



41015SE9210 2.15105 SWAYZE

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CUCKOO LAKE PROPERTY

SWAYZE TOWNSHIP

**2.15105**

FINAL SUBMISSION

OPAP 92-814

RON CRICHTON

JANUARY 1993

*Deal 2.1819*

CUCKOO LAKE PROPERTY

SWAYZE T



410155E9210 2.15105 SWAYZE

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INTRODUCTION:

THIS FIVE CLAIM PROPERTY CONSISTS OF FIVE CONTIGUOUS CLAIMS IN SWAYZE TOWNSHIP, PORCUPINE MINING DIVISION. THEY ARE NUMBERED P. 1182447, P. 1182448, P. 1112774, P. 1182170 and P. 1182172. THE PROGRAM INVOLVES STRIPPING, LINECUTTING, TOTAL FIELD MAGNETOMETER, V.L.F. E.M.16, DIAMOND DRILLING AND ASSAYS.

PURPOSE:

THE FIVE CLAIM PROJECT IN SWAYZE TOWNSHIP IS BEING WORKED ON WITH THE ASSISTANCE OF AN O.P.A.P. GRANT. THE TWO GEOPHYSICAL SURVEYS AND DRILLING ARE TO FIND AN EXISTING EXTENSION OF THE CREE LAKE VEIN. UPON ENTERING THE PROJECT, IT IS HOPE THAT THE EXTENSION CAN BE FOUND. THE MAIN OBJECTABLE MINERAL IS GOLD AND HOPEFULLY AND SECONDARY MINERAL WILL ALSO BE FOUND.

3

LOCATION AND ACCESS:

THE CUCKOO LAKE PROPERTY IS LOCATED IN THE SOUTH WEST SECTION OF SWAYZE TOWNSHIP, PORCUPINE MINING DIVISION, DISTRICT OF COCHRANE. THEY COVER THE MOST PART OF CUCKOO LAKE AND THE MAINLAND TO THE NORTH OF THE LAKE.

THE GROUP IS ACCESSES BY THE FOLEYET TIMBER ROAD, ONE MILE EAST OF THE TOWN OF FOLEYET ON HIGHWAY 101. THE TIMBER ROAD GOES FOR ABOUT AN HOURS DRIVE TO AN ACCESS ROAD THAT LEADS TO FREYMOND AND BRETT LAKES. AN A.T.V. ROAD TRAVELS AROUND FREYMOND LAKE TO THE MAINLAND BETWEEN CREE LAKE AND CUCKOO LAKE.

see claim map section

PROPERTY DESCRIPTION:

APPROXIMATELY HALF OF THE PROPERTY IS COVERED BY CUCKOO LAKE. THE NORTH AND NORTHEAST PORTION OF THE PROPERTY HAS VERY HIGH ROLLING HILLS, WITH OUTCROP DROPPING DOWN STEEPLY INTO THE LAKE. THESE HILLS ARE VERY STEEP CLIFFS IN THE VERY NORTHEAST CORNER OF THE CLAIMS.

THE LAND MASS NORTH OF THE LAKE IS COVERED WITH JACK PINE, SPRUCE BALSAM AND SOME BIRCH. THERE ARE A FEW AREAS OF HIGHLAND TRAPPED CEDARS WITH MEDIUM MOOSE MAPLE AND SOFT ALDERS.

THE AREAS WEST AND SOUTH OF THE LAKE ARE LOW LYING WET MUSKEG. THE SOUTH WEST CORNER OF THE PROPERTY IS A LARGE OUTCROP SURROUNDED BY TAG ALDERS AND MUSKEG SWAMP. THE OUTCROP ITSELF IS COVERED WITH SPRUCE BALSAM AND CEDAR.

THE LARGE ISLAND IN THE CENTER OF CUCKOO LAKE IS VERY LOW LYING WITH SPRUCE CEDAR AND BALSAM. THE LAKE ITSELF IS VERY SHALLOW MUSKEG AND FILLED WITH BOULDERS.

METHOD

A NORTH SOUTH LINE GRID WAS ESTABLISHED ON THE MAINLAND IN SEPTEMBER OF 1992, WITH THE LAKE AND ISLAND BEING DONE IN JANUARY 1993. A TOTAL OF 4.38 MILES WERE CUT.

AN EAST WEST BASELINE WAS CUT AND CHAINED FROM 0+25W to 30+25E. LINES WERE TURNED OFF OF THE BASELINE WITH AN ANGLE BOARD AT 0+00, 2+25E, 6+25E, 10+25E, 14+25E, 18+25E, 22+25E, 26+25E and 30+25E. PICKET STATIONS WERE SET UP EVERY 100 FEET ALONG THE GRID LINES. IN JANUARY OF 1993 PICKETS WERE PLACED ON THE LAKE AND THE LINE WAS CUT AND PICKETED ACROSS THE ISLAND. THE GRIDS WERE CUT AND CHAINED BY RON CRICHTON WITH THE HELP OF JACOB CRICHTON.

THIS GRID WAS USED FOR ALL SURVEYS AND ALL REFERENCE POINTS FOR THE WORK PROJECT.

TOTAL FIELD MAGNETOMETER:

READINGS WERE TAKEN ALONG ALL GRID LINES AT THE PICKET STATIONS. A BASE STATION WAS ESTABLISHED AT BLO 0+00. DIURNAL DRIFT WAS CORRECTED AND CONTROLLED BY NOTING THE TIME AND LOOPING THE GRID LINES WITH EACH OTHER AND THE CONTROL BASE STATION.

A TOTAL OF 227 READINGS WERE TAKEN. THE HIGHEST READING WAS 59691 AND THE LOWEST READING WAS 58237 gammas. DRAFTING WAS DONE AT A SCALE OF 1cm=100feet. THE CONTOURS WERE DONE IN INCREMENTS OF 100 GAMMAS USING 58500 AS THE BASE VALUE. THE UNIT FOR THE SURVEY WAS A MC PHAR.

6  
V.L.F. E.M. 16

THE GRID LINES WERE USED TO TAKE READINGS AT EACH PICKET STATION FOR A TOTAL OF 410 READINGS BETWEEN TWO SURVEYS. TWO SURVEYS WERE DONE USING CUTLER MAINE AND ANNAPOLIS MARYLAND. THESE TWO STATIONS WERE USED AS THE DIP OF THE SHEAR ZONE WAS NOT KNOWN, AND BY USING TWO STATIONS THE ANOMILIES WOULD BE BETTER DEFINED.

ALL READINGS WERE TAKEN WHILE FACING NORTH EAST. THE INPHASE AND QUADRATURE VALUES WERE NOTED. A TOTAL OF 197 READINGS WERE TAKEN ON THE ANNAPOLIS, MARYLAND STATION AND 213 READINGS WERE TAKEN ON THE CUTLER MAINE STATION. THE MAPPING WAS DONE ON A SCALE OF 1"=200 feet AND THE PROFILE WAS DRAFTED AT 1"=40%.

A GEONICS E.M. 16 UNIT WAS USED FOR BOTH SURVEYS.

#### DIAMOND DRILLING

TWO DRILL HOLES WERE PUT IN PLACE. DRILL HOLE M-3 WAS EXTENDED FROM 540 feet to 692 feet. IT IS LOCATED AT 6=10'W 1+00'N of #2 POST 1112774. THE AZIMUTH WAS 167 WITH THE DIP ANGLE BEING 40. THE ORIGINAL PART OF THIS HOLE WAS PUT DOWN BY SOMEONE ELSE WHO RAN OUT OF FUNDS. IT WAS CONTINUED TO TEST THE SHEAR ZONE FOUND WHILE PROSPECTING. THIS SHEAR ZONE WAS FOUND IN THE HOLE AT 665 FEET.

DRILL HOLE C93-1 WAS LOCATED AT L14+25E at 24+40S and 20E Az 70 DIP of 45 ON CLAIM 1182448. THE HOLE WAS DRILLED TO A DEPTH OF 402'. THIS LOCATION WAS CHOSEN TO INTERSECT THE SHEAR ZONE FOUND IN HOLE M3. THE DRILLER WAS LARRY SALO WITH RON CRICHTON AS THE HELPER. USING A BBS 2 DRILL WITH ADBGM ROD (1.2" core). ALL CORE WAS TAKEN TO KIRKLAND LAKE FOR LOGGING BY MARK MASSON. SAMPLES WERE TAKEN TO SWASTIKA LABORATORIES FOR ASSAYS AFTER BEING SPLIT BY RON CRICHTON.



STRIPPING:

AFTER CUTTING THE GRID LINES ON THE PROPERTY THE LOCATION OF THE OLD EXISTING TRENCHES AND PITS WAS CONFIRMED. SOME OVERBURDEN AND GROWTH WAS HAND STRIPPED FROM AROUND THE EDGES AND THE CENTERS WERE SHOVELLED OUT. THIS ENABLED A BETTER LOOK AT THE ROCKS AND THE ACCESSIBILITY TO OBTAIN FRESH BREAK SAMPLES AS APPOSED TO WEATHERED SAMPLES AND MUCK PILE SAMPLES.

DISCUSSIONS:

THE ROCKS OF THE SWAYZE AREA ARE A PRECAMBRIAN SEDIMENTARY-VOLCANIC COMPLEX, INTRUDED BY DYKES AND STOCK WORK BODIES OF GRANITE AND PORPHYRY. KEEWATIN GREENSTONES, CONSISTING OF BASIC FLOWS AND TUFFS ARE ENFOLDED WITH BANDS OF SEDIMENTS, INTERLACED WITH ACID FLOWS AND TUFFS.

GOLD BEARING QUARTZ STRINGERS WERE FOUND NEAR THE TRENCHES MADE BY BUFFALO CANADIAN MINES.

A QUARTZ VEIN OR STRINGERS ON THE ADJOINING IMMEDIATE WEST PROPERTY IS ABOUT TWO FEET WIDE WITH INCLUSIONS OF WASTE. THE VEIN RUNS EAST WEST ONTO THE PROPERTY AND DIPS TO THE SOUTH. THE ENTIRE LENGTH OF THE QUARTZ IS WELL MINERALIZED. OXIDIZATION ON THE SURFACE HAS OCCURED BUT FRESH BREAKS SHOWED PYRITE AND CHALCOPYRITE. SOME PLATINUM VALUES WERE OBTAINED BY VANNIN MINING HOWEVER THE EXACT VALUES ARE HERESAY AS IT WAS NEVER MADE PUBLIC.

THE PROPERTY HAS THREE MAIN AREAS OF OUTCROP. THESE ARE ALL PORPHYRY WITH FINELY DISSEMINATED SULPHIDES.

STRIPPING

THE IMMEDIATE PROPERTY HAS THREE AREAS OF OUTCROP. THE FIRST BEING IN THE NORTH EAST SECTION. THE ROCK APPEARS TO BE A PORPHYRY WITH FINE GRAINED BISSEMINATED BROWNISH PYRITES. SEVERAL OLD PITS AND TRENCH OF APPROXIMATELY TWENTY FIVE YEARS WERE FOUND WHILE DOING THE LINE GRIDS. THESE ARE NEAR LINE 22+25E 2+00S. THEY WERE HAND STRIPPED AROUND THE SURFACE AND OUTER EDGES AND THEN SHOVELLED OUT. SAMPLES WERE TAKEN AND SENT FOR ASSAY.

THE SECOND AREA IS NEAR THE WEST BOUNDARY AND TRENDS EASTERLY. ACROSS THE NORTH END OF CUCKOO LAKE. A PIT WAS LOCATED OF LINE 6+25E 9+15S. THIS WAS ALSO HAND STRIPPED AND SAMPLED. THE PORPHYRY IS OF THE SAME TYPE THAT WAS FOUND NEAR THE SHOWINGS OF CREE LAKE.

THE THIRD IS A LARGE PORHRY OUTCROP ON THE SOUTHWEST CORNEROF CUCKOO LAKE. IT APPEARS TO ABUT THE SHEAR ZONE EVIDENCE IN THE GULCH.. DRILL HOLE C93-1 IS ON THIS OUTCROP.

THE HAND STRIPPING AND SHOVELLING OF PITS AND TRENCHES WAS DONE IN OCTOB. ER 1992 BY RON CRICHTON AND STEVE POLSON.

TOTAL FIELD MAGNETOMETER SURVEY

THE TOTAL FIELD MAGNETOMETER SURVEY DONE ON THIS PROPERTY IN JANUARY 1993 WAS CONDUCTED BY RON CRICHTON ON THE EXISTING GRID LINES. A MCPHAR PROTON MAGNETOMETER WAS USED.

THE MAGNETIC READINGS FOR THE MAJORITY OF THE PROPERTY WAS VERY FLAT LYING WITH THE BASE BEING 58300's.

A BAND OF MAGNETIC INCREASE STARTS JUST NORTH OF CUCKOO LAKE.

AS THE TOPOGRAPHY RISES SO DOES THE MAGNETIC VALUES. THE HIGHEST AREAS ARE IN AND NEAR THE NORTH EAST CORNER OF THE PROPERTY WERE THE TERRAIN BECOMES THE STEEPEST. THE PITS AND TRENCHES IN THE AREA SHOW THE ROCK TO BE FINE GRAINED DISSEMINATED PYRITE CONTAINED WITHIN THE PORPHYRY. IT IS HARD TO JUSTIFY THIS AS THE CAUSE OF THE MAGNETICS AS THEY SEEM TO HAVE A PATTERN THAT DISTINCTLY FOLLOWS THE LAY OF THE LAND AND THE SHAPE OF THE LAKESHORE.

FURTHER WORK OF DETAILED MAPPING AND CONTOURING IS RECCOMENDED FOR THE FUTURE. THIS AREA SHOULD ALSO SEE SOME ACTIVE BLASTING TO EXPOSE FRESH ROCK. ALL AREAS WITH READINGS OVER 58850 GAMMAS SHOULD BE LOOKED AT.

Annapolis, MARYLAND

AN EM. SURVEY WAS CARRIED OUT ON THE EXISTING GRID IN JANUARY OF 1993 BY RON CRICHTON. A GEONICS EM UNIT WAS USED AND ALL READINGS WERE TAKEN WHILE FACING NORTH EAST.

THE PROFILES SEEM TO BE VERY FLAT. THE IN PHASE SHOWS A STRONG DIP COMING FROM THE HIGH ELEVATIONS IN THE NORTH, ACCENTING THE STEEP LAKE SHORE.

CONDUCTOR A IS STRIKING WNW-ESE AND STRIKING FOR APPROXIMATELY SIXX HUNDRED FEET. THE AREA IS COVERED BY SWAMP TO THE WEST AND THE LAKE TO THE EAST. THE ANOMALY DOES HAVE THE TRUE CHARACTERISTICS OF A SULPHIDE CONDUCTOR.

THE CONDUCTOR COULD BE CAUSED BY A CONTACT MIXING OF THE MAFIC VOLCANICS TO THE NORTH AND THE PORPHYRY UNITS TO THE SOUTH.

Cutler MAINE

THE SURVEY USING CUTLER WAS DONE THE SAME AS THE ONE USING MARYLAND THESE PROFILES ALSO APPEAR VERY FALT LYING, HOWEVER THERE ARE MORE PRONOUNCED AND LINEATED CONDUCTORS.

CONDUCTOR B- THIS IS A WEAK CONDUCTOR POSSIBLY CAUSED BY A CONTACT ZONE BETWEEN THE MAFIC VOLCANICS AND THE FELSIC-INTERMEDIATE VOLCANICS IN THE SOUTH.

CONDUCTOR C- THIS CONDUCTOR IS ALMOST EAST WEST ACROSS THE CENTER OF THE PORPHYRY OUTCROP, AND THE LAKE. IT IS HARD TO SAY IF IT IS CAUSED BY THE OUTCROP OR BY THE WATERS SURROUNDING IT ( LAKE TO THE § EAST AND SWAMP TO THE NORTH, SOUTH AND WEST).

CONDUCTOR D- IS LOCATED NORTH OF CONDUCTOR C HOWEVER IT IS SMALLER. THIS CONDUCTOR COULD BE CAUSED BY THE EXTENSION OF THE SHEAR SONE

ENCOUNTERED IN DRILL HOLE M3 TO THE WEST. AS THE SHEAR ZONE DEEPENES  
THE FARTHER EAST YOU GO IT WOULD EXPLAIN THE SHORTENING OF THE  
CONDUCTOR..

FROM THE TWO VLF SURVEYS IT CAN BE RECCOMENDED THAT TWO MORE  
DRILL HOLES BE DONE. SEE RECCOMMENDATIONS FOR POSSIBLE LOCATIONS.

DIAMOND DRILLING

TWO DRILL HOLES WERE PUT IN PLACE DURING THIS PROGRAM. THE FIRST BEING AN EXTENSION OF HOLE M3. THIS HOLE IS LOCATED ON CLAIM P. 1112774 610'W 100'n of POST #2. THIS HOLE WAS PREVIOUSLY DRILLED TO 540', THE EXTENSION TOOK IT TO 692'. THE EXTENSION WAS DONE AS THE HOLE HAD STOPPED JUST AS IT WAS ENTERING A CHANGE WITH VALUES INCREASING AND EVIDENCE OF THE SHEAR ZONE BEGINNING THE HOLE HAD TO BE STOPPED AS THE HOLE FLATTENED OUT TO THE POINT THAT DRILLING COULD GO NO FURTHER. THIS IS UNFORTUNATE AS WE HAD REACHED THE SHEAR ZONE BUT DID NOT PASS THROUGH IT.

HOLE c93-1 WAS SET UP AT L14+25E 24+40S+ 20'E, WITH A BEARING OF 7 DEGREES AND A DIP OF 45 DEGREES. THIS LOCATION WAS CHOSEN TO TRY TO CROSS CUT THE SHEAR ZONE IN HOLE M3. ALTHOUGH A FAULT AND A SHEAR ZONE WERE ENCOUNTERED IT IS NOT BELIEVED TO BE THE SAME ZONE.

THE DRILLING WAS DONE BY LARRY SALO WITH A BBS2 DIAMOND DRILL. THE HELPER WAS RON CRICHTON. THE CORE SIZE IS ADBGM MEASURING 1.2". THE TOTAL DEPTH WAS 402'.

CONCLUSIONS

OVERALL THIS PROJECT WAS VERY INFORMATIVE. ALTHOUGH THERE WAS NO SPECTACULAR RESULTS OR ANY OF SURPRISE, THE PROGRAM DOES SHOW THERE IS STILL MERIT IN THE SWAYZE AREA.

THE STRIPPING RETURNED LOW ASSAY VALUES, HOWEVER THEY PROVE THAT THERE IS A PRESENCE OF GOLD AND SILVER IN THE PORPHYRITIC ROCKS IN THE NORTHERN PORTION OF THE PROPERTY.

THE MAGNETOMETER SURVEY FURTHER ENCOURAGES THE NORTH AND NORTH EAST AREAS OF THE PROPERTY TO BE FURTHER LOOKED AT IN ORDER TO EXPLAIN SOME OF THE VALUES OBTAINED.

ALTHOUGH THE V.L.F. DID NOT CONCUR WITH THE MAGNETOMETER SURVEY, THEY DID PICK UP SEVERAL CONDUCTORS THAT WERE NOT IN EVIDENCE DUE TO EITHER WATER OR SWAMP.

DRILL HOLE M3 EXTENDED TO CUT EVIDENCE OF SHEARED VOLCANICS. THIS IT DID. DRILL HOLE C93-1 WAS SET UP TO TRY TO CUT THE SAME SHEAR ZONE FROM THE SOUTH. ALTHOUGH A FAULT WAS ENCOUNTERED AND SOME FOLIATED TO SHEARING WAS SEEN IT IS NOT BELIEVED TO BE THE SAME SHEAR ZONE.

RECOMMENDATIONS:

1. A GEOLOGICAL SURVEY TO BE CARRIED OUT ON THE NORTH SECTION OF THE GRID TO BETTER EVALUATE THE ROCKS AND MAGNETIC PATTERNS. THIS SHOULD INCLUDE A DETAILED GRID LINE SURVEY, PLUGGER SAMPLING OF THE MAGNETIC VALUES HIGHER THAN 58950.
2. A DRILL HOLE TO TEST CONDUCTOR A OF THE VLF. THIS HOLE SHOULD BE PLACED AT L10+25E 8+00S Az 30 DIP 45 TO A DEPTH NO SHORTER THAN 400'.



3. A DRILL HOLE TO TEST CONDUCTOR D OF THE VLF. HOLE C-93-1 COULD  
BE CONTINUED ANOTHER 250' TO PICK UP THE SHEAR ZONE ENTERED  
IN HOLE M3.

DEPENDING ON THE ASSAY RESULTS AND THE WORK OF THE ABOVE RECOMMENDATIONS  
FURTHER DRILLING AND OR A MAX-MIN SURVEY WILL GIVE FURTHER DIRECTION  
TO APPROACHING THIS PROPERTY.

PHOTOS



PICKET LINE WORK ON CUCKOO LAKE PROPERTY



BASE LINE CUCKOO LAKE PROPERTY

CUCKOO LAKE PROPERTY

SWAYZE TOWNSHIP

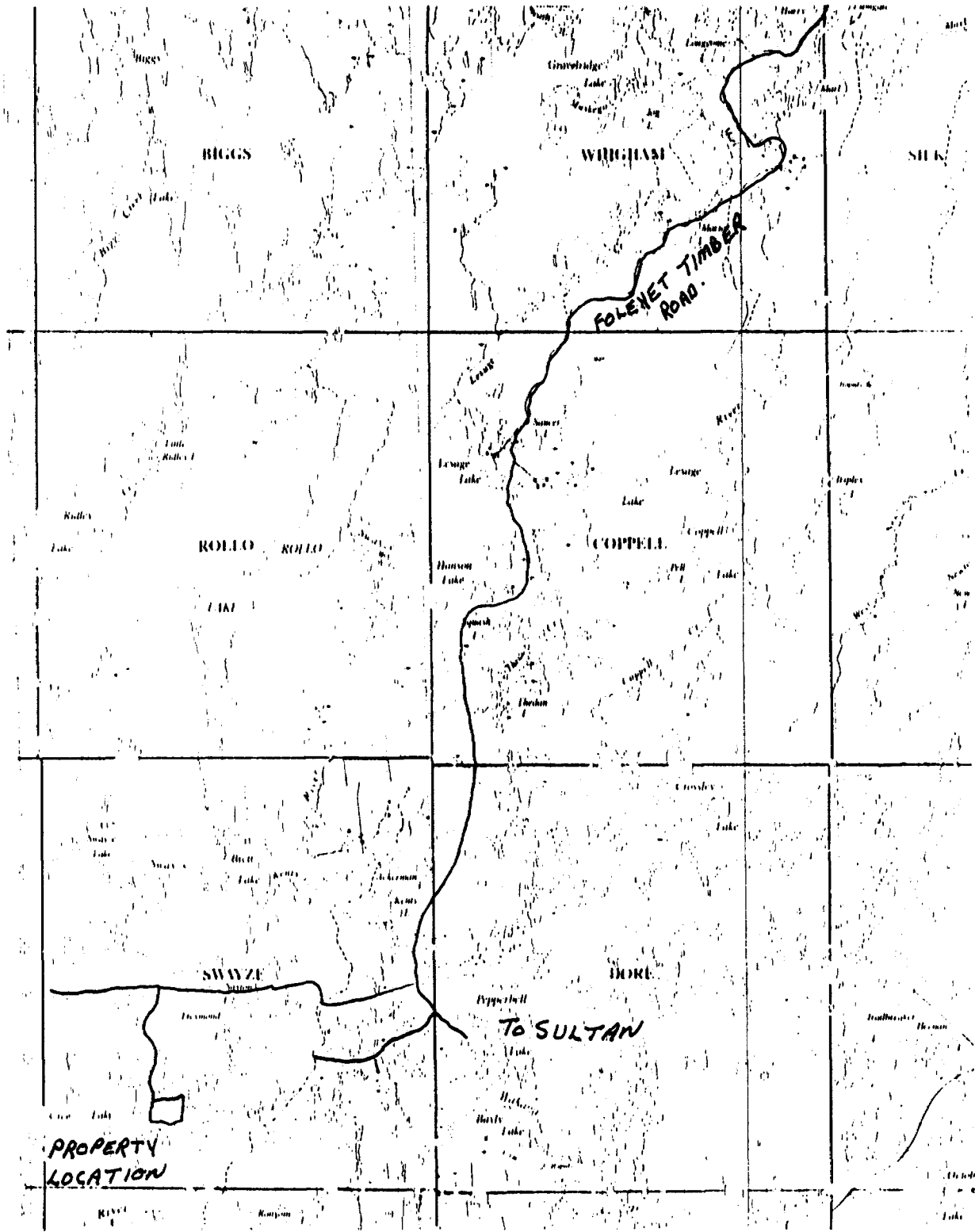
CLAIM MAP SECTION

LOCATION MAP

APPENDAGE 1



N



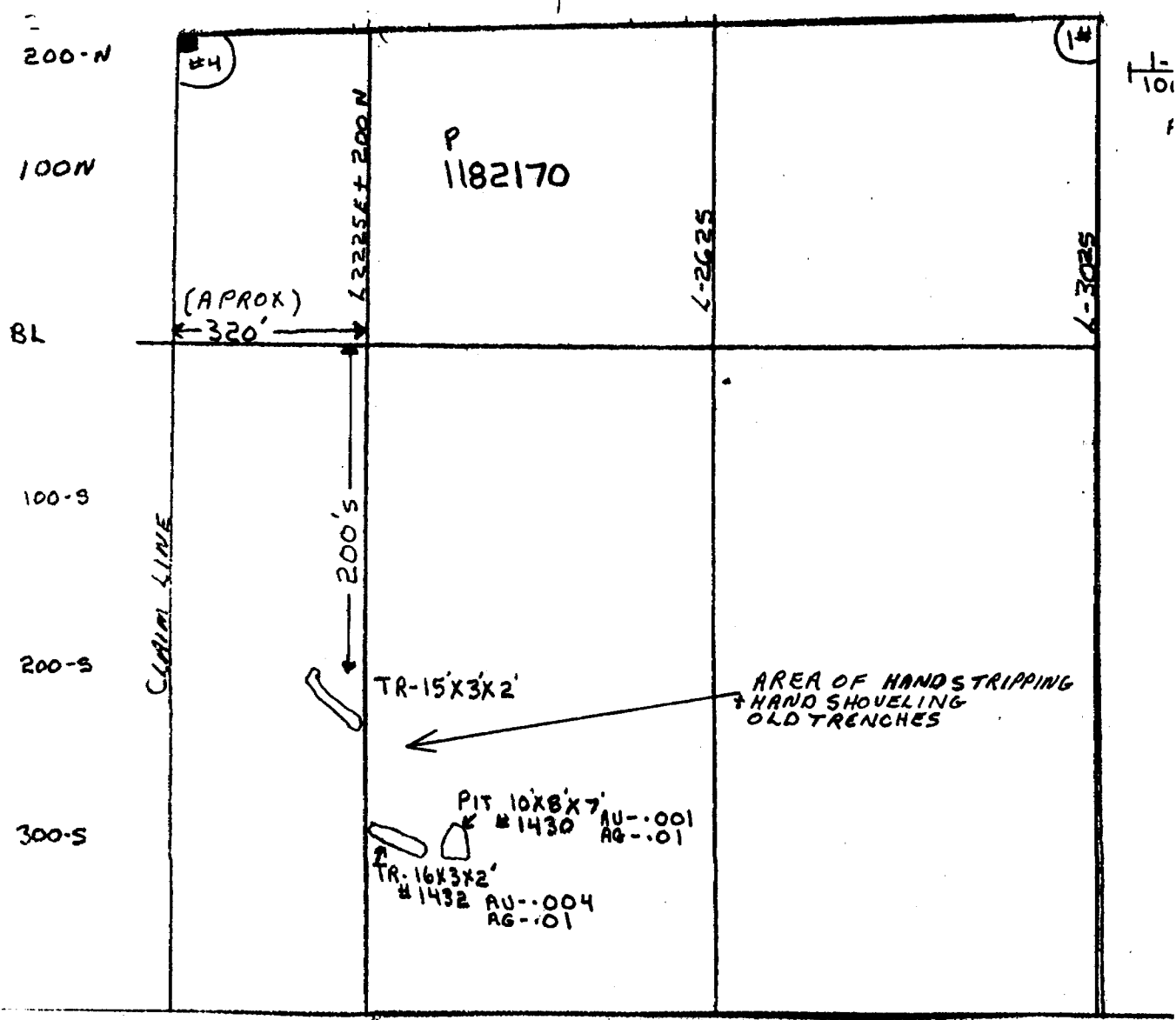
CUCKOO LAKE PROPERTY

SWAYZE TOWNSHIP

STRIPPING SKETCH

APPENDAGE 2





CUCKOO LAKE PROPERTY

SWAYZE TOWNSHIP

TOPOGRAPHICAL FEATURES

APPENDAGE 3

CUCKOO LAKE PROPERTY

SWAYZE TOWNSHIP

V.L.F. E.M. 16 PROFILES

APPENDAGE 4

Pioneered and patented exclusively by Geonics Limited, the VLF method of electromagnetic surveying has been proven to be a major advance in exploration geophysical instrumentation.

Since the beginning of 1965 a large number of mining companies have found the EM16 system to meet the need for a simple, light and effective exploration tool for mining geophysics.

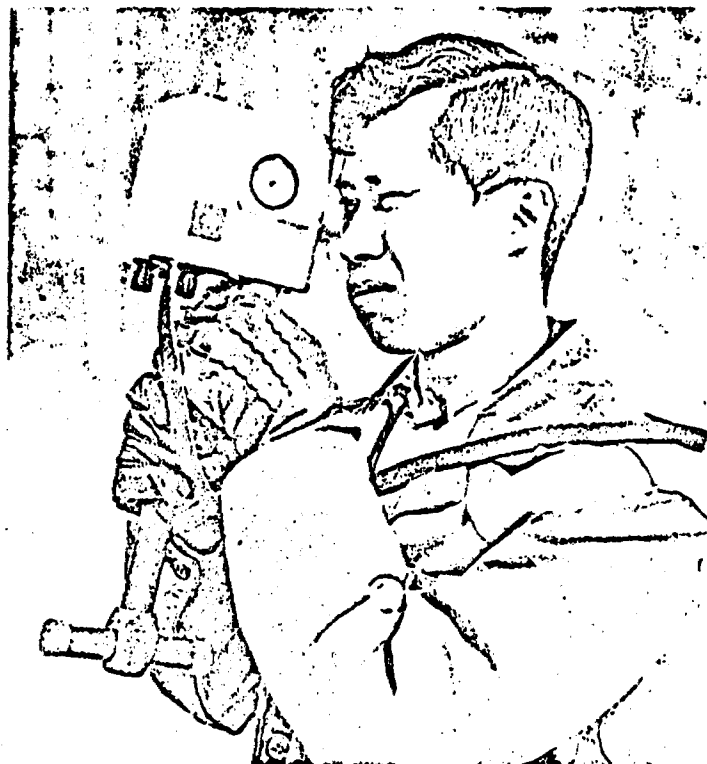
The VLF method uses the military and time standard VLF transmissions as primary field. Only a receiver is then used to measure the secondary fields radiating from the local conductive targets. This allows a very light, one-man instrument to do the job. Because of the almost uniform primary field, good response from deeper targets is obtained.

The EM16 system provides the *in-phase* and *quadrature* components of the secondary field with the polarities indicated.

Interpretation technique has been highly developed particularly to differentiate deeper targets from the many surface indications.

#### Principle of Operation

The VLF transmitters have vertical antennas. The magnetic signal component is then horizontal and concentric around the transmitter location.



## Specifications

<b>Source of primary field</b>	VLF transmitting stations.	<b>Reading time</b>	10-40 seconds depending on signal strength.
<b>Transmitting stations used</b>	Any desired station frequency can be supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station.	<b>Operating temperature range</b>	-40 to 50° C.
<b>Operating frequency range</b>	About 15-25 kHz.	<b>Operating controls</b>	ON-OFF switch, battery testing push button, station selector, switch, volume control, quadrature, dial $\pm 40\%$ , inclinometer dial $\pm 150\%$ .
<b>Parameters measured</b>	(1) The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid). (2) The vertical out-of-phase (quadrature) component (the short axis of the polarization ellipsoid compared to the long axis).	<b>Power Supply</b>	6 size AA (penlight) alkaline cells. Life about 200 hours.
<b>Method of reading</b>	In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Nulling by audio tone.	<b>Dimensions</b>	42 x 14 x 9 cm (16 x 5.5 x 3.5 in.)
<b>Scale range</b>	In-phase $\pm 150\%$ ; quadrature $\pm 40\%$ .	<b>Weight</b>	1.6 kg (3.5 lbs.)
<b>Readability</b>	$\pm 1\%$ .	<b>Instrument supplied with</b>	Monotonic speaker, carrying case, manual of operation, 3 station select plug-in tuning units (additional frequencies are optional), set of batteries
		<b>Shipping weight</b>	4.5 kg (10 lbs.)

CUCKOO LAKE PROPERTY

SWAYZE TOWNSHIP

TOTAL FIELD MAGNETOMETER CONTOURS

APPENDAGE 5

## 1.2 EARTH'S MAGNETIC FIELD

Figure 1 shows nominal distribution of Earth's magnetic field in kilogammas, with dotted lines separating equatorial and polar regions. In polar regions an inclination of magnetic field vector is closer to vertical, while in equatorial regions it is nominally horizontal. To obtain the best precession signal and superior quality of operation, the sensor must be aligned accordingly. Orientation line at the side of the sensor should be oriented vertically in polar regions and horizontally in equatorial regions. Although maximum signals are achieved by aligning the sensor orientation line close to the actual direction of the magnetic field, it is generally not necessary to go beyond horizontal/vertical orientation mentioned above.

Range position on a front panel of the instrument should initially be selected closest to a nominal value of magnetic field shown for particular region in fig.1. As local distributions of magnetic field could be considerably altered, a proper range position should be determined by first valid reading of the magnetometer (first two digits of the display show a real magnetic field value for the place of measurement). During a survey, the field value may change beyond initially used range and the Range switch position should be adjusted accordingly, although the GSM-8 will generally work correctly on several adjacent ranges.

Local ferromagnetic objects like screws, nuts, pocket knives, nickel coins, wristwatches, tools etc. may impair the quality of measurement by modifying the value of local magnetic field being measured or in drastic cases by even destroying the proton precession signal due to excessive gradients. For best results ferromagnetic objects should be kept away from the sensor. NiCd batteries, although slightly magnetic, do not produce visible effect on measurements if the sensor is installed on the staff and kept at arms length away from the operator and the console. For back-pack installation of the sensor a nonmagnetic set of batteries is recommended.

2. SPECIFICATIONS

RESOLUTION: 1 gamma, 0.5 gamma optional

ACCURACY:  $\pm 1$  gamma over operating range

RANGE: 20,000-100,000 gamma in 23 overlapping steps

GRADIENT TOLERANCE: Up to 5000 gamma/metre

OPERATING MODES: MANUAL PUSHBUTTON, new reading every 1.85 sec.,  
display active between readings

CYCLING, pushbutton initiated, 1.85 sec. period

SELFTEST, pushbutton controlled, 7 sec. period

OUTPUT: VISUAL: 5 digit 1 cm (0.4") high Liquid Crystal  
Display, visible in any ambient light

DIGITAL: Multiplied precession frequency and  
gating pulse

ANALOG: Optional 0-99 or 0-999 gamma

EXTERNAL TRIGGER: Permits externally triggered operation with pe-  
riods longer than 1.85 sec. (optional minimum  
period 0.9 sec.)

POWER REQUIREMENTS: 12V 0.7A peak, 5mA standby

POWER SOURCE: INTERNAL: 12V 0.75Ah NiCd rechargeable battery  
3,000 readings per full charge

EXTERNAL: 12-18V

BATTERY CHARGER: Input: 110/220V 50/60Hz; output: 14V 75mA DC

OPERATING TEMPERATURE: -35 to +55C

CUCKOO LAKE PROPERTY

SWAYZE TOWNSHIP

DRILL LOGS

APPENDAGE 6





Ontario

Ministry of Northern Development and Mines

Diamond Drilling Log

CORE SIZE ABDGM

Complete this form and related sketch in duplicate.

Fill in on every page

Hole No. C-93-1 Page No. 01

Drilling Company <b>SELF</b>		Collar Elevation	Bearing of hole from true North <b>70° E 1/4 N</b>	Total Footage <b>402</b>	Dip of Hole at Collar <b>45°</b>	Address/Location where core stored <b>L2C6 German Twp Sals Farm</b>	Map Reference No.	Claim No. P. <b>1182448</b>
Date Hole Started <b>Jan 15/93</b>	Date Completed <b>Jan 31/93</b>	Date Logged <b>JAN-28-93</b>	Logged by <b>M.W. Masson BSc.</b>				Location (Twp., Lot, Con. or Lat. and Long.) <b>SWAYZE TWP G-3249</b>	Property Name <b>CUCKOO LAKE PROPERTY</b>
Exploitation Co., Owner or Optionee <b>R. CRICHTON</b>		Date Submitted	Submitted by (Signature) 					

Footage (Ft.)		Rock Type	Description Colour, grain size, texture, minerals, alteration, etc.	Planar Feature Angle *	Core Specimen Footage †	Your Sample No.	Sample Footage		Sample Length	Assays †	
From	To						From	To			
0	9	OVERBUDDEN				1434	85	90	5.0		
						1435	90	95	5.0		
9	132.5	FELDSPAR PORPHYRY	MASSIVE fine to very fine-grained blue-grey porphyry composed of 1-10% sub-embeddled milk-white feldspar phenocrysts (albite?) up to 2-3mm in a very fine-grained to aphanitic groundmass. Unit is quite inhomogeneous (with porphyritic sections) grading to non-porphyrific sections. (May be in part altered volcanic?)  - very hard, NON-MAGNETIC  - unit carries prominent quartz ± calcite vein set @ 60° tea. (1-2% by vol.) - veins are milk-white to buff after saccharoidal range from hairline cracks to 3/4 inch wide - non-mineralized  - unit contains sporadic trace disseminated pyrite as small (≤ 2mm) sub-embeddled grains and grain clusters with dark chloritic rims often evident (secondary). Frequently associated with hairline anastomosing fractures and small pyritic clusters.  At 102.0 - 102.8 - Bleached (buff-brown) siliceous section with 1% fine disseminated pyrite - Section is composed of irregular white-pink quartz + calcite veins and masses  125.6-125.75 - Irregular, white-blue quartz + calcite vein with 1% bleached, subhedral pyrite 128.0-129.0 Groundmass 130.2 - 2mm wide non-massive Pyrite stringer @ 40° tea  - lower contact is broken, rubble but appears to be quite tight			1436	95	100	5.0		
						1437	100	102	2.0		
						1438	102.0	103.0	1.0		
						1439	103.0	105.0	2.0		
						1440	105.0	110.0	5.0		
						1441	110.0	115.0	5.0		
						1442	115.0	120.0	5.0		
						1443	120.0	125.0	5.0		
						1444	125.0	127.0	2.0		
						1445	127.0	129.0	2.0		
						1446	129.0	131.0	2.0		
						1447	131.0	132.5	1.5		



Complete this form and  
related sketch in duplicate.

Fill in on  
every page

Hole No. **C-93-1** Page No. **2**

Drilling Company		Collar Elevation	Bearing of hole from true North <b>7°</b>	Total Footage <b>402'</b>	Dip of Hole at Collar <b>45°</b>	Address/Location where core stored	Map Reference No.	Claim No. <b>1182448</b>
Date Hole Started	Date Completed	Date Logged <b>JAN-28-93</b>	Logged by		FL		Location (Twp., Lot, Con. or Lat. and Long.) <b>SWAYZE TWP.</b>	Property Name <b>CUCKOO LAKE PROPERTY</b>
Exploration Co., Owner or Optionee		Date Submitted	Submitted by (Signature) 		FL			
					FL			

Footage		Rock Type	Description Colour, grain size, texture, minerals, alteration, etc.	Planar Feature Angle *	Core Specimen Footage †	Your Sample No.	Sample Footage		Sample Length	Assays †	
From	To						From	To			
132.5	285.3	MAFIC VOLCANIC (BASALTIC)	Massive to weakly foliated, medium to dark green (chromite) very fine-grained to aphentic basalt - structureless i.e. non-pillared, non-variolitic, etc. - non-descript. - moderately to strongly magnetic - contains 2-3% irregular narrow quartz + calcite veinlets and fracture filling - ubiquitous (= 1cm wide)								
			192.0-219.0 - Unit is stockworked by at least 3 generations a) quartz, quartz + calcite and calcite + barite (=epid.) stringers (3-4" wide) ranging from hairline to 2" wide. - generally irregular anastomosing veins - typically barren but occasional vein carries trace - blebby pyrite.			1448	195.0	199.0	4.0		
			200.1-200.8 Quartz / calcite vein @ 35' tca with 1% fine disseminated pyrite. Weak buff-brown alteration proximal to vein.			1449	199.0	201.0	2.0		
						1450	201.0	204.0	3.0		
						1451	209.0	214.0	5.0		
						1452	214.0	219.0	5.0		
			219.4-232.0 - Unit appears to be somewhat bleached to a light grey colour (similar to porphyry) and is notably silicified. - contacts appear to be gradational over 1 foot. - Section contains < 1% (quartz + calcite stringers and trace disseminated pyrite. - non-magnetic v.f.g with sporadic mafic ghosts (amphibole?) evident in groundmass								
			219.7-220.6 - Irregular white - buff quartz + calcite vein with 1/2% fine disseminated pyrite and 1-2" wide buff alteration halo.			1453	219.0	221.0	2.0		



Drilling Company		Collar Elevation	Bearing of hole from true North <b>7°</b>	Total Footage <b>402'</b>	Dip of Hole at Collar <b>45°</b>	Address/Location where core stored		Map Reference No.	Claim No. <b>1182448</b>
Date Hole Started	Date Completed	Date Logged	Logged by		FL			Location (Twp., Lot, Con. or Lat. and Long.)	
Exploration Co., Owner or Optionee		Date Submitted	Submitted by (Signature)		FL			Swayze Twp. G-3249	
					FL			Property Name Cuckoo Lake	
					FL				

Footage From	Footage To	Rock Type	Description Colour, grain size, texture, minerals, alteration, etc.	Planar Feature Angle *	Core Specimen Footage †	Your Sample No.	Sample Footage		Sample Length	Assays †
							From	To		
			230.6-230.8 - 1/4" wide white quartz veins with 3" of buff alteration of wall rock. Altered zone contains 2% pyrite in small fractures and adjacent to vein.			1454	221.0	225.0	4.0	
						1455	225.0	230.0	5.0	
						1456	230.0	231.0	1.0	
						1457	231.0	235.0	4.0	
			At 249.0 and 263.0 ft. are two irregular magnetizing quartz/calcite veins up to 3" wide. Veins are typically barren but adjacent wall rock contains (less) 1% subhedral pyrite blebs.			1458	249.0	250.0	1.0	
						1459	262.0	264.0	2.0	
285.3	340.0	Feldspar Porphyry (Dioritic?)	Light to medium grey massive medium-grained hard. - composed of 2-15% 'milk-white' euhedral plagioclase crystals and quartz in a v.g. dark grey groundmass. - some veins quite coarse, possibly dioritic. - non-magnetic with trace ubiquitous disseminated pyrite. - 1-2% late quartz + calcite alteration. - upper contact is sharp intrusive type. No chill margins evident in porphyry. - basic contact obscured by rubble core.			1460	285.3	290.0	4.7	
						1461	300.0	305.0	5.0	
						1462	320.0	325.0	5.0	
340.0	402.0	Mafic Volcanic (Basaltic)	From 340.0-371.0 unit is massive to foliated to sheared and displays varying degrees of alteration increasing towards shear zone. Alteration consists of patchy, buff-brown silicification (?) typically associated with vein quartz-calcite veins. (red) of some of peak to massive blebbing. - Typically dry with minor disseminated pyrite.			1463	335.0	340.0	5.0	



Ontario

Ministry of Northern Development and Mines

# Diamond Drilling Log

Complete this form and related sketch in duplicate.

Fill in on every page

Hole No. **C-93-1** Page No. **4**

Drilling Company		Collar Elevation	Bearing of hole from true North <b>7°</b>	Total Footage <b>402</b>	Dip of Hole at Collar <b>45°</b>	Address/Location where core stored	Map Reference No.	Claim No. <b>1182448</b>
Date Hole Started	Date Completed	Date Logged <b>JAN-28-93</b>	Logged by		FL		Location (Twp., Lot, Con. or Lat. and Long.) <b>SWAYZE TWP. G-3249</b>	Property Name <b>CUCKOO LAKE</b>
Exploration Co., Owner or Optionee		Date Submitted	Submitted by (Signature)		FL			
					FL			

Footage		Rock Type	Description Colour, grain size, texture, minerals, alteration, etc.	Planar Feature Angle *	Core Specimen Footage †	Your Sample No.	Sample Footage		Sample Length	Assays †	
From	To						From	To			
			355.7 - 362.0 Well foliated to sheared, micritic volcanic - grades from buff-brown, micritic basalt to (moderately well) foliated, moderately bleached and micritic volcanic 355.7 - 358 - Fault - sheared, micritic volcanic @ 30° to - somewhat angular textured with stretched remnants evident around tight micritic slips. - very minor patchy quartz throughout (Nil - trace) - sections carries 2% white-buff to blue quartz + calcite veins and stringers.			1464	340.0	345.0	5.0		
						1465	345.0	350.0	5.0		
						1466	350.0	355.0	5.0		
						1467	355.0	358.0	3.0		
						1468	358.0	362.0	4.0		
						1469	362.0	365.0	3.0		
						1470	365.0	370.0	5.0		
402.0	EOH		371.0 - 402.0 Massive fine-grained, moderately magnetic mafic volcanic. - 1-2% late quartz + calcite stringers.								

\* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

† Additional credit available. See Assessment Work Regulations.

CUCKOO LAKE PROPERTY

SWAYZE TOWNSHIP

DRILL SECTIONS

appendage 7

DD-C-93-1

VERTICAL VIEW  
DD-C-93-1



BEARING OF HOLE FROM  
TRUE NORTH - 7° E

DIP OF HOLE AT COLLAR.  
45°

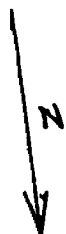
CLAIM # <sup>P.</sup> 1182448

GRID LOCATION  
\* 1 L-1425E + 2440'S + 20'E  
COLLAR

TOTAL FOOTAGE - 402'

DD-CORE SIZE  
ABDGM

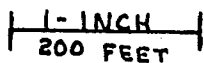
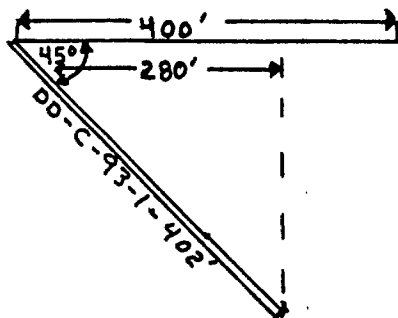
SWAYZE TWP.



SAMPLE #

	1434
COLLAR DD-C-93-1	1435
OVERBURDEN 9'	1436
	1437
	1438
	1439
	1440
FELDSPAR PORPHYRY	1441
	1442
	1443
	1444
	1445
	1446
	1447
132.5'	1448
	1449
	1450
	1451
	1452
	1453
MAFIC VOLCANIC (BASALTIC)	1454
	1455
	1456
	1457
	1458
	1459
285.3'	1460
	1461
FELDSPAR PORPHYRY (DIORITIC?)	1462
	1463
	1464
	1465
340'	1466
	1467
MAFIC VOLCANIC (BASALTIC)	1468
	1469
	1470
402'	
EOH	

HORIZONTAL VIEW  
DD-C-93-1



D.D.-M-3  
EXTENSION

S  
VERTICAL VIEW

1-INCH  
100-FEET

BEARING OF HOLE FROM  
FROM TRUE NORTH 167° SE

DIP OF HOLE AT COLLAR  
40°

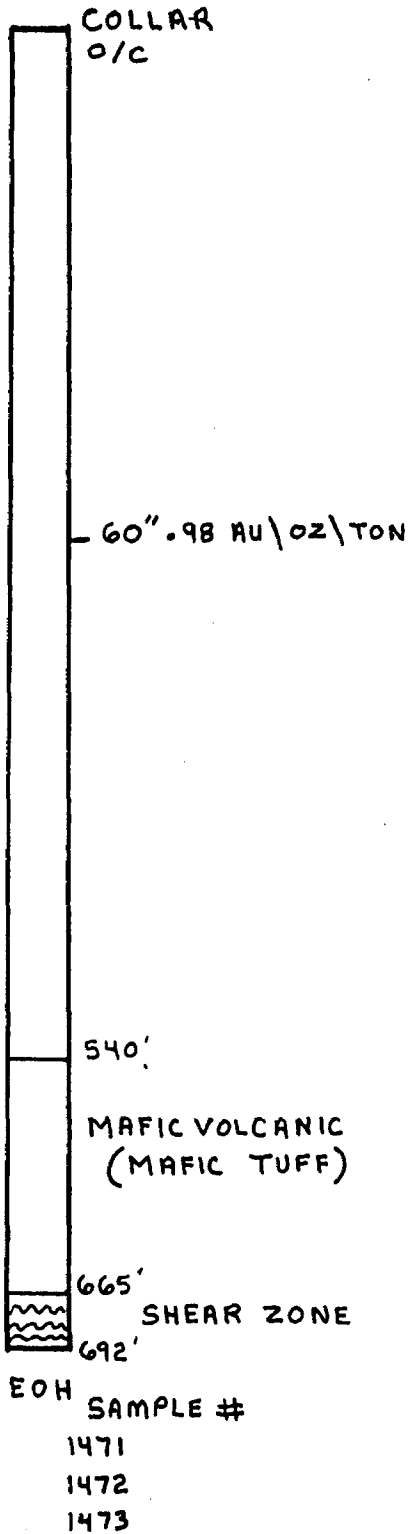
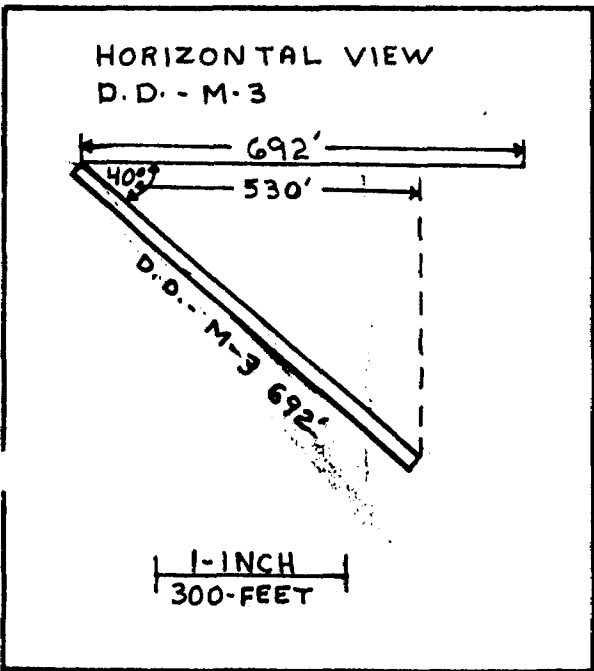
CLAIM #<sup>P</sup> 1112773  
P. 1112774

LOCATION  
610' W + 100' N  
OF THE #2 POST  
P. 1112774

TOTAL FOOTAGE OF  
HOLE EXTENSION  
152'  
FROM 540' TO 692'

D.D. CORE SIZE  
ABDGM

SWAYZE TWP.



CUCKOO LAKE PROPERTY

SWAYZE TOWNSHIP

ASSAYS

APPENDAGE 8





Established 1928

# Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting - Representation

## Assay Certificate

2W-1003-RA1

Company: **R. CRICHTON**

Date: SEP-16-92

Project:

Attn:

We hereby certify the following Assay of 5 ROCK samples submitted SEP-14-92 by .

Sample Number	Au Au check		Ag oz/ton	Co PPM	Cu PPM	Mb PPM	Ni PPM	Pb PPM	Zn PPM
	oz/ton	oz/ton							
1429	0.002		0.01						
1430	0.001		0.01						
1431	1.370	1.386	0.34						
1432	0.004		0.01						
1433	0.001		0.05	61	218	9	51	27	330

1433 - #1182006

*Charles Sulphide Blowing*

Certified by *Donna Gardner*

DRILL CORE HAS BEEN SENT TO SWASTIKA LABS, SWASTIKA ONTARIO. RESULTS  
WILL BE FORWARDED AS QUICKLY AS POSSIBLE.

CUCKOO LAKE PROPERTY

SWAYZE TOWNSHIP

RECEIPTS

APPENDAGE 9

Date	Recipient of Payment	Office	Gas	Help	Food	Rental	Account	Supplies	Other Supplies	Misc
Sept 3	Metro - groceries							107.16		
4	Office Product People - note books	2.36								
4	Amis Northend - <sup>gas</sup> <del>gas</del> propane							43.92		
4	Connup. Shell - ice for coffee									2.30
4	Lois WIT - groceries							11.58		
4	Steve's groceries - groceries							30.70		
4	McDonald's - meal - beef							1.30		
4	McDonald's - meal - beef							1.30		
4	Northern Auto - paint & parking							50.27		
4	K&H Hardware - Plywood & pencil							40.70		
4	Home Hardware - wood stove & pipe							115.81		
4	Canadian Tire - <sup>chairs</sup> <del>chairs</del> <sup>file</sup> <del>file</del> <sup>socks</sup> <del>socks</del> <sup>nails</sup> <del>nails <sup>manila</sup> <del>manila</del></del>							28.07		
4	W.R. Chapman - propane									11.77
Oct 10	Steve's groceries - groceries							337.73		
10	Canadian Tire - mixed gas		30.00							
23	Car's Office Supply - rulers & pencil	10.40								
23	Office End People - photocopies	2.29								
19	Car's Office Supply - paper, pen	15.09								31.00
14	McMagan - white oil, bulb									31.00
Jan 2	Metro - groceries							321.00		
3	Canadian Tire - <sup>paid out are 4.14</sup> <del>metal chair</del> <sup>nails</sup> <del>nails</del>								24.65	
3	Home Hardware - paint								27.56	
2	W.R. Chapman - diesel gas, diesel	159.00								
3	Canadian Tire - diesel gas	67.00								
4	Metro - groceries							75.00		
4	AsP - groceries							39.37		

Office Gas Kilns Food Rental Assay <sup>Cash</sup> <sup>Supplies</sup> <sup>Supplies</sup> <sup>Contract</sup> Misc.

Jan 16	Feb-12A - groceries		90 <sup>38</sup>						
	8 Canadian Oil - drill gas	332 <sup>97</sup>							
	19 Esso - druggas + propane	54 <sup>75</sup>							
	30 Carls Office Supply - paper pens	36 <sup>32</sup>							
	31 World of Photo - developing	32 <sup>77</sup>							
	26 R. Thompson - 15 gal drum fuel			30					
	29 Super Prod. Supply - photo supplies	7 <sup>71</sup>							
	30 Carls Office Supply - drafting pen	39 <sup>44</sup>							
	28 R. Home Hardware - fiber tape						17 <sup>43</sup>		
	31 Larry's Auto - wages	2550							
	28 M. Masson - core logging							150	
Oct 16	E. Pleen - ATV Rental			420					
	16 J. Polson - wages	400							
	Tom Vaugre Renaud - mag. ULP			310					
	29 Sparta Mining							7974	
Sept 16	Swas Kat - assay					111 <sup>52</sup>			
Jan 39	Swas Kat - assay					509 <sup>90</sup>			
	Jacob Dighton - helper	330							

11478 52662 2770 102667 650 61472 46198 78717 150 4507

PROSPECTING DAY

SWAYZE SULPHIDE SHOWINGS

APPENDAGE 10

SWAYZE SULPHIDE ZONE

ON PREVIOUS WORK ON CLAIM P.1#2006, SWAYZE TOWNSHIP, CONSISTED OF PROSPECTING TO LOCATE THE SOURCE OF AN AIRBORNE ANOMALIE.

A LARGE WEATHERED MASSIVE SULPHIDE FLOAT WAS FOUND. THE AREA WAS STRIPPED AND A PIT 10 x 12 x 10 WAS PUT DOWN ON THIS SULPHIDE BURN.

A REPRESENTATIVE SAMPLE TAKEN BY HAMMER WAS COLLECTED OVER THE SULPHIDE PIT AREA. THE ASSAY VALUES WERE DISAPPOINTING LOW FOR AU, AG, CO, CU, Mb, Ni, Pb, Zn. Results found in assay section ofprogram.

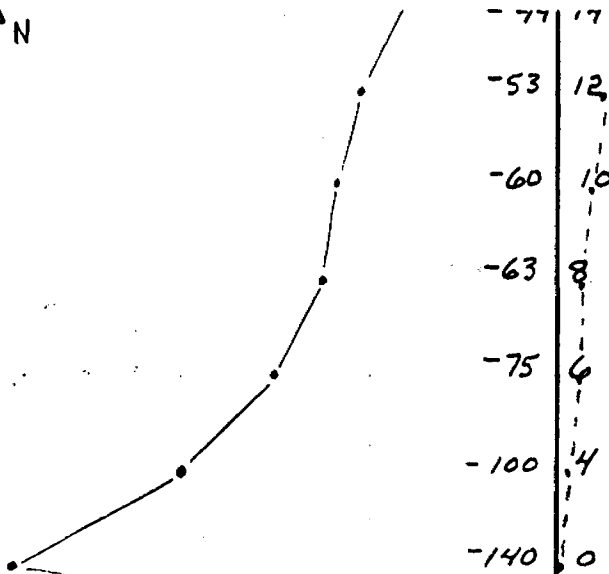
DIP-1"=50

N

1-INCH  
50 FEET

Q 1"=50

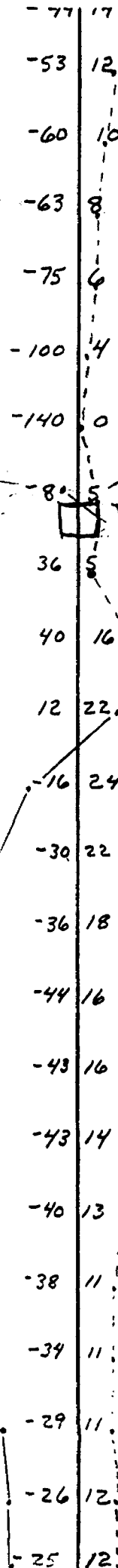
775 N



### SWAYZE TWP. SULPHIDE TRENCH

INSTRUMENT - VLF-EM-16  
 STATION USED - CUTLER, MAINE  
 INPHASE PROFILE 1"=50% ———  
 OUTPHASE PROFILE 1"=50% - - - -  
 INPHASE VALUES RECORDED-LEFT  
 OUTPHASE VALUES RECORDED-RIGHT  
 POSITIVE VALUES PLOTTED-LEFT  
 NEGATIVE VALUES PLOTTED-RIGHT

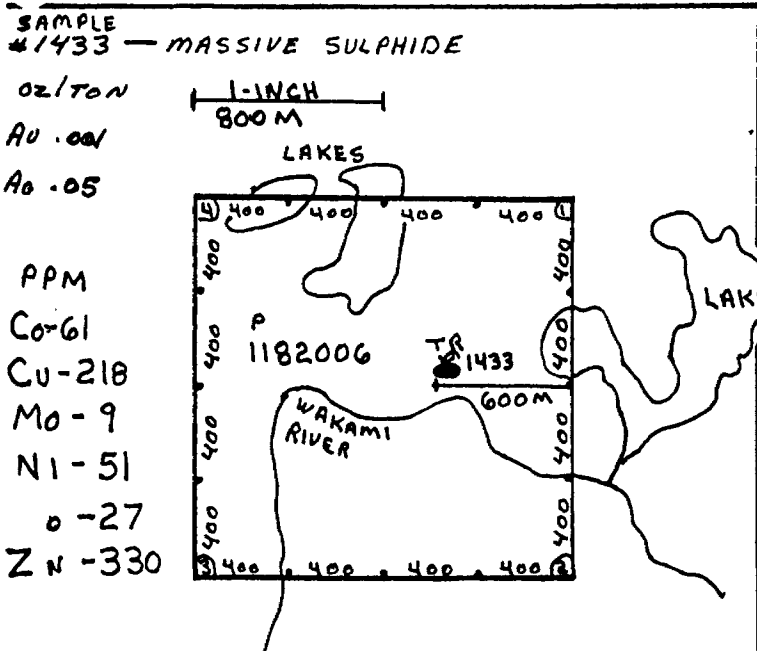
CLAIM # 1182006



CONTACT

TRENCH  
10'x12'x10' # 1433

0+10 N  
0+5 N  
0+0  
0+5 S  
0+1  
0+15 S  
0+20 S  
0+25 S  
0+30 S  
BUS. LINE  
0+35 S  
0+40



SAMPLE #1433 - MASSIVE SULPHIDE  
 oz/ton  
 Au .001  
 Ag .05  
 PPM  
 Co-61  
 Cu-218  
 Mo-9  
 Ni-51  
 Pb-27  
 Zn-330

Sept. 18/92





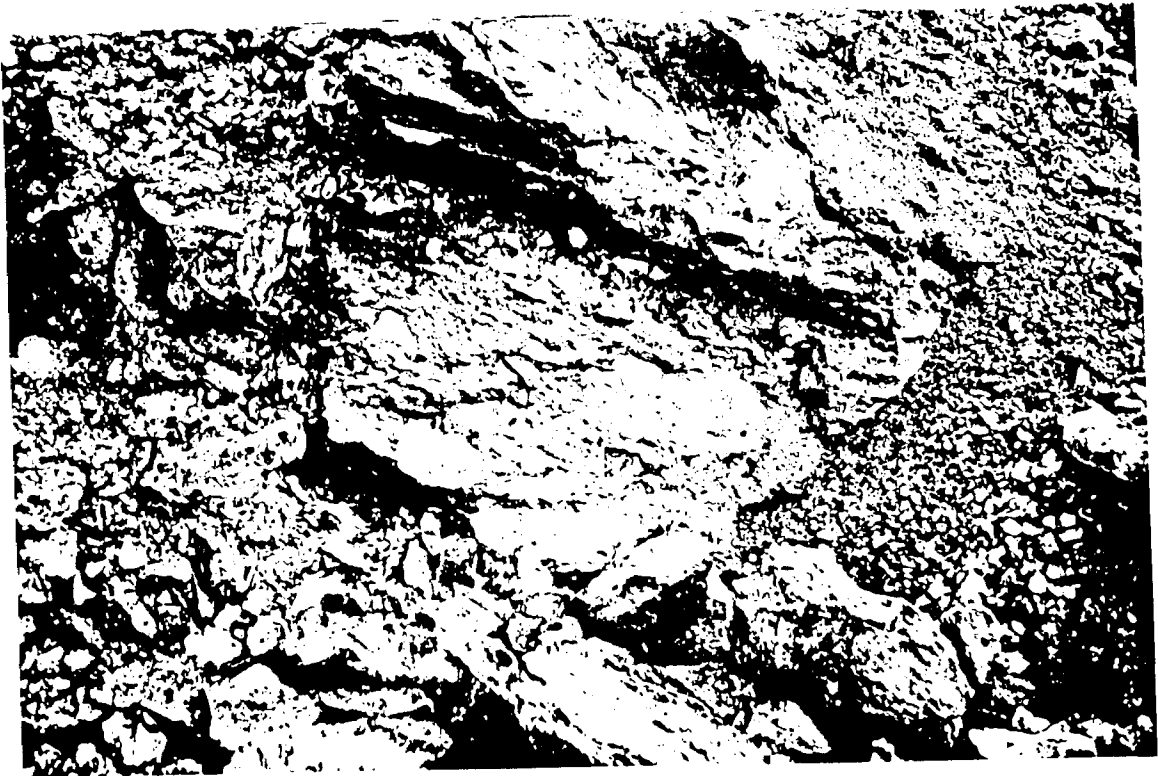
*SULPHIDE PIT*



*MASSIVE SULPHIDE*



*SAMPLING SWAYZE SULPHIDE ZONE*



*MASSIVE SULPHIDE*



Ontario



410155E9210 2.15105 SWAYZE

900

Ministry of  
Northern Development  
and Mines

Ministère du  
Développement du Nord  
et des Mines

Geoscience Approvals Section  
933 Ramsey Lake Road  
6th Floor  
Sudbury, Ontario  
P3E 6B5

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

September 9, 1993

Our File: 2.15105  
Transaction #: W9360.00113  
.00114

Mining Recorder  
Ministry of Northern  
Development and Mines  
60 Wilson Avenue  
1st Floor  
Timmins, Ontario  
P4N 2S7

Dear Sir/Madam:

**Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS  
P1182447 ET AL IN SWAYZE TOWNSHIP**

The assessment work credits for Geophysics, Section 14 of the Mining Act Regulations, have been approved as outlined on the original submission.

The approval date is August 24, 1993.

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

Yours sincerely,

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

D

LJ/dm

cc: Resident Geologist  
Timmins, Ontario

Assessment Files Library ✓  
Toronto, Ontario

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

2.15105

- Instructions:
- Please type or print and submit in duplicate.
  - Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
  - A separate copy of this form must be completed for each Work Group.
  - Technical reports and maps must accompany this form in duplicate.
  - A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s) <b>J. SAJO / LSAJO / C. MORTIMER</b>	Client No. <b>191078/191085/172990</b>
Address <b>40 Gen Del., Connaught, Ont</b>	Telephone No. <b>705-363-2108</b>
Mining Division <b>BOCCURINE</b>	M or G Plan No. <b>G-3249</b>
Township/Area <b>SWAYZE TWP</b>	
Date Work Performed From: <b>Sept 5/92</b>	To: <b>Jan 14/93</b>

Work Performed (Check One Work Group Only)

Work Group	Type
<input checked="" type="checkbox"/> Geotechnical Survey	<b>Line Cutting, VLF EM 16, Magnetometer</b>
<input type="checkbox"/> Physical Work, including Drilling	
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	

**RECEIVED**  
 JUL 21 1993  
 MINING LANDS BRANCH

**RECORDED**  
 MAY 31 1993  
 Receipt \_\_\_\_\_

Total Assessment Work Claimed on the Attached Statement of Costs \$ 5966

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

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

Name	Address
<b>B. CRICHTON</b>	<b>65 TWEEDSMuir, KIRKLAND LAKE</b>
<b>JOE-ANNE SAJO</b>	<b>Gen Del., Connaught Ont</b>

Attach a schedule if necessary)

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

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.

Date <b>MAY 25/93</b>	Recorded Holder or Agent (Signature) <b>J. Sajo</b>
--------------------------	--

Certification of Work Report

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

Name and Address of Person Certifying  
**JOE-ANNE SAJO**

Telephone No. <b>705-363-2108</b>	Date <b>May 25/93</b>	Certified By (Signature) <b>J. Sajo</b>
--------------------------------------	--------------------------	--

Office Use Only

Total Value Cr. Recorded <b>\$5,966</b>	Date Recorded <b>MAY 31/93</b>	Mining Recorder <b>[Signature]</b>	<b>RECEIVED</b> <b>MAY 31 1993</b> <b>16 (c) 400</b>
	Deemed Approval Date <b>AUG. 30/93</b>	Date Approved <b>[Signature]</b>	
	Date Notice for Amendments Sent		

Mining Act/Loi sur les mines

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and going status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 870-7284.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, Ministère du Développement du Nord et des Mines, 159, rue Cedar, 4<sup>e</sup> étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 870-7284.

Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre	3720	
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Frais de l'entrepreneur et de l'expert-consultant	Type		
Supplies Used Fournitures utilisées	Type OFFICE	114 78	
	BUSH	461 98	
	MISC	450 7	
Equipment Rental Location de matériel	Type ATV	420	
	HAG	105	
	VLF EM-14	105	
Total Direct Costs Total des coûts directs			19783

2. Indirect Costs/Coûts indirects

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

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type TRUCK		
	1500 km @ 30¢	450	
Food and Lodging Nourriture et hébergement	GROCERIES	1026 67	
Mobilization and Demobilization Mobilisation et démobiliation			
Sub Total of Indirect Costs Total partiel des coûts indirects			
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			
Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs)			20766
Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)			

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

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

Billing Discounts

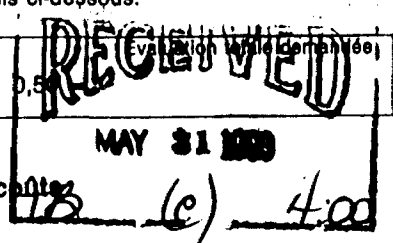
Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.  
 Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
	x 0.50 =

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	x 0.50
--------------------------------------	--------



Certification Verifying Statement of Costs

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

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

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

Et qu'à titre de \_\_\_\_\_ je suis autorisé  
 (Titulaire enregistré, représentant, poste occupé dans la compagnie)

I make this certification

à faire cette attestation.

Signature J. G. Salo Date May 25/93



Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ont. P3E 8A5, telephone (705) 670-7264.

2.15105

- Instructions:**
- Please type or print and submit in duplicate.
  - Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
  - A separate copy of this form must be completed for each Work Group.
  - Technical reports and maps must accompany this form in duplicate.
  - A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s) <b>C MORTIMER</b>	Client No. <b>172990</b>
Address <b>Box 136, Hwy 101 West, Storm Creek Cabins</b>	Telephone No. <b>339-2218</b>
Mining Division <b>PORCUPINE</b>	Township/Area <b>SWAYZE TWP</b>
Dates Work Performed From: <b>SEPT 18/92</b>	To: <b>SEPT 18/92</b>

**Work Performed (Check One Work Group Only)**

Work Group	Type
<input checked="" type="checkbox"/> Geotechnical Survey	<b>PROSPECTING + VLF EM16</b>
<input type="checkbox"/> Physical Work, Including Drilling	
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	

RECORDED  
MAY 31 1993  
Receipt

Total Assessment Work Claimed on the Attached Statement of Costs \$ 300

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

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

Name	Address
<b>R. Crichton</b>	<b>65 Tweedsmuir, Kirkland Lake</b>
<b>J.G. Salo</b>	<b>Gen Del., Connaught Ont.</b>

(attach a schedule if necessary)

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

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date <b>MAY 25/93</b>	Recorded Holder or Agent (Signature) <i>J. Salo</i>
--	--------------------------	--

**Certification of Work Report**

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

Name and Address of Person Certifying <b>JOE-ANNE G SALO</b>		
Telephone No. <b>705-363-2108</b>	Date <b>May 25 1993</b>	Certified By (Signature) <i>J. Salo</i>

**For Office Use Only**

Total Value Cr. Recorded <b>\$300.</b>	Date Recorded <b>MAY 31/93</b>	Mining Recorder <i>Bluhit</i>	Received Stamp PORCUPINE MINING DIVISION <b>RECEIVED</b> MAY 31 1993 UB (C) 4.00
	Deemed Approval Date <b>AUG. 30/93</b>	Date Approved	
	Date Notice for Amendments Sent		





for Assessment Credit  
État des coûts aux fins  
du crédit d'évaluation

Transaction No. / N° de transaction  
W9360.00114

Mining Act/Loi sur les mines

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

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

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Labour Main-d'oeuvre		300	
	Field Supervision Supervision sur le terrain		
Tractor's Consultant's Costs de l'entrepreneur de l'expert- isell	Type		
Machines Used Machines utilisées	Type		
Equipment Matériel de l'évaluation	Type		
<b>Total Direct Costs</b> <b>Total des coûts directs</b>			

2. Indirect Costs/Coûts indirects

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

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation			
<b>Sub Total of Indirect Costs</b> <b>Total partiel des coûts indirects</b>			
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			
Total Value of Assessment Credit (Total of Direct and Allowable indirect costs)		Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)	

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

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

3. Working Discounts

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

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

Total Value of Assessment Credit	Total Assessment Claimed
	× 0.50 =

Remises pour dépôt

- Les travaux déposés dans les deux ans suivant leur achèvement sont  
remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
- Les travaux déposés trois, quatre ou cinq ans après leur achèvement  
sont remboursés à 50 % de la valeur totale du crédit d'évaluation  
susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Évaluation totale demandée
× 0,50	REÇU

4. Certification Verifying Statement of Costs

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

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

Attestation de l'état des coûts

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

Et qu'à titre de TO (C) 4:00 je suis autorisé  
(titulaire enregistré, représentant, poste occupé dans la compagnie)

I make this certification

à faire cette attestation.

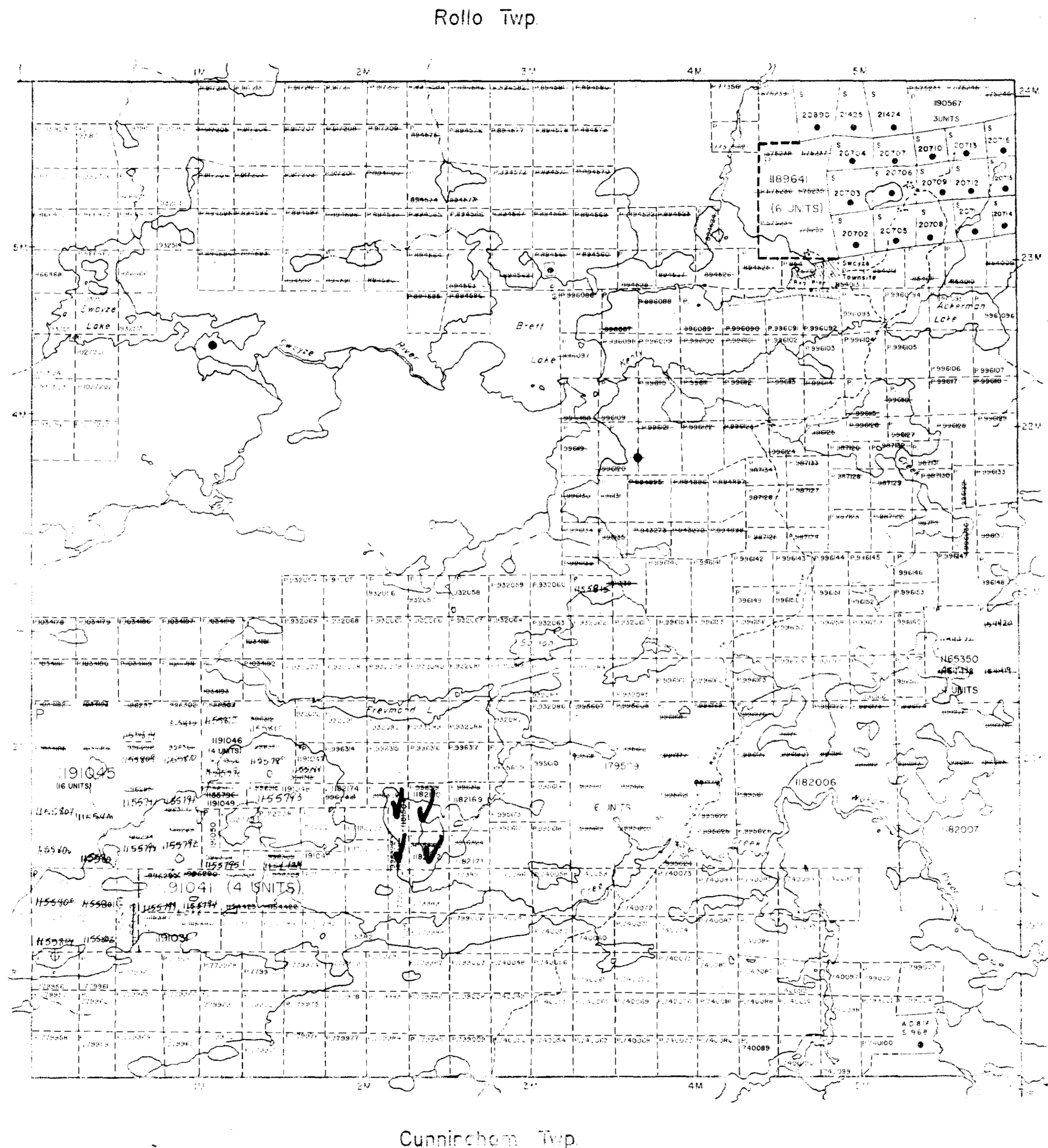
Signature J. J. Salo Date May 25/93

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



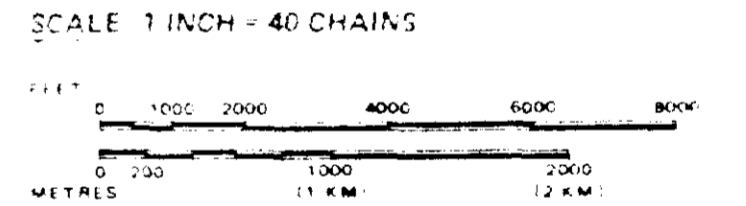
LEGEND

- 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

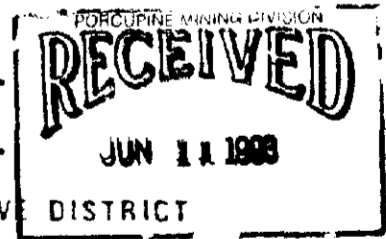
DISPOSITION OF CROWN LANDS

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	
RESERVATION	
CANCELLED	
SAND & GRAVEL	
LAND TITLES DIVISION	

NOTE: MINING RIGHTS & PARCELS PATENTED PRIOR TO MAY 1 1913 VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 340, SEC. 63, SUBSECTION 1.



TOWNSHIP  
**SWAYZE**  
 DISTRICT  
 MINING DIVISION  
 PORCUPINE  
 LAND TITLES / REGISTRY DIVISION  
 SUDBURY

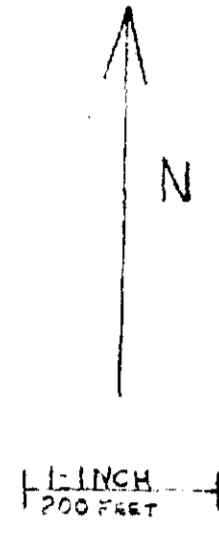


Ministry of Land Management  
 Natural Resources Branch  
 Ontario

Date: MARCH, 1985    Number: **G-3249**

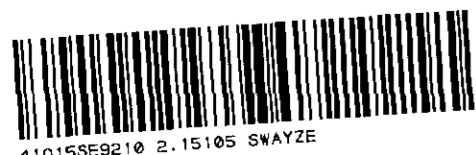
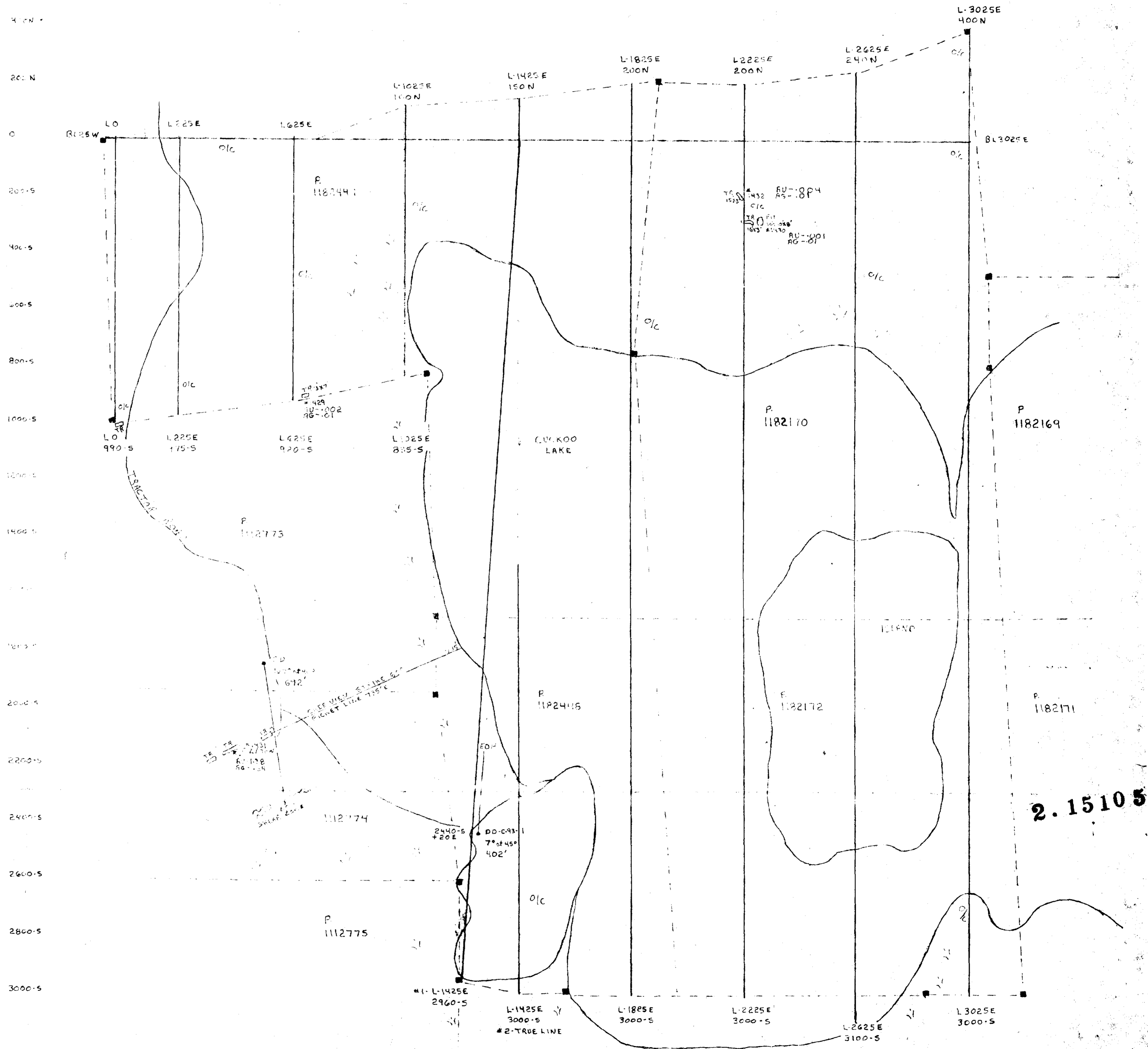
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO MAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

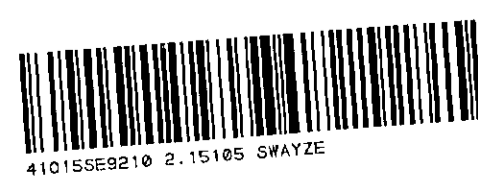
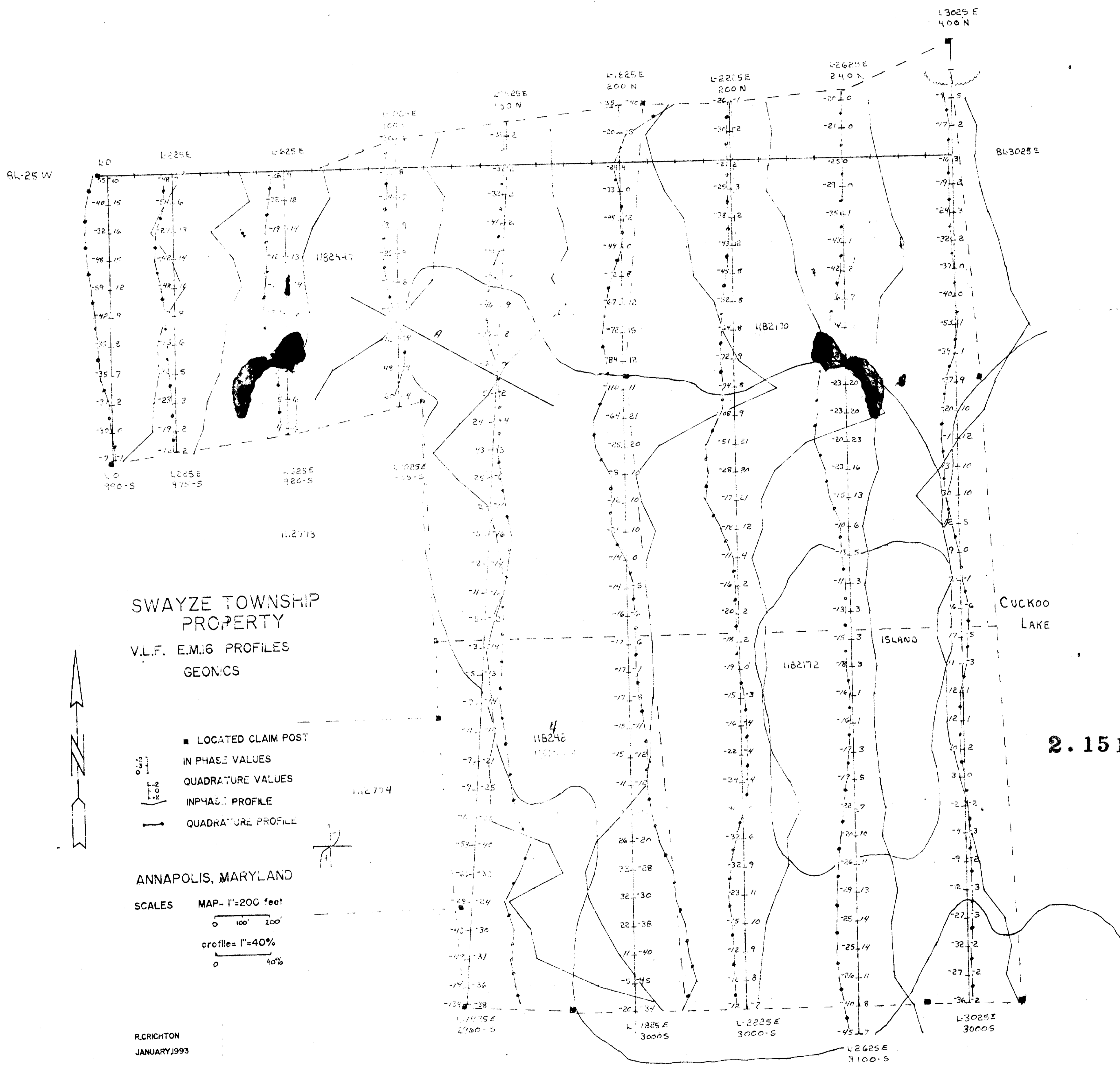




**CUCKOO LAKE PROPERTY**

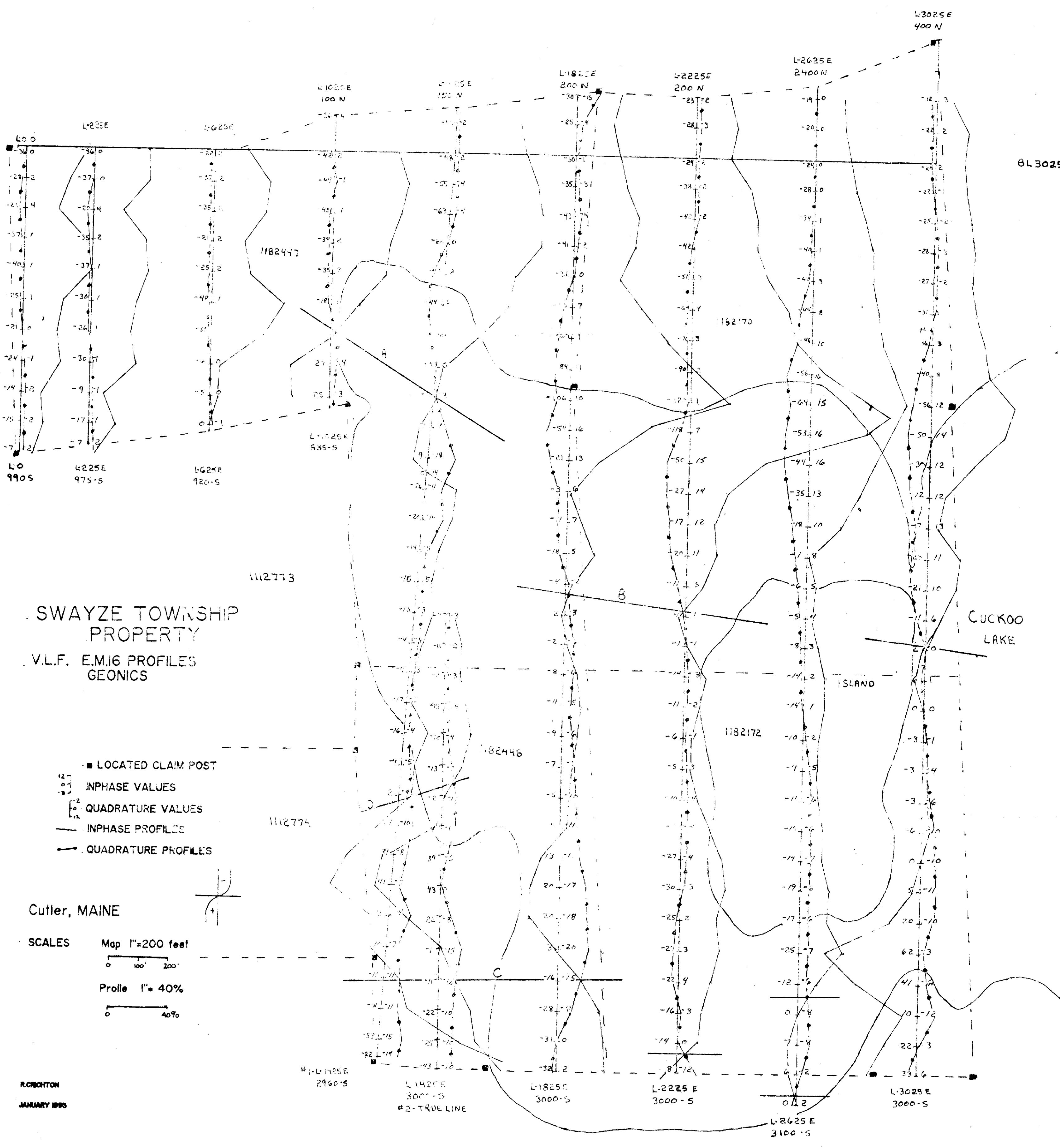
- BASE LINE 3050'
- PICKET LINES 1/4 MILES
- TRAIL MARKERS AS SHOWN ON PLAN
- DD - DIKORNO DRILL HOLE
- CLAIM POSTS
- CLAIM LINE
- TRACTOR ROAD





81.25 W

81.3025 E

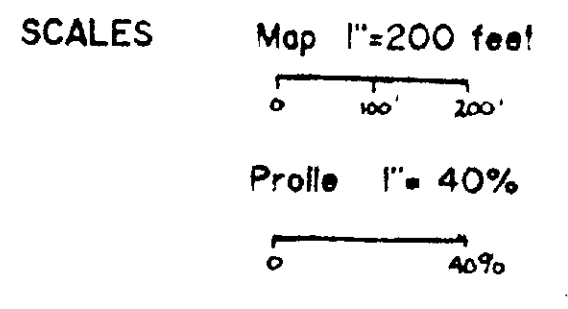


SWAYZE TOWNSHIP  
PROPERTY  
V.L.F. E.M.16 PROFILES  
GEONICS



- LOCATED CLAIM POST
- INPHASE VALUES
- QUADRATURE VALUES
- INPHASE PROFILES
- QUADRATURE PROFILES

Cutler, MAINE

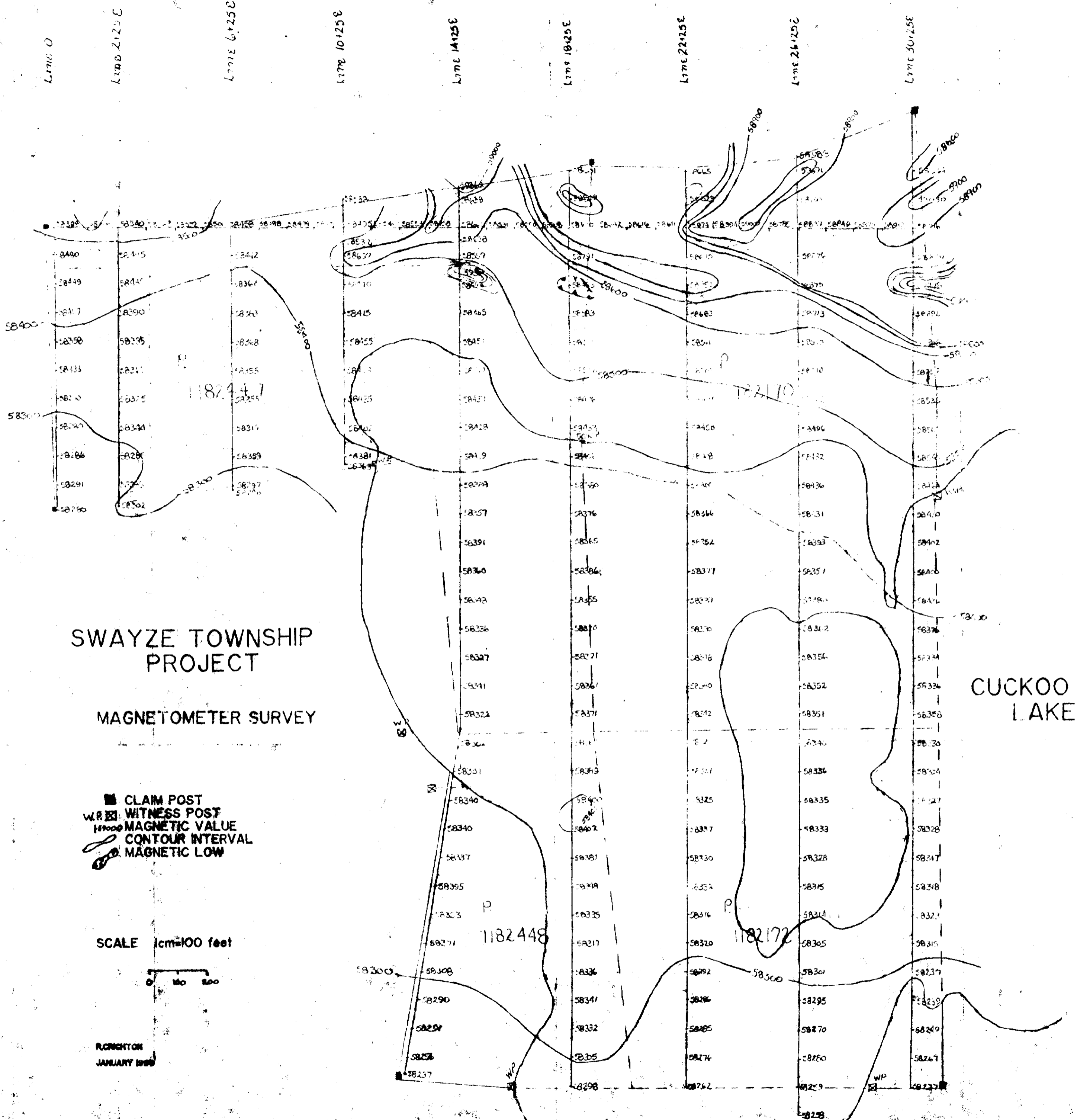


ROBICHTON  
JANUARY 1995

2.15105



4100N  
3100N  
2100N  
1100N  
Baseline 0  
100S  
2100S  
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29100S  
30100S



SWAYZE TOWNSHIP  
PROJECT  
MAGNETOMETER SURVEY

■ CLAIM POST  
 W.P. ○ WITNESS POST  
 — MAGNETIC VALUE  
 - - - - - CONTOUR INTERVAL  
 [ ] MAGNETIC LOW

SCALE 1cm=100 feet

PLC/INTON  
JANUARY 1988

CUCKOO LAKE

2.15105

