRAVEL

Gravel File 71043

M.N.R. Gravel Pit No. 84 File 116134, 116141

Gravel File 178418

Effective as liner Aug 24, 1984



FLEMING

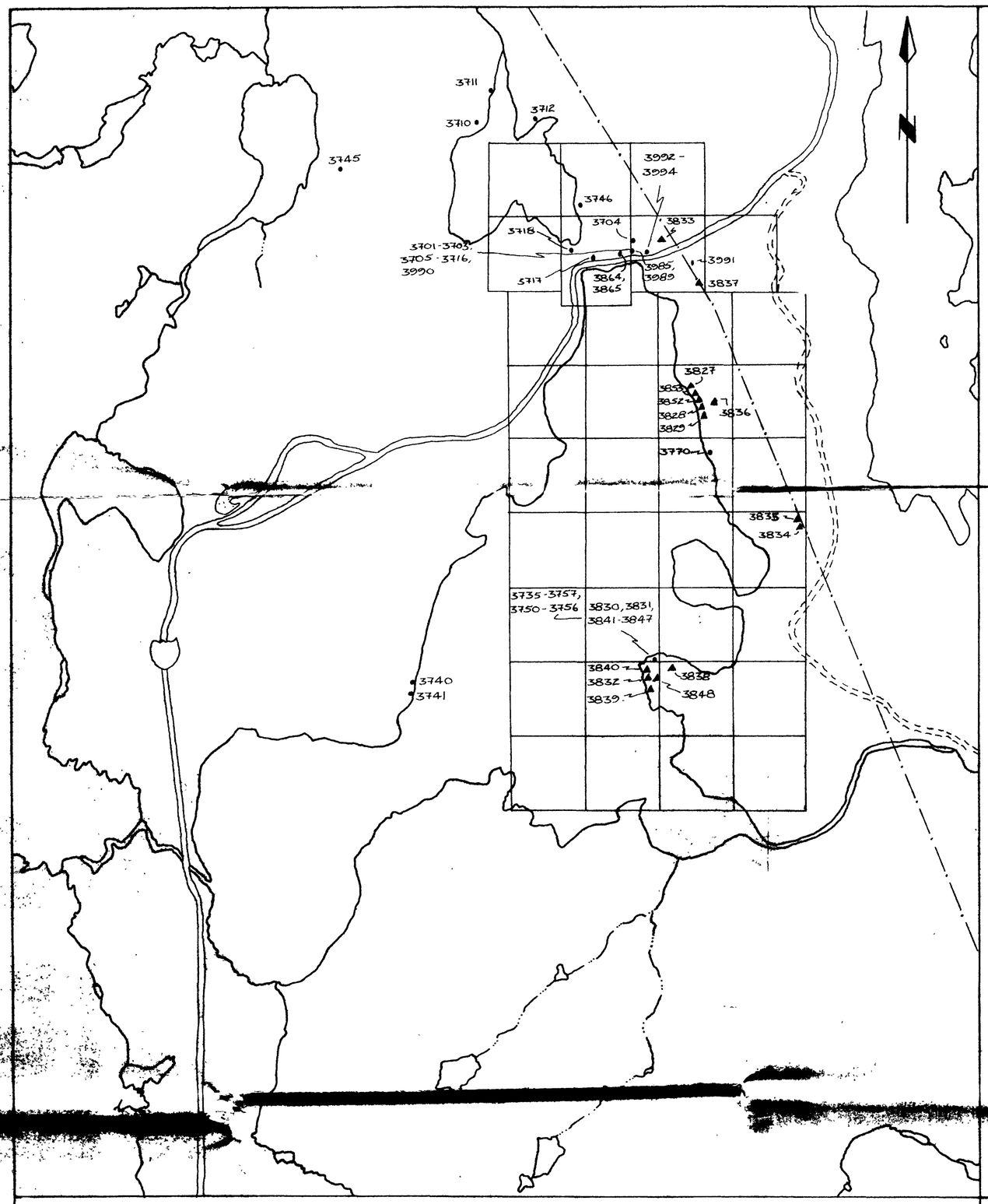
RAINY RIVER

KENORA

Ministry of Natural Resources

M.2083

200



ASSAY RESULTS

1985 SURVEY

Sample Number	GOLD - WIDTH oz/ton - ft	GOLD - WIDTH g/t - m
3827	—	—
3828	0 005	0.171
3829	—	—
3830	0.07 - 3.5	2 40 - 106
3831	0 06 - 2 0	2.06 - 0 61
3832	0.01	0 34
3833	—	—
3834	—	—
3835	—	—
3836	—	—
3837	0.01	0 34
3838	0.002	0 067
3839	0 005	0 171
3840	—	—
3841	0 02	0 67
3842	0 005	0 171
3843	0.03 - 3 0	103 - 10
3844	0.002 - 5.0	0.067 - 1 54
3845	0 125 - 2.5	4.29 - 0.77
3846	[illegible]	[illegible]
3847	0.005	0 171
3848	0.005	0 171
3852	0.005	0 171
3853	—	—
3864	0.002	0 067
3865	0.002	0.067

1984 SURVEY

Sample	GOLD - WIDTH oz/ton - ft	GOLD - WIDTH g/t - m	Sample	GOLD - WIDTH oz/ton - ft	GOLD - WIDTH g/t - m
3701	—	—			
3702	—	—	3756	0.071	2.20
3704	—	—	3770	0 002	0.067
3705	—	—	3771	0 037	1.17
3716	—	—	3985	—	—
3717	—	—	3986	—	—
3735	—	—	3987	—	—
3736	0.154	4.775	3988	—	—
3746	—	—	3989	—	—
3750	0.30	9.013	3990	—	—
3751	0.02	0 632	3991	0 002	0 067
3752	0.216	6 723	3992	—	—
3753	0.091	2.843	3993	—	—
3754	0.047	1 460	3994	—	—
3755	0.153	4.773			

NOTE: Sample 3846 consists of chip samples taken along strike.

NOTE: 1984 assays after Christie (1984).

1985 Sample Location

1984 Sample Location

MILES 1 0 1 MILES

METRES 1000 0 1000 2000 METRES

AGASSIZ RESOURCES LIMITED

OFF LAKE CLAIM GROUP : SAMPLE MAP

Survey by:	Date:
P. A. STUDEMEISTER	JULY 1, 1985
Scale: 1:15,840	Figure: 5 Paul Studemeister 1/7/1985

PREACHER'S

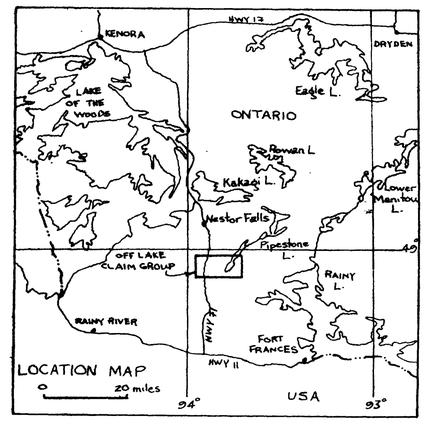
LAKE

SENN TWP

POTTS TWP.

OFF LAKE

Au



LEGEND

LATE PRECAMBRIAN

3 Diabase

EARLY PRECAMBRIAN (ARCHEAN)

2 Felsic Suite
- 2a Quartz-Feldspar Porphyry
- 2b Quartz Felsite
- 2c Pelitic Tuff

1 Mafic Suite
- 1a Med. Grain. Massive Lava or Sill
- 1b Fine Grain. Massive Lava or Sill
- 1c Debris Flow Breccia
- 1d Pillowed Lava
- 1e Lithic Tuff

SYMBOLS

- Metamorphic Transition
- Schistosity (inclined, vertical)
- Outcrop
- tr Trench
- Au Occurrence
- Grid Line
- Claim Line
- Claim Post (located, assumed)
- Road
- Power Line
- Cottage
- Marsh

AGASSIZ RESOURCES LIMITED

OFF LAKE CLAIM GROUP: OUTCROP MAP

Paul Studemeister
1/7/1985

SCALE

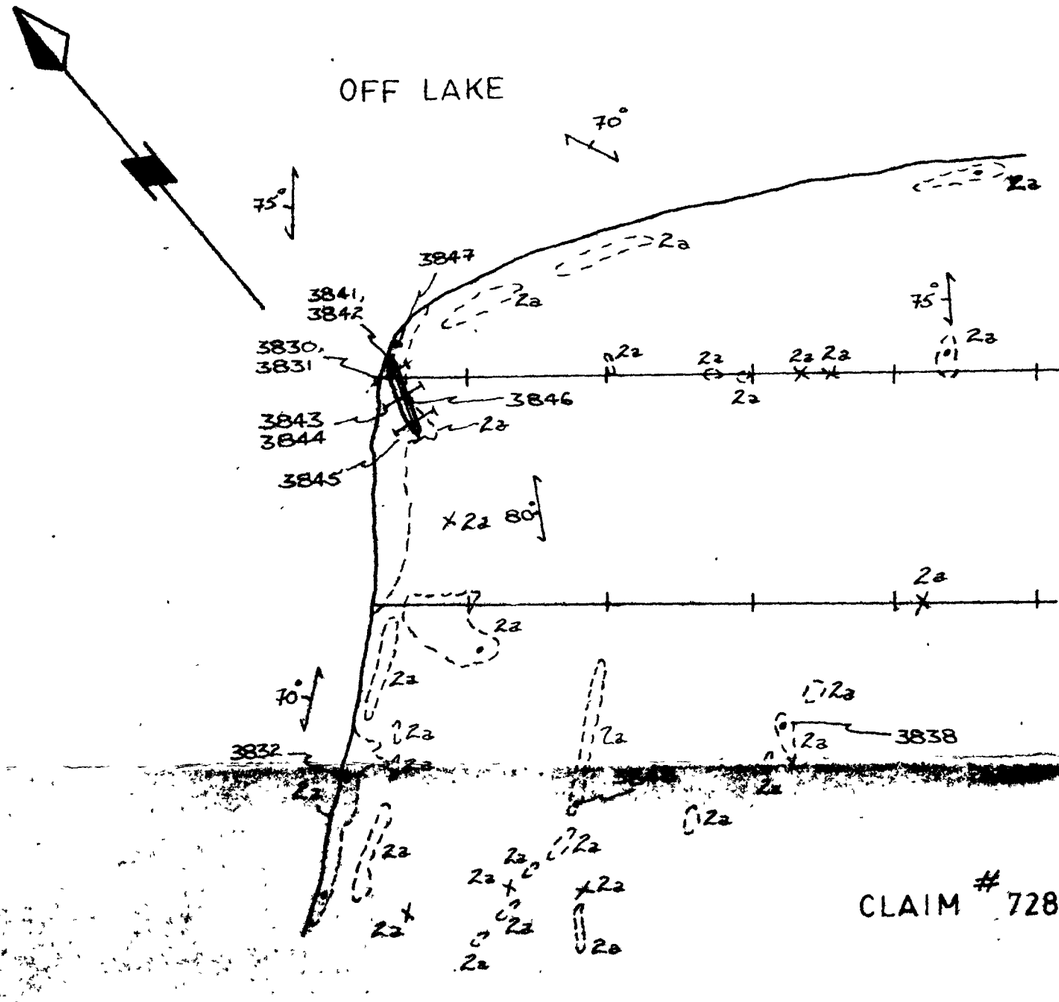
0 500 1000 1500 2000 Ft

0 300 600 m

Survey by: P. A. STUDEMEISTER

Date: JULY 1, 1985

Figure: 3



LEGEND

EARLY PRECAMBRIAN (ARCHEAN)

2a Quartz-Feldspar Porphyry

SYMBOLS

Schistosity (inclined, vertical)

Outcrop

Au Occurrence

Grab Sample Location

Grid Line

0 100 200 300 Ft.

0 30 60 m.

AGASSIZ RESOURCES LIMITED

OFF LAKE CLAIM GROUP · DETAILED MAP OF Au OCCURRENCE

Survey by	Date
P.A. STUDEMEISTER	JULY 1,1985
Paul Studemeister 1/7/1985	Figure: 4