ASSESSMENT WORK REPORT

REPORT ON GEOLOGICAL MAPPING AND VLF-EM GEOPHYSICAL SURVEYS OVER A PORTION OF THE PROPERTY OF ASQUITH RESOURCES INC.

IN

ASQUITH TOWNSHIP, SHINING TREE AREA
LARDER LAKE MINING DIVISION
DISTRICT OF SUDBURY
ONTARIO

qual. 63.2846

January 31, 1991
Toronto, Ontario

J. L. Tindale & Associates Inc.
J. L. Tindale, P. Eng.

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FIGURES

MAPS (in envelopes attached)

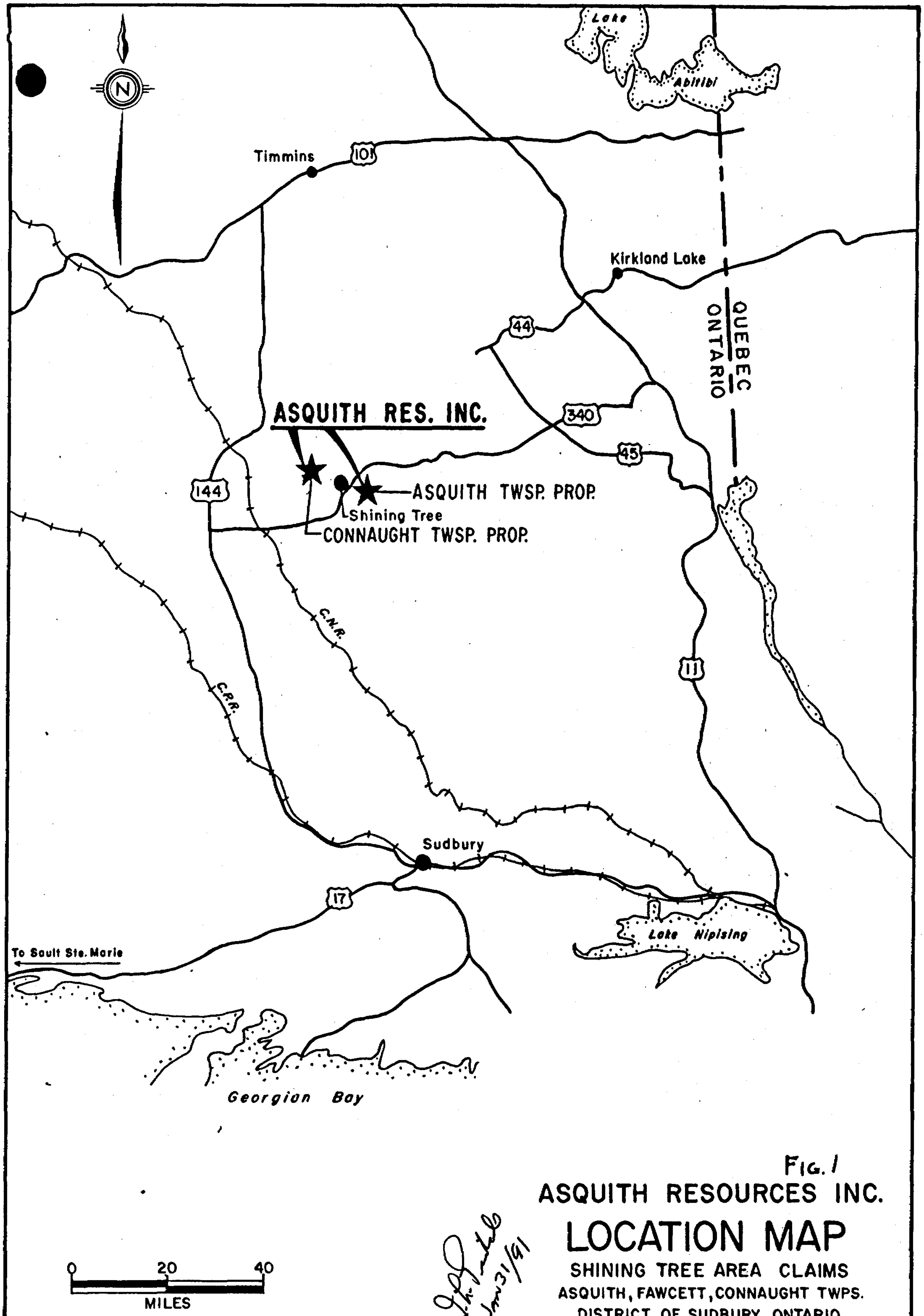


FIG. 1

ASQUITH RESOURCES INC.

LOCATION MAP

SHINING TREE AREA CLAIMS

ASQUITH, FAWCETT, CONNAUGHT TWPS.

DISTRICT OF SUDBURY, ONTARIO

Jan 31/91

INTRODUCTION

Asquith Resources Inc., with offices at 907 - 110 Erskine Avenue, Toronto, Ontario M4P 1Y4, owns a contiguous group of 72 claims in Asquith Township, in the Shining Tree Area of Ontario. The 30 claims subject of this report are located in the southeast sector of the claim block and were acquired by staking or option at various times commencing in 1987.

Lincutting, geological mapping, Magnetometer and VLF-EM surveys were carried out at various periods during the Company's tenure on the ground as claims were acquired and/or as funds were available. This report combines geological and VLF-EM surveys over the subject thirty claims.

CLAIM DATA

Claim No.		Acquisition Date
L 973554-61	(8)	June 15, 1987
L 973348-54	(7)	June 15, 1987
L 980036-40	(5)	June 15, 1987
L 980042	(1)	June 15, 1987
L 973355-56	(2)	August 17, 1987
L 980046-49	(4)	November 1, 1988
L1046154	(1)	November 1, 1988
L1048645-46	(2)	February 6, 1989
Total	30	

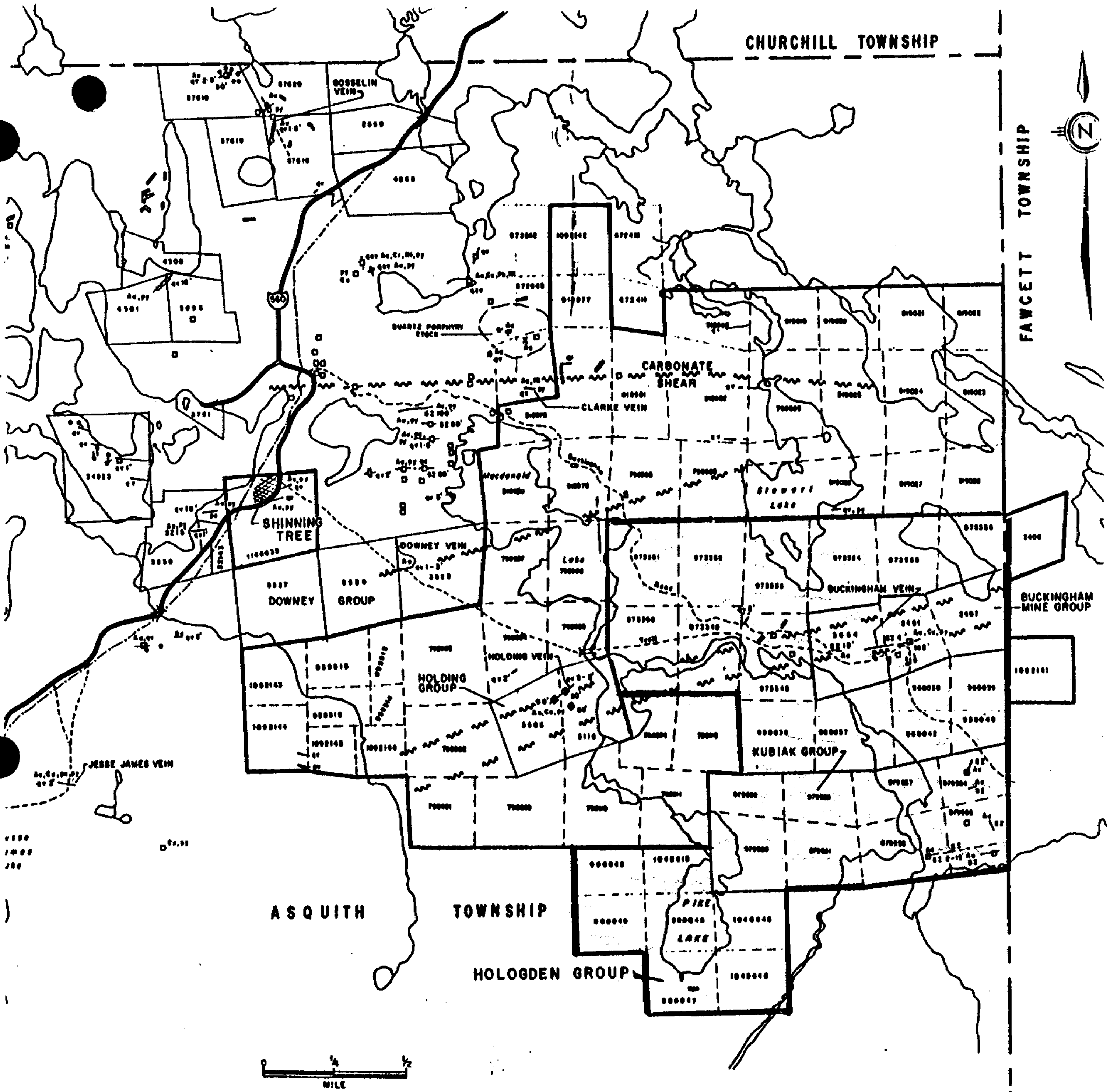
LOCATION, TOPOGRAPHY, ACCESS

The property is located south of Highway 560 near the village of Shining Tree, Ontario. Trails suitable for ATV travel provide access to the claims. Forestry operations scheduled for the winter of 1990-91 will provide further access over the eastern areas.

The terrain is typical of the Canadian Shield and though outcrop is reasonably abundant in some areas most of the land surface is covered by glacial deposits, boreal forest, bog and lakes.

HISTORCIAL DATA

Rather than review generally the entire Shining Tree camp the writer has chosen to summarize only those occurrences present on the claims under



LEGEND

- Quartz Vein
- Shear Zone
- Shaft, depth in feet
- Faults & Major Shear Zone
- Pit
- Trench
- D.D.Hole

ASQUITH RESOURCES INC.

PROPERTY LOCATION MAP

ASQUITH TOWNSHIP

Revised Mar., 1989

MAY 1987 FIGURE 2

discussion in this report. These showings are still referred to by their historical names by Asquith when referencing various parts of the property. The reader has referred to various published reports listed in the bibliography for a fuller understanding of the historical background of the general area.

BUCKINGHAM MINE

This occurrence was first reported on by P. E. Hopkins in 1920 and later by F. L. Finley in 1926, and G. G. Langford in 1927 all for the O.D.M. A Prospectus of Buckingham Mines Limited published in the late 1920's and letters from Douglas A. Mutch, manager of the property in 1929 assist in piecing together the early history of the property. Later examination reports by D. K. Burke in 1936 and 1937 for Sylvanite Mines and still later independent reports by Burke in 1958 and 1959 mention later efforts at the property.

Prior to 1920 coarse gold was located on the property in a 1 to 3 foot wide quartz vein upon which a shaft inclined at 60° to the south was sunk to a depth of 85 feet. Considerable trenching and pitting along strike traced the vein for 1,000 feet to the west but only a short distance to the east. During 1929 the shaft was deepened to 167 feet and lateral work totalling approximately 300 feet was carried out at the 100 foot level. Buckingham Mines Limited went bankrupt in 1929, probably coinciding with the infamous stock market collapse.

Following a hiatus of some 30 years Central Porcupine Mines Limited explored the vein in the immediate shaft area by means of eight short drill holes along four section lines 37½ feet apart. This work explored the vein to a vertical depth of 50 feet and showed it to vary from 0.7 to 7.8 feet in width, with values ranging from 0.03 to 1.3 ounces of gold per ton. A weighted average of six intersections returned 0.28 ounces of gold per ton across 2.7 feet.

Burke in his report of 1959 mentioned a new find on the Buckingham some 1,200 feet west and north of the shaft workings. Stripped by prospector E. G. James the zone contains gold bearing quartz veins within a 12 to 15 foot wide green carbonate zone. Drilling by Central Porcupine in 1959 along two lines 40 feet apart returned values ranging from .01 to .20 ounces per ton with an overall average of 0.07 ounces of gold per ton. No work was carried out on the extension of this zone.

During January and February of 1989, the Company drilled 21 holes totalling 7,560 feet in the Buckingham Mine area. This drilling outlined the presence of at least three parallel gold bearing shear zones enclosed in carbonate-rich mafic to intermediate volcanic host rocks. The zones trend roughly east-west and were traced for a drilled distance of approximately 500 feet before being interrupted by north trending diabase dikes.

Gold values occur with a very distinctive pale green carbonate rock which has been intensely sheared and injected with grey, blue and black quartz veining. The shear zone may be up to 20 feet wide but the central core normally contains the higher gold values. Finely disseminated pyrite is pervasive throughout the shears, increasing in quantity with intensity of shearing. Native gold was noted in the quartz veining as minute specks and plates along fractures. Tourmaline is common in the quartz.

KUBIAK SECTOR

P. E. Hopkins in 1920 reported much trenching and pitting on this property south of the Buckingham. Visible gold was noted in the bluish-grey quartz veins contained within hornblende, chlorite and carbonate schists. Similarly in 1934 H. C. Laird of the O.D.M. mentioned trenching and pitting activity by the owners in that year.

More recent assessment work records show the property to have been held by Patino and latterly Onitap who carried out cursory exploration and drilled a single hole under the more southerly showing on the block.

The Company drilled four holes totalling 1,392 feet on claims 979555-556 during January of 1989 to test a strong quartz filled shear zone striking approximately east-west from a pitted area adjacent to Papoose Creek. Results were disappointing as the intensity of shearing and quartz veining were much less than that encountered in surface outcrops. Accordingly assay values were low, the best being 0.158 ounces of gold per ton across a width of 1.0 feet in hole No. 4.

HOLOGDEN MINE PROPERTY

There is no mention in the literature of work carried out on this property aside from a notation on Carter's O.D.M. map of the Shining Tree District published in 1980 and carrying the notation "circa 1924". Fairly extensive pitting and trenching are evident at the location.

GENERAL GEOLOGY

The area is underlain by Precambrian rocks which trend northwesterly and consist of a suite of mafic to felsic intrusives interlayered rarely within metasedimentary deriviatives of the volcanic activity. By far, the most dominant rock type is the mafic volcanics which is predominantly black to dark green colour, fine grained and often pillowed. Interlayered with these mafic units are light green intermediate metavolcanics which are often porphyritic containing phenocrysts of blue to white quartz. Thin bands of metasediments occur in the area interbedded with the metavolcanics and these consist primarily of interflow chert, arkose and greywacke. Ultramafic intrusives grading from talc-rich serpentine bodies to dioritic and gabbroic composition also make up a portion of the interlayered volcanic sequences. Plutonic rocks of granite intrude the volcanic pile and appear as large masses bordering the area to the north, south and west. Dikes and small stocks of porphyritic granite occur within the interlayered sequence probably derived from the plutonic episode. Diabase dikes and sills with northerly trends cut all of the preceeding units noted above.

LINECUTTING PROGRAM

Initial linecutting was carried out by Geosphere Consultants of Toronto during September of 1987. This phase included Grids A and C north and east of the Seager Creek-Lake waterways. Extensions of the A grid during February of 1988 were made over lake ice of MacDonald and Stewart Lakes. Lines 16W to 32W were extended south to the Pike Lake area during this winter by local cutters in the employ of the Company. Acquisition of the Hologden claims around Pike Lake during the summer of 1988 led to the cutting of a 8 mile grid by Loma Exploration of Val D'Or during August of 1988. This was initiated by extending the C grid baseline west and utilizing a system of tie-lines to expedite coverage west of Pike Lake.

GEOLOGICAL MAPPING

During the summer of 1988, K. W. Johnson, geologist, mapped the A grid portion of the property and the writer mapped the C grid section east of Seager Lake. Rob Cinits, geologist, mapped the area south of Seager Creek and around Pike Lake during July of 1990. Geological maps are presented with this report as Maps No. 1 & 2 at a scale of 1" = 200'.

GEOLOGY

The area covered by the mapping is predominantly underlain by fine to coarse grained amphibolite in the southwesterly portion which grades to mafic volcanic flows, often pillowed, in the northern part of the map area. Interbedded with these units are irregular and discontinuous horizons of mafic, intermediate and felsic tuffs. Crosscutting this northwesterly trending stratigraphic sequence is a series of north striking diabase dikes.

The transition from the higher metamorphic grade amphibolites to the pillowed flows is fairly abrupt and appears to follow the regional stratigraphy. The influence of the Miarmichi Batholith to the south probably accounts for the metamorphic facies transition as well as the occurrence of small dikes of quartz-feldspar and granite west of Pike Lake. The amphibolites are variable in texture and composition ranging from fine to medium grained equigranular to very coarse grained porphyritic phases with euhedral hornblende crystals up to ½" in diameter within a feldspar-rich matrix. Translucent quartz-eyes up to 1/8" across are present in some occurrences. The finer grained amphibolites tend to have a stronger foliation than the coarser porphyritic types which tend to display more idiomorphic textures. Several narrow,discontinuous bands of fine grained volcanics and tuffs were noted within the amphibolite sequence.

The mafic volcanics underly most of the area north of Pike Lake. These are dark green, fine to medium grained flows, massive to pillowed and moderately foliated parallel to the northwesterly trend of the stratigraphy. Pillows are usually deformed with thin chlorite-rich selvages and display north to NNE facing tops.

Felsic flows and quartz-eye tuffs are present throughout the mapped area. They range in thickness from less than 10 feet to 200 feet and are most commonly hosted within the amphibolite schists. the quartz-eye tuffs are moderately foliated with 1-5% translucent to smokey or blue quartz-eyes ranging from 1/8" to 1/16" in diameter in a fine grained felsic ground mass. In a few localities lapilli and fine grained tuff units were mapped, neither of which are very extensive and are minor features of the felsic sequence.

An ultramafic intrusive is known to be present underlying the Buckingham Mine area where it was noted in drill core. This is a talc-rich peridotite unit, riddled with irregular quartz-carbonate veinlets. Only a single outcrop of this recessively weathering unit was located on the map sheets, this being on the east shore of Stewart Lake on claim 973354. It is believed this dike or sill strikes northwesterly as a similar unit has been mapped on adjoining claims to the north.

Interbedded steeply dipping sediments and oxide iron formation were mapped along the steep side hill on the north side of Seager Creek. These are fine grained greywackes with thin iron formation interbeds which appear to trend northwesterly.

The dikes range in thickness from a few inches to over 200 feet with rapid variation along strike. Commonly they are fine to medium grained equigranular units though in some cases are porphyritic with light green to yellow phenocrysts of olivene, characteristic of the Matachewan phase diabase. The dikes tend to weather recessively and therefore occur as prominent ridges.

STRUCTURE

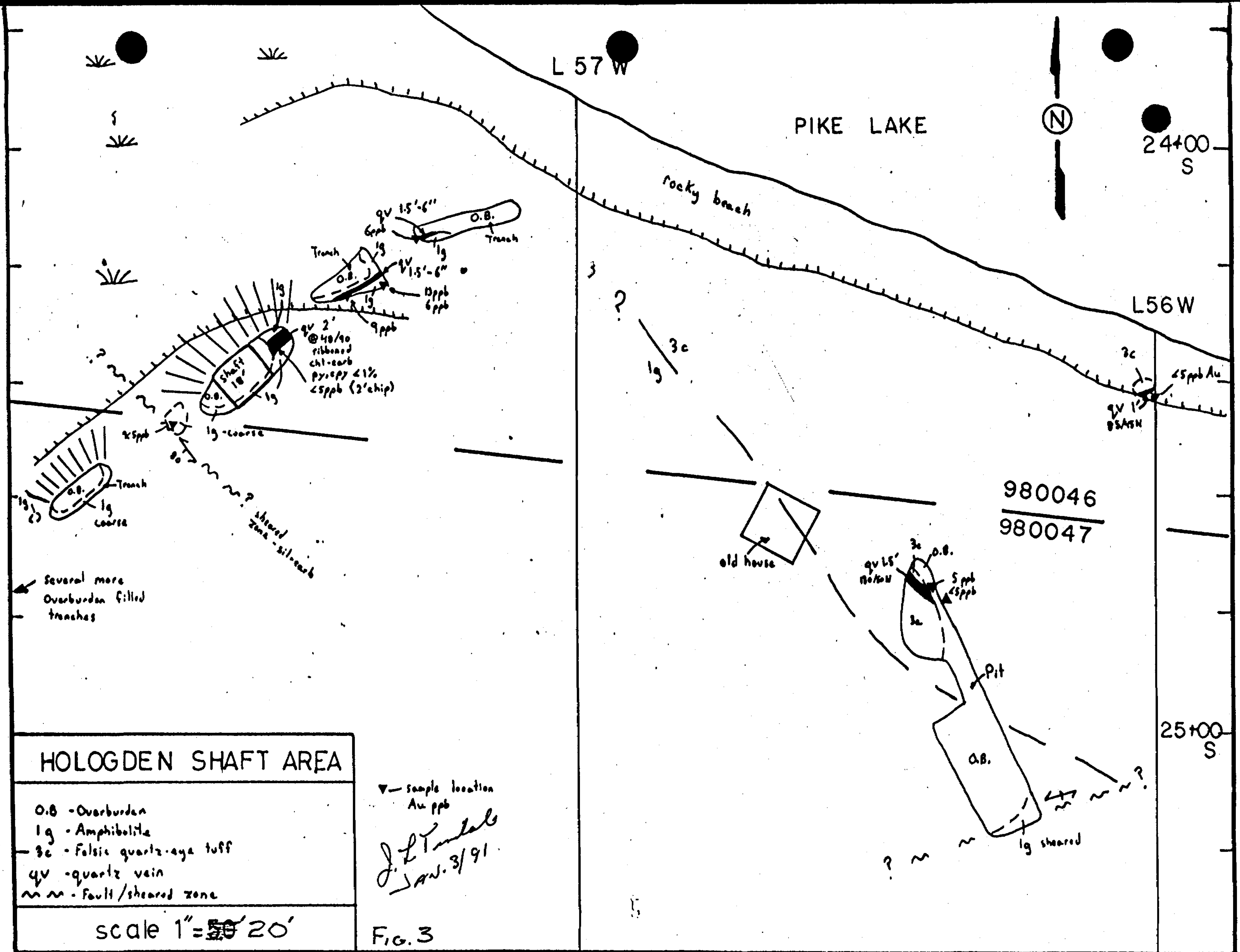
The majority of the rocks, aside from the diabase, display a moderate foliation which parallels the stratigraphy and strikes 320° - 350° east of Pike Lake and swings to 270° - 300° to the north of Seager Creek. Dips are moderate to steep to the south.

Two strong areas of faulting have been interpreted from the mapping. The most southerly parallels Papoose Creek along the southern claim boundary and the second is mirrored by the trace of Seager Creek. The Seager Creek zone is characterized by a zone of high VLF-EM field strengths and subordinate crossovers. Associated with the Seager Creek structure are zones of moderate carbonate alteration, silicification, quartz veining, chloritization and fine disseminated pyrite. Sericite and fuchsite occur locally. There does not appear to be any significant offsetting of the stratigraphy by these faults.

Shearing,intense, relatively narrow, carbonate-rich with sericite, chlorite and quartz veining is noted at a number of localities within the map area. This type of shear usually is enriched in gold values and is most prominantly exposed in the Buckingham Mine area where stripping during 1990 exposed a sinuous, highly folded shear over a distance of over 1,600 feet. These shears vary in width from 1 foot to 10 feet, are highly contorted internally and exhibit boudinaged quartz as well as fractured quartz veining throughout.

MINERALIZATION/AREAS OF INTEREST

The mapped area is dotted with a multitude of old pits, trenches, pits and stripped areas many of which are overgrown or caved. Wherever possible these showings were sampled in an attempt to identify the gold contact. Sampling results are noted on the accompanying maps in ppb. Some of the more interesting


L 57 W
PIKE LAKE
N
24+00 S
rocky beach
L56W
qv 1.5'-6"
6ppb
O.B.
Trench
lg
Trench
O.B.
qv 1.5'-6"
13ppb
6ppb
9ppb
qv 2'
@ 48/90
ribboned
chl-carb
py+cpy <1%
<5ppb (2'chip)
Shaft 18'
O.B.
lg
lg-coarse
<5ppb
sheared zone-sil-carb
O.B.
Trench
lg coarse
Several more Overburden filled trenches
3c
lg
old house
980046
980047
3c
<5ppb Au
qv 1'
85/45N
3c
O.B.
qv 1.5'
110/60N
5ppb
<5ppb
3c
Pit
O.B.
lg sheared
25+00 S
HOLOGDEN SHAFT AREA
O.B - Overburden
lg - Amphibolite
3c - Felsic quartz-eye tuff
qv - quartz vein
Fault/sheared zone
scale 1" = 20'
sample location Au ppb
JAN. 3/91
Fig. 3

areas examined are discussed in point form below.

a) Hologden Shaft Area

See 1"=20' detail - Fig. 3. The area is located along the south shore of Pike Lake. A series of trenches, pits and an 18 foot deep shaft exposes a 2"-6" wide smokey quartz vein for about 40 feet in a southwesterly direction away from the lakeshore. The vein is hosted by lightly carbonatized, chlorite-rich amphibolite schists with traces of finely disseminated pyrite and chalcopyrite evident in the vein and wall rock. Seven grab and/or chip samples from the vein area failed to return significant values. Further work is not planned.

b) Kubiak Area

Grid C at L2E, 8+00N - a series of blue-grey quartz veins are contained within a 10 foot wide intensely sheared east-west carbonate-rich structure mineralized with up to 2% disseminated pyrite. The main "leader" is 12"-15" wide blue quartz on which a series of pits and trenches have been sunk along a strike of 50 feet. To the east the exposure enters a swamp, to the west heavy overburden.

Sampling of the exposure adjacent to the swamp assayed 584 ppb across 3.5 feet; 901 ppb across 4.0 feet and 1,137 ppb across 2.0 feet; in continuous chip samples. The zone is visually very similar in occurrence to the Buckingham shear.

c) Buckingham Mine Area

The prime structural feature, and the locus of the alteration and the gold mineralization across the area of interest is the Buckingham Shear. Stripping has exposed this prominent break, intermittently for a distance of 1,600 feet in a roughly east-west direction. Previous drilling to the east may have added a further 400 feet to this length.

The Buckingham Shear is a zone varying in width from 1 foot up to 10 feet of intensely schistose, crenulated, carbonate-rich, pale green mafic volcanic along which bluish-grey quartz stringers and veins have been injected which carry free gold. Finely disseminated pyrite is distributed throughout the shear with rare sightings of chalcopyrite. Chlorite and sericite alteration products are present within the shear and along fractures in the veining. The quartz may form wide sections which as at the Buckingham Shaft where the vein is over 3.5 feet wide or as narrow, boudinage-like fillings, as along the shear planes. Wide sections of quartz are also evident at 4S on line 8E where the shear has been tightly isoclinally folded. Tourmaline is a common constituent of the quartz.

The Buckingham Shear is anything but a straight-line break. Rather it is a sinuous, ductile-appearing zone given to rapid changes in strike though carrying a general east-west trend. Secondary splays branch from the main break but these appear limited in strike extent and tend to be less well mineralized and often carry white quartz veining. The main break where it is folded plunges westerly at approximately 75° as do the crenulations within the shear. Possibly this plunge may be a guide to tracing the depth extension of the gold bearing shoots.

The entire shear is enriched in gold mineralization. A total of 301 channel samples were cut along the shear and its branches utilizing a Stihl diamond saw during late August. Two areas of significant gold values were confirmed, these being located at 4S on line 8E and immediately west of the Buckingham Shaft. The former has gold values distributed along a strike length of 150 feet coincident with folding of the shear which has proliferated a marked increase in blue quartz. Assay values up to 1.94 ounces gold per ton across 2.0 feet were returned from this area. A fifty foot trench west of the shaft returned values up to 0.69 ounces per ton across 6.0 feet from this strongly veined area.

All values greater than 1,000 ppb were reassayed with the variable results strongly indicating the expected influence of free gold in the system. From a total of 74 samples with results over 1,000 ppb, 30 samples reassayed higher on average by 35.7% and 44 samples reassayed lower by 23%. This so called "nugget effect" must be addressed in future programs.

The sampling program while verifying that the Buckingham Shear is enriched in gold also indicated that concentrations of quartz veining appears necessary for the shear to approach economic interest. The quartz need not be in the form of a massive vein to carry significant values. Thin, boudinaged veinlets, also carry across significant widths provided they are concentrated to at least 20% of the shear zone. Possibly the stronger portion of the shear occurs at 12E near the Buckingham Road but quartz is noticeably a minor constituent and values were correspondingly lacking. The nature of the shear is such, however, that an increase in quartz content could occur within a short distance laterally or vertically.

There appears to be little doubt that the Buckingham Shear is a significant gold bearing structure. The zone appears to continue to the west past the stripped area and to the east as verified by stripping and drilling. Is is possible to visualize the structure having a lateral strike of at least double the present 1,600 feet.

Future evaluation of this structure should include tracing the zone through the gaps in stripping particularly between the Buckingham Shaft area and the more westerly stripped area. This may best be accomplished by a series of shallow closely spaced holes to trace the break laterally with followup deeper holes to verify the vertical extent. A similar program to the east and west is warrented.

VLF-EM SURVEY

The electromagnetic data was collected using a CRONE Radem VLF-EM receiver utilizing a transmitter station located in Cutler, Maine for the majority of the survey, in an effort to define easterly-trending conductive zones. A transmitter station located in Annapolis, Maryland was utilized to outline north-trending conductors, the data recorded from traverses along the baseline.

The Radem is capable of receiving low frequency signals from numerous communication broadcast stations positioned throughout the world, from distances of up to 5,000 miles from the transmitter unit. Three parameters are capable of being read with the Radem unit:

DIP ANGLE in degrees of the magnetic field component, from the horizontal, of the major axis of the polarization ellipse. Detected by a minimum on the field strength meter and read from an inclinometer with an accuracy of +/-½ degrees.

FIELD STRENGTH (total or horizontal) of the magnetic component of the VLF field, (amplitude of the major axis of the polarization ellipse). Measured as a percent of normal field strength established at a base station. Accuracy +/-2% dependent on the signal. Meter has two ranges: 0 to 300% and 0 to 600%.

QUADRATURE component of the magnetic field, perpendicular in direction to the resultant field, as a percent of the normal field strength, (amplitude of the minor axis of the polarization ellipse). This is the minimum reading of the Field Strength meter obtained when measuring the dip angle. Accuracy +/-2%.

The surveys were carried out by Brian Erickson and Gerry LaFortune, geophysical technicians from Sudbury in the employ of J. L. Tindale & Associates Inc. The bulk of the surveys were done in March of 1988 with the areas around Pike Lake and west of Seager Lake covered during October of 1988. Both the Dip Angle and the Field Strength readings were recorded during the survey and are presented on Maps 3 & 4 accompanying this report. In total 1,720 station-readings were recorded yielding total coverage of the claim block.

There are numerous conductors present on the property but many of these appear due to surficial deposits as they occupy low swampy areas and are characterized by discontinuous strike length and low field strengths. Four conductors appear to have som validity and are annotated as A to D inclusive on the accompanying maps.

CONDUCTOR A - This east-west fracture is located on claim 980038 th of the Buckingham Mine and is characterized by strong crossovers and field strengths. The field strengths continue to both the east and west possibly indicating extensions. The anomoly is overlain by alder swamp and underlain in part by diabase dike. A mineralized conductor would not be expected in the diabase and the zone is interpreted as a fault structure possibly part of the Seager Creek system.

CONDUCTOR B - Similar in amplitude and strength to "A" and 400 feet to the southeast thereof, this fracture may be a branch fault or a parallel structure. The area is overlain by overburden with no outcrop.

CONDUCTOR C - This anomoly crosses claims over the southern portion of MacDonald Lake on a southwesterly trend and is characterized by a topographic low and strong crossovers and field strengths. It has been interpreted as a fault zone, part of the Seager Creek zone and as such may connect with Conductor A. Increased shearing, carbonatization and veining have been noted adjacent to the presumed trace of this structure.

CONDUCTOR D - This anomoly has been selected to illustrate the effect of lake-bottom sediments upon the instruments. The conductor occupies the length of Caput Lake and though field strengths are high the crossovers are relatively subtle. The lake is shallow and filled with black organic ooze.

DISCUSSION OF RESULTS

Geological mapping and accompanying sampling has disclosed the presence of two distinct stratigraphies on the mapped area. The southwestern portion is underlain by amphibolites which grade upward to the northeast into mafic pillowed lavas and flows. Quartz veining is common across the property but gold values only appear in significant amounts when associated with intense ductile shears in carbonate-rich mafic pillowed lavas and flows, as at the Buckingham and the Kubiak showings. Without these intense shears the veins appear to occupy brittle fracture patterns with limited strike-length and low gold values.

The VLF-EM survey, though mainly of little economic interest, did confirm the trace of a strong fault system along Seager Creek and laterally to the east and west.

Respectfully submitted,

J. L. TINDALE & ASSOCIATES INC.

J. L. Tindale — qualifications 63.2846

J. L. Tindale
President

January 31, 1991
Toronto, Ontario

Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Mining Lands Section
4th Floor, 159 Cedar Street
Sudbury, Ontario
P3E 6A5

Telephone: (705) 670-7264
Fax: (705) 670-7262

Your File: W.9108.00033
Our File: 2.13903

May 15, 1991

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

Dear Sir/Madam:

RE: Notice of Intent dated April 15, 1991 for Geological and Geophysical (Electromagnetic) Surveys on mining claims L.973348 et al. in the Township of Asquith.

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,

Ron. C. Gashinski,
Provincial Manager, Mining Lands
Mines & Minerals Division

DM/jl

cc: Mr. Asquith Resources Inc.
Toronto, Ontario

Resident Geologist
Cobalt, Ontario

✓Assessment Files Office
Toronto, Ontario

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

Date	Mining Recorder's Report of Work No.
April 15, 1991	W.9108.00033

2.13903

AMENDED

Recorded Holder
Asquith Resources Inc.

Township or Area
Asquith Township

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	L.973348 to 356 incl.
Electromagnetic 17.9 days	979554 to 561 incl.
Magnetometer ____ days	980036 to 040 incl.
Radiometric ____ days	980042
Induced polarization ____ days	980046 to 049 incl.
Other ____ days	1046154
Section 77 (19) See "Mining Claims Assessed" column	1048645-46
Geological 17.1 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

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

828 (85/12)

M.L.

Ministry of Northern Development and Mines

Ontario

DOCUMENT No. W9108.00033

Mining Act

Report of Work

(Geophysical, Geological and Geochemical Surveys)

Instructions
- Please type or print.
- Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed per survey type.
- If number of mining claims traversed exceeds space on this form, attach a list.
- Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch.

Type of Survey(s)	Mining Division	Township or Area
GEOLOGICAL; VLF-EM	LARDER LAKE	ASQUITH TOWNSHIP

Recorded Holder(s): ASQUITH RESOURCES INC. 2.13903

Prospector's Licence No.: T 4759.

Address: 907-110 ERSKINE AVE TORONTO ONTARIO M4P1Y4

Telephone No.: 416-481-5781

Survey Company: J.L. TINDALE & ASSOCIATES INC.

Name and Address of Author (of Geo-Technical Report): J.L. TINDALE 907-110 ERSKINE AVE TORONTO ONTARIO M4P1Y4

Date of Survey (from & to): Day 1 Mo. 9 Yr. 87 / Day 1 Mo. 8 Yr. 90

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	20
For each additional survey: using the same grid: Enter 20 days (for each)	- Magnetometer	
	- Other	
	Geological	20
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Other	
	Geological	
	Geochemical	
Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Other	

Total miles flown over claim(s).

Date	Recorded Holder or Agent (Signature)

Mining Claims Traversed (List in numerical sequence)

Prefix	Number	Prefix	Number	Prefix	Number
L	973348	L	980036		
L	973349		980037		
L	973350		980038		
L	973351		980039		
L	973352		980040		
L	973353		980042		
L	973354		980046		
L	973355		980047		
L	973356		980048		
L	979554		980049		
L	979555		1048645		
L	979556		1048646		
L	979557		1046154 ~~1048616~~		
L	979558				
L	979559				
L	979560				
L	979561				

Total number of mining claims covered by this report of work: 30

RECEIVED FEB 14 1991 MINING LANDS SECTION

Certification Verifying Report of Work

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

Name and Address of Person Certifying: J.L. TINDALE 907-110 ERSKINE AVE TORONTO ONTARIO M4P1Y4

Telephone No.	Date	Certified By (Signature)
416 481 5781	JAN. 21 1991	[signature]

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
1200	Jan 23/91	[signature]
	Date Approved as Recorded	Provincial Manager, Mining Lands
	See revised work Statement	

Received Stamp: RECEIVED LARDER LAKE MINING DIVISION JAN 23 1991 TIME 10.55am

1362 (89/06)

Ministry of Northern Development and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

2.13903

File ____________

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

Type of Survey(s): Geological and Geophysical

Township or Area: Asquith Township

Claim Holder(s): Asquith Resources Inc.

Survey Company: J.L. Tindale & Associates Inc.

Author of Report: J.L. Tindale

Address of Author: 907 - 110 Erskine Ave.,Toronto,Ont.M4P1Y4

Covering Dates of Survey: Sept. 1987 - Jan. 31, 1991 (linecutting to office)

Total Miles of Line Cut: 33 miles

SPECIAL PROVISIONS CREDITS REQUESTED

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

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	20
–Magnetometer	
–Radiometric	
–Other	
Geological	20
Geochemical	

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

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

DATE: Jan. 31, 1991 SIGNATURE: J.L. Tindale — Author of Report or Agent

OFFICE USE ONLY

Res. Geol. ____________ Qualifications ____________

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L 973348	L 980042
L 973349	L 980046
L 973350	L 980047
L 973351	L 980048
L 973352	L 980049
L 973353	L1048645
L 973354	L1048646
L 973355	L1046154
L 973356	
L 979554	
L 979555	
L 979556	
L 979557	
L 979558	
L 979559	
L 979560	
L 979561	
L 980036	
L 980037	
L 980038	
L 980039	
L 980040	

If space insufficient, attach list

TOTAL CLAIMS 30

RECEIVED FEB 08 1991 MINING LANDS SECTION

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 1720 Number of Readings 1720

Station interval 50' and 100' Line spacing 200' and 400'

Profile scale 1" = 20'

Contour interval

MAGNETIC

Instrument

Accuracy – Scale constant

Diurnal correction method

Base Station check-in interval (hours)

Base Station location and value

ELECTROMAGNETIC

Instrument Crone Radem VLF-EM

Coil configuration N/A

Coil separation N/A

Accuracy N/A

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

Frequency Cutler, Maine (specify V.L.F. station)

Parameters measured Dip angle and field strength

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time Frequency

– Off time Range

– Delay time

– Integration time

Power

Electrode array

Electrode spacing

Type of electrode

SELF POTENTIAL

Instrument ____________________ Range ____________________

Survey Method ____________________

____

Corrections made ____________________

____

RADIOMETRIC

Instrument ____________________

Values measured ____________________

Energy windows (levels) ____________________

Height of instrument ____________________ Background Count ____________________

Size of detector ____________________

Overburden ____________________

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey ____________________

Instrument ____________________

Accuracy ____________________

Parameters measured ____________________

____

Additional information (for understanding results) ____________________

____

____

AIRBORNE SURVEYS

Type of survey(s) ____________________

Instrument(s) ____________________

(specify for each type of survey)

Accuracy ____________________

(specify for each type of survey)

Aircraft used ____________________

Sensor altitude ____________________

Navigation and flight path recovery method ____________________

____

Aircraft altitude ____________________ Line Spacing ____________________

Miles flown over total area ____________________ Over claims only ____________________

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken ______

______

______

Total Number of Samples ______

Type of Sample ______
(Nature of Material)

Average Sample Weight ______

Method of Collection ______

______

Soil Horizon Sampled ______

Horizon Development ______

Sample Depth ______

Terrain ______

______

Drainage Development ______

Estimated Range of Overburden Thickness ______

______

______

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis ______

______

______

______

General ______

______

______

______

______

______

______

______

______

______

ANALYTICAL METHODS

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

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

Others ______

Field Analysis (______ tests)

Extraction Method ______

Analytical Method ______

Reagents Used ______

Field Laboratory Analysis

No. (______ tests)

Extraction Method ______

Analytical Method ______

Reagents Used ______

Commercial Laboratory (______ tests)

Name of Laboratory ______

Extraction Method ______

Analytical Method ______

Reagents Used ______

General ______

______

______

______

______

______

______

______

______

______

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
R	M.N.R. RESERVE			S.R.O.	163003
R2	M.N.R. RESERVE			S.R.O.	163005
R3	WASTE DISPOSAL		2/9/81	S.R.O.	

R4 WITHDRAWL SEC 36/80 MINING ACT, ORDER W91/81 28/8/81 SURFACE RIGHTS ONLY WITHDRAWN 188517

R5 WITHDRAWL SEC 36/80 MINING ACT ORDER W13/86 30/01/86 SURFACE+MINING RIGHTS WITHDRAWN

R6 WITHDRAWL SEC. 36/80-MINING ACT, ORDER W27/86 09/04/86, SURFACE + MINING RIGHTS WITHDRAWN
0-Q7/89L OPENS PART OF W-27/86
0-U6-90 NER OPENS PART OF W-27/86
0-L22-90 NR OPENS PART OF W27/86

APPLICATION FOR SURFACE RIGHTS PENDING-PUBLIC LAND ACT FEBRUARY 12 1988

SAND and GRAVEL

G1 M.T.C PIT 489
G2 M.T.C GRAVEL PIT NO.3C-14
G3 GRAVEL PIT FILE 124425
G4 M.T.C PIT 3C-16
G5 M.T.C GRAVEL PIT NO.3C-15

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE 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.

NOTICE OF FORESTRY ACTIVITY

THIS TOWNSHIP / AREA FALLS WITHIN THE ____

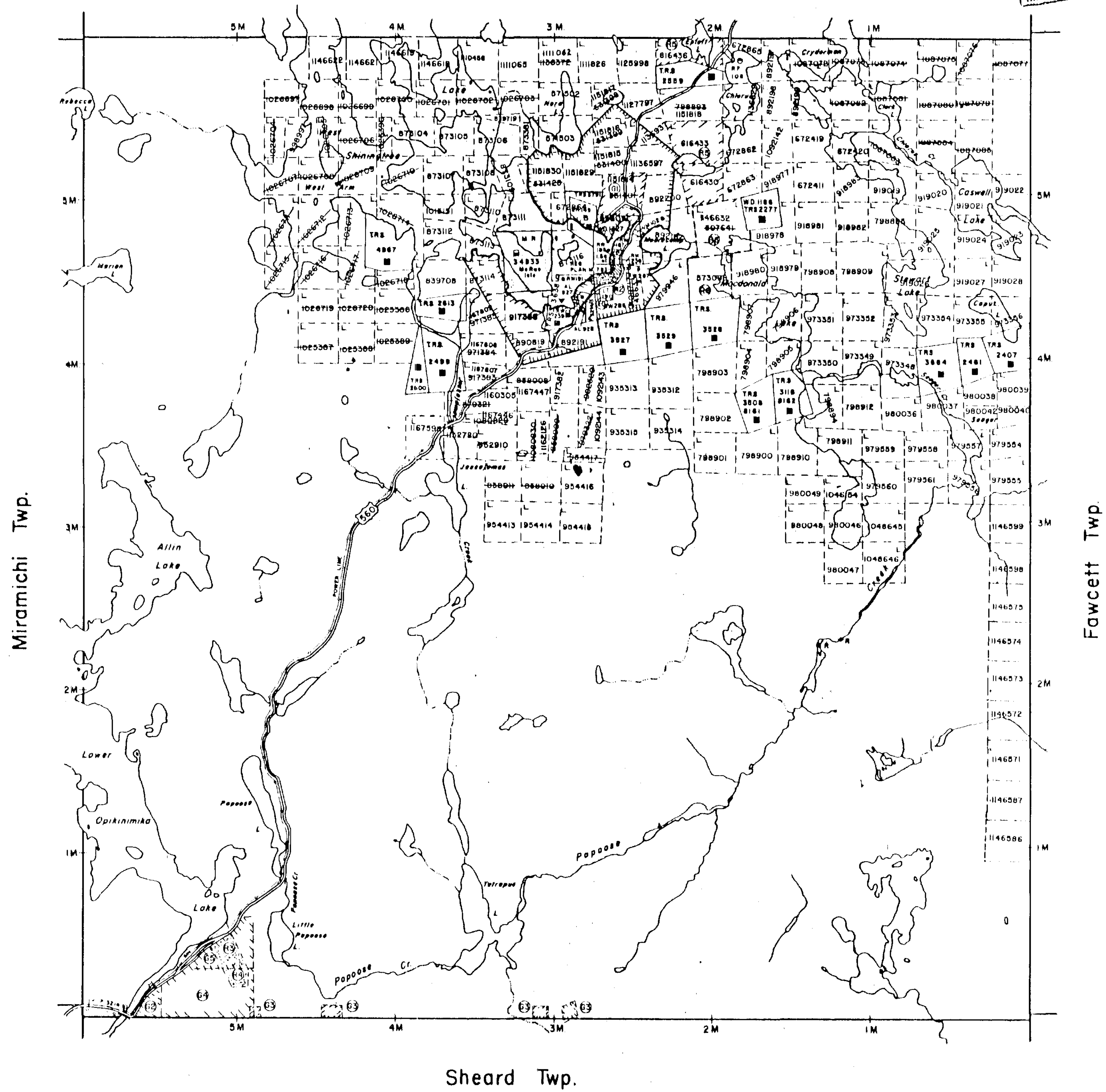
200

TOWNSHIP SUBJECT TO FORESTRY OPERATIONS

Churchill Twp.

GEOLOGY REFERENCE -COBALT RESIDENT GEO.

JAN 29 1991
LARDER LAKE MINING RECORDER'S OFFICE



LEGEND

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

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	◐
" , MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	◧
" , MINING RIGHTS ONLY	⬓
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	Ⓡ
CANCELLED	⊛
SAND & GRAVEL	Ⓢ

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

SCALE: 1 INCH = 40 CHAINS

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

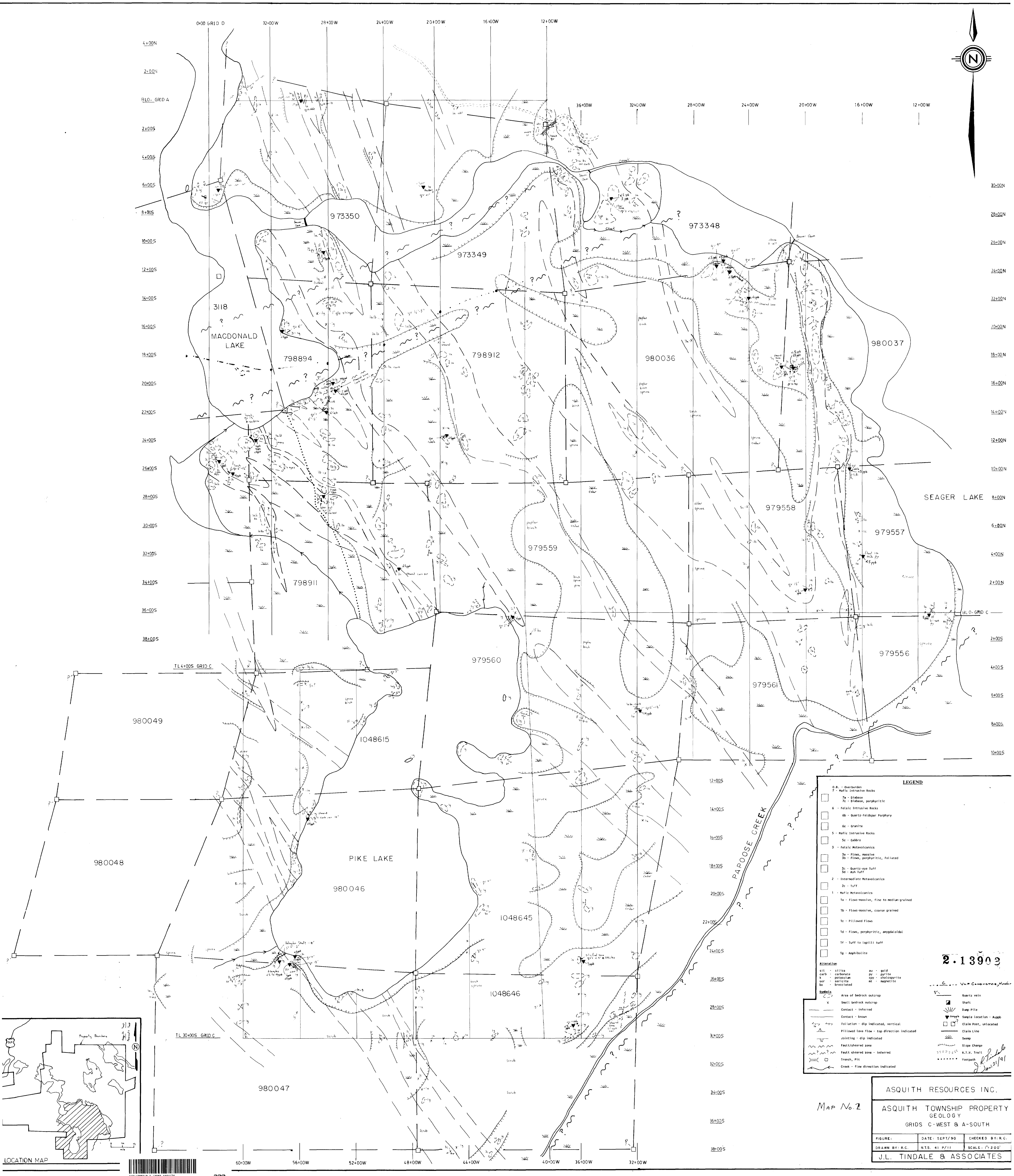
TOWNSHIP
ASQUITH
M.N.R. ADMINISTRATIVE DISTRICT
GOGAMA
MINING DIVISION
LARDER LAKE
LAND TITLES / REGISTRY DIVISION
SUDBURY

Ministry of Natural Resources — Ontario
Land Management Branch

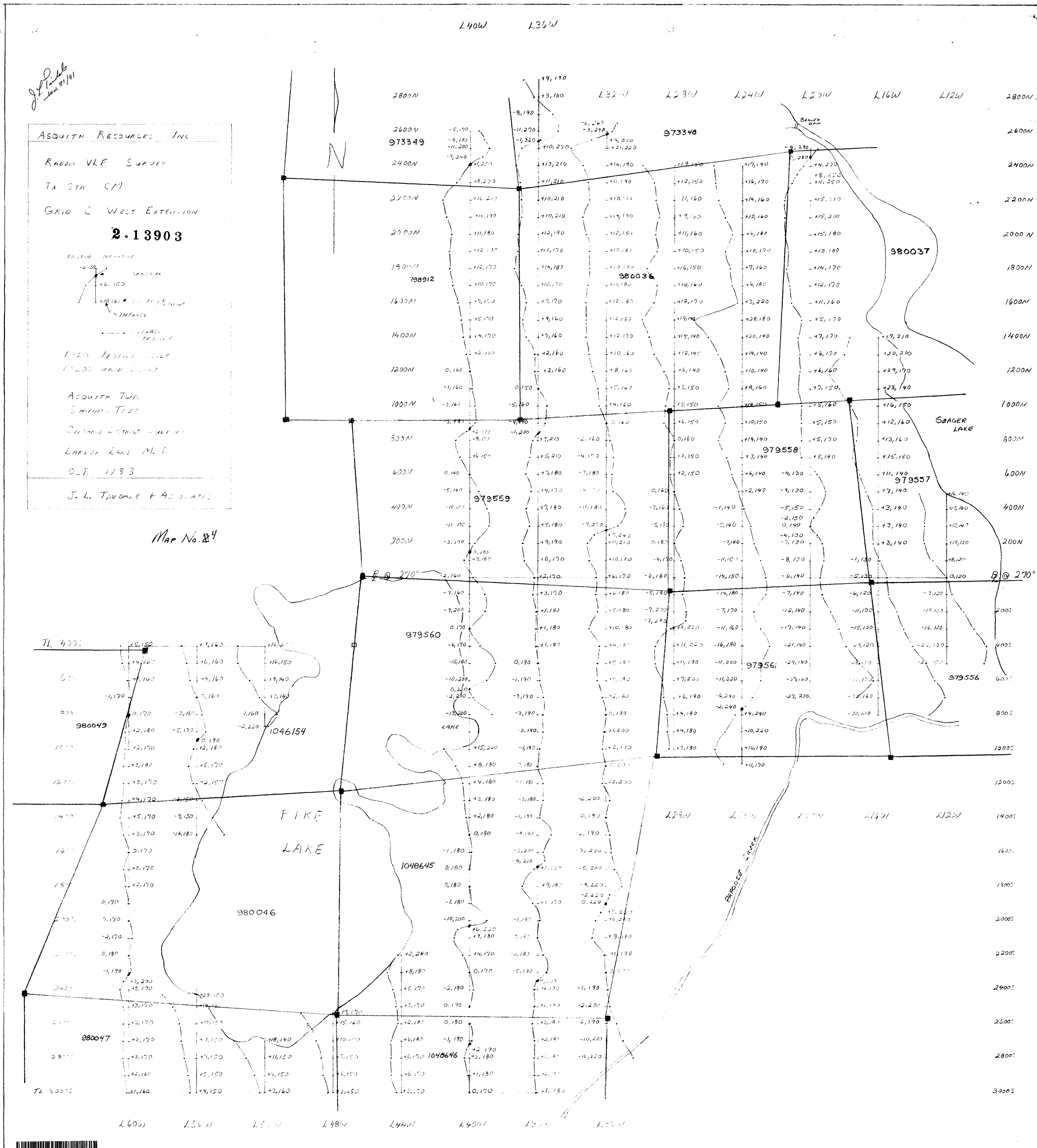
Date FEBRUARY, 1985
CIRCULATED FEB. 26, 1990

Number
G-3206

MacDonald Lake
973351
973352
973353
973354
973355
973350
973349
973348
TRS 3664
TRS 2461
980038
980037
980042
979557
979556
Joins To Map No 2
Seager Lake
A
ASQUITH RESOURCES INC.
LEGEND
[7] Mafic Intrusive Rocks
7a. Diabase
7b. Diabase, granophyric
7c. Diabase, porphyritic
7d. Olivine Diabase
[6] Felsic to Intermediate Intrusive Rocks
6a. Quartz Porphyry
6b. Quartz Feldspar Porphyry
6c. Granite, massive, fine to medium grained
6d. Aplite
6e. Syenite
[5] Ultramafic Intrusive Rocks
5a. Serpentinite
5b. Diorite
5c. Gabbro
[4] Metasediments
4a. Chert
4b. Sulfide Iron Formation
4c. Oxide Iron Formation
4d. Argillites
4e. Greywacke
4f. Arkose
[3] Felsic Metavolcanics
3a. Flows, massive
3b. Flows, porphyritic, foliated
3c. Tuffs
[2] Intermediate Metavolcanics
2a. Flows, massive
2b. Flows, pillowed
2c. Tuffs
2d. Agglomerate
[1] Mafic Metavolcanics
1a. Flows, massive, fine-medium grained
1b. Flows, massive, coarse-grained
1c. Pillowed Flows
1d. Flows, porphyritic
1e. Flows, foliated
1f. Tuffs
1g. Amphibolite
1h. Chlorite Schist
1i. Flows, silicified, carbonatized
1j. Pillow Breccia
1k. Trachyte
Alteration
sil - silica
carb - carbonate
k - potassium
ser - sericite
bx - brecciated
au - gold
py - pyrite
cpy - chalcopyrite
mt - magnetite
Symbols
Area of bedrock outcrop
Small bedrock outcrop
Contact - inferred
Contact - known
Foliation - dip indicated, vertical
Pillowed lava flow - top direction indicated
Jointing - dip indicated
Fault/sheared zone
Fault sheared zone - inferred
Trench, Pit
Creek - flow direction indicated
Quartz vein
Shaft
Dump Pile
Sample location - Auppb
Claim Post, unlocated
Claim Line
Swamp
Slope Change
A.T.V. Trail
Footpath
2.13903
Map No 1
ASQUITH RESOURCES Inc.
GEOLOGY MAP
BUCKINGHAM MINE PROPERTY
Grid 'A' & 'C'
Asquith Township
Shining Tree, Ontario
Scale 1" = 200'
Geology By: R.W.S.
Sept '88
41P11SW0210 2.13903 ASQUITH
210


MACDONALD LAKE
PIKE LAKE
SEAGER LAKE
PAPOOSE CREEK
3118
973350
973349
973348
798894
798912
980036
980037
798911
979559
979558
979557
979560
979561
979556
980049
1048615
980048
980046
1048645
1048646
980047
BLO - GRID A
BLO - GRID C
TL 4+00S GRID C
TL 30+00S GRID C
0+00 GRID D
LOCATION MAP
Property Boundary
LEGEND
O.B. - Overburden
7 - Mafic Intrusive Rocks
7a - Diabase
7c - Diabase, porphyritic
6 - Felsic Intrusive Rocks
6b - Quartz-Feldspar Porphyry
6c - Granite
5 - Mafic Intrusive Rocks
5c - Gabbro
3 - Felsic Metavolcanics
3a - Flows, massive
3b - Flows, porphyritic, Foliated
3c - Quartz-eye Tuff
3d - Ash Tuff
2 - Intermediate Metavolcanics
2c - Tuff
1 - Mafic Metavolcanics
1a - Flows-massive, fine to medium-grained
1b - Flows-massive, coarse grained
1c - Pillowed Flows
1d - Flows, porphyritic, amygdaloidal
1f - Tuff to lapilli tuff
1g - Amphibolite
Alteration
sil - silica
carb - carbonate
k - potassium
ser - sericite
bx - brecciated
au - gold
py - pyrite
cpy - chalcopyrite
mt - magnetite
Symbols
Area of bedrock outcrop
Small bedrock outcrop
Contact - inferred
Contact - known
Foliation - dip indicated, vertical
Pillowed lava flow - top direction indicated
Jointing - dip indicated
Fault/sheared zone
Fault sheared zone - inferred
Trench, Pit
Creek - flow direction indicated
VLF Conductor, Number
Quartz vein
Shaft
Dump Pile
Sample location - Auppb
Claim Post, unlocated
Claim Line
Swamp
Slope Change
A.T.V. Trail
Footpath
2.13903
Map No. 2
ASQUITH RESOURCES INC.
ASQUITH TOWNSHIP PROPERTY
GEOLOGY
GRIDS C-WEST & A-SOUTH
FIGURE:
DATE: SEPT/90
CHECKED BY: R.C.
DRAWN BY: R.C.
N.T.S. 41 P/11
SCALE: 1" = 200'
J.L. TINDALE & ASSOCIATES

2.13903
MAP No. 3
MacDonald Lake
973351
973350
973353
973354
973355
973348
798894
798911
980036
980037
980038
979558
979557
979556
See Map No. 4 For Coverage
A
Grid D
230


ASQUITH RESOURCES INC
RADEM VLF SURVEY
Tx STA CM
GRID C WEST EXTENSION
2.13903
ASQUITH TWP.
CHAPMAN TWP.
LARDER LAKE M.D.
OCT. 1983
J. L. TINDALE + ASSOCIATES
Map No. #4
N
L40W
L36W
L32W
L28W
L24W
L20W
L16W
L12W
2800N
2600N
2400N
2200N
2000N
1800N
1600N
1400N
1200N
1000N
800N
600N
400N
200N
973349
973348
980037
798912
980036
979558
979557
979559
979560
979561
979556
980049
1046154
1048645
980046
980047
1048646
SEAGER LAKE
PIKE
LAKE
PAPOOSE CREEK
BEAVER DAM
B.L. @ 270°
TL 400S
TL 3000S
200S
400S
600S
800S
1000S
1200S
1400S
1600S
1800S
2000S
2200S
2400S
2600S
2800S
3000S
L60W
L56W
L52W
L48W
L44W
L40W
L36W
L32W
L28W
L24W
L20W
L16W
L12W
240

14+00N
12+00N
10+00N
8+00N
6+00N
4+00N
2+00N
0+00 @ 90° "A" Grid
2+00S
4+00S
6+00S
8+00S
10+00S
12+00S
14+00S
16+00S
18+00S
20+00S
22+00S
24+00S
6+00N
4+00N
2+00N
0+00 @ 90° "C" Grid
2+00S
4+00S
6+00S
8+00S
10+00S
973353
973354
973355
973356
973348
D
(P) TRS 2407
(P) TRS 2461
(P) TRS 3664
A
B
980038
980039
980037
980040
980042
979557
979554
979556
979555
Seaver Lake
Joins To MAP No 2
[redacted]
Alteration
sil - silica
carb - carbonate
k - potassium
ser - sericite
bx - brecciated
au - gold
py - pyrite
cpy - chalcopyrite
mt - magnetite
Symbols
Area of bedrock outcrop
Small bedrock outcrop
Contact - inferred
Contact - known
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Jointing - dip indicated
Fault/sheared zone
Fault sheared zone - inferred
Trench, Pit
Creek - flow direction indicated
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Sample location - Auppb
Claim Post, unlocated
Claim Line
Swamp
Slope Change
A.T.V. Trail
Footpath

2.13903
L.1
Map No. 3
973353
973354
973348
A
B
D
980036
980037
980038
980039
See Map No. 4
For Coverage
979558
979557
979556
979555