



41P11SE0152 63.5501 ASQUITH

010

SUMMARY REPORT  
OF  
WORK PERFORMED ON THE SHINING TREE PROPERTY  
ASQUITH TOWNSHIP  
DURING 1988 - 1989 SEASON  
OF  
ASQUITH RESOURCES INC.

Toronto, Ontario  
July, 1989

J. L. Tindale & Associates Inc.

OM87-6-C-334



41P115E0152 63.5501 ASQUITH

TABLE OF CONT

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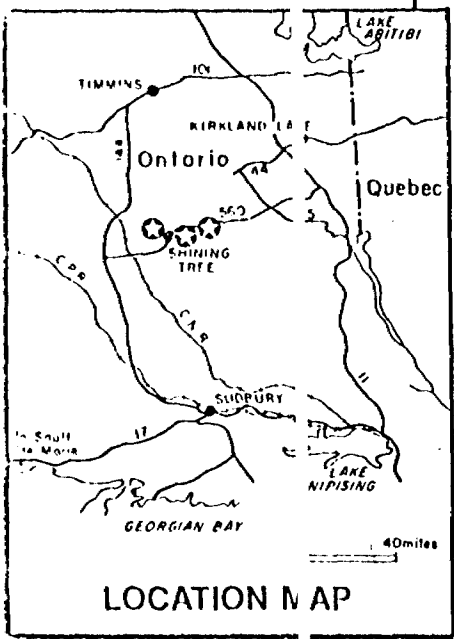
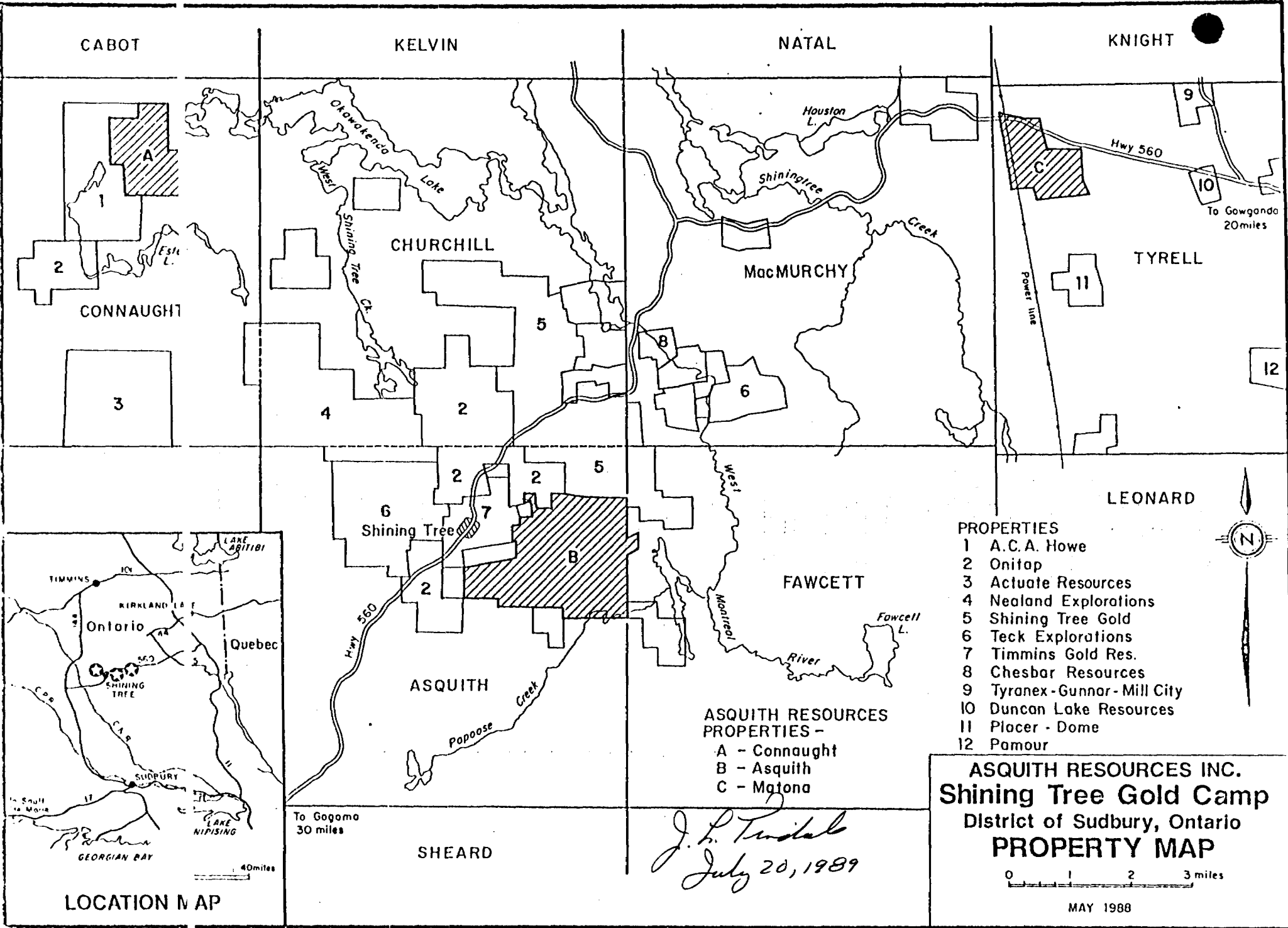
	<u>Page No.</u>
Summary	1
Preamble	2
Property Holdings	2
Location, Access, Topography	4
Review of Historical Data on Property	4
(a) Clarke Showing	5
(b) Buckingham Mine	5
(c) Holding Property	6
(d) Kubiak Property	6
(e) Hologden Mine Property	7
1988 - 1989 Program Results	7
(a) Geological Mapping	7
(i) The Clarke Sector	7
(ii) Buckingham Sector	8
(iii) Kubiak Sector	8
(b) Geophysical Surveys	9
Magnetometer Survey Data	9
Electromagnetic Surveys	10
(i) Clarke Showing Area	10
(ii) Westerly Claim Block	10
(iii) Buckingham Mine Sector	11
(iv) Holding Mine Sector	11
(c) Diamond Drilling	11
(i) Kubiak Program	11
(ii) Buckingham Program	12
Conclusions	14
Recommendations for 1989 Program	15
Cost Estimate 1989 Program	17
Bibliography	18

LIST OF FIGURES AND PLANS

Shining Tree Gold Camp - Location Map	Map A
Property Location Map	Map B
Buckingham - Holding Groups 1" = 10 chains	Map C
Location : Regional Geology Map	Map D
Location Plan of 1989 Drilling	Map E

THE FOLLOWING PLANS, SECTIONS AND LOGS ARE IN MAP FOLDER ATTACHED TO THIS REPORT:

200	Property Location Map	1" = $\frac{1}{4}$ mile
	Geology of Grid "D" - Clarke Area	1" = 200'
210	Geology of Grid "A", "C" - Buckingham, Kubiak Areas	1" = 200'
	Survey Plan of 1989 Diamond Drill Program	1" = 50'
220	Raden <sup>14</sup> VLF Survey Grids A & C (Profiles)	1" = 200'
230	Raden VLF Survey Grids A & C (Field Strengths)	1" = 200'
240	Raden VLF Survey Grids A, D & B (Profiles)	1" = 200'
250	Raden VLF Survey Grids A, D & B (Field Strengths)	1" = 200'
260	Raden VLF Survey Grid D (Extn) (Profiles)	1" = 200'
270	Raden VLF Survey Grid D (Extn) (Field Strengths)	1" = 200'
	Raden VLF Survey Grid C (Extn) (Profiles & Field Strengths)	1" = 200'
	Magnetometer Grids A & B	1" = 200'
	Magnetometer Grid C & Extn	1" = 200'
	Magnetometer Grid D (Extn)	1" = 200'
	Magnetometer Grids A & C	1" = 200'
	DDH Sections	1" = 50'
	Diamond Drill Logs (B89-1 - 21)	
	(K1 - 4)	



- PROPERTIES**
- 1 A. C. A. Howe
  - 2 Onitap
  - 3 Actuate Resources
  - 4 Nealand Explorations
  - 5 Shining Tree Gold
  - 6 Teck Explorations
  - 7 Timmins Gold Res.
  - 8 Chesbar Resources
  - 9 Tyranax - Gunnar - Mill City
  - 10 Duncan Lake Resources
  - 11 Placer - Dome
  - 12 Pamour

**ASQUITH RESOURCES  
PROPERTIES -**  
 A - Connaught  
 B - Asquith  
 C - Magona

**ASQUITH RESOURCES INC.  
Shining Tree Gold Camp  
District of Sudbury, Ontario  
PROPERTY MAP**



MAY 1988

*J. L. Tindal*  
July 20, 1989

## SUMMARY

1. Asquith Resources Inc. has acquired by staking and option a contiguous 72 claim block in Asquith Township near the village of Shining Tree in northeastern Ontario.
2. Previous work upon the property has located a number of gold occurrences, details of which are contained within publications of the Ontario Department of Mines and others prior to 1940.
3. A systematic exploration program encompassing linecutting, geological mapping, geophysical surveying and diamond drilling was commenced over the property during 1988.
4. Geological mapping of the eastern portion of the property significantly increased the Company's understanding of the Clarke, Buckingham and Kubiak gold occurrences.
5. Geophysical surveying, VLF and Magnetometer, established a number of unresolved conductors which await further evaluation.
6. Diamond drilling consisted of four holes (1,392 feet) on the Kubiak section and twenty-one holes (7,560 feet) on the Buckingham sector. Encouraging values were obtained from the Buckingham area with the mineralization localized within strong east-west striking, carbonate-rich, quartz-filled shear zones which were subsequently traced over strike lengths of five hundred feet. Three of these structures have been partially explored. Coarse gold is present within the quartz fillings.
7. The discovery of these strong structural controls at the Buckingham has encouraged the Company to pursue other areas of reported carbonate-rich shearing on the property to determine if other potential deposits may exist within similar geological environments.
8. A program to further evaluate the Buckingham and Clarke occurrences, and to evaluate the western portion of the property is presented for the 1989 field season. This work will include geological mapping; bulldozer stripping, washing and sampling; and a continuation of diamond drill testing of significant gold occurrences.
9. An estimate of costs totalling \$250,000 has been prepared to carry out this work.

PREAMBLE

Asquith Resources Inc. with offices at Suite 907, 110 Erskine Ave., Toronto, Ontario M4P 1Y4, was formed in 1986 to hold, acquire and develop various claim holdings in the Shining Tree area of northeastern Ontario. Since that time the Company has assembled a contiguous seventy-two claim group in Asquith Township upon which numerous gold occurrences have been reported in past exploratory ventures, most of which took place prior to 1940 and have been reported upon in Ontario Department of Mines' publications of the 190's and 1930's.

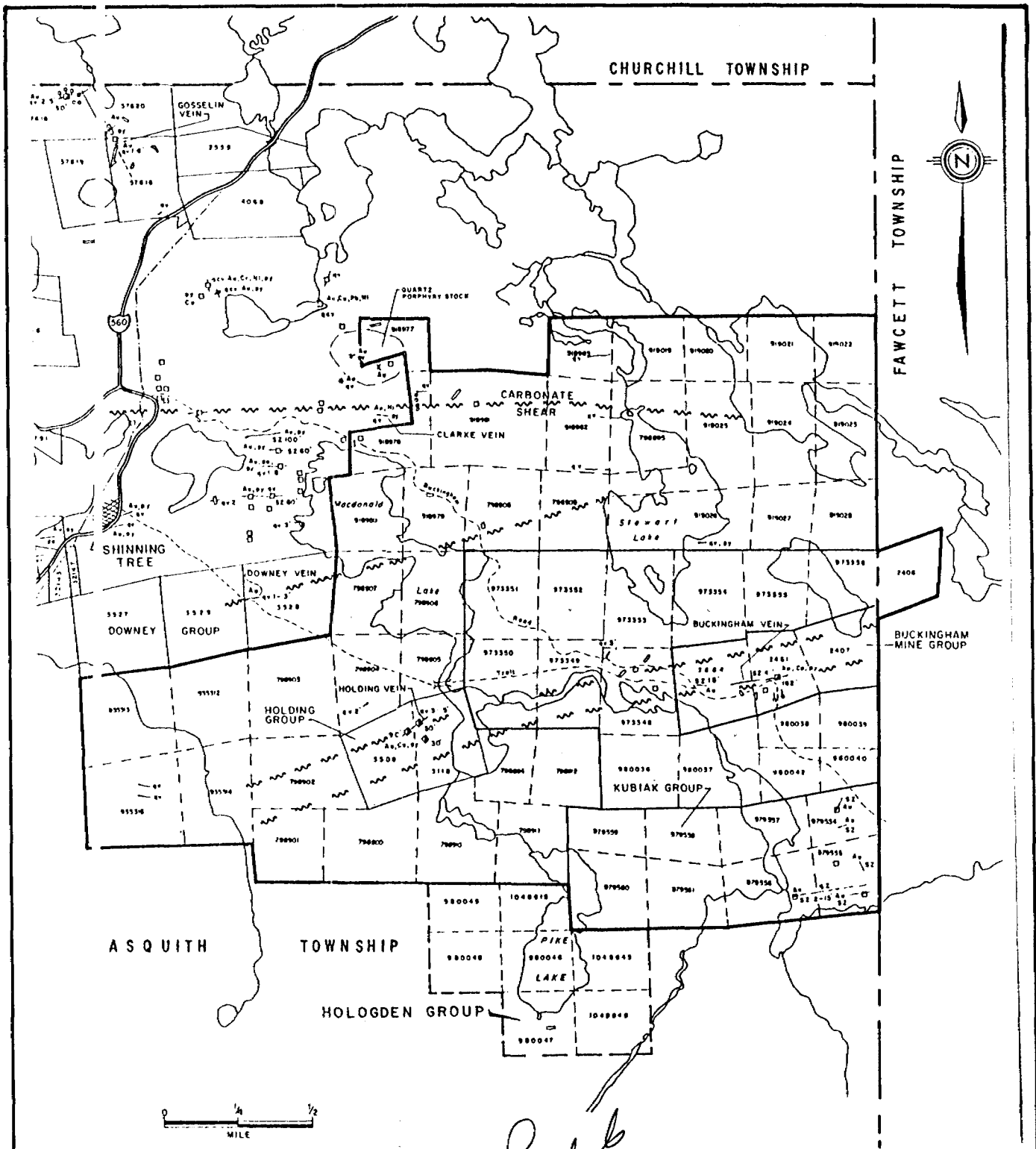
The Shining Tree Gold Camp, as it has been referred to in literature over the years, has been the focus of a number of "mini-rushes" based on findings of some spectacular gold occurrences. These outbursts of activity lead to many fanciful developments, wild speculations and ownership disputes which were quickly followed by a cessation of work and loss of investor confidence in the area.

It is Asquith's contention that while concentrated exploration efforts have been expended on a few small claim holdings, there has never been a systematic study carried out over a large block of geologically favourable ground which contains known gold occurrences in order to develop a rational understanding of the geological and structural controls which have emplaced the gold mineralization in this locality. The Company believes it has made great strides in this direction during the past exploration season. A description of the work carried out follows with conclusions drawn and a program for 1989 recommended with relevant cost estimates.

This report is structured to justify a submission made for an OMEP grant on the 1988 - 1989 work program.

PROPERTY HOLDINGS

Asquith Resources Inc. holds a contiguous 72 claim group in northeastern Asquith Township, Larder Lake Mining Division, District of Sudbury, Ontario. Acquisition has been by staking and option agreements as outlined in the following table. Except for the optioned leased claims all are recorded in the Company name.



**LEGEND**

- Quartz Vein
- z - Shear Zone
- ⊞ 50' Shaft, depth in feet
- ~ Faults & Major Shear Zone
- Pit
- ▭ Trench
- ⊙ D.D.Hole

*J. P. Tindal*  
*July 20, 1989*

**ASQUITH RESOURCES INC.**  
**PROPERTY LOCATION MAP**  
**ASQUITH TOWNSHIP**  
 Revised Mar., 1989  
 MAY 1987 FIGURE 2

Table No. 1

## Claim Holdings of Asquith Resources Inc. in Asquith Township

<u>Claim No. s</u>	<u>Total Claims</u>	<u>Recording Date</u>	<u>Assessment Recorded</u>
L918977-81	7	Oct. 2, 1986	120 - 140 days
L935312-11	4	Feb. 2, 1987	120 days
L919019-018	10	Feb. 2, 1987	90 - 160 days
L979554-61	8	Apr. 2, 1987	110 - 120 days
L973348-51	7	May 25, 1987	100 days
L980036-41	5	June 5, 1987	60 - 100 days
L980042	1	June 5, 1987	100 days
L973355-51	2	Aug. 11, 1987	100 days
L798894	1	Aug. 16, 1984	200 days
L798895	1	Sept. 4, 1984	200 days
L798900-11	13	Aug. 16, 1984	200 days
TRS2407, 2461, 3664, 2406	4	Leased Claims (Buckingham)	
TRS3508, 318	2	Leased Claims (Holding)	
L980046-41	4	Feb. 11, 1988	100 days
L1046154	1	Sept. 12, 1988	100 days
L1048645-16	2	Nov. 8, 1988	60 days
TOTAL CLAIMS	72		

Twenty-one of the above claims are subject to option agreements which are summarized below.

(a) Yoder Option; claims L798894-95, L798900-12, fifteen claims in all in which Asquith has earned a 100% interest subject to a 2% NSR royalty payable to the vendors from production.

(b) Buckingham Option; leased claims TRS2406-7, 2461, 3664, four leased claims in Asquith and Fawcett Townships, in the Sudbury Mining Division, the Buckingham Option, for \$12,000 cash and the payment of further option payments of \$40,000 and the expenditure of \$400,000 on property exploration and development over a three year period as follows to acquire a 100% interest:

(i) on or before December 31, 1987, an option payment of \$15,000 (paid) and the expenditure of \$80,000 on or before June 30, 1988.

(ii) on or before December 31, 1988, and subsequently extended to February 8, 1989, an option payment of \$25,000 (paid) and the expenditure of a further \$ 20,000 by the same date (work performed).

(iii) on or before December 31, 1989, a further expenditure of \$200,000 and the granting of a 2½% net smelter royalty on all production from the property. The Company has the right to reduce the royalty to 1½% by the issuance of 100,000 shares. The vendor has the right to cause the Company to



purchase back all or any portion of the 2½% net smelter royalty at the rate of 10,000 shares for each 1% of the royalty.

(c) Holding Option; leased claims TRS3508,3118, two claims in Asquith Township, for a cash payment of \$5,000 and further option payments of \$40,000 and the expenditure of \$450,000 on exploration and development work over a four year period as follows to acquire a 100% interest:

(i) on or before May 28, 1988, a cash payment of \$10,000 (paid) and the expenditure of \$50,000 which has been extended to May 28, 1989.

(ii) on or before May 28, 1989, a cash payment of \$15,000 and the expenditure of \$100,000.

(iii) on or before May 28, 1990, a cash payment of \$15,000 and the expenditure of \$150,000.

(iv) on or before May 28, 1991, the expenditure of \$150,000.

The vendor shall also be entitled to a 2½% net smelter royalty on all minerals produced from the property.

#### LOCATION, ACCESS, TOPOGRAPHY

The subject property is approximately 60 miles south of Timmins and north of Sudbury and is accessible by Highway 560, an east-west partially paved route between Highway 144 and 11 on the west and east respectively.

The eastern portion of the property is reached by the old Buckingham Mine road, while the western portion is accessed by the Holding Mine road. Both routes are suitable for ATV travel. Logging operations over the property are scheduled for the fall of 1989 which will improve access markedly.

The topography is typical of pre-Cambrian terrain with moderate relief in areas of north-trending ridge forming diabase dikes. The lower portions are covered with cedar and spruce swamp. Lakes occupy approximately 20 per cent of the property. Overburden is light, possibly a maximum of one hundred feet in the lower areas.

The village of Shining Tree, population 50, has a general store, gas station and several year round tourist camp operations providing accomodation.

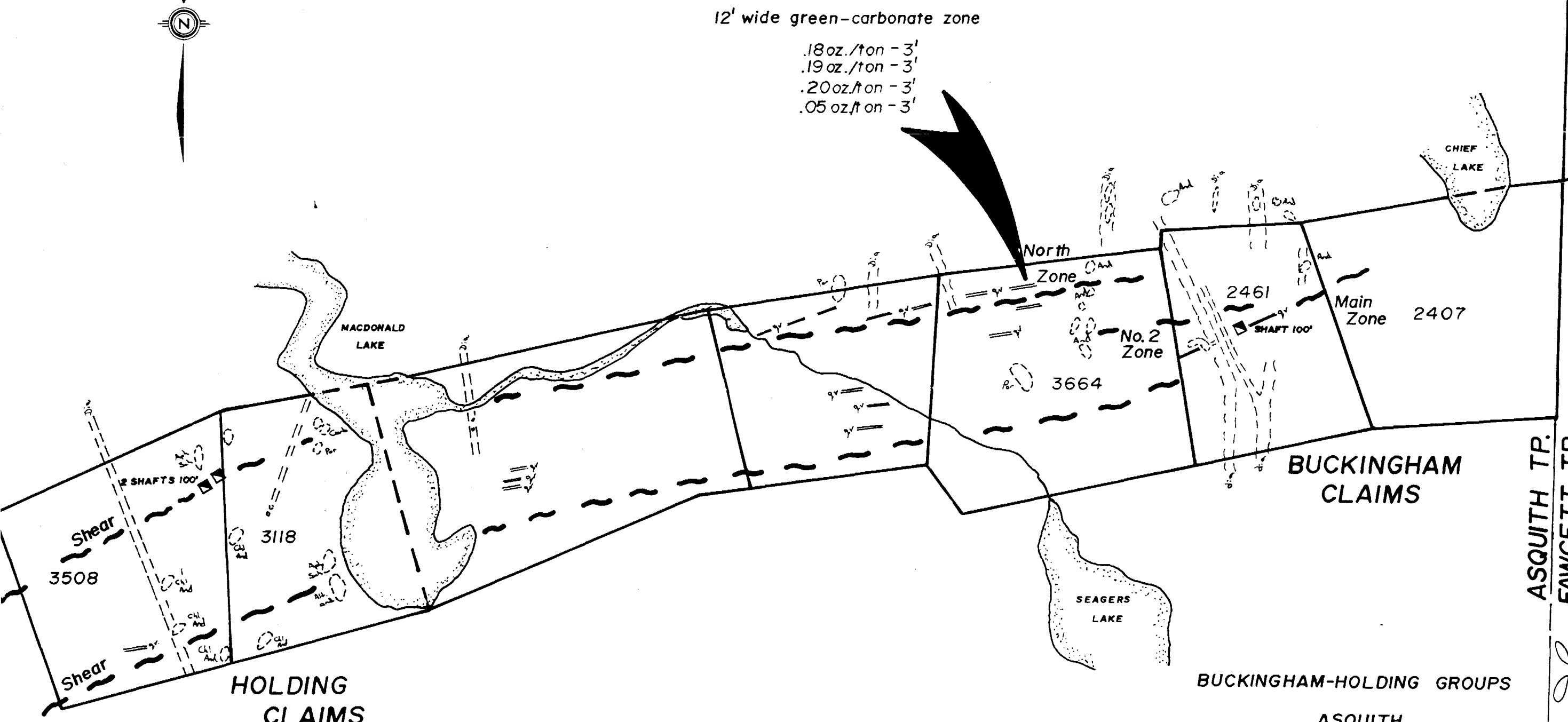
#### REVIEW OF HISTORICAL DATA ON PROPERTY

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



12' wide green-carbonate zone

- .18 oz./ton - 3'
- .19 oz./ton - 3'
- .20 oz./ton - 3'
- .05 oz./ton - 3'



2406

CHIEF LAKE

North

Zone

2461

Main Zone

2407

SHAFT 100'

No. 2 Zone

3664

MACDONALD LAKE

BUCKINGHAM CLAIMS

ASQUITH TP.  
FAWCETT TP.

3508

3118

HOLDING CLAIMS

SEAGERS LAKE

BUCKINGHAM-HOLDING GROUPS

ASQUITH AND FAWCETT TWPS.

SHININGTREE AREA  
ONTARIO

*J.P. Timbale*  
July 20, 1989

from:  
D.K. Burke

FIGURE 5

Scale: 1 inch = 10 chains

the Asquith property. These showings are still referred to by their historical names by Asquith when referencing various portions of the claim group.

(a) Clarke Showing

This was one of the original showings in the Shining Tree Camp being first reported on by R.B. Stewart in 1912 for the Ontario Department of Mines (O.D.M.) A wide zone of green carbonate, mineralized with pyrite and injected with a network of quartz stringers and veins revealed gold values on panning the rusty outcroppings stripped along a length of four chains. Along the north of the carbonate zone a ridge of granite porphyry was located. Proceeding westerly from the Clarke similar green carbonate-rich sheared gold bearing showings were reported on the Moore MacDonald, Cryderman and Gibson claims by P.E. Hopkins in 1920 for the O.D.M.

These old reports indicate the carbonate structure has been traced westerly approximately 1.5 miles to the shore of West Shiningtree Lake. It is noteworthy that this strong structural break has not been traced eastward where it passes into low swampy ground. Also, since the early part of this century little or no work has been recorded on this break which is an obvious exploration target and the object of Asquith's efforts along the northern portion of their property holdings.

(b) Buckingham Mine

This occurrence was first reported on by P.E. Hopkins in 1920 and later by L.L. Finley in 1926, and G.B. Langford in 1927 all for the O.D.M. A Prospectus of Buckingham Mines Limited published in the late 1920's and letters from Doug as A. Mutch, manager of the property in 1929 assist in piecing together the early history of the property. Later examination reports by D.K. Burk 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 Ltd. 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.B. 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.

(c) Holding Property

P.E. Hopkins in 1920 reported on this discovery made in 1912 when gold values were obtained in a series of parallel quartz veins in a hornblende schist. Subsequently an inclined shaft (70°) was sunk to 50 feet and a drift put out on the 30 foot level from which rich gold samples were obtained. Later work, also pre-1920, consisted of the sinking of a second shaft to 90 feet some 35 feet west of the initial entry and a third put down 100 feet and located south of the above mentioned, presumably to intersect the veins at depth.

D.K. Burke mentions conversations he had in 1936 with men in Shining Tree who actually worked on the Holding Property, which confirmed the richness of the occurrence in the underground workings.

Since these early days there is no record of work carried out on the property.

(d) Kubiak Property

P.E. Hopkins in 1920 reported much trenching and pitting on this property south of the Buckingham. Visible gold was noted in bluish-grey quartz veins contained within hornblende, chlorite and carbonate schists. Similarly in 1934 H.C. Liard 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.

(e) 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.

1988 - 1989 PROGRAM RESULTS

Programs of geological mapping, geophysical surveying and diamond drilling were carried out over the eastern portion of the property during the season. This work partially evaluated the Clarke, Buckingham and Kubiak sectors of the property. These programs are described in the following.

(a) Geological Mapping

K.W. Johnson, geologist, mapped the central or Buckingham sector of the block and J.L. Tindale, geologist, mapped the northern (Clarke) and southern (Kubiak) sections. All mapping was at a scale of 1 inch = 200 feet.

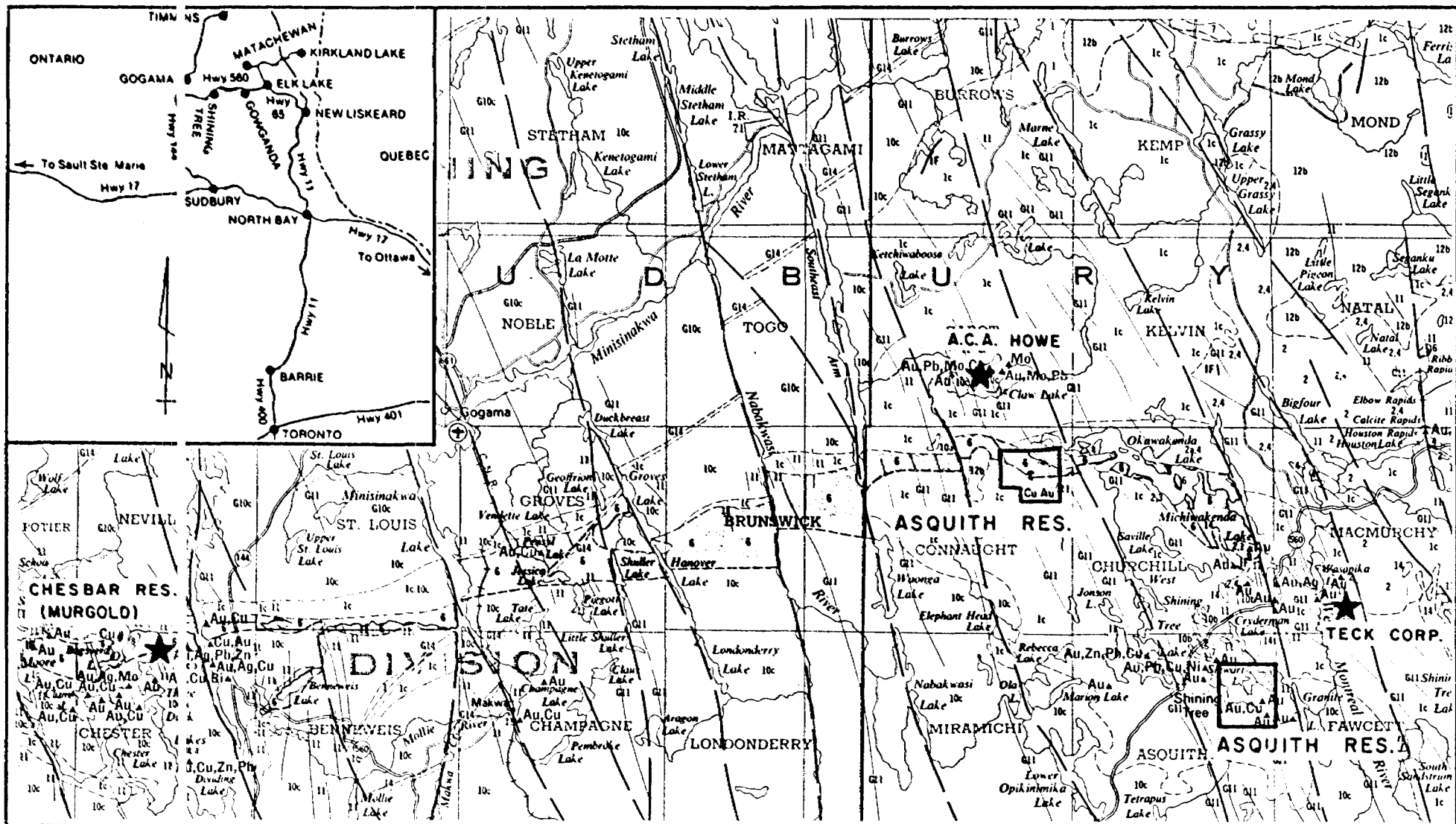
(i) The Clarke Sector

Mapping of this northern section was carried out over lines oriented in a north-south direction spaced at 400 foot intervals along a baseline laid out along the north shore of MacDonald Lake and extending easterly to the western shore of Stewart Lake.

Country rocks were found to be fine to medium grained, dark green, westerly trending andesitic flows, moderately sheared to massive, over much of the area. These have been cut by north to northwesterly trending diabase dikes which form pronounced ridges especially along the eastern shore of MacDonald Lake.

Gabbroic, medium to coarse grained, dark green rocks occur over a portion of northeastern part of the block. These rocks are relatively fresh and unaltered and may represent a late intrusive into the andesitic country rocks.

The most interesting rock type noted and perhaps having economic significance is a quartz-feldspar porphyry unit located at intervals along the northern portion of the block. This unit is rusty weathering, coarse grained, pink to brick red in colour and is often well sheared. Pyrite is disseminated throughout the unit. A 300' x 200' stripped area exposes the



**LEGEND**

- |                                  |                                      |
|----------------------------------|--------------------------------------|
| <b>10</b> Felsic Intrusive Rocks | <b>2</b> Felsic Volcanics            |
| <b>6</b> Metasediments           | <b>1</b> Inter./ Mafic Metavolcanics |

From O.D.S. Map 2205

*J. L. Tindal*  
July 20, 1989



**ASQUITH RESOURCES INC  
LOCATION & REGIONAL  
GEOLOGY MAP**

MARCH, 1987

porphyry in contact with sheared and carbonate-rich flow rocks in the south-east corner of claim L918977. Carbonate alteration is pervasive in both porphyry and volcanic rocks, with bright green fuchsite lining the shear planes. Numerous overgrown trenches and pits are present within the porphyry and along its contacts. Grab samples returned low gold values from the altered rocks which was disappointing as the degree of alteration, and quality of pyrite mineralization makes the zone a tempting target. A second band of porphyry was located further to the east which is probably an extension to that described above.

Partial coverage of the Clarke claim was included in the mapping but the original gold showing was not located, perhaps being overgrown and missed.

(ii) Buckingham Sector

A central baseline from MacDonald Lake on the west to the Township boundary on the east, the "A" baseline, served as the control for a north-south grid system at 400 foot line spacing excepting over the Buckingham Mine sector where 200 foot line spacing was utilized.

Country rocks are east-west trending mafic to intermediate flow rocks, massive to pillowed in part, foliated in part and containing quartz veins and stringers occasionally with accompanying pyrite. Tourmaline is common in the veining.

North trending diabase dikes transect the above flow rocks.

Along the steep side hill above Seager Creek several outcrops of interbedded, steeply dipping sediments and oxide iron formation were noted trending in a northwesterly direction. These are the only sedimentary units noted to date on the property.

Sampling of pits and trenches immediately adjacent to the Buckingham Shaft returned assays from trace to 0.72 ounces of gold per ton. A zone of blue quartz veining on line 8E approximately 800 feet northwest of the Buckingham Shaft also returned erratic gold values. Visible gold was noted with some of the quartz. Fine pyrite is noted in the wall rocks but rare in the quartz veins. Carbonate alteration though noted occasionally adjacent to veins did not appear to be common during the mapping.

(iii) Kubiak Sector

A central east-west baseline east of Seager Lake and extending to the eastern property boundary served as the control for a north-south grid of cut lines at 200 foot intervals. A forest fire in the spring of 1988 destroyed

a portion of this grid.

Rocks underlying this sector are predominantly mafic to intermediate flows, foliated in part, striking east-west and are dark green in colour. North trending diabase dikes bisect the country rocks, forming ridges notable along the eastern boundary.

The claims appear to have been subjected to extensive prospecting given the quantity of trenches and pits scattered over the area mapped. Visible gold was noted in a series of grey to white quartz veins within a sheared 25 foot wide host of volcanics along the shore of Papoose Creek south of Seager Lake. This zone has been traced intermittently with trenches to the east for approximately 1,000 feet and was subsequently drilled by the Company later in the year.

The Kubiak Sector has a great number of bluish quartz veins many over a foot wide. Analysis of these veins failed to return economic values except from the above noted where visible gold was seen. One of the blue quartz occurrences was tested by Onitap in 1984 by a drill hole just north of Papoose Creek, the collar of which was located and plotted.

#### (b) Geophysical Surveys

During the late winter and early spring of 1988 VLF and Magnetometer surveys were run over the majority of the property holdings of Asquith Resources Inc. in Asquith Township. A system of baselines and grid lines cut by Geosphere Consultants in 1987 was utilized for control. Extensions of this existing grid were made over lake ice during the winter of 1988 to complete coverage.

Acquisition of the Hologden claims around Pike Lake during the summer of 1988 led to the cutting of an eight mile grid by Loma Exploration of Val d'Or during August. This grid was subsequently covered with VLF and Magnetometer survey.

Maps illustrating the geophysical coverage are enclosed with report, many having been filed for assessment credits. A broad discussion of the results follows.

#### Magnetometer Survey Data

Readings were generated utilizing a Gem Systems Model GSM-8 proton magnetometer with corrections for diurnal drift made by averaging results obtained over a two hour maximum interval based on the looping procedure utilized.



The surveys served to outline the trace of the numerous diabase dikes which trend across the property in a north to northwesterly direction. Breaks in these trends may be interpreted as fault traces. Variations in strike may be caused by deflections of the late stage dikes against older more resistant country rock. Aside from the diabase dikes the property is magnetically inactive and will require compilation of geological mapping and electromagnetic surveying to determine if subtle changes in magnetic intensity are meaningful.

#### Electromagnetic Surveys

Surveys were run utilizing a Crome Radem unit tuned to Cutler, Maine, with dip angle and field strength recorded.

A significant number of anomolous responses were recorded. In the main these are characterized as sinuous east-west or north-south trending features occurring along the axis of lakes or in low swampy ground and as such stand a good chance of being due to overburden-bedrock contact effects. Aside from these suspect occurrences there are a number of responses which have been selected for further examination due to their geological significance or geophysical signature. These are discussed individually in the following.

##### (i) Clarke Showing Area

A zone of high field strengths generally associated with an east-west cross over series occurs across the northern portion of claims L918978 and L918981. Geological mapping of this area indicates the anomolous response occurs at or near the south contact of a quartz-feldspar porphyry intrusive which has been sheared and altered and is reported to carry gold mineralization. Stripping and/or diamond drilling is recommended to test this zone which may be a mineralized carbonate-rich shear.

##### (ii) Westerly Claim Block

A sinuous east-west trending conductor extends across the four claim block (L9.5313 et al) and exhibits moderate to high field strength responses. The zone mirrors the trend of a small creek bed in the area of B.L.36W to B.L.26W and may indicate a topographic zone of weakness due to shearing and/or faulting. The strongest electromagnetic responses were derived from L36W+3S through to L28W+3S and weakened in response further to the east where magnetic data suggests the presence of a northwest trending diabase dike. No magnetic responses are indicated coincident with the conductive zone. Geological mapping planned for the summer of 1989 may further evaluate the validity of this feature.

(iii) Buckingham Mine Sector

A series of east-west striking conductors with corresponding high field strengths occur to the south of the mine area from 14E to 24E at approximately 12S. This string of anomalies lies just south of the area drilled during the 1988-1989 program and was not tested accordingly. The conductors appear to cross known north striking diabase dikes with little interruption and are located in low swampy ground.

A second zone of high field strengths with strong conductors appears to parallel Seager Creek west of its entry to Seager Lake. Shearing is evident in a sedimentary sequence along the north side of the creek with isolated outcrops showing oxide facies iron formations which may account for this anomalous effect.

Both of these zones are deserving of further examination either by stripping or drill testing.

(iv) Holding Mine Sector

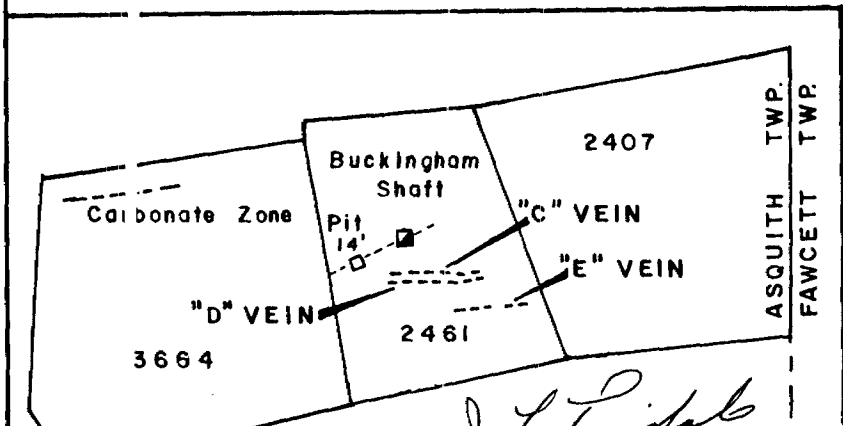
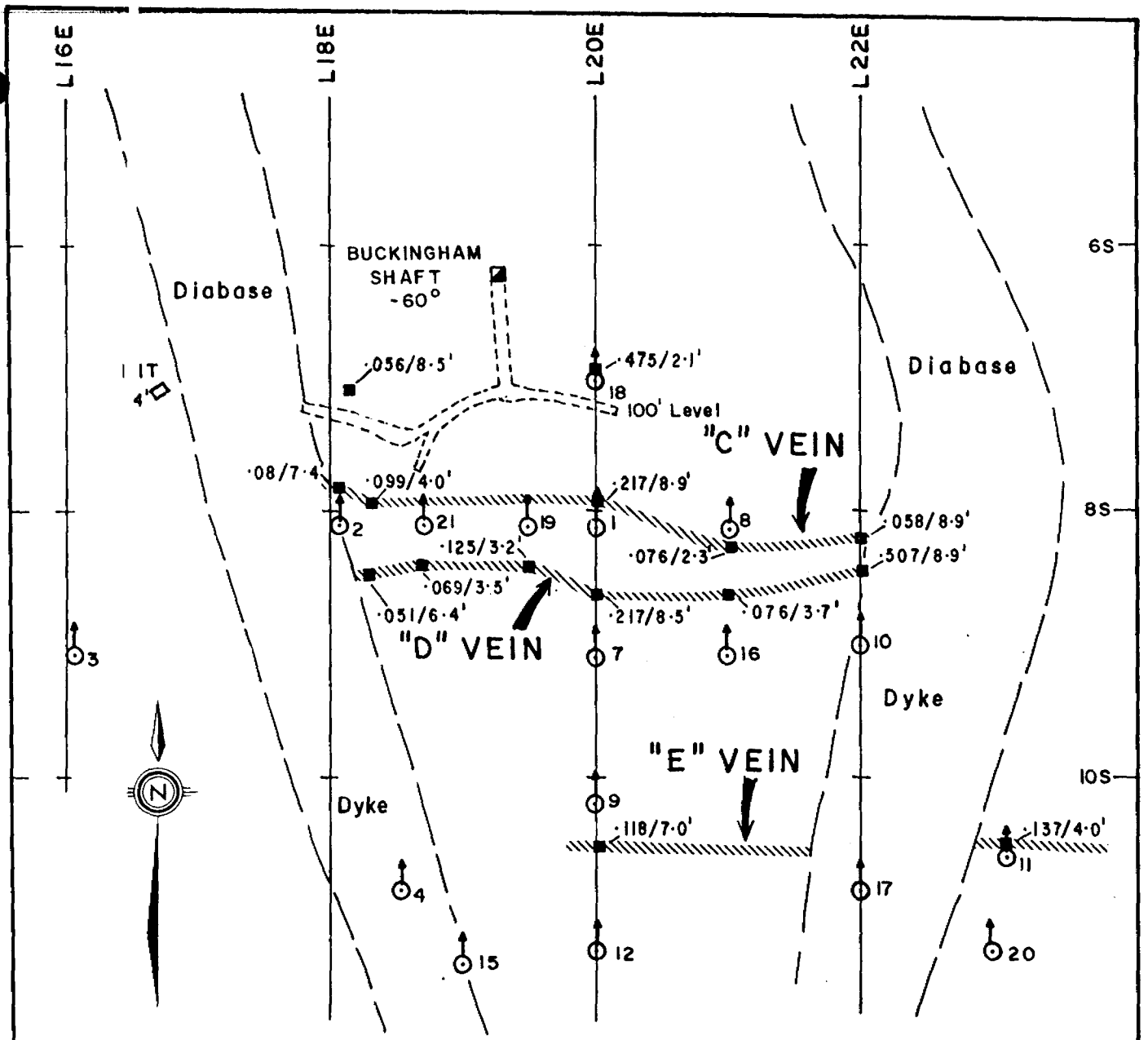
A southwest striking series of weak to moderate conductors with similar intensity field strengths trend across the area west of MacDonald Lake commencing along the southern boundary of the Holding claims. Surface examination of this long conductor is required and will be carried out in conjunction with geological mapping planned for the area during 1989. It is noteworthy that this long conductor appears to line up with a similar feature east of MacDonald Lake but considered to be mirroring Seager Creek overburden effects. This may in fact be a major structural break.

(c) Diamond Drilling

During January and February 1989 diamond drilling was initiated on the property. Initial drilling was carried out on the Kubiak area followed by a more prolonged effort on the Buckingham property. These drilling programs are discussed individually in the following.

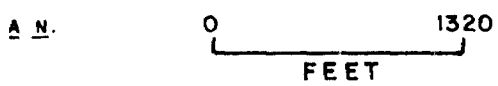
(i) Kubiak Program

Four holes totalling 1,392 feet were drilled on claims L979555-56 to test a strong quartz filled shear zone striking approximately east-west from a pitted area along Papoose Creek. Results were disappointing as the intensity of shearing and quartz veining appeared to be much less than that encountered in surface outcrops. Accordingly assay values were low, the best being 0.18 ounces of gold per ton across a width of 1.0 feet in hole No. 4. Hole No. drilled immediately below the pit on line 4W returned 0.069 ounces



*J.L. Tindale*  
 July 20, 1989

**BUCKINGHAM CLAIMS**



**LEGEND**

- D.D. Hole Collar
- D.D.H. Intersection
- Au oz/Ton/Feet
- Gold Vein Trace at 100 ft. Horizon



ASQUITH RESOURCES INC.

ASQUITH TWP. AREA - ONT.

**LOCATION PLAN  
 OF 1989 DRILLING**

March, 1989

J.L. Tindale

of gold per ton across 4.0 feet. No further testing is recommended for this particular zone on the Kubiak property.

(ii) Buckingham Program

During January and February 1989, 21 holes totalling 7,560 feet were drilled on the Buckingham property.

As illustrated in the accompanying map, the drilling outlined the presence of at least three parallel gold bearing shear zones enclosed in carbonate rich intermediate volcanic host rocks. These zones trend east-west across a drilled distance of approximately 500 feet before being interrupted by north-trending diabase dikes. Preliminary drilling to the east indicates the zone may continue in this direction. The western extension have not been looked for as yet.

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

The new zones have been named "C" through "E" from north to south and dip to the south at approximately 65°. They are easily traceable due to their intensely sheared character, green carbonate alteration, and the presence of bluish grey quartz either as major veins or as small infillings along the shear planes. Visible gold has been noted in both types of quartz. Listed in the following tables are intersections on the "C", "D", and "E" zones.

TABLE NO. 1

Intersection on "C" Zone Structure

<u>Hole No.</u>	<u>Footage</u>	<u>Width</u>	<u>Assay (Ounces/T.)</u>
B89-1	87.0 - 95.9	8.9	0.217
B89-2	114.6 - 122.0	7.4	0.080
B89-2A	113.4 - 121.0	7.6	0.063
B89-4	258.0 - 262.0	4.0	0.099
B89-8	47.0 - 51.3	4.3	0.063
B89-10	119.5 - 123.7	4.2	0.058

TABLE NO. 2

## Intersection on "D" Zone Structure

<u>Hole No.</u>	<u>Footage</u>	<u>Width</u>	<u>Assay (Ounces/T.)</u>
B89-4	228.5 - 234.9	6.4	0.051
B89-7	88.5 - 97.0	8.5	0.217
B89-10	85.6 - 94.5	8.9	0.507
B89-12	225.6 - 256.1	0.5	0.544
B89-16	92.0 - 95.7	3.7	0.076
B89-19	53.8 - 57.0	3.2	0.125
B89-21	25.5 - 29.0	3.5	0.069

TABLE NO. 3

## Intersection on "E" Zone Structure

<u>Hole No.</u>	<u>Footage</u>	<u>Width</u>	<u>Assay (Ounces/T.)</u>
B89-11	43.0 - 44.6	4.0	0.137
B89-15	193.5 - 199.5	6.0	0.070
B89-9	32.3 - 39.3	7.0	0.118
B89-20	114.5 - 118.3	3.8	0.088

A fourth zone is known to exist on the property, this being the Buckingham zone which lies to the north of the above described. This zone, characterized by a grey white quartz vein, does not appear to be associated with a strong carbonate shear but does carry promising gold values as illustrated in the following table No. 4.

TABLE NO. 4

## Intersection on Buckingham Vein

<u>Hole No.</u>	<u>Footage</u>	<u>Width</u>	<u>Assay (Ounces/T.)</u>
B89-1	130.0 - 138.4	8.4	0.275
B89-2	168.5 - 174.5	6.0	0.042
B89-2A	197.0 - 205.5	8.5	0.046
B89-9	283.0 - 285.4	2.4	0.437
B89-18	64.5 - 66.6	2.1	0.475

The Buckingham vein was partially developed during the 1920's by an inclined shaft to the approximate 100 foot level and by 300 feet of lateral work. High grade gold has been reported from the surface and underground workings on this occurrence.

Two holes, No.'s 5 and 6, were drilled to test a zone of bluish quartz veins located on line 8E at approximately 5S. The zone appears to weaken at depth and along strike and though shearing is present in the host rocks, alteration is weak and assay results were below economic interest.

The Buckingham Program has returned some very encouraging results which are deserving of a followup program to attempt to extend and expand upon these results. It is also important to note that carbonate alteration associated with these findings has been reported in other sections of the Asquith property and a thorough testing of these occurrences appears warranted in the belief that similar zones of mineralization may have been emplaced under similar geological and structural conditions.

Visible or coarse gold seems to be a critical ingredient of the Buckingham findings. The frequency of these occurrences and thus the overall quantity of this coarse gold must be evaluated to assist in determining the economics of these promising deposits.

#### CONCLUSIONS

The Company has reached the conclusion, based on current results, that geological and structural conditions exist on its Asquith Township property of sufficient magnitude to host a mineable deposit of gold mineralization. This conclusion has been reached as a result of encouraging drill results on its Buckingham property, and the resultant realization that shear controlled quartz veining accompanied by intense carbonate-rich alteration is the locus of significant gold mineralization and that these zones have lateral and vertical dimensions and a degree of continuity which may enable the development of tonnages sufficient to support a mining operation. Notwithstanding the above, coarse free gold is an important factor in these findings, and must be addressed in any further evaluation of the findings at the Buckingham and probably at any other development upon the property within the above noted geological scenerio.

Carbonate-rich shearing and reported gold occurrences have been reported at the Clarke and at other locations upon the Asquith property. These are deserving of a thorough testing similar to that carried out at the Buckingham to evaluate the depositional characteristic present and to determine if they are comparative geologically, structurally and mineralogically.

The Company recognizes it is in the early stages of development on its comparatively large property holdings. However, the realization that strong structural features and accompanying alteration exist which exhibit a controlling factor to the deposition of gold mineralization, and that these controls have dimensions which may contain sizeable tonnages is a meaningful breakthrough to exploration and development potential of the property. Rather than chasing single

vein deposits with erratic pockets of high-grade gold, the Company now has a model on which to base its future endeavours in the area which connotes much larger and more consistent features and thereby increases the chances of successfully developing a mineable deposit.

#### RECOMMENDATIONS FOR 1989 PROGRAM

(1) A program of bulldozer stripping, washing and sampling is required to evaluate the surface expression of the "C", "D" and "E" vein structures at the Buckingham Mine area. As an assist to the sampling it may be necessary to "freshen up" the outcrop trace of these zones by pitting and trenching across the width of the structures utilizing a plugger and blasting powder. This program will serve three valuable purposes in evaluating the known occurrences. It will give an accurate reading on the attitude of the structures, their variability both across and along strike and should assist to some extent in determining the quantity of free gold present within the quartz filled structures. Careful examination and detailed mapping of all channel samples and vein occurrences uncovered is a prerequisite to the success of this program.

(2) Exploratory drilling to the east and west of the known intersections in the Buckingham area is recommended to trace the carbonate shear zones and expand the potential of these gold bearing zones. North striking diabase dikes are known to disrupt the strike of these deposits and care must be taken not to waste valuable footage by drilling into these late intrusives. To this end a series of east-west magnetometer traverses to better outline the diabase contacts are warranted.

(3) A program of stripping is recommended to examine the showing mentioned by Burke '1,200 feet northwest" of the Buckingham shaft. This reported gold bearing carbonate-rich shear structure is believed to exist on Line 0 at the baseline where caved trenches were noted in geological mapping. Evaluation of the stripping program may justify diamond drilling for further information in a vertical and lateral sense.

(4) Detailed mapping of the claim area west of MacDonald Lake is recommended to evaluate this sizeable untested area. The area contains the old Holding Mine property which is reported to have yielded spectacular gold occurrences prior to 1920. It may be necessary to drill a few holes at the Holding location once a geological map of this old mine has been completed. A brief reconnaissance of the property by the writer in 1988 left the impression that the existing rock

dumps from the old workings may have covered all surface expressions of the veins previously worked on and it appeared that any extension to these veins would pass into heavy overburden cover.

Within the western claim block are a number of other reported gold showings (eg. Speed, Hologden) and the anomalies noted in the geophysical section of this report, all of which will be further evaluated as part of the recommended geological survey. The cut grid established in the fall of 1987 and added to during 1988 will be utilized to control this work.

(5) Further examination of the Clarke showing area is warranted particularly in the vicinity of the feldspar porphyry intrusion with its accompanying high degree of shearing, sulphide mineralization and pervasive carbonate-rich alteration associated with the contact zone of this intrusion. Detailed geological mapping at 1" = 50', in the northwest sector of the property, to more accurately trace the contact zone is recommended. Bulldozer stripping and washing is warranted if an area of light overburden can be found to coincide with old trenching and pitting with encouraging gold values. Geochemical samples at 50 foot intervals should be taken over an area bounded by 4N on the south and extending from L20W to 24E. Much of this area is covered with either swamp or poplar uplands with limited outcrop exposure. If indeed the feldspar porphyry which extends across this area is a source of the gold mineralization the geochemical survey may highlight areas of anomalous gold concentration in these overburden covered areas. Lastly the anomaly paralleling the feldspar porphyry as discussed in our geophysical section must be examined on the ground to determine its cause and value. Depending upon favourable results from the above work in the Clarke section diamond drilling may be required.



COST ESTIMATE 1989 PROGRAM

1. Bulldozer stripping, washing, drilling, blasting @ Buckingham and Clarke Sections		\$ 32,000
2. Geological mapping, prospecting, sampling @ West Claim Block, Clarke Showing, Buckingham		12,000
3. Geochemical survey @ Clarke Area	300 samples @ \$20	6,000
4. Transportation and accomodation		10,000
5. Project supervision		10,000
6. Diamond drilling		
@ Buckingham	5,000' @ \$20	100,000
@ Clarke	2,500' @ \$20	50,000
@ Holling	1,500' @ \$20	30,000
	TOTAL PROGRAM COST ESTIMATE	<u>\$250,000</u>

Respectfully submitted,

J. L. TINDALE & ASSOCIATES INC.

*J. L. Tindale July 20, 1989*

J. L. Tindale, P. Eng.  
Geologist

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# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES INC.  
907-110 Erskine Ave.  
Toronto, Ontario M4P 1Y4

NAME OF PROPERTY ASQUITH TOWNSHIP PROPERTY  
HOLE NO. B89-1 LENGTH 350 Feet  
LOCATION Asquith Township, Parry Sound, Ontario  
LATITUDE 42° 5' DEPARTURE 8400'  
STARTED January 21, 1989 FINISHED January 21, 1989

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
150'	43°				
350'	40°				

HOLE NO. B89-1 SHEET NO. 1  
REMARKS Casing Pulled  
LOGGED BY J. L. Tindale

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	ppb	OZ/TON	OZ/TON
					FROM	TO				
0.0	11.0	Casing in Curbstone								
11.0	87.0	Andesite - medium green, fine grained, massive to slightly foliated at 50° to CIA; <2% quartz-carbonate stringers at 50° to 30° to CIA; occasional shear with iron-carbonate cement; flow structures evident.								
		40.5 to 41.5: shear at 85° to CIA with 40% thin quartz-carbonate stringers and trace iron-carbonate at selvages; 50% chlorite in matrix, 20% very fine pyrite.	456	1%	39.0	40.5	1.5	735	.021	
			457	1%	40.5	41.5	1.0	1427	.042	
			458	1%	41.5	44.9	3.4	84	.002	
			459	1%	44.9	49.4	4.5	18	.001	
		72.1 to 72.4: irregular quartz-carbonate at 50° to CIA; 3% fine pyrite in matrix.								

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Property

HOLE NO. B87-1 SHEET NO. 2

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS						
FROM	TO		NO.	% SULPH. IDES	FOOTAGE			Au	Pt	oz. ton	oz. ton	
					FROM	TO	TOTAL					
87.0	102.0	Sheared Andesite with Quartz Carbonate Veining										
		- fine-grained andesite as previous with moderate sheared sections exhibiting quartz-carbonate veining and stringers.	460	<1	79.0	81.7	2.7	20	.001			
			461	<1	81.7	84.0	2.3	12	<.001			
			462	<1	84.0	87.0	3.0	25	.001			
		87.0 to 89.4: 60% quartz-carbonate veins to 1/2 inch exhibiting high vertical folding at 85° to 90°; 5% biotite at vein contacts; 1% fine pyrite in disseminated stringers within the sheared andesite.	3330		87.0	87.0	2.0	6998	0.204			} .217 8.9"
			3331		89.0	92.0	3.0	8301	0.242			
			3332		93.0	95.9	2.9	6566	0.191			
			3333		95.9	96.3	0.4	215				
		89.4 to 93.0: 55% quartz-carbonate in veins to 2.75 inch at 0° to 55° to 90°.	3334		96.3	99.4	3.1	86				
			3335		99.4	102.0	2.6	20				
			NOTE: VG found in 1/2" gg wh grtz vein @ 92.0'									
		93.0 to 95.9: sheared andesite cut by thin fractures filled with carbonate at < 30° to CIA; 3% coarse white pyrite noted.										
		* 95.9 to 96.3: Green Telsite Dike - very fine grained, two separate intrusions: one at 0° to CIA with gk-cb at surface.										

RIDGES - ONTARIO - 366-1168

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Property

HOLE NO. 889-1 SHEET NO. 3

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE		g	Au	Ag	
				FROM	TO	TOTAL		ppb	02 TON	01 TON
		- the second felsite dyke at 80° to CIA and cross-cuts first dyke at 0° to CIA.								
		99.4 to 102.0: 80% quartz-carbonate with strong shearing at shear splay, displaying ribbon pattern at 45° to CIA and 2% fine pyrite within splay material; pink-carbonate vein from 101.5 to 102.0 lies at 5° to CIA and appears secondary to upper altered and sheared zone.								
102.0	132.0	Fine-Grained Andesite								
		- as veins; generally < 1% quartz-carbonate stringer veins at 35° to CIA.								
		115.1 to 116.1: two quartz-tourmaline veins at 35° to CIA exhibit widths to 0.5 feet; trace pyrite = Tourmaline	3336	115.0	116.5	1.5		32		

RIGGS - MONTO - 366.1168

# DIAMOND DRILL RECORD

J.L. TINDALE & ASSOCIATES INC.  
Consulting Geologists

NAME OF PROPERTY Buckingham Property  
HOLE NO. B89-1 SHEET NO. 4

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE		Z	Au		GT TON
					FROM	TO		TOTAL	ppb	
		126.0 to 126.7: quartz-cb. shear at 50° to CIA; trace epidote and 15% chlorite along vein surfaces.								
		* 127.5 to 127.6: grey felsite d.f. at 45° to CIA.	463		125.5	128.4	2.9	17	2.001	
			464	1	128.4	130.0	1.6	10	2.001	
		130.9 to 132.0: 2 inch qtz-cb. veins at 45° to CIA in mottled, med-grained carbonatized and deacid volcanic. "VG splash in 1/8" blue gtz vein.	3337		130.0	132.0	2.0	3441	0.100	
			465	21	132.0	135.4	3.4	1332	.039	
			466	21	135.4	138.4	3.0	22499	.655	
132.0	152.0	Silicified Andesite	673	T	138.4	142.3	3.9	20	.001	
		-fine grained light grey to green with slight bleached or altered appearance: cut by thin 2% quartz carbonate stringers, 2% very fine disseminated pyrite throughout section and clastic accret. with veins.	644	T	142.3	144.0	1.7	39	.001	
			3338		144.0	148.0	4.0	200		

.275 / 18.4

RUGES - ONTARIO - 366-1168

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Property  
 HOLE NO. B 89-1 SHEET NO. 5

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			g	ppb	02 TON	07 TON
					FROM	TO	TOTAL				
152.0	165.0	Andesite - mildly silicified grading back into fine-grained andite as previous with fine interstitial carbonate throughout.									
		158.1 to 158.7. quartz-carbonate alteration with 0.05 inch vein at 30° to CIA with 10% Tourmaline in stringer in vein.	467	1	157.8	160.8	3.0		879	.026	
			3339		165.0	166.0	1.0		297		
165.0	170.5	Shear-Banded Andesite with Quartz-Carbonate - thin, shear-banded andite; banded at 45° to CIA with 15% quartz-carbonate stringers and chert veins cut perpendicular to by carbonate fracture fillings; hosted within thin partings of chloritic schist with banded iron carbonate at 5%. trace disseminated pyrite associated with veining.	3340		166.0	170.5	4.5		1632		
			3341		170.5	172.0	1.5		157		
172.5	179.0	Andesite - medium-green; fine-grained and massive									

RIGES - DINTO - 366-1168

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Property  
 HOLE NO. B89-1 SHEET NO. 6

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	% SULPH. IDES	FOOTAGE			%	Au		
					FROM	TO	TOTAL		ppb	02 TON	01 TON
179.0	181.7	Massively silicified shear zone	3342		177.0	179.0	2.0		35		
		-brecciated shear zone with coarse irregular quartz-carbonate as concretions within fine grained chloritic schist; foliation along contacts at 65° to CA; coarse calcite up to 20% fine masses of epidote.	3343		179.0	182.0	3.0		926		
		180.2 to 181.1 : breccia zone → 20% epidote in fine grained masses hosted in concretions of chlorite fine grained quartz (masses) and 30% irregular stringers/masses of white quartz-carbonate hostings with coarse hematite; <1% Fe oxide.									
181.7	188.2	Andesite	3344		187.0	188.0	1.0		39		
		-as previous	3345		188.0	190.0	2.0		26		
			3346		190.0	192.0	2.0		16		
188.2	189.6	Buff-Colorous Altered Shear Zone									
		-strongly sheared zone with shearing at 25° to CA; 25% brown limonite									

RIGGS - SNOOK - ONTARIO - 366-1168



# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Property  
HOLE NO. B89-1 SHEET NO. 7

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPH. IDES	FOOTAGE		%	g/g	02. TON	07. TON
					FROM	TO				
		carbonate in fractured stringer surfaces bounded by sections/bands of quartz and carbonate (white) upto 0.5 inch which host 1% fine crystal-grains of Tourmaline and 2% pyrite in disseminated masses.								
189.6	197.0	Silicified Amphibole - grey-green in colour: very fine grained and moderate sized with siliceous texture.	468	21	195.8	198.0	2.2	325	1009	
			3317		198.0	200.0	2.0	42		
			3318		200.0	203.0	3.0	71		
197.0	205.0	Silicified Amphibole with Siliceous Bands - amphibole as primary with sections of quartz-carbonate shear-bands at 80° to CIA with <5% fine iron-carbonate.	3319		203.0	205.0	2.0	33		
		197.0 to 199.0: 5% iron-carbonate in stringer in shear-banded amphibole.								
		5% iron-carbonate.								
		203.2 to 204.5: 20% quartz-carbonate in shear-banded amphibole.								

ROGES - TINDALE - 366-1168

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Property  
 HOLE NO. 889-1 SHEET NO. 8

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	Au	Pb	02. TON	07. TON
				FROM	TO	TOTAL		ppb			
205.0	233.8	Silicified Andesite -as previous; 5% quartz-carbonate stringers.									
233.8	350.0	Carbonatized Talc-Peridotite Intrusive -sharp upper intrusive-type contact at 30° to CIA; 15% white calcite marks and lenses. dark nodules at 80 to 90° to CIA; talcose on dry cut edges; very soft and cut easily with knife, mottled white-black and appears almost porphyritic in texture.									
		242.0 to 247.0: sheared peridotite with 10% quartz-carbonate stringers at 85° to CIA; 3% fine disseminated iron carbonate throughout; trace pyrite.	3350		242.0	247.0	5.0		3		
	350.0	End of Hole.									

# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES INC.  
 907-110 Erskine Ave.  
 Toronto, Ontario M4P 1Y4

NAME OF PROPERTY ASQUITH TOWNSHIP PROPERTY  
 HOLE NO. B89-2 LENGTH 297 Feet.  
 LOCATION Asquith Twp. Buckingham Mine Zone; Grid B.  
 LATITUDE 48° 18' E DEPARTURE R+25'S  
-120' 0.00 -40°  
 STARTED January 24 FINISHED January 25, 1989

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
150'	15°				
297'	45°				

HOLE NO. B89-2 SHEET NO. 1  
 REMARKS Casing Pulled.  
 LOGGED BY N. W. JOHNSON

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS					
FROM	TO		NO.	SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON	
					FROM	TO	TOTAL					
0.0	9.0	Casing in Overburden.										
9.0	79.5	Diabase. - fine-grained variety; black, slightly magnetic; epidioritic; Malachukov-type. Diabase. coarse blocks from surface to 140' depth. 79.5 to 79.5: thin layer of fractures with red hematite markings. fractures, pyrites, 1% pyrites associated.										
79.5	91.2	Andesite. - massive, fine-grained dark green with < 1% quartz, calcite, stringers; bleached from upper contact with diabase.										

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Property

HOLE NO. B 89-2 SHEET NO. 2

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE		Au	Au			
					FROM	TO			TOTAL	ppb	oz. ton
91.2	113.0	Andesite with Quartz-Carbonate Shear Zones - andesite as previous with sections up to 3 feet with moderate staining and quartz-carbonate veining.									
		91.2 to 94.0: moderate staining and quartz-carbonate stringers at random orientations. 2% disseminated pyrite.	3351		91.0	94.5	3.5	863	<del>0.025</del>		
			477		94.5	97.9	3.4	154	.004		
			478		97.9	102.0	4.1	243	.007		
		102.0 to 103.5: shear zone with chloritic schist at $<10^\circ$ to CIA; quartz-carbonate veins to 2 inch widths with 2% coarse veinlets of pyrite.	3352		102.0	103.5	1.5	3744	0.109		
			3353		103.5	104.0	3.5	579			
			479		107.0	112.0	5.0	1274	.037		
		in chloritic material; Trace BUFF Cu All.*	3354		112.0	113.0	1.0	47			
113.0	116.4	Buff-Carbonate Shear Zone - quartz-carbonate veins to 4 inch width at $<15^\circ$ to CIA hosted within sheared and altered andesite; up to 15% brown iron-carbonate alteration in shear. beds at $<10^\circ$	3355		113.0	114.6	1.6	312			
			3356	Crz V.G.	114.6	116.0	1.4	3222	0.094		
			3357		116.0	118.5	2.5	123			
			3358		118.5	122.0	3.5	4429	0.129		
			3359		122.0	123.5	1.5	946	0.027		

RIGGS TORONTO - 366-1168

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Property

HOLE NO. B89-2 SHEET NO. 3

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPH. IDES	FOOTAGE			%	%	OZ. TON	GT. TON
					FROM	TO	TOTAL				
		to CIA; iron-carbonate bands exhibit open folding	480	<1	123.5	127.0	3.5		21	.001	
		at 85° to CIA, bands separated with thin	481	<1	127.0	128.5	1.5		262	.008	
		quartz carbonate (white) seams; 3% fine white	482	<1	128.6	133.5	4.9		78	.002	
		disseminated along iron-carbonate bands.	483	<1	133.5	137	3.5		1264	.037	
		* - white quartz veins exhibit <1% black crystals of Turmaline with 1% irregular masses of quartz associated with vein shales, <u>Trace Visible Gold</u> associated with quartz in quartz.									
116.4	118.6	Sheared Andesite - massive with fine interstitial carbonate at <10° to CIA.									
118.6	121.6	Quartz-Carbonate Shear Zone - < 2% sinuous markings of buff-carbonate at <10° to CIA; 60% quartz carbonate veins exhibiting irregular brecciation and exhibiting 20% shales and interstitial chlorite; 20% white and 20% fine									

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Property  
 HOLE NO. P-83-2 SHEET NO. 4

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS						
FROM	TO		NO.	% SULPH. IDES	FOOTAGE			%	Au				
					FROM	TO	TOTAL		ppb	01 TON	01 TON		
		disseminations of iron-carbonate associated with chloritic partings											
121.6	167.5	Andesite. - mildly silicified with quartz-carbonate veins increasing in amounts from 3% at upper contact to 1% down hole. Some grey-green.											
		157.0 to 157.5: quartz-carbonate vein at 35° to CIA; 2% chloritic partings incorporated within vein material itself.	3360		157.0	158.0	1.0		79				
		- grades into shear-banded andesite at 167.5 feet.											
			3361		167.0	168.0	1.0		43				
167.5	174.5	Shear-Banded Andesite with Quartz-Carbonate - gradational from andesite; becomes progressively more siliceous down hole becoming light grey-green and banded with 2% thin quartz-carbonate at	3362		168.0	168.5	0.5		385				
			3363		168.5	172.0	3.5		1346	0.039			
			3364		172.0	174.5	2.5		1569	0.046			
			3365		174.5	177.0	2.5		164				

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Property  
HOLE NO. 889-2 SHEET NO. 5

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	Au ppb	OZ. TON	GT. TON
					FROM	TO	TOTAL				
		20 to CIA; 0% thin sinuous partings of brown carbonate	485	<1	177.0	180.2	3.2		537	.010	
		in areas of moderate quartz and quartz-carbonate veining.	486	<1	180.3	183.7	3.4		81	.002	
			487	<1	183.7	187.0	3.3		759	.022	
		168.0 to 168.5: 75% quartz-carbonate	487	<1	187.0	193.0	6.0		30	.001	
		stringers at 90° to CIA with sinuous buff-cl. altered schistes; 2% fine pyrite.									
		172.5 to 174.0: 3 inch white quartz vein at 173.1 feet bounded by buff-cl. altered schistes with 2% fine pyrite.									
174.5	193.0	Silicified Andesite - medium grey-green; fine-grained to massive w/ 5% quartz-carbonate stringers.	3366		193.0	197.0	4.0		360		
193.0	214.2	Silicified Andesite with Quartz-Carbonate - as previous, but andesite exhibits some sheet sections of shear-banding with quartz carb. veins to 1/4 inch widths; trace to 1% pyrite	488		197.0	202.0	5.0		212	.006	
			489		202.0	205.0	3.0		16	<.001	

RIGGS ONTARIO - 366-1168

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Mine Property  
 HOLE NO. B89-2 SHEET NO. 6

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	Au	OZ. TON	GT. TON
					FROM	TO	TOTAL				
		195.6 to 196.0: white quartz carbonate vein at 25° to CIA; trace pyrite.									
		205.0 to 205.9. irregular quartz cl. veins bounded by 1/2" iron carbonate; slight attrition; 1% fine pyrite associated.	3367		205.0	206.0	1.0		118		
214.2	219.7	Shattered and mineralized mafic dyke - fine to medium-grained black mafic dyke; oxidized, soft, cherty and mineralized upper contact, lower contact obscured by 3 inch quartz-carbonate vein at 50° to CIA; becomes steeper from here massive type at 217.5 feet with 7% pyrite in medium-grained disseminated stringers at 0° to 5° to CIA.	3368		214.0	217.5	3.5		36		
			3369		217.5	220.0	2.5		4156	0.121	
			3370		220.0	222.0	2.0		167		
			3371		222.0	225.5	3.5		179		
			490		225.5	228.1	2.6		282	.008	
			491		228.1	231.3	3.2		2740	.080	
219.7	222.3	Siliceous breccia - green veins; fine-grained; as previous.									

RIGGS - DUNTO - 366-1168



# DIAMOND DRILL RECORD

Consulting Geologists

NAME OF PROPERTY Buckingham Mine Property  
 HOLE NO. B 89-2 SHEET NO. 7

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ. TON	OZ. TON
					FROM	TO	TOTAL				
222.3	225.5	Quartz-Carbonate Shear Zone with Sill Contact - moderately sheared andite at 70° to CIA with quartz-carbonate as granular groundmass and secondary, interlocking stringer veins; 2% buff carbonate associated with chloritic schage material; trace stringer pyrite									
225.5	240.5	Silicified Andesite - as previous; 3% stringer quartz-carbonate at 60° to CIA; trace cubic pyrite. 237.5 to 240.5: 5% interstitial carbonate throughout									
240.5	297.0	Andesite - fine-grained; medium to dark green with occasional spherule associated with 3% quartz-carbonate stringers and alteration; massive texture. 293.6 to 294.8: white quartz-cb. vein at 70° to CIA.									
297.0		End of Hole.									

RIOC TORONTO - 366-1168

# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES INC.  
907-110 Erskine Ave.  
Toronto, Ontario M4P 1Y4

NAME OF PROPERTY ASQUITH TOWNSHIP PROPERTY  
HOLE NO. B89-2A LENGTH 287 Feet  
LOCATION Asquith Twp; Buckingham line Area, Grid 'B'  
LATITUDE 48E DEPARTURE 8+25'S  
-170' 210° N -60°  
STARTED January 25 FINISHED January 26, 1989

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
150'	62°				
287'	61°				

HOLE NO. B89-2A SHEET NO. 1  
REMARKS Casing Rilled.  
LOGGED BY N. W. Johnson

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	ppb	OZ/TON	OZ/TON
					FROM	TO	TOTAL				
0.0	2.0	Casing in Bedrock									
2.0	84.7	Diabase - black, medium grained equigranular; 2% epidote along fracture planes; slightly magnetic.									
84.7	104.5	Andesite - bleached from upper contact with diabase; fine-grained, massive to slightly banded; dark green.									
104.5	125.7	Andesite with Quartz-Carbonate Shears - andesite becomes sheared and altered with quartz-carbonate veins and stringers and intermittent brown 'buff' carbonate alteration over sections up to 3 feet in width.	3372		104.5	107.5	3.0	269			
			3373		107.5	110.0	2.5	730			

# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES INC.  
907-110 Erskine Ave.  
Toronto, Ontario M4P 1Y4

NAME OF PROPERTY Buckingham Mine Property  
HOLE NO. B89-2A SHEET NO. 2

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS			
FROM	TO		NO.	% SULPHIDES	FOOTAGE		Au	Au	
					FROM	TO			TOTAL
		104.5 to 107.5: sheared altered and banded section at 0° to 40° to CIA; moderate brown-'buff' alteration exhibits folding in a 'sinuous' pattern along core; <5% quartz in discontinuous veins; 1% coarse euhedral pyrite.							
		109.6 to 110.5: diffuse 'buff'-carbonate alteration - minor.	469	1%	110.0	113.4	3.4	540	.016
			470	1%	113.4	115.3	1.9	2296	.067
			471	1%	115.3	118.5	3.2	1404	.041
		118.8 to 124.0: sheared andesite with quartz-carbonate veins up to 4 inches width at 10° to 60° to CIA; trace pyrite within schistose and chloritic selvages; minor buff-carb. alteration.	3374		118.5	121.0	2.5	3635	0.088
			3375		121.0	124.0	3.0	105	
			3376		124.0	126.0	2.0	152	
			3377		126.0	131.0	5.0	173	
			3378		131.0	132.5	1.5	29	
125.7	131.0	'Buff'-Carbonate Shear Zone - shear-banded zone at 35° to CIA with 3% grey-quartz stringers; 10% white quartz-carbonate filling secondary fractures							

# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES INC.  
907-110 Erskine Ave.  
Toronto, Ontario M4P 1Y4

NAME OF PROPERTY Buckingham Mine Property  
HOLE NO. B89-2A SHEET NO. 3

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	SULPHIDES	FOOTAGE			%	%	OZ TON	OZ TON
					FROM	TO	TOTAL				
		at 0° to CIA: 1% medium-grained to fine intergrowths of pyrite associated with quartz and quartz-carbonate; up to 2% medium crystals of Tourmaline in white quartz-cb. veins.; 15% sinuous bands of 'buff'-carbonate overall.									
131.0	155.0	Andesite - slightly siliceous with < 3% quartz-carbonate in veins to 1/2 inch.  - at 147.0 feet becomes carbonatized with 2% fine interstitial carbonate.; massive texture.; grey-green.									
155.0	160.5	Open Cavity - 5 foot open cavity - underground workings; probably x-cut to vein.									
160.5	161.5	Broken and Ground Core - prob. debris/muck on drift floor.									

LANGRIDGE - TORONTO - 366-1168

# DIAMOND DRILL RECORD

J. E. FINNELL & ASSOCIATES INC.  
907-110 Erskine Ave.  
Toronto, Ontario M4P 1Y4

NAME OF PROPERTY Buckingham Mine Property  
HOLE NO. B89-2A SHEET NO. 4

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ TON	OZ TON
					FROM	TO	TOTAL				
161.5	170.0	Carbonatized Andesite -as previous; becomes sheared with 5% discontinuous quartz-carbonate veins at 69.5 feet; grades back into fine andesite at 170.0 feet.									
170.0	198.0	Andesite with Occasional Quartz-Carbonate Shear Zones. -fine-grained, green, massive andesite exhibits <5% sections of shear-banding at 85° to CIA and quartz-carbonate veins. 172.1 to 172.4. quartz-carbonate-tourmaline vein at 80° to CIA.	472	<1	171.6	173.3	1.3			158	.005
			473	<1	173.3	176.3	3.0			120	.003
			474	<1	176.3	180.5	4.2			45	.001
			475	<1	180.5	184.3	3.8			17	<.001
			476	<1	193.2	197.0	3.8			242	.007
			3379		197.0	198.0	1.0			562	
198.0	200.0	Quartz-Filled Shear Zone -white quartz and carbonate vein with 10% chlorite incorporated in vein material overlies 1 foot - brecciated grey-quartz and carbonate-fracture zone; trace pyrite overall.	3380		198.0	200.0	2.0			1498	
			3381		200.0	203.0	3.0			274	
			3382		203.0	205.5	2.5			3595	0.105
			3383		205.5	207.0	1.5			21	
200.0	205.6	Andesite -massive, med-green and fine-grained.	3384		207.0	208.0	1.0			49	

LANGRIDGE - TORONTO - 366-1168

# DIAMOND DRILL RECORD

907-110 Erskine Ave.  
Toronto, Ontario M4P 1Y4

NAME OF PROPERTY Buckingham Mine Property  
HOLE NO. B89-2A SHEET NO. 5

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPH IDES	FOOTAGE			Cu ppm	Au ppb	Au	
					FROM	TO	TOTAL			OZ. TON	OZ. TON
205.6	206.8	Quartz-Carbonate Shear Zone - sheared at 70° to CIA; quartz-carbonate and chlorite marks schistosity plane; no mineralization noted.									
206.8	242.0	Shear-Banded Andesite with Quartz-Carbonate - 5% quartz-carbonate veining with widths to 2 inches at 45° to 80° to CIA with associated minor and diffuse buff-carbonate alteration.  240.5 to 241.6: broken ground.	3385		231.0	233.0	2.0		114		
			3386		239.0	240.5	1.5		561		
242.0	287.0	Andesite with Quartz-Carbonate Fractures. - dark-green, fine grained andesite with dominant schistose chlorite at 45° to CIA cut by up to 5% brittle, quartz-carbonate fracture-fillings at 0° to 45° to CIA; trace epidote alteration; trace Cpy noted at 272.0 feet.	3387		271.0	273.0	2.0	Cu 864			
	287.0	End of Hole.									

LANGRIDGES - TORONTO - 366-1168

# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES INC.  
 907-110 Erskine Ave.  
 Toronto, Ontario M4P 1Y4

NAME OF PROPERTY Asquith Township Property  
 HOLE NO. B89-5 LENGTH 350 Feet  
 LOCATION Asquith Twp; Buckingham Mine Area; North Zone; Grid 8  
 LATITUDE L8 00 E DEPARTURE 6.54'S  
 ELEVATION \_\_\_\_\_ AZIMUTH 220° DIP -45°  
 STARTED January 29 FINISHED January 30, 1989

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
150'	44°				
350'	44°				

HOLE NO. B89-5 SHEET NO. 1  
 REMARKS Casing Pulled  
 LOGGED BY V. N. JOHNSON

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON	
					FROM	TO	TOTAL					
	0.0	Bedrock										
0.0	72.0	Fine-Grained Andesite - dark green, fine-grained andesite with <1% quartz-carbonate veins to 0.5 inches; very slight foliation at 45° to GA cident; grades into medium-grained flow at 72.0 feet.										
72.0	85.5	Andesite Flow - slight foliation to fragmental appearance marked by interstitial carbonate at 45° to GA, minor epidote marks thin, low-angle fractures; quite massive in appearance on whole; sharp lower contact at 75° to CIA.										

LANGRIDGES - TORONTO - 366-1168

# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES INC.  
 907-110 Erskine Ave.  
 Toronto, Ontario M4P 1Y4

NAME OF PROPERTY Buckingham Mine Area - North Zone  
 HOLE NO. B89-5 SHEET NO. 2

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPH IDES	FOOTAGE		%	%	OZ/TON	OZ/TON	
					FROM	TO					TOTAL
00.0	101.0	<p><u>Fine-Grained Andesite</u></p> <p>- as previous unit; dark green, massive with very slight fine-grained foliation at 45° to CIA; up to 5% epidote associated with thin carbonate-filled fractures.</p> <p>86.3 to 87.2 : Quartz-Carbonate-Chlorite Vein; vein contacts sharp and chloritic at 40° to CIA; up to 20% chlorite as subangular clasts in white vein material; 1% very fine pyrite along thin fracture. Fillings in chlorite schist.</p> <p>98.4 to 99.0 : diffuse epidote alteration.</p> <p>- grades into medium-grained andesite flow at 101.0 feet.</p>									
			3401		85.0	86.0	1.0		8	2.001	
			3402		86.0	87.5	1.5		16	2.001	
			3403		87.5	89.0	1.5		11	2.001	



# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES INC.  
907-110 Erskine Ave.  
Toronto, Ontario M4P 1Y4

NAME OF PROPERTY Buckingham Mine Area, North Zone

HOLE NO. B09-5

SHEET NO. 3

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPH. IDES	FOOTAGE		%	%	OZ./TON	OZ./TON
					FROM	TO				
101.0	156.0	<p>Andesite Flow</p> <p>-as previously intersected; medium-grained, chloritic with 10% fine interstitial carbonate throughout, marking weak foliation at 50° to C/A.</p> <p>147.5 to 147.7: white quartz-carbonate vein at 35° to C/A; trace very fine pyrite associated with chloritic selvages.</p>								
156.0	177.3	<p>Fine-Grained Andesite with Shear Banding.</p> <p>-fine-grained, grey-green andesite with up to 5% granular stringers and fracture fillings of quartz-carbonate at 0° to 40° to C/A</p> <p>158.9 to 159.6: quartz-carbonate vein at 40° to C/A with 15% chloritic partings and selvages containing trace to 1% fine pyrite</p> <p>-gradational contact at 177.3 feet.</p>	3404		157.0	158.5	1.5	11	4.001	
			3405		158.5	159.0	0.5	396	0.012	
			3406		159.0	161.0	2.0	19	.001	

LANGRIDGES - TORONTO - 366-1168

# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES  
 907-110 Erskine A.e.  
 Toronto, Ontario M4P 1Y4

NAME OF PROPERTY Buckingham Mine Area - North Zone  
 HOLE NO. B89-5 SHEET NO. 4

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ./TON	OZ./TON
					FROM	TO	TOTAL				
177.3	264.0	Medium-Grained Andesite Flow -as previous; moderate epidote alteration associated with quartz-carbonate alteration.  177.5 to 178.4: diffuse epidote and quartz-carbonate alteration at 45° to CIA.									
264.0	280.5	Sheared Andesite Tuff -very fine-grained andesite tuff; banded to sheared at 45° to CIA with up to 2% fine/thin carbonate fractures over sections up to 1.5 feet; trace diffuse brown 'buff' carbonate alteration associated	3407		277.0	280.5	3.5	11		2.001	
280.5	288.5	Quartz-Carbonate Shear Zone. -shear-banded at 60° to CIA; 20% brown to beige carbonate in thin partings banded with quartz stringers cut by thin irregular white-carbonate fractures; trace finely disseminated pyrite occurs within quartz-carbonate stringers.	3408		280.5	283.5	3.0	35		.001	
			3409		283.5	286.0	2.5	21		.001	
			3410		286.0	288.5	2.5	10		2.001	

LANGRIDGES - TORONTO - 366-1168

# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES INC.  
 907-110 Erskine Ave.  
 Toronto, Ontario M4P 1Y4

NAME OF PROPERTY Buckingham Mine Area - North Zone  
 HOLE NO. B89-5 SHEET NO. 5

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ./TON	OZ./TON
					FROM	TO	TOTAL				
288.5	350.0	<p>Pillowed Andesite Flows</p> <p>- very fine-grained, light to medium green; exhibit flow structures and minor brecciation (flow) and repetitive carbonatized pillow selvages to 1 inch widths which exhibit chilled margins and trace pyrite.</p> <p>331.7 to 332.3: quartz-carbonate epidote vein at 45° to 4A.</p> <p>End of Hole.</p>									
350.0											

# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES  
 907-110 Erskine Ave.  
 Toronto, Ontario M4P 1Y4

NAME OF PROPERTY Asquith Township Property  
 HOLE NO. B89-6 LENGTH 347 Feet  
 LOCATION Asquith Township; Buckingham Mine Area; North Zone  
 LATITUDE 19+7SE DEPARTURE 6+00'S  
 STARTED January 30 FINISHED January 31, 1969

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
150'	41°				
347'	38°				

HOLE NO. B89-6 SHEET NO. 1  
 REMARKS Casing Pulled.  
 LOGGED BY K. W. Johnson

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS						
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON		
					FROM	TO	TOTAL						
	0.0	Bedrock											
0.0	156.0	Andesite Flow -dark green, massive; fine to medium-grained and chloritic; poorly developed foliation evident; generally less than 1% quartz-carbonate veining evident; but occasional vein reaches widths of 0.50 feet.; becomes very fine-grained and slightly lighter-green in color at 81.0 feet.  0.0 to 17.0 feet: blocky core.											
156.0	164.0	Shear-Banded Andesite -moderately sheared fine-grained andesite with very thin and irregular quartz-carbonate fracture-fillings making the shear planes; small-scale $\pi$ -folding evident in carbonate-fractures; slight trace pyrite noted.											

LANGRIDGES TORONTO - 366-1188

# DIAMOND DRILL RECORD

J. L. TINDALE & ASSOCIATES INC.  
 907-110 Erskine Ave.  
 Toronto, Ontario M4P 1Y4

NAME OF PROPERTY Buckingham Mine Property - North Zone  
 HOLE NO. B89-6 SHEET NO. 2

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON
					FROM	TO	TOTAL				
174.0	178.6	<p>Andesite                      - fine-grained, chloritic andesite exhibits vesicular sections containing 2% rounded, carbonate-filled vesicles; and flow-breccia contacts foliated at 55° to CIA.</p>									
178.6	182.6	<p>Shear Zone                      - grades from sheared andesite with 3% thin carbonate-filled fractures into a core of silicified and sericitized schist with trace pyrite along secondary carbonated fractures; schistosity at 45° to CIA; grades back into fine andesite at 182.0 feet.</p>	3411		179.0	182.5	3.5		11	2.001	
182.6	220.5	<p>Andesite                      - as previous; fine-grained, medium-green and massive; occasional carbonate-filled vesicle from 206.0 feet; irregular quartz-carbonate-epidote alteration in patches up to 0.5 feet.</p> <p>197.5 to 199.8: 15% quartz-carbonate-epidote alteration in patches to 0.5 feet.</p>									

LANGRIDGES - TORONTO - 366-1168

# DIAMOND DRILL RECORD

J. L. TINDALE & ASSG.  
907-110 Erskine Ave.  
Toronto, Ontario M5R 1Y4

NAME OF PROPERTY Buckingham Mine Property - North Zone  
HOLE NO. B88-6 SHEET NO. 3

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON
					FROM	TO	TOTAL				
220.0	247.0	<p>Pillar and Andesite Flow</p> <p>- fine-grained andesite with repetitive pillow selvages with slight carbonate and epidote alteration noted; occasional white quartz-carbonate vein noted at 30° to CIA.</p>									
		<p>247.6 to 248.5 } quartz-carbonate 249.4 to 249.7 } veins at 30° to 249.9 to 250.8 } 60° to CIA; coarse white carbonate noted in fine groundmass of quartz and carbonate (calcite). - becomes slightly bleached in appearance from 268.0 feet.</p>	3412		247.5	251.0	3.5		15	1.001	
		<p>322.6 to 322.8 : white quartz vein at 50° to CIA.</p>	3413		329.0	331.0	2.0		12	1.001	
		<p>331.5 to 332.0 : quartz-carbonate- epidote vein at 40° to CIA; trace pyrite noted.</p>	3414		331.0	332.5	1.5		6	1.001	
			3415		332.5	334.0	1.5		8	1.001	
347.0		End of Hole.									



# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham MINE  
 HOLE NO. B-89-8 SHEET NO. 2

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON
					FROM	TO	TOTAL				
		@ 39.0 - 42.4 Carbonate-rich, sheared, minor blue gtz. w diss. pyrite.	536	T-	39.0	42.4	3.4		<222	.017	
		@ 42.4 - 47.0 as above w sections of wavy white to clear gtz-tourmaline w tr pyrite.	537	T-	42.4	47.0	4.6		147	.004	
		@ 47.0 - 51.3 as above w minor blue; gtz-tour. veins, tr. py	538	T-	47.0	51.3	4.3		2154	.063	
		----- " " "									
		@ 57.0 - 60.1 Pale gn. carb-rich v. l. w white gtz tourmaline vein @ 90° (4") and 1" @ 11el core.	539	T-	57.0	60.1	3.1		1155	.034	
		@ 60.0 - 71.0 Pale gn carb rich, tr py, 90° wh gtz @ 60°	540	T-	60.0	71.0	3.0		8	<.001	
		@ 71.0 - 74.0 as above, no gtz veins, tr py	541	T-	71.0	74.0	3.0		8	<.001	
		@ 74.0 - 77.0 <u>well sheared</u> , wavy blue gtz along shear planes; chlorite, scorp; tr py	542	T-	74.0	77.0	3.0		16	<.001	
		@ 77.0 - 79.5 <u>sheared</u> , dk gn, blue gtz w white flaky carbonate infilling fractures in gtz, tr py, scpy	543	T-	77.0	79.5	2.5		25	<.001	
		@ 79.5 - 83.0 less intense shearing; gtz carb veins rare, pyrite trace.	544	T-	79.5	83.0	3.5		<5	<.001	
		----- " " "									
		@ 86.2 - 88.8 Darker gn v. l., w splashes of white gtz carb veins, trace py.	545	T-	86.2	88.8	2.6		6	<.001	



# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Mines  
 HOLE NO. B89-8 SHEET NO. 3

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPH. IDES	FOOTAGE			%	%	OZ/TON	OZ/TON
					FROM	TO	TOTAL				
		@ 94.4-97.0 sheared gn carb rich as above w 2" white gtz-tourmaline vein @ 30° Tr py. End of interval.	546	T-	94.4	97.0	2.6				
97.0	121.3	<u>Pillowed Andesite</u> ; green as g-ess; f.g.; sheared and injected w white carbonate; epidote alt <sup>n</sup> along veins and within veins; minor jasper red Fe along shear partings; tr. diss. pyrite; gtz-carb. veins irregular throughout.									
		@ 97.0-102.0 most intense shearing of above, white carb. alteration; blue gtz blebs; tr py.	547	Tr	97.0	102.0	5.0		30	.001	
		@ 119.0 2" gywh gtz-carb vein, sharp, @ 45° sheared									
121.3	153.2	<u>Carbonate Zone</u> ; pale gn gy w some zones of intense shearing and blue gy gtz; occasional gn wh gtz-carb veins, pyrite very finely diss. throughout. Upper contact gradational; lower sharp @ 90°									
		@ 121.3-124.8 Gn, less altered, soft, w irregular gtz-calc, tr py.	548	T-	121.3	124.8	3.5		19	.001	
		@ 124.8-126.0 as above, 50% gtz-calc vein, blue wh, gy; w diss. py, <u>Trace V.G.</u> Veins @ 45°	549	Tr	124.8	126.0	1.2				

<5 <.001  
Specimen V.G. No Gold

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Mine  
 HOLE NO. B89-8 SHEET NO. 4

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	OZ/TON	OZ/TON	
					FROM	TO					TOTAL
		@ 124.3-137.6 Carb. alt <sup>2</sup> intense, w. a. calc. i. occasional blue gtz stringers, irregular, tr py	550	T	127.1	137.6	3.5				
		@ 137.6-139.5 <u>Shear-Zone</u> , intense alt <sup>2</sup> banded, w blue gtz injected along shear planes @ 60°; pyrite 2% fine diss.; grades to less banding.	551	2	137.6	139.5	1.8		28	.001	
		@ 139.5-143.2 Sheared, altered as above but less intense, less gtz but still blue and clear gtz str @ 60° to 45° tr py.	552	T	139.5	143.2	3.7		22	.001	
		@ 143.2-147.5 as above, shearing @ 45°	553	T	143.2	147.0	3.8		14	2.001	
		@ 147.5-150 as above, less intensity; tr gtz, py	554	T	147.5	150.0	2.5		9	2.001	
		@ 150.0-153.2 as above, 2, 1/2" blue gy gtz tourmaline veins @ 90°	555	T	150.0	153.2	3.2		9	2.001	
153.2	171.0	<u>Andesite</u> ; possible pillowed; dk gn; sheared but not intense; wavy yellow soap and white gtz calc str; tr. pyrite. Appears to grade into underlying carbonate section.									

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Mine  
 HOLE NO. B89-8 SHEET NO. 5

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS			
FROM	TO		NO.	% SULPHIDES	FOOTAGE FROM TO TOTAL	%	%	OZ/TON	OZ/TON
171.0	173.2	brecciated in part; wavy blue gtz injected and as fragments; trace fig. pyrite; minor tourmaline w/ occasional gtz veins;							
		@ 171.0-173.2 as above w/ wispy gtz-corb, tourmaline	556	Tr	171.0 173.2 2.2		7	.001	
		@ 173.2-176.5 as above, sl. increase in blue gtz	557	Tr	173.2 176.5 3.3		<5	.001	
		@ 176.5-179.5 brecciated section, yellow gn infills, blue gtz frags., tr py.	558	Tr	176.5 179.5 3.0		21 35	.001 .001	
179.5	327	<u>Ultramafic/PERidotite</u> ; talcose; very soft; dk gn to black, med. grd; sheared in part w/ wh. gtz veining; traces of pyrite disseminated, minor well developed wh. gtz. veins @ 45°. carbonate-rich.							
		@ 260.7-261.0 Diabase dyke.							
		@ 287.0-288.7, 2, 6" white gtz veins @ 30°/45°, tr. pyrite.	559	Tr	287.0 288.7 1.7		13	.001	
		@ 310.5-313.5 wh. gtz veins in well shear banded talc; salmon pink calcite, @ 45°	560	Tr	310.5 313.5 3.0		53	.002	
		@ 323.3-326.1 wh. gtz veins, tr. py disseminated in veins, magnetite xls along vein borders; @ 90-30°, very irregular.	569	Tr	323.3 326.1 2.8		37 33	.001	
		End Hole @ 327'							

# DIAMOND DRILL RECORD

NAME OF PROPERTY Asquith Township Property  
 HOLE NO. B89-18 LENGTH 200 Feet.  
 LOCATION Asquith Township; Buckingham Mine Area  
 LATITUDE L20.00W DEPARTURE 700s  
 ELEVATION -3.93' AZIMUTH 360° DIP -45°  
 STARTED February 20 FINISHED February 21, 1982

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
200'	41°				

HOLE NO. B89-18 SHEET NO. 1

REMARKS Casing Pilled.

LOGGED BY K.W. Johnson

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	OZ/TON	OZ/TON	
					FROM	TO	TOTAL				
0.0	5.0	<u>Casing in Overburden.</u>									
5.0	16.0	<u>Chloritic Andesite</u> - dark green, fine-grained schist at 56° to CIA; very slight schistosity and exhibits massive texture; sharp lower contact at 16.0 feet with grey, homogeneous rock.									
16.0	36.0	<u>Fine-Grained Andesite Tuff.</u> - sharp contact with chloritic andesite at 55° to CIA; light grey-green, massive and very fine-grained rock cut by < 3% very thin grey quartz and white carbonate-filled fractures at < 20° to CIA; grades back into massive, fine-grained dk. green andesite at 36.0 feet.									
		18.0 to 19.5: 10% quartz and carbonate fracture-fillings at 80° to CIA; brittle	6855		16.0	18.0	2.0		8	<.001	
			6856		18.0	19.5	1.5		<5	<.001	
			6857		19.5	22.0	2.5		<5	<.001	

# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_

HOLE NO. 889-18 SHEET NO. 2

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	GT/TON	GT/TON
				FROM	TO	TOTAL				
		<p>deformation of host tuff evident; 20% white carbonate in areas of most intense brittle deformation (19.2 to 19.5)</p> <p>21.3 to 21.6: white qtz. db. vein at 25° to CIA; 30% fracture/vegy carbonate within white quartz.</p> <p>23.1 to 23.3: qtz-carbonate vein at 80° to CIA.</p>								
36.0	53.0	<p><u>Chloritic Andesite (Pillared).</u></p> <p>-as previous; dark-green, fine-grained and massive; probably pillared flow with very slight epidote alteration of pillow selvages; occasional breccia-filling of quartz and rose-carbonate over shoot, irregular sections with fissile and chloritic selvages.</p> <p>43.0 } quartz-carbonate-chlorite 48.2 to 49.0 } fracture filling.</p>	6858	47.0	49.0	2.0	47	.001		

LANGRIDGES - TORONTO - 366-1168

# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_

HOLE NO. B89-18 SHEET NO. 3

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS			
FROM	TO		NO.	% SULPH. IDES	FOOTAGE		%	OZ./TON	OZ./TON
					FROM	TO			
53.0	60.4	<u>Fine-Grained Andesite Tuff</u> - as previous; light-grey to green, fine-grained, moderately carbonatized throughout with massive appearance; fine tuffaceous texture marked by fine interstitial carbonate; <1% fracture fillings of grey qtz. and carbonate.	6857		59.0	60.4	1.4	20	
60.4	62.0	<u>Fine-Grained Diabase</u> - black, slightly magnetic; bleached green-grey from very thin, randomly oriented fractures; bleached upper and lower contacts for 0.5 inches - chilled margins.	6860		60.4	62.0	1.6	<5	
62.0	64.5	<u>Fine-Grained Andesite Tuff</u> - grey-green as previous; becomes sheared at 64.0 feet at 40° to CIA. with 25% grey quartz and carbonate fracture fillings.	6861		62.0	64.5	2.5	124	0.004
62.0	64.5	<u>Fine-Grained Andesite Tuff</u> - grey-green as previous; becomes sheared at 64.0 feet at 40° to CIA. with 25% grey quartz and carbonate fracture fillings.	6862		64.5	66.6	2.1	16332	0.475
64.5	66.6	<u>Quartz Vein</u> - smoky grey quartz; vitreous to cherty	6863		66.6	68.5	1.9	56	0.002
64.5	66.6	<u>Quartz Vein</u> - smoky grey quartz; vitreous to cherty	6864		68.5	69.5	1.0	76	

LANGRIDGES - TORONTO - 366-1168

# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_  
 HOLE NO. B 89-18 SHEET NO. 4

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	OZ. TON	OZ. TON	
					FROM	TO	TOTAL			
66.6	100.5	<p>In appearance with &lt; 2% white carbonate predom. along late features; 20% irregular patches of aggregate chlorite masses with 5% brown to light beige carbonate intrusively; 2% coarse pyrite associated, trace Cpy.; Lower contact irregular at 60° to CIA.; 1% Tourmaline Stringers.</p> <p><u>Pillowed Andesite</u></p> <p>-dark green, fine-grained chloritic andesite with rhythmic pillow selanges exhibiting slight epidote alteration; occasional sheared section with quartz-carbonate-tourmaline veins at 20° to 40° to CIA.; slow reaction with acid.</p> <p>68.5 to 69.5: white quartz-carbonate vein at 20° to CIA with 5% bladed tourmaline along vein selanges; 1% fine pyrite.</p> <p>-at 89.0 feet becomes carbonated and reacts quickly with HCl; becomes lighter</p>	6865		69.5	71.5	2.0		34	

# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_

HOLE NO. 889-18 SHEET NO. 5

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPH. IDES	FOOTAGE		%	%	OZ. TON	OZ. TON
				FROM	TO	TOTAL				
		grey in colour.								
		94.0 to 95.0 : 20% white quartz-carbonate veins at 35° to CIA; no mineralization noted.								
100.5	119.0	<u>Carbonatized Andesite</u> - green to dark-grey massive andesite, fine-grained with 15% disseminated, interstitial carbonate throughout, increasing in intensity in areas of quartz-carbonate shearing; trace buff beige carbonate in sinuous stringers within carbonate shear zones.								
		100.5 to 100.8 } quartz-carbonate	6866	100.0	105.0	4.0'		21		
		105.0 to 106.5 } shear zone at 35° to CIA; 3% sinuous partings of yellow-beige carbonate in moderately chloritic selvages at qtz cb. veinlets; trace to 1% fine pyrite.	6867	105.0	107.0	2.0		130		
			6868	107.0	109.0	2.0		225		

4.0' sample error lost top 1' of sample to 6867.



# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_

HOLE NO. B89-1B. SHEET NO. 6

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPH. IDES	FOOTAGE		g	g	OZ. TON	OZ. TON
				FROM	TO	TOTAL				
119.0	137.5	<p><u>Pillowed Andesite</u></p> <p>- dark green, slightly sheared andesite, strom chloritic; up to 15% white carbonate as fine interstitial disseminations and as fracture-fillings with up to 3% coarse pyrite associated; grades into very fine-grained dark green andesite.</p>								
137.5	160.0	<p><u>Andesite</u></p> <p>- very fine-grained, massive dark green rock; &lt; 1% carbonate as thin fracture-fillings at 65° to CIA; lower contact with peridotite not readily discernable.</p>								
160.0	200.0	<p><u>Talc - Peridotite Intrusive</u></p> <p>- gradational contact with andesites; medium to coarse-grained texture with up to 20% white carbonate giving rise to coarse intrusive texture; talc-chlorite marks schistosity plane at 80° to CIA</p>								

LANGRIDGES - TORONTO - 366-1168

# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_

HOLE NO. B89-18 SHEET NO. 7

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPH IDES	FOOTAGE			%	OZ. TON	OZ. TON
					FROM	TO	TOTAL			
		175.4 to 176.7: quartz-carbonate veins to 1 inch widths at 65° to CIA, 5% brown carbonate along vein selenge.	6869		171.0	175.0	4.0	63		
			6870		175.0	177.0	2.0	25		
2000		<u>End of Hole.</u>								

# DIAMOND DRILL RECORD

NAME OF PROPERTY Asquith Township Property  
 HOLE NO. B89-19 LENGTH 333 Feet  
 LOCATION Asquith Twp. Buckingham Hiv. Area.  
 LATITUDE 19+50E DEPARTURE 8+25S  
 ELEVATION -8.04' AZIMUTH — DIP -0°  
 STARTED February 21 FINISHED February 22, 1989

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
150'	85°				
331'	80°				

HOLE NO. B89-19 SHEET NO. 1  
 REMARKS Casing Rilled  
 LOGGED BY K. W. Johnson

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS			
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	OZ/TON	OZ/TON
					FROM	TO				
0.0	12.0	<u>Casing in Overburden</u>								
12.0	107.0	<u>Carbonized Andesite</u> - green-grey andesite; fine-grained schist at 48° to CIA, cut by irregular to tabular grey-quartz and carbonate fracture-fillings to 1/8 inch.; trace yellow-beige carbonate alteration associated with fractured and sheared andesite.  21.0 to 21.2: wht. qtz-ds vein at 45° to CIA.  @ 29.0 feet exhibits sheared and qtz-ds filled fractured zones up to 2 inches at 40° to 45° to CIA, 2% fine pyrite associated with qtz-ds.  31.0 to 32.0: 35% qtz-ds filled fractures with 40% yellow-beige carbonate as folded selvages in quartz and as sinuous parting at 51° to CIA; 5% fine pyrite.	6871		25.0	30.0	5.0		274	
			6872		30.0	32.0	2.0		304	
			6873		32.0	37.0	5.0		155 113	
			6874		37.0	41.5	4.5		99	

LANGRIDGES - TORONTO - 366-1168



# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_

HOLE NO. B89-19 SHEET NO. 50

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPH. IDES	FOOTAGE		1	2	OZ/TON	OZ/TON
				FROM	TO	TOTAL				
		along partings within qtz; trace to 2% yellow-beige cb associated.								
		* 56.0 to 56.6: white-grey quartz vein with sheared, mod. chloritic upper contact at 37° to CIA; up to 2% fine pyrite noted at upper selvage; lower contact not evident; presumably ground.; Traces to 1% med pyrite growths in white grey qtz exhibit traces of fine <u>Visible Gold</u> associated.	6881	V.G.	56.0	57.0	1.0	10764 7777	0.313	0.226
			6882		57.0	58.5	1.5	124 298	0.004 0.009	
		58.8 to 60.2: sheared and quartz-filled zone with upr. contact at 35° to CIA; lower contact pinches at 45° to CIA and appears to mimic a pillow selvage.; moderate cb. alt gives selvages mottled to intrusive texture.	6883		58.5	60.5	2.0	38		
			6884		60.5	62.0	1.5	11		
		71.5 to 72.2: slight shearing and qtz-cb. alteration at 40° to CIA.	6885		62.0	67.0	5.0	826	.024	

# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_

HOLE NO. B 89-19 SHEET NO. 4

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	OZ. TON	OZ. TON	
					FROM	TO					TOTAL
		75.3 to 75.8 } mildly to moderately 82.5 to 82.8 } sheared andesite with 83.1 to 83.6 } traces brownish alteration and trace to 2% fine pyrite; at 20° to 40° to CIA.	6886		67.0	72.0	5.0		132		
		87.8 to 88.5: quartz-carbonate slens at 36° to CIA; trace pyrite; trace beige carbonate along chloritic partings.	6887		82.0	84.0	2.0		492		
		90.0 to 91.3: moderate shearing with qtz-carbonate; trace beige carbonate as previous.	6888		87.5	91.5	4.0		310		
		- from 92.0 feet up to 2% quartz- carbonate stringers and veins at 0° to 45° to 80° to CIA.									
		<u>Pillowed Andesite</u> - massive, fine-grained, dk gr. with gradational upper contact with carbonate.									
	107.0	168.0									

# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_

HOLE NO. 889-19 SHEET NO. 5

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPH. IDES	FOOTAGE FROM	TO	TOTAL	%	%	OZ./TON	OZ./TON
		unit; up to 3% gash and stringers of white quartz-carbonate up to 0.5 inch widths at 0° to 80° to CIA rhythmically throughout sequence; trace epidote at pillow selvages; mild carbonate alteration throughout, medium to slow reaction = HCl.	6889		155.0	156.5	1.5			8	
		157.0 to 157.5: grey qtz as fracture filling = 10% granular white carb. trace pyrite; 1% beige to light grn. carbonated at vein selvages; 5% chlorite in vein matt; 3% Tourmaline in masses.	6890		156.5	157.5	1.0			25	
			6891		157.5	159.0	1.5			25	
168.0	176.8	<p><u>Carbonatized Andesite</u></p> <p>- fine-grained, schistose and green-grey; schistosity banded at 23° to CIA with &lt;4% grey qtz-cb fractures to 0.25 inches and wht. qtz-cb at 80° to CIA to 0.25 inches; gradational yr. and lwr. contacts.</p>									

# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_

HOLE NO. 389-19 SHEET NO. 6

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS						
FROM	TO		NO.	% SULPH. IDES	FOOTAGE			%	%	OZ./TON	OZ. TON	
					FROM	TO	TOTAL					
146.8	251.0	<p><u>Andesite</u></p> <p>-gradational from carbonatized schist; massive, medium to fine-grained <math>\approx</math> 20% interstitial white cb disseminated throughout; med. green to grey colour, &lt;1% qtz-cb veins.</p> <p>216.0 to 216.2: white qtz-cb tourmaline vein at 65° to CIA. in massive grn. andesite; sharp contacts.</p> <p>234.7 to 236.0: qtz-cb vein at 16° to CIA <math>\approx</math> 5% pink-rose carbonate in groundmass of qtz-act-cb and chlorite.</p> <p>-grades into grey carbonatized andesite at 251.0 feet.</p>										
			6892		214.0	215.5	1.5			<del>24</del> 24		
			6893		215.5	216.5	1.0			20		
			6894		216.5	219.0	2.5			5		
			6895		234.0	237.0	3.0			28		



# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_

HOLE NO. B89-19

SHEET NO. 7

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS			
FROM	TO		NO.	% SULPHIDES	FOOTAGE FROM TO TOTAL	%	%	OZ/TON	OZ/TON
251.0	276.0	<p><u>Carbonated Andesite</u></p> <p>- fine-grained, green-grey with 10% very fine interstitial carbonate throughout; slight schistosity at 30° to CIA; slight banding; up to 5% thin fracture-fillings of grey quartz and carbonate throughout.</p>	6896		267.0 271.5 4.5			124	
		<p>271.5 to 276.5 } sheared and carbonated</p> <p>287.0 to 290.0 } zone with up to 20% grey quartz stringers and veins 30° to CIA; with 5% yellow-beige carbonate through section; trace pyrite.</p>	6897		271.5 276.5 5.0			993	
			6898		276.5 281.0 4.5			239	
			6899		287.0 291.0 4.0			401	
296.0	319.5	<p><u>Andesite</u></p> <p>- dark green with moderate to intense white carbonate throughout; shearing and schistosity at 40° to CIA; up to 15% white carbonate as discontinuous stringers or 'gash' veins; sharp lower contact + chilled at 50°.</p>							

# DIAMOND DRILL RECORD

NAME OF PROPERTY \_\_\_\_\_

HOLE NO. B 89-19 SHEET NO. 8

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	OZ./TON	OZ./TON
					FROM	TO				
319.5	333.0	<p><u>Peridotite</u></p> <p>- grades from chilled contact at 319.5 feet into medium-grained intrusive texture with 30% green chlorite shards in grey-green matrix; massive; grey-black appearance; non-magnetic; little to no carbonate evident; <u>non-talcose</u>.</p>								
	333.0	<p><u>End of Hole</u></p>								

# DIAMOND DRILL RECORD

NAME OF PROPERTY Asquith Township Property  
 HOLE NO. B89-21 LENGTH 274 Feet  
 LOCATION Asquith Township; Buckingham Area  
 LATITUDE 18-60E DEPARTURE B+25S  
 ELEVATION -740' AZIMUTH N/A. DIP 90°  
 STARTED February 63 FINISHED February 67, 1967

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
269'	86°	014°			

HOLE NO. B89-21 SHEET NO. 1  
 REMARKS Casing Pulled

LOGGED BY V. J. J. J.

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON
					FROM	TO	TOTAL				
0.0	5.0	<u>Casing in Overburden.</u>									
5.0	53.4	<u>Carbonatized Andesite</u> - light green-grey schist, fine-grained at 40° to CIA; only in areas of shearing; unaltered areas grade to massive texture; highly reactive to acid; moderate shearing with trace being carbonate associated with grey quartz with white carbonate.	6912		5.0	8.0	3.0		559		
		6.2 to 9.0: grey quartz fracture-fillings at irregular orientations at 15° to CIA; trace buff-beige carbonate to 5% in elongated sinuous patches; trace coarse pyrite; white cb. along way this fractures at 45° parallel to cb-buff + chlorite selvage	6913		8.0	11.0	3.0		503		

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Hill  
 HOLE NO. B89-21 SHEET NO. 2

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS			
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	OZ. TON	---
				FROM	TO	TOTAL			
		27.5 to 27.5 } grey quartz veins + 29.4 to 30.0 } fracture-fillings = 38.0 to 39.0 } trace to 1% b.f. - db							
		at vein selvages, trace coarse grains of pyrite; 2% white fractures marked by carbonate; veins + shearing at 15° to 25° to CIA.	6915	25.5	29.0	3.5		2376	.069
			6916	29.0	32.0	3.0		524	.015
			6917	32.0	37.0	5.0		700	.020
		50.3 to 50.6: white qtz-db vein at 31° to CIA with 5% Tantalum enclosed in vein material.	6918	37.0	39.0	2.0		1640	.048
			6919	39.0	41.0	2.0		1849	.054
		- grades into slightly carbonatized andesite at 53.0 feet.						447	.013
53.4	117.6	<u>Chloritic Andesite (Slight Carbonate).</u> - medium-green in colour; massive and fine-grained; slightly carbonatized and a little less reactive than previous; 2% thin qtz + db. fracture-fillings evident but discont.							

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Mine  
 HOLE NO. B89-21 SHEET NO. 3.

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPH IDES	FOOTAGE			%	%	OZ. TON	OZ. TON
					FROM	TO	TOTAL				
		53.0 to 63.5. white qtz vein at 30° to CIA; barren.									
		67.5 to 67.7. white qtz-cb. as previous.									
		-from 82.0 andesite becomes slightly more carbonate-alkal and exhibits subtle carbonate banding at 37° to CIA.									
		86.2 to 86.5: white qtz-cb vein at 15° to CIA; X-cuts schistosity.	6920	96.0	98.0	2.0			54		
		* 98.0 to 99.0: grey quartz with white carbonate along thin fractures at 37° to CIA with slight yellow-beige carbonate evident; trace to 1% pyrite noted along chloritic vein schanges.	6921	98.0	99.0	1.0			366		
			6922	99.0	101.0	2.0			24		
			6923	101.0	103.0	2.0			16		
			6924	103.0	105.0	2.0			82		
		103.5 to 103.9 } irregular white to 104.9 to 105.0 } grey qtz vein with 10% prismatic barite.	6925	105.0	106.0	1.0			25		

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Hill  
 HOLE NO. B89-21 SHEET NO. 4

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ. TON	OZ. TON
					FROM	TO	TOTAL				
		110.2 to 117.6: grains up to 30% white carbonate in 'gash-type' fracture fillings up to 1/8 inch; often cut by late fractures off-setting carbonate lat-laterally									
117.6	205.5	<u>Chloritic Pillowed Andesite</u> - dark green; massive and fine-gr. with up to 4% bright epidote along thin fractures and associated with slightly discernable pillow selvages.; 2% wh. qtz. cb. in veins to CIA.									
		188.6 to 189.7: white massive qtz + crystalline carbonate vein at 5% CIA; 2% epidote clots, trace pyrite.									
205.5	228.0	<u>Chloritic Andesite with Quartz-Ch.</u> <u>Shearing</u> - fine-grained, schistose and green at 10° to CIA; with up to 15% white carb.									

# DIAMOND DRILL RECORD

NAME OF PROPERTY Buckingham Mine  
 HOLE NO. B89-21 SHEET NO. 5

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	OZ. TON	OZ. TON	
					FROM	TO	TOTAL				
		as irregular fracture-fillings in argill. zone									
		226.5 to 227.5 : qtz-ds. vein at 5° to CIA; trace red hematite along fractures in white qtz.; crenulated chloritic selvages at 5°.									
		239.2 to 240.0 : qtz-ds-epidote vein at 5° to CIA with trace bladed Tourmaline at upper contact.									
228.0	267.0	<u>Pillowed Andesites</u> -as previous.									
267.0	274.0	<u>Carbonated Andesite</u> -gradational from pillow lavas; grades to grey-green with shearing increasing down-hole to 272.2 feet; carbonate minor to moderate; banded reaction with acid.									
		272.2 to 273.1 : grey, qtz-ds sheared andesite with trace partings of beige carbonate; shearing at 57° to CIA.; 15% qtz-ds overall.	6926		272.0	274.0	2.0		186	382	

# DIAMOND DRILL RECORD

NAME OF PROPERTY

Buckingham Mine

HOLE NO. 389-21

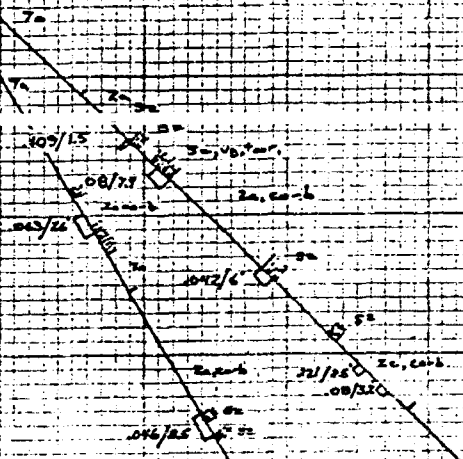
SHEET NO. 6

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ./TON	OZ. TON
					FROM	TO	TOTAL				
<u>2740</u>		<u>E-1 21 Hole</u>									
		<p><u>N.B.</u>                      Hole terminated at 2740 as                      bit finished.  <i>K.H.P.</i></p>									



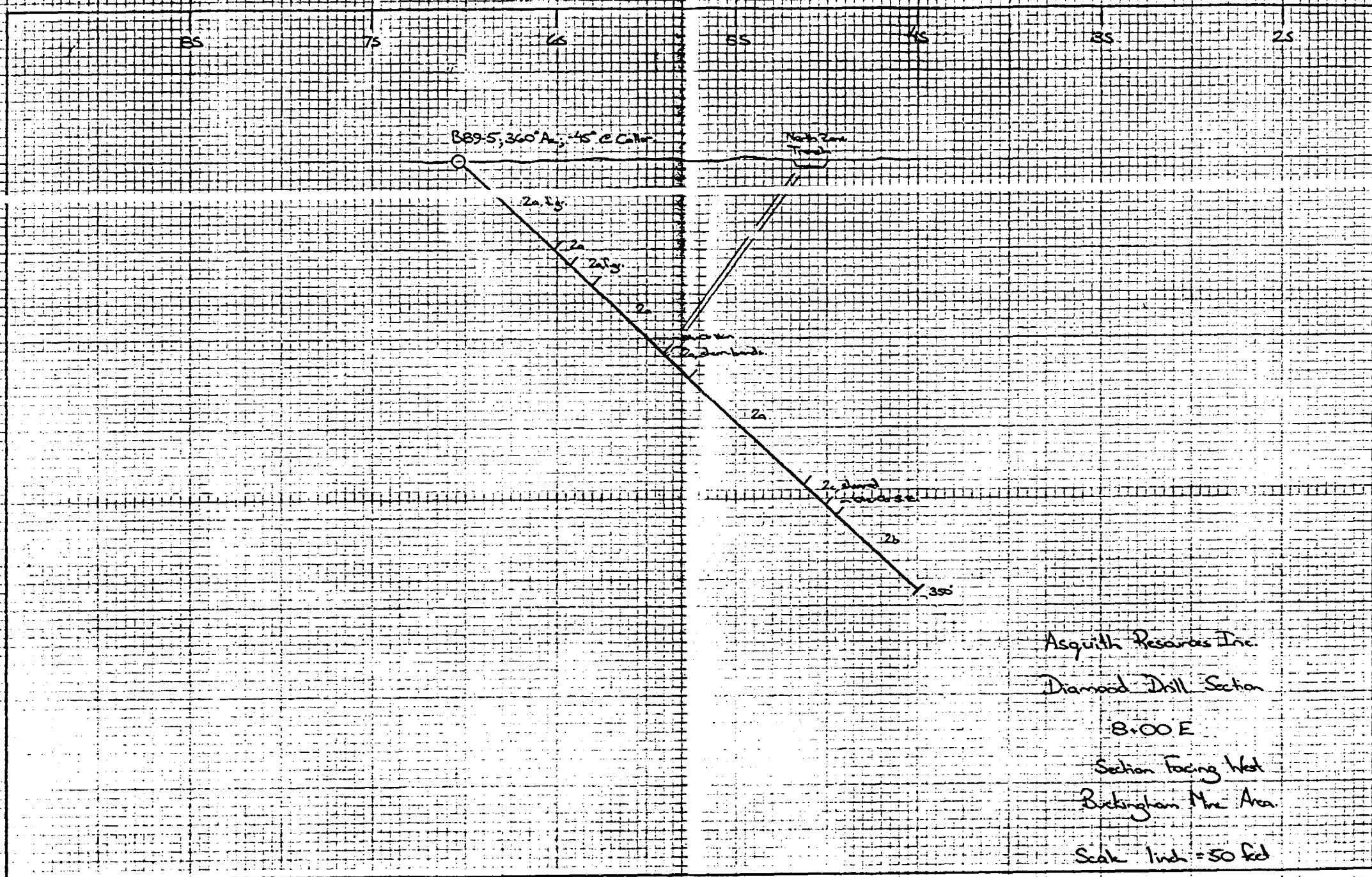
EGO RESOURCES LIMITED  
 Diamond Drill Services  
 Line 1BE  
 Scale 1"=50' Mar '59  
 J.L. TINDALE, ACCOUNTANT IN CHARGE

889-2, 2A

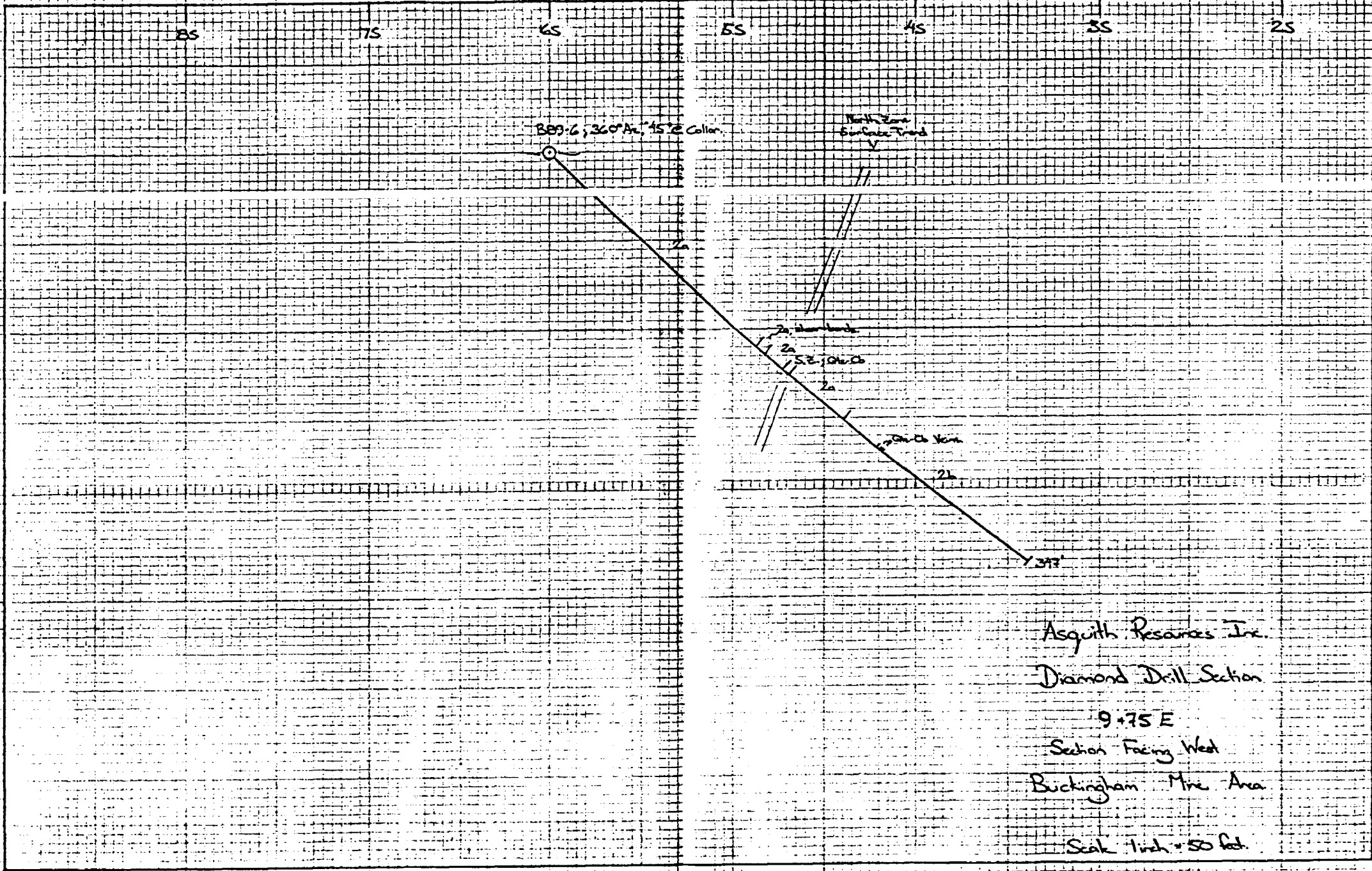


297'

267' (2A)



Asquith Resources Inc.  
 Diamond Drill Section  
 8.00 E  
 Section Facing West  
 Buckingham Mtn Area  
 Scale 1 inch = 50 feet

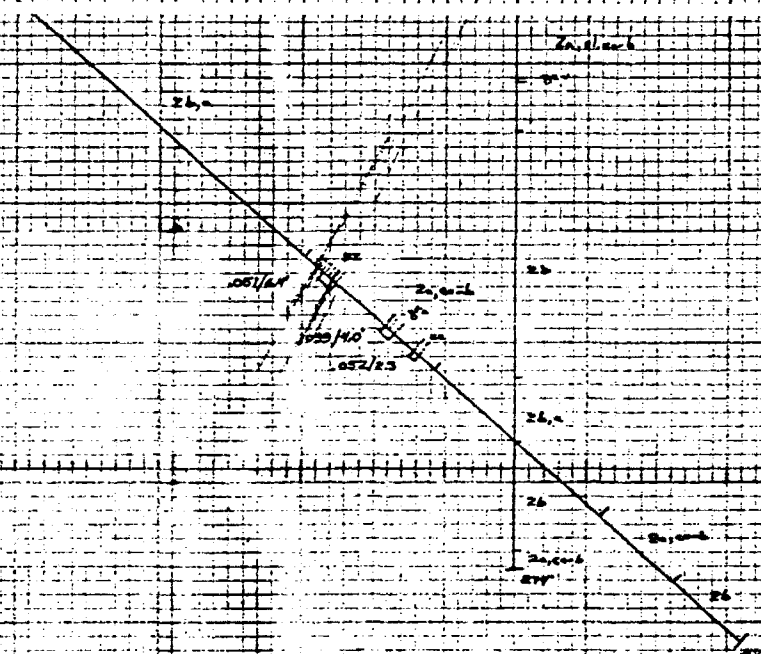
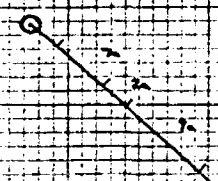


Asquith Resources Inc.  
 Diamond Drill Section  
 9.75E  
 Section Facing West  
 Buckingham Mine Area  
 Scale 1 inch = 50 feet

B65-4

B65-2

2078-4



EGO Resources Limited

Danvers Dam Section

Line 1B+50E

Scale 1"=50' MAR 87

J.L. Tinsley & Associates Inc.

13 S

12 S

11 S

10 S

9 S

8 S

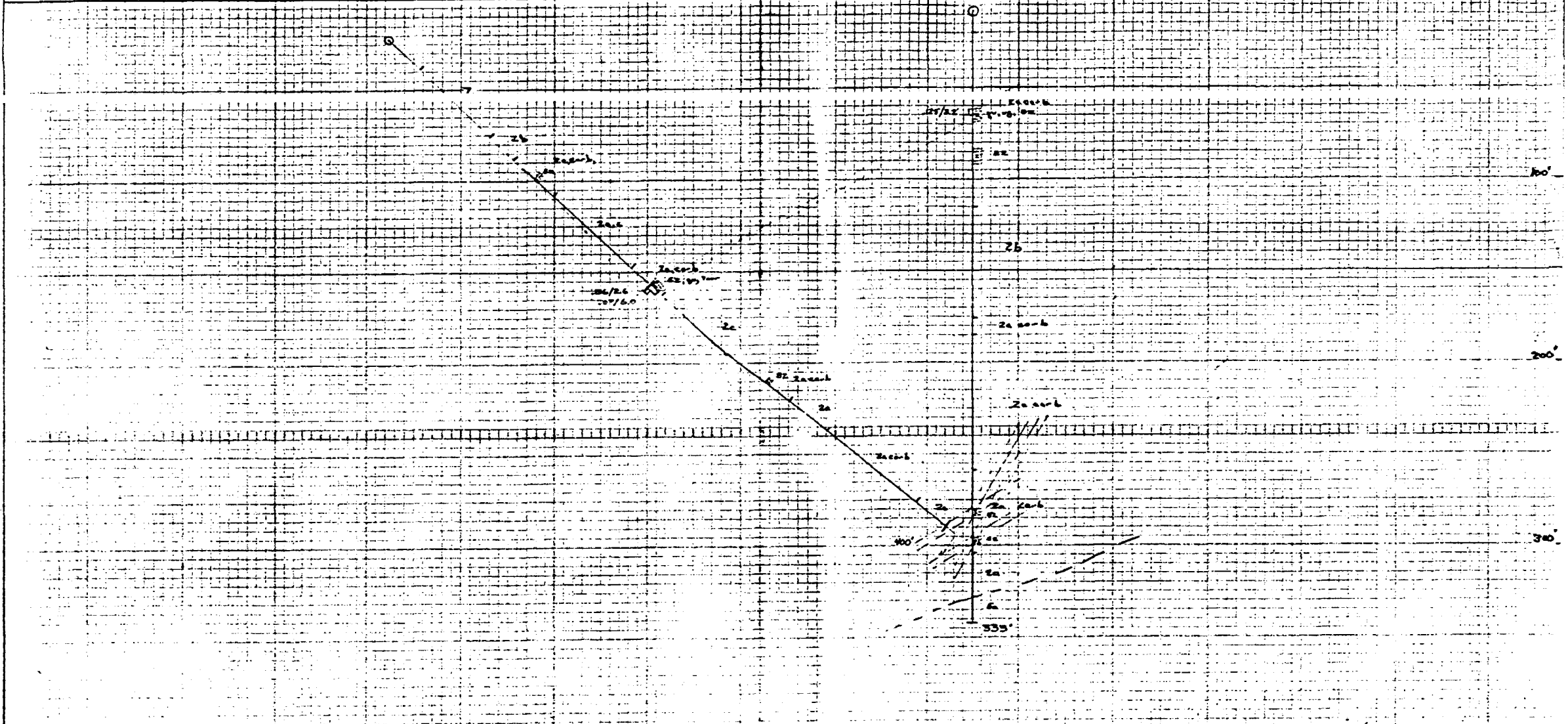
7 S

6 S

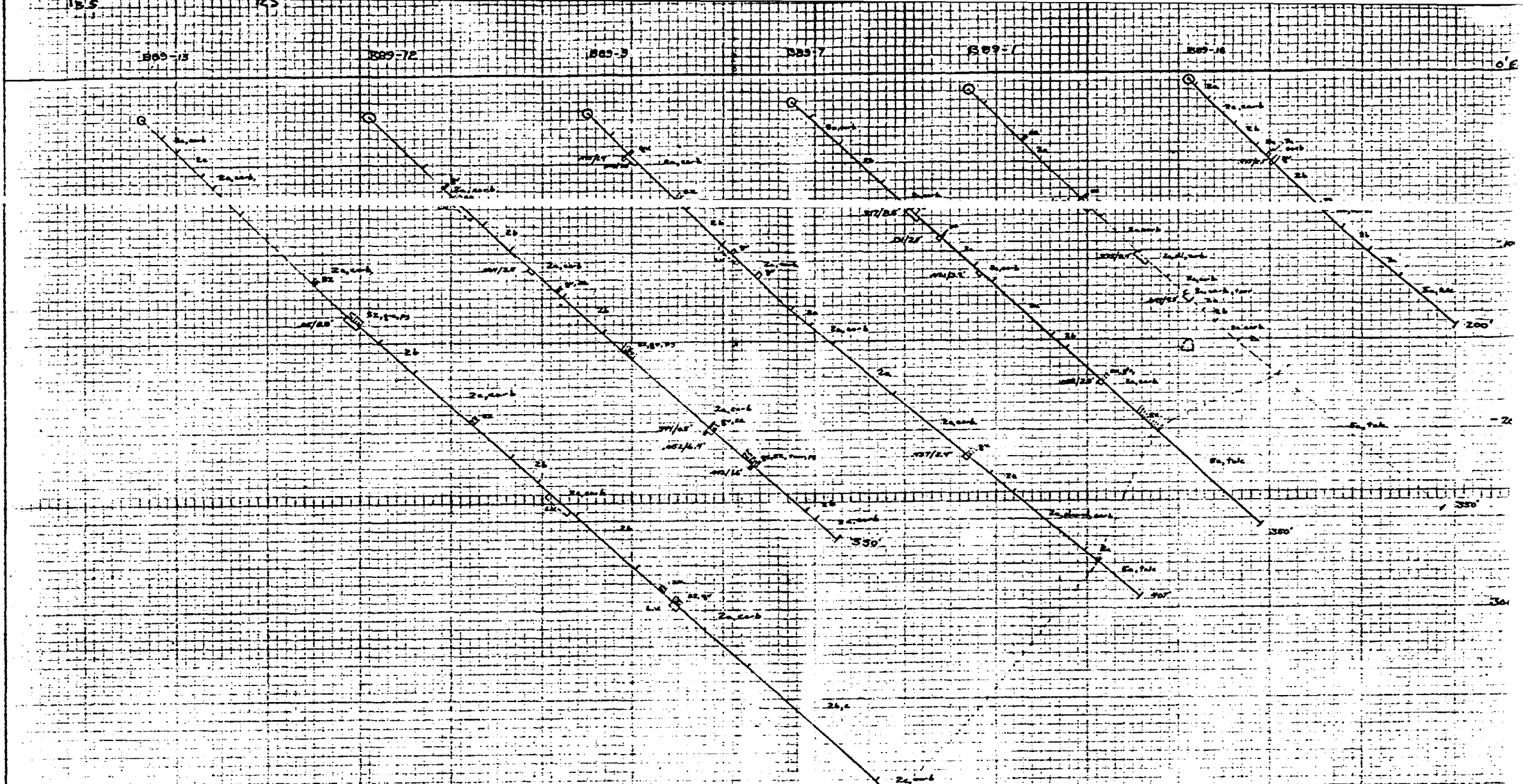
889-15

889-19  
(45' at bottom)

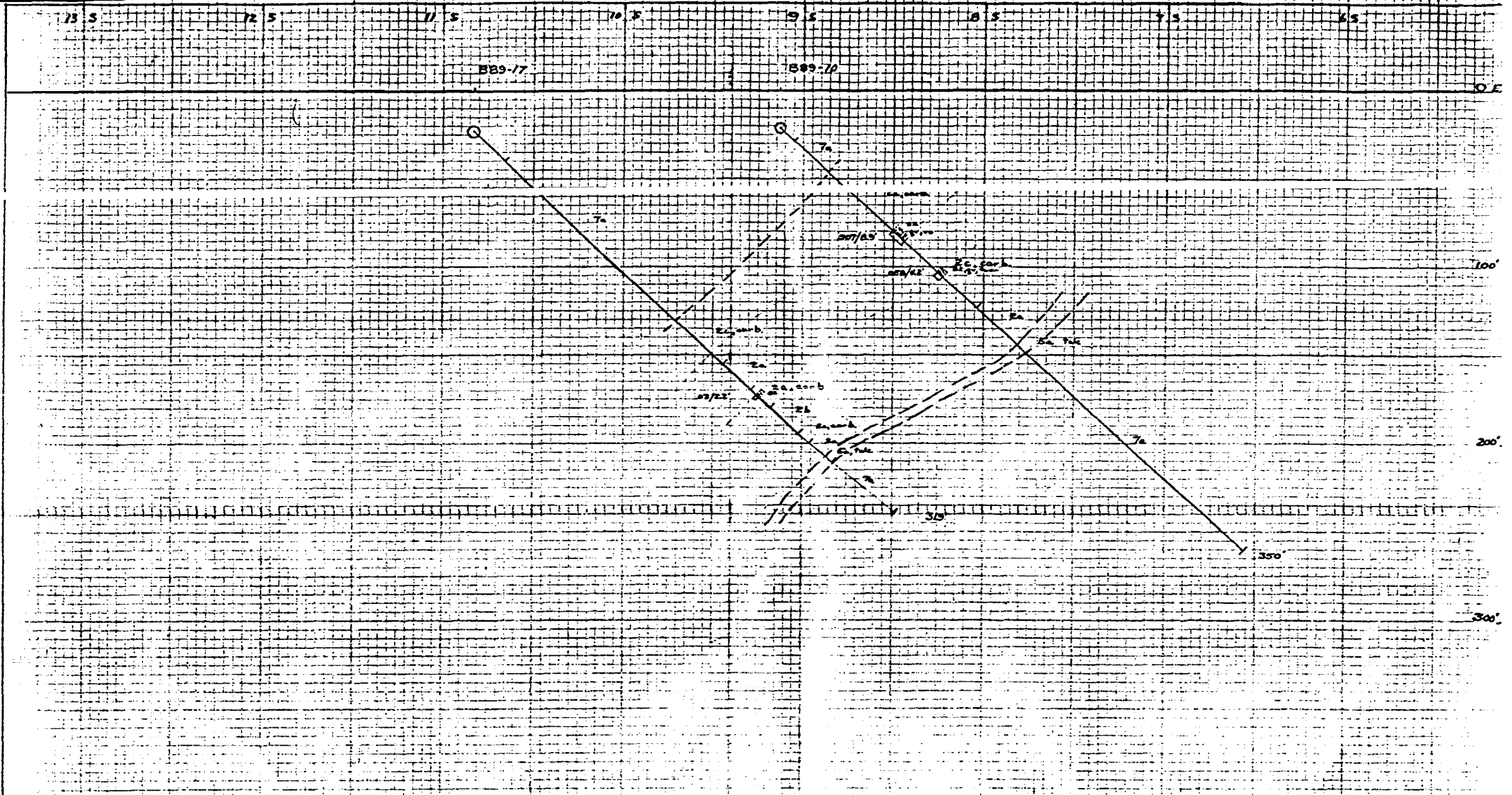
0 E



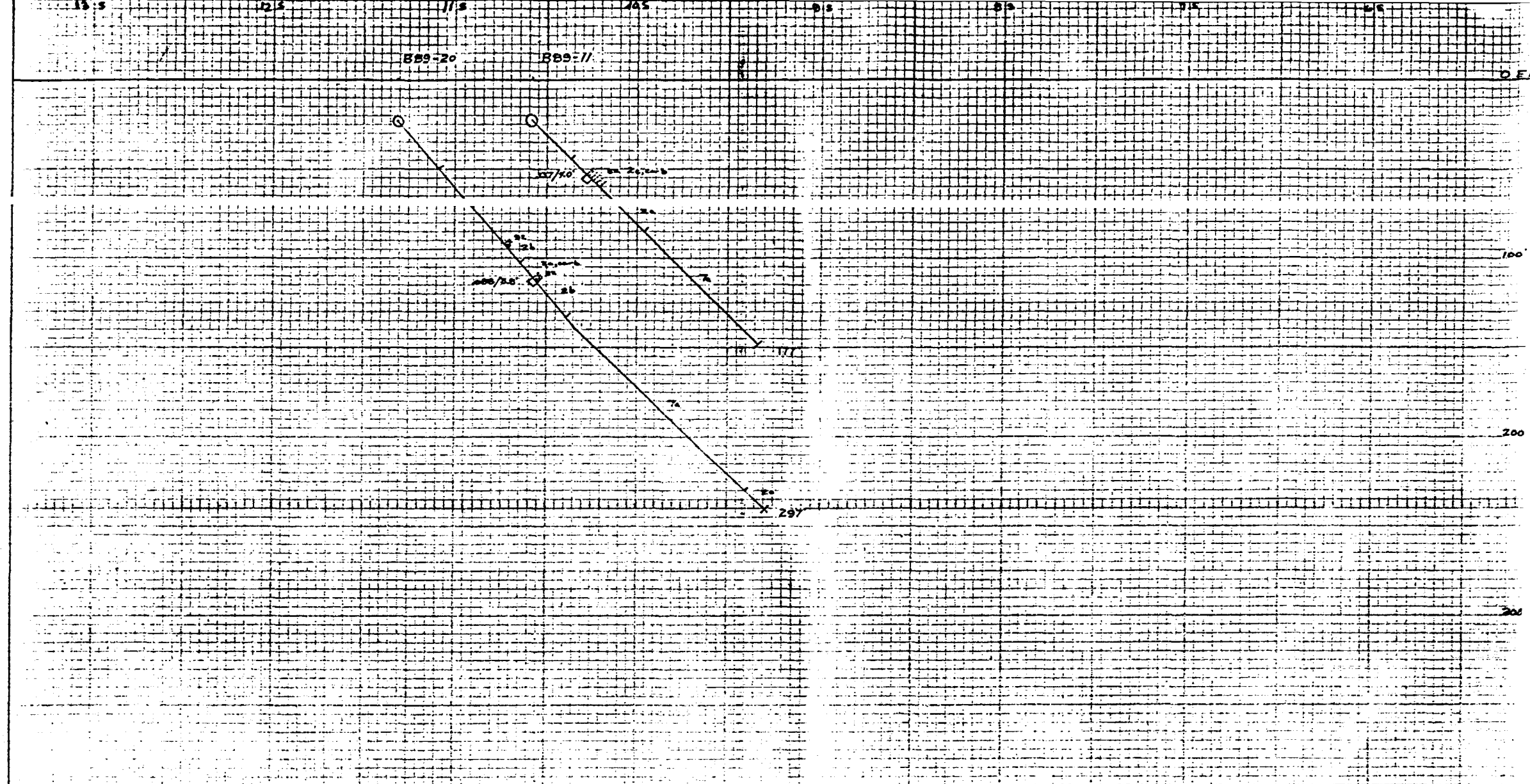
Ego Resources Limited  
 Diamond Drill Section  
 Line 19E  
 Scale 1" = 50' - May '89  
 J.L. Thomas (Responsible) JTW



EGO Resources Limited
Diamond Drill Section
LINE 20E
SCALE 1" = 50' MAR '89
J.L. TINDRUP & ASSOCIATES INC.

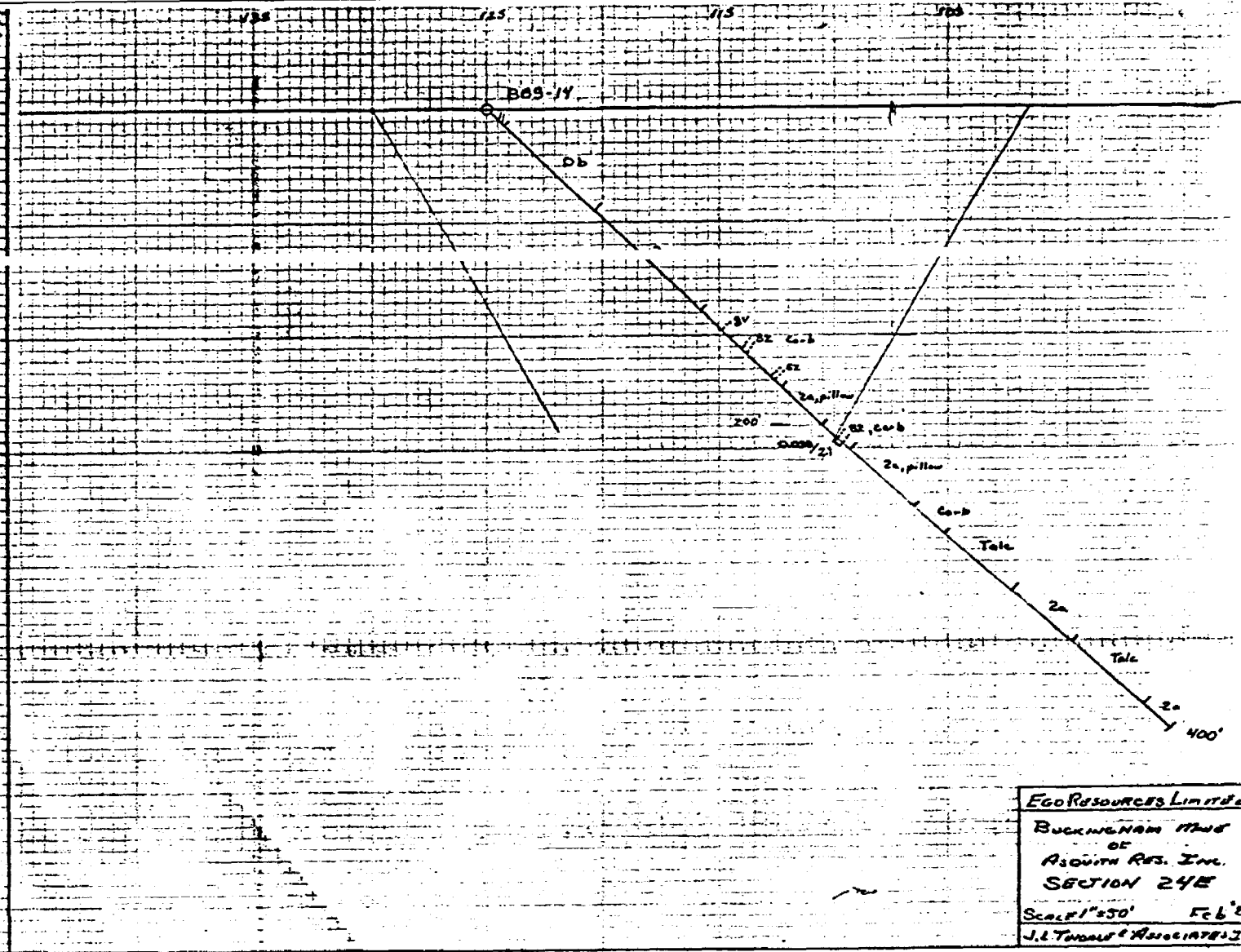


EGO RESOURCES LIMITED  
DIAMOND DRILL SECTION  
LINE 22 E  
SCALE 1" = 50' MAR '89  
J.L. TURNER & ASSOCIATES INC.



EGO Resources Limited  
 Diamond Drill Series  
 Line 23E  
 Scale 1"=60' MAR '89  
 J.L. TINDALE & ASSOCIATES





Eco Resources Limited  
 BUCKINGHAM MINE  
 OF  
 ASOUTH RES. INC.  
 SECTION 24E  
 SCALE 1" = 50' Feb 82  
 J.L. TUDOR & ASSOCIATES



OM 87 -6- C-334

THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

- ① MAP ONLY - FIGURE #1, Magnetometer → See Toronto File # 2. 11044. Reports  
Survey, West Claim Block of Work # W8808-038, W8808-114
- ② a) MAP ONLY - FIGURE #1, Magnetometer → See Toronto File # 2. 11227. Reports  
Survey, N.E. Claims. of Work # W8808-121, W8808-122.  
b) MAP ONLY - FIGURE #2, Magnetometer  
Survey, Kubiak Claims.
- ③ MAP ONLY. Magnetic Survey, Asquith → See Toronto File # 2. 11419. Report  
Township Property. of Work # W8808-220.
- ④ a) MAP ONLY - Indem Field Strength (contours), → See Toronto File # 2. 12301, Report  
Grid B, West Claims. of Work # W8908-048  
b) MAP ONLY - Indem Dip Angle, Grid B,  
West Claims

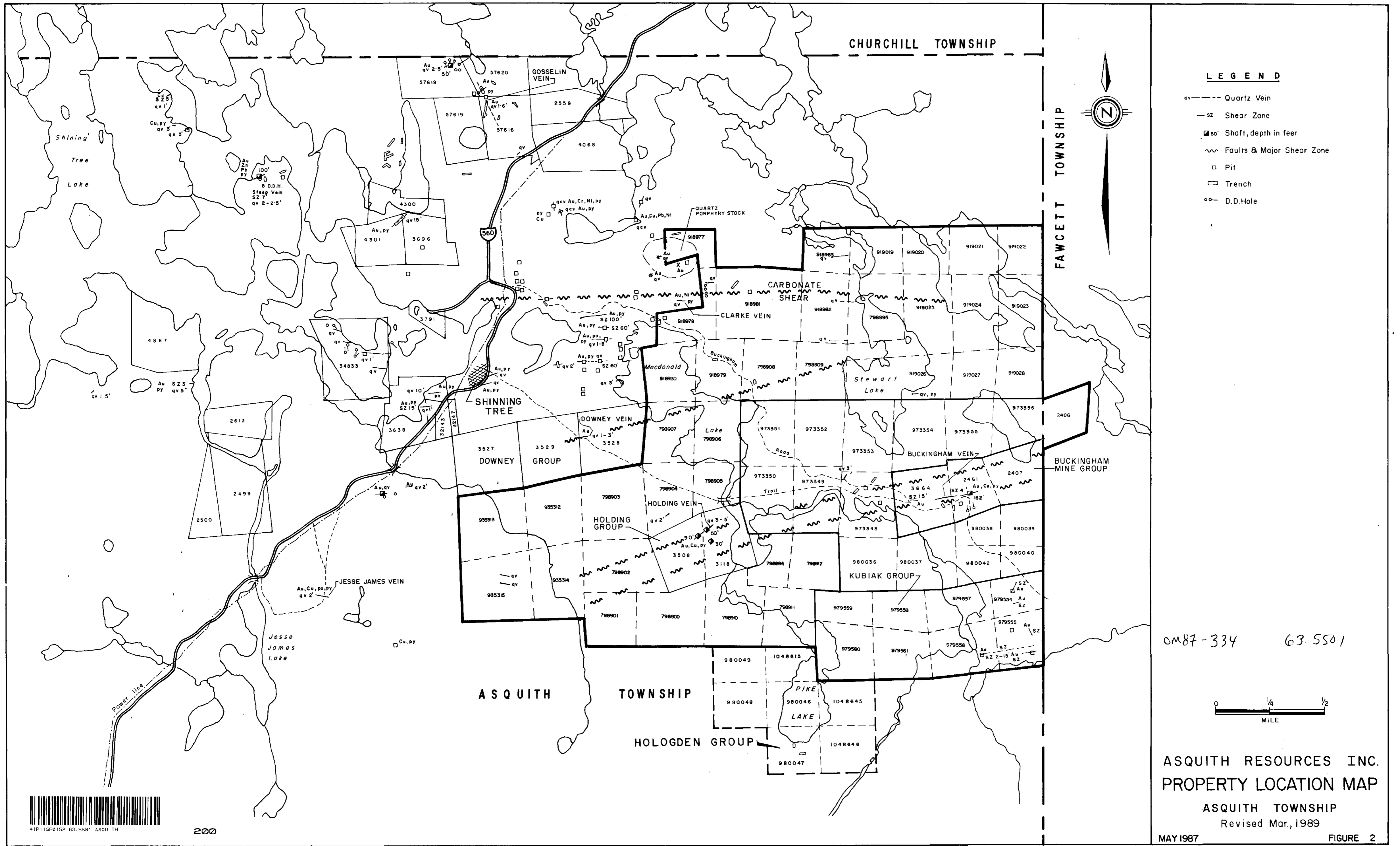
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#63. 5501

OM: 87-6-C-334

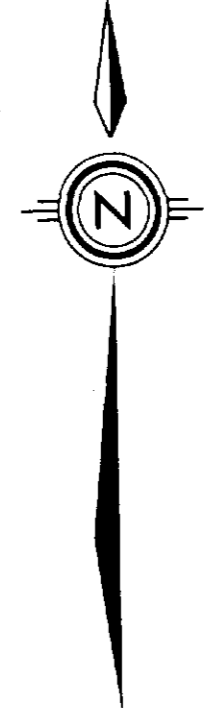
THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

- ⑤ MAP ONLY - Podem VLF Survey, Dip Angle → See Toronto File # 2.13903. Report and Field Strength. Holyden Mine Area, Oct/88. of Work # W9108-00033.
- ⑥ a) MAP ONLY - Geological Survey, Claims L.918977 → See Toronto File # 2.11844. Report to 918983, Aug. 1988. of Work # W8808-416.
- b) MAP ONLY - Podem VLF, Field Strength (Contours), Grid D, March 1988.
- c) MAP ONLY - Podem VLF, Dip Angle, Grid D, March 1988.
- ⑦ DDH's # K89-1 to K89-4, Asquith Resources → See Toronto File ASQUITH TP. DDR #33. Inc., Asquith Tp., K.W. Johnson, Jan. 1989. Report of Work # W8908-206.
- ⑧ DDH's # B89-3 B89-4, B89-7, B89-9 to B89-17, → See Toronto File ASQUITH TP. DDR B89-20. Asquith Resources Inc., K.W. Johnson, #35. Report of Work # W8908-206. J.L. Tindale, Jan-Feb/89.

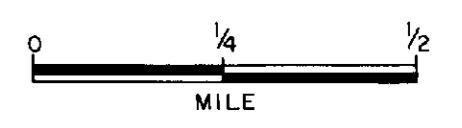


**LEGEND**

- qv --- Quartz Vein
- sz Shear Zone
- 50' Shaft, depth in feet
- ~ Faults & Major Shear Zone
- Pit
- ▭ Trench
- D.D.Hole



0M87-334 63.5501

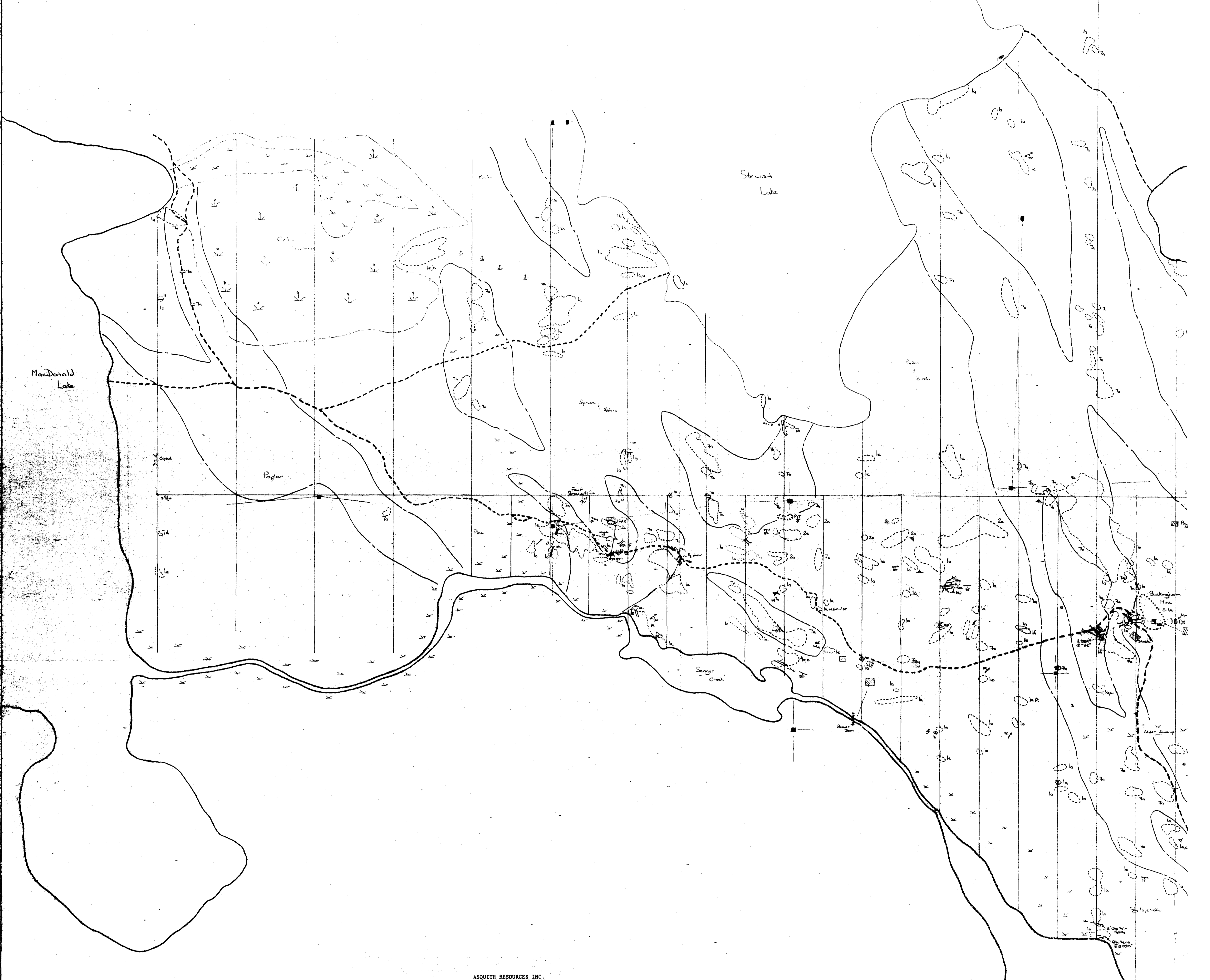


**ASQUITH RESOURCES INC.  
PROPERTY LOCATION MAP**

ASQUITH TOWNSHIP  
Revised Mar, 1989



- L32-00W - L28-00W - L24-00W - L20-00W - L16-00W - L12-00W - L8-00W - L4-00W - L0-00 - L4-00E - L8-00E - L12-00E - L16-00E - L20-00E



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, carbonized
  - 1j. Pillow Breccia
  - 1k. Trachyte



0M87-334 63.5501

ASQUITH RESOURCES INC.

GEOLOGY MAP

BUCKINGHAM MINE PROPERTY

Grid 'A'

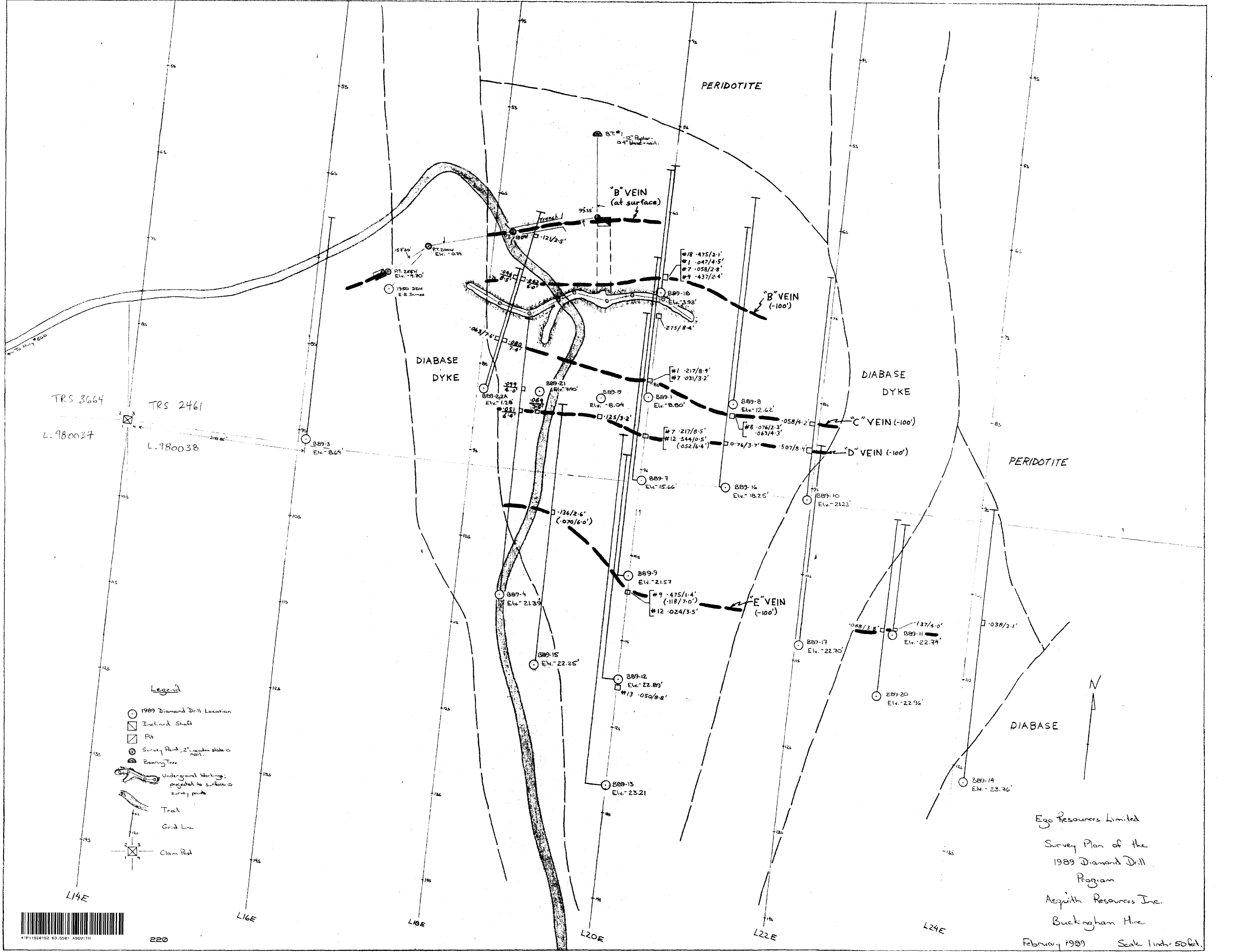
Asquith Township

Shining Tree, Ontario

Scale 1:50,000 Geology B, K.W.S.

A. L. D. and Associates Inc.





**Legend**

- 1989 Diamond Drill Location
- Inclined Shaft
- ⊠ Pit
- ⊙ Survey Point, 2" wooden stake & nail
- ⊙ Bearing Tree
- ⊔ Underground Workings, projected to surface as survey points
- Trail
- Grid Line
- ⊠ Clam Post

Ego Resources Limited  
 Survey Plan of the  
 1989 Diamond Drill  
 Program  
 Asquith Resources Inc.  
 Buckingham Mine

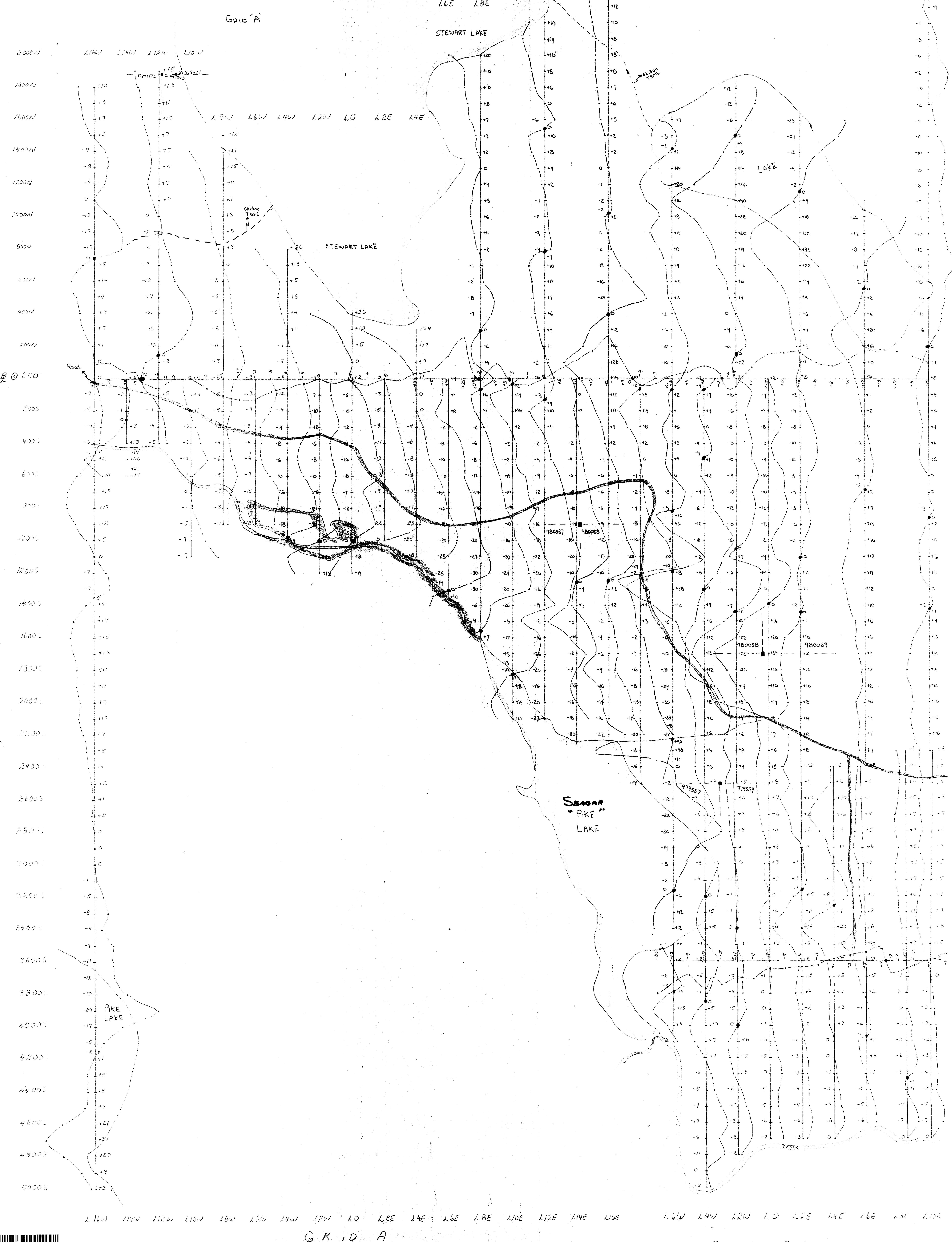
February 1989 Scale 1 inch = 50 feet

0M87-334, 63-5501



ASQUITH RESOURCES INC  
 RADEM (VLF) SURVEY  
 Sta. STA CM, AM  
 GRIDS A + C  
 INCLUDE NEGATIVE  
 IN PHASE  
 IN PHASE  
 CROSSOVER  
 IN PHASE  
 1" = 20'  
 ASQUITH TWP. SHIMMO TWP.  
 DIST. SUDBURY  
 LAMBER LAKE M. D.  
 SCALE 1" = 200' MARCH 1988  
 J. L. TINDALE & ASSOCIATES INC

- clamp post
- claim limit
- == Road
- LAKE
- CREEK



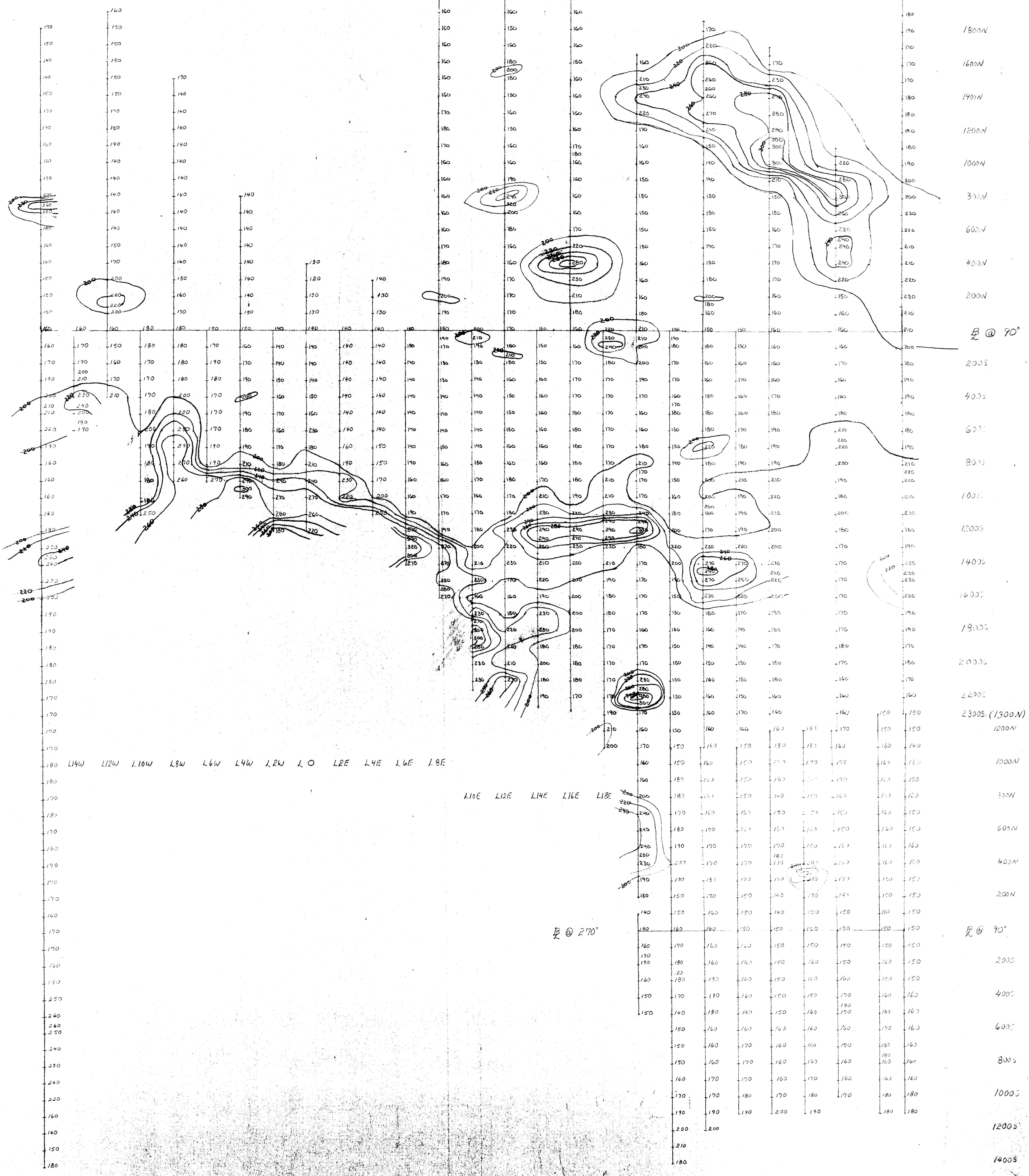
OMB7-334 63-5501  
**ASQUITH RESOURCES INC.**  
 RADEM SURVEY STA. CM  
 ASQUITH TWP, SHINING TREE  
 ONTARIO, DIST. 300 BURY  
 LAVER LAKE M. D.  
 NTS 41-P-11  
 GRIDS A + C  
 SCALE 1" = 200' MARCH 1988  
 J. L. TINDALE & ASSOCIATES INC.

L14E L16E L18E L20E L22E L24E L26E L28E L30E L32E L34E

L6E L8E L10E L12E

L16W L14W L12W L10W L8W L6W L4W L2W L0 L2E L4E

2000N  
1800N  
1600N  
1400N  
1200N  
1000N  
800N  
600N  
400N  
200N  
0 @ 270°  
200S  
400S  
600S  
800S  
1000S  
1200S  
1400S  
1600S  
1800S  
2000S  
2200S  
2400S  
2600S  
2800S  
3000S  
3200S  
3400S  
3600S  
3800S  
4000S  
4200S  
4400S  
4600S  
4800S  
5000S



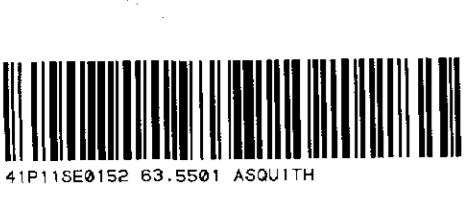
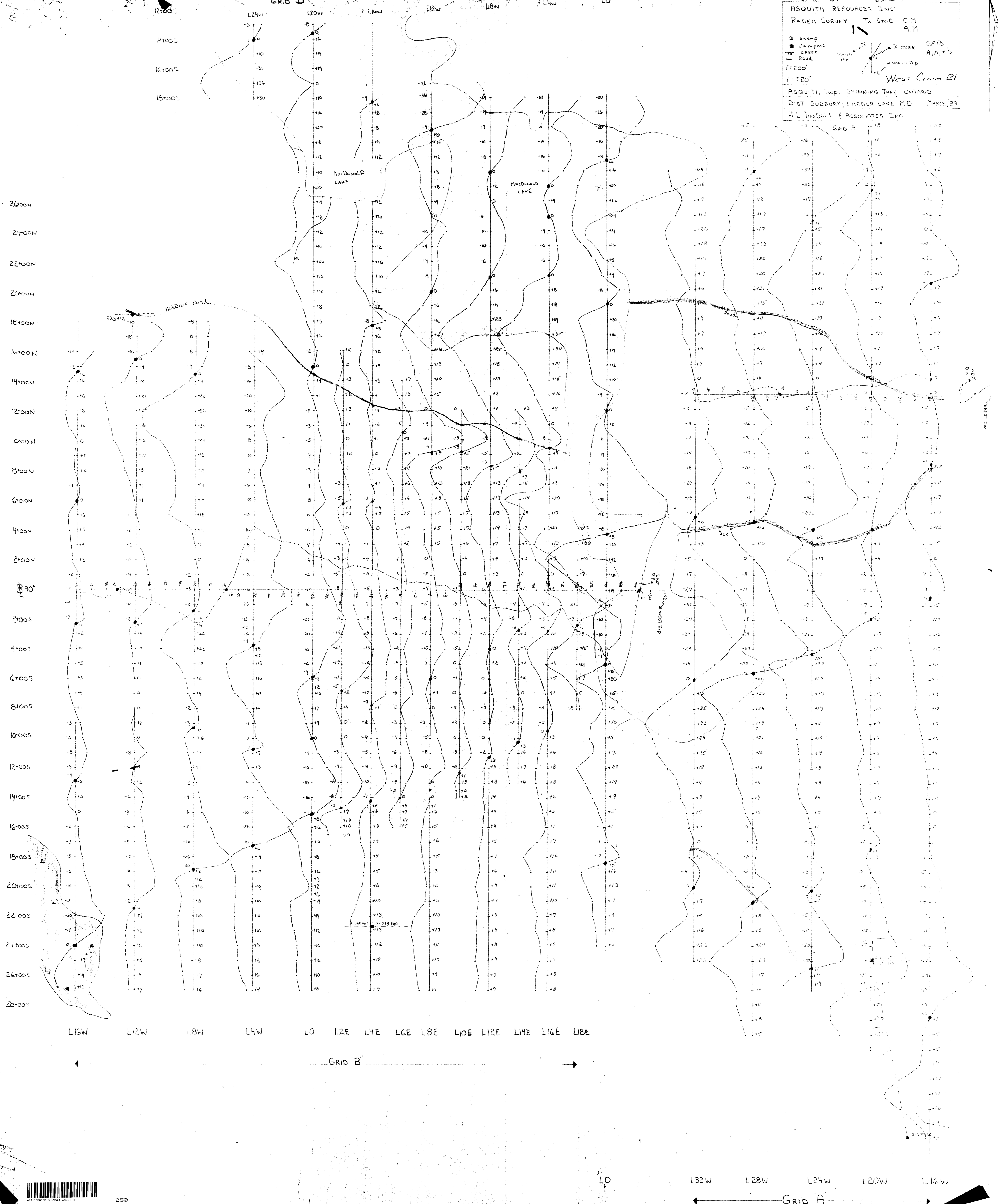
L16W

L6W L4W L2W L0 L2E L4E L6E L8E L10E

GRID C



0M87-237 63 5501  
 ASQUITH RESOURCES INC.  
 RADEN SURVEY Tx Stat C.M  
 A.M  
 1" = 200'  
 1" = 20'  
 WEST CLAIM B1  
 ASQUITH TWP., SHINNING TREE ONTARIO  
 DIST. SUDBURY, LARDER LAKE MD MARCH, 88  
 J.L. TINDALE & ASSOCIATES INC.



LO L32W L28W L24W L20W L16W  
 GRID A

600S

800S

1000S

1200S

1400S

1600S

1800S

2000S

2200S

2400S

2600S

2800S

3000S

3200S

1700N (3400S)

1400N

1400N

1200N

1000N

800N

600N

400N

200N

200S

400S

600S

800S

1000S

1200S

1400S

1600S

1800S

2000S

2200S

2400S

2600S

3000S

3200S

3400S

3600S

3800S

4000S

4200S

4400S

4600S

4800S

5000S

L24W L20W L16W L12W L8W L4W L0

L32W L28W L24W L20W L16W

L16W L12W L8W L4W L0 L2E L4E L6E L8E L10E L12E L14E L16E L18E

GRID B

GRID D

L32W L28W L24W L20W L16W

GRID A

ASQUITH RESOURCES INC  
 RADEM (VLF) SURVEY Tx. STA. CM, RM  
 GRID A, B + D  
 constant Interval: 20%  
 FIELD STRENGTH (90)  
 WEST CLAIM BLOCK  
 ASQUITH TWP SHINING TREE  
 ONTARIO DIST. SUBURBY  
 LAUREL LAKE M.D.  
 NTS 91-P-11  
 SCALE 1" = 200' MARCH 1988  
 J. L. TINDALE & ASSOCIATES INC

OM87-334 6345501



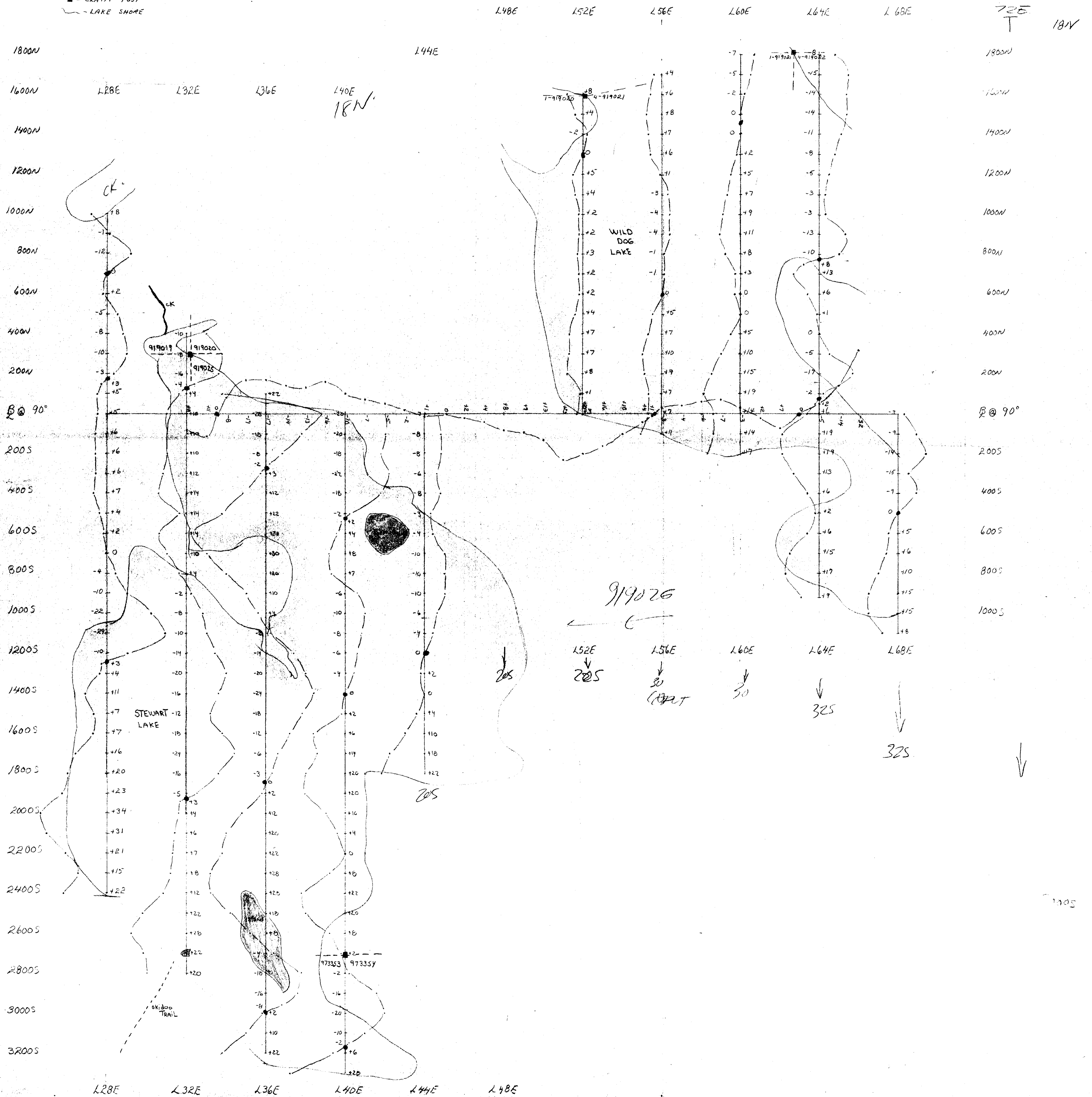
ASQUITH RESOURCES INC  
 RADEM STRAJEY Tx STA CM  
 GRID "D" EXT. E AM

GRID SCALE 1"=200'  
 PROFILE SCALE 1"=20'

ASQUITH TWP SHIMING TREE  
 ONTARIO DIST. SUDBURY  
 LARDER LAKE M. D.

J. L. TINDALE & ASSOCIATES INC

■ CLAIM POST  
 --- LAKE SHORE

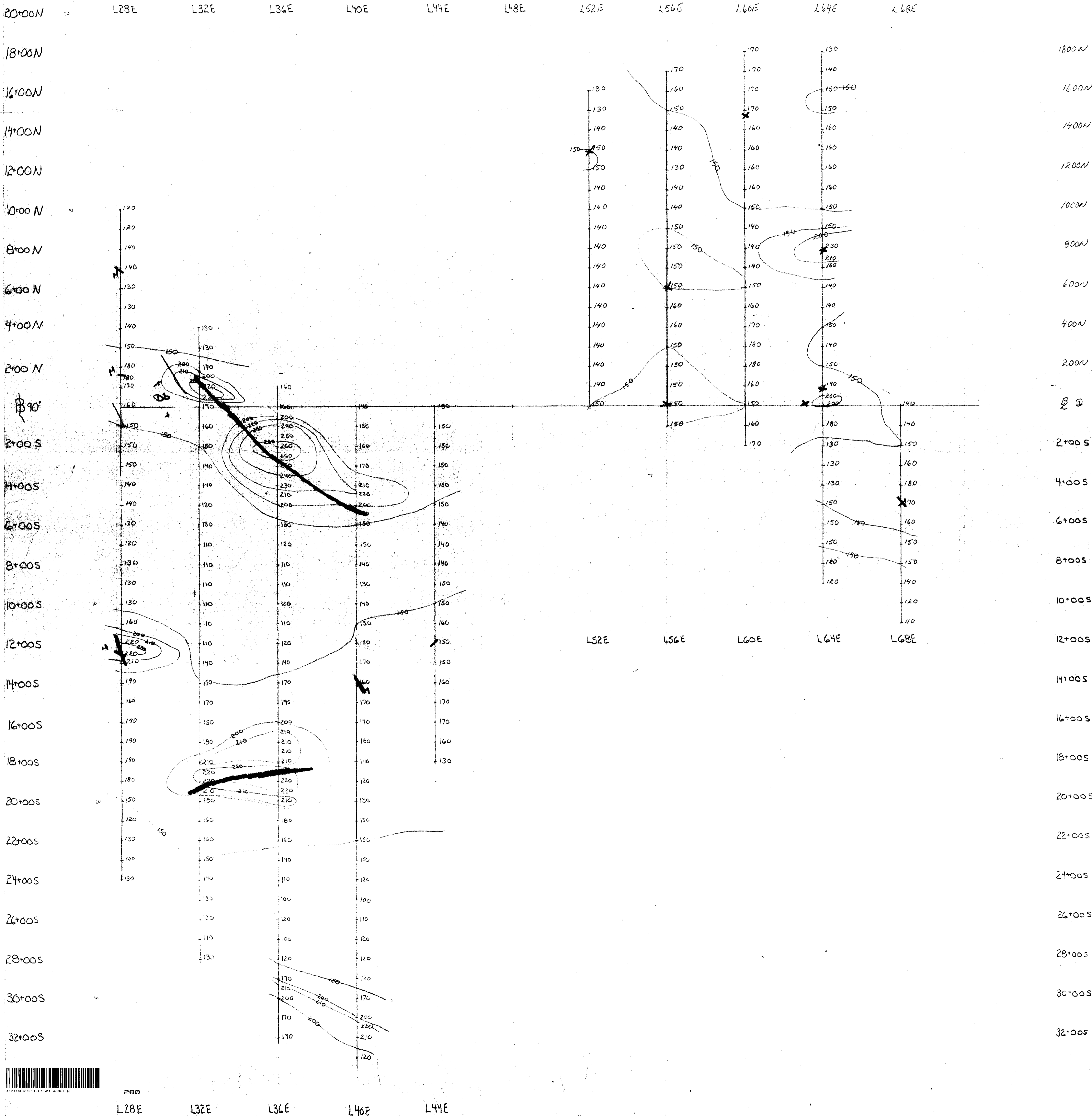


30+00N  
28+00N  
26+00N  
24+00N  
22+00N

ASQUITH RESOURCES INC  
RADEN SURVEY T.S. & C.M. AM

150 contour Interval 10%  
200  
220  
240  
FIELD strength %

ASQUITH Twp., SHINNING TREE  
ONTARIO, DIST. SUDBURY  
LARGER LAKE RD NTS 41-P-11  
SCALE 1"=200' MARCH/1988  
J.L. Tindale & ASSOCIATES INC



- L 6.00W

- L 4.00W

- L 0.00

- L 4.00E

- L 8.00E

- L 12.00E

- L 16.00E

- L 20.00E

- L 24.00E

- L 28.00E

- L 32.00E

- L 36.00E

30.00N

28.00N

26.00N

24.00N

22.00N

20.00N

18.00N

16.00N

14.00N

12.00N

10.00N

8.00N

6.00N

4.00N

2.00N

0.00 e 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

26.00S

28.00S

6.00N

4.00N

2.00N

0.00 e 90° C Grid

2.00S

4.00S

6.00S

8.00S

10.00S

