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52011SW0029 52011SW0041 MCVICAR LAKE

010

DURATION MINES LTD.

Report on Dougie Lake  
Claim Group,  
Pickle Lake Ontario

August 8, 1986

**RECEIVED**

NOV 10 1986

**MINING LANDS SECTION**

Prepared By

WILLIAM HILL MINING CONSULTANTS LIMITED  
Suite 704, 80 Richmond Street West,  
Toronto, Ontario, M5H 2C7

(416) 362-1474



52011SW0029 52011SW0041 MCVICAR LAKE

010C

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## INTRODUCTION

The Pickle Lake area has been the focus of intense exploration activity since the discovery of Dome Mines' Dona Lake deposit, and more recently St. Joes' Golden Patricia discovery.

At the request of Duration Mines Ltd., William Hill Mining Consultants Limited undertook an exploration program from May 31 to June 23, 1986 which consisted of geological mapping, VLF-EM and magnetic surveys to outline possible gold bearing horizons using the Dona Lake and Golden Patricia models.

## LOCATION AND ACCESS

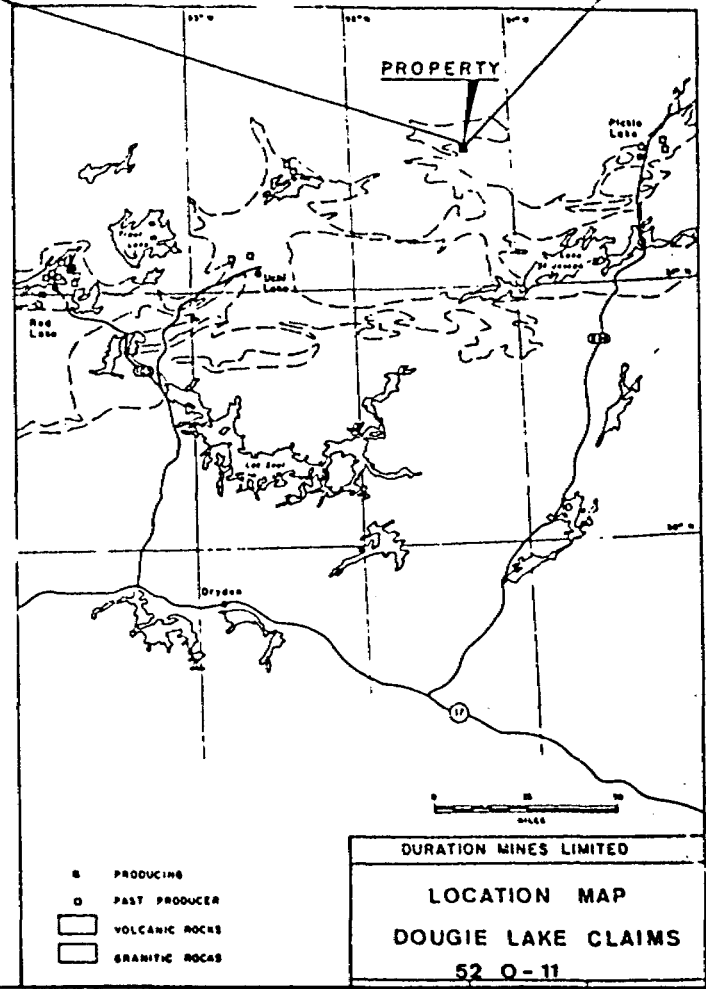
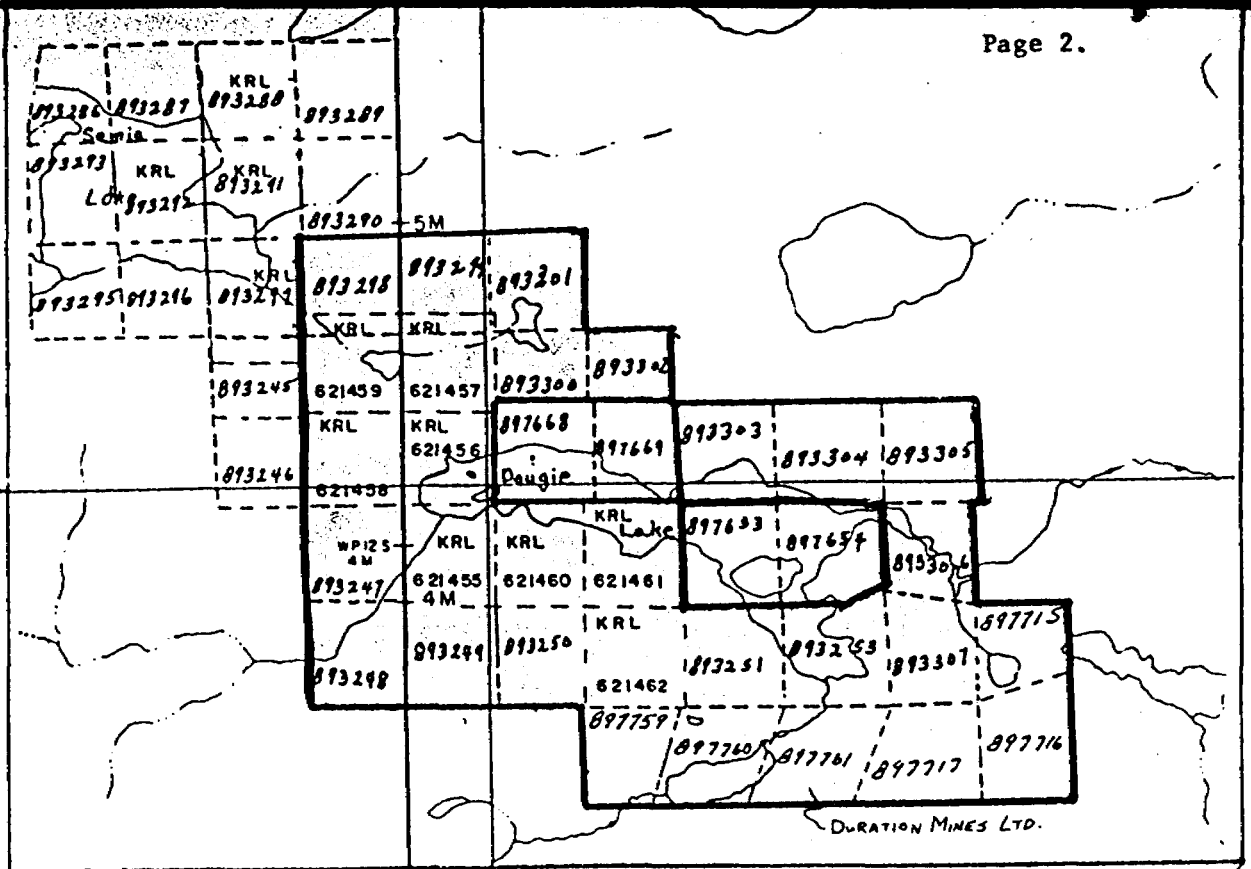
The original Dougie Lake claim group (KRL 621455 - 621462) found on the McVicar Lake Claim Sheet is located 80 km. west of Pickle Lake, and 110 km. east of Red Lake in the Red Lake Mining Division. At present, it is only accessible by float equipped aircraft, which can be chartered from either town (see Claim and Location Map).

## WORK HISTORY

Pickle Patricia Explorers Ltd. and Kenlaw Mines Ltd. were the first companies to record exploration work in the area. During 1960 - 1962, they mapped the geology of the area, performed trenching (12 trenches all totalled, ranging in length from 6 ft. to 160 ft.) and drilled 4 holes totalling 2,244 ft. The results of their work showed gold in DDH KL-4 of .05 oz. Au/ton over 36" from a zone on a small island at the west end of Dougie Lake plus a large gold bearing piece of float located in a small bay on the south shore of the lake which assayed up to 4 oz. Au/ton.

51° 31'

91° 24'



From 1978 to 1981, Cominco performed an extensive regional reconnaissance project throughout the area. They did an airborne magnetics survey, followed by ground magnetics, horizontal loop EM, and gravity surveys. They drilled one hole, 103 meters in length on the south-east shore of Semia Lake. Assay results indicate the target was base metals. They did not assay for gold.

In 1984 Durations Mines Ltd., in joint venture with Wilshire Energy Resources Ltd. acquired this ground based on a gold showing listed on the ODM Map 2218, and performed reconnaissance geological mapping, VLF-EM and magnetic surveys.

#### PRESENT SURVEY

Early in May, 1986, 23 additional claims were staked surrounding the initial 8 claim block, bringing the total to 31 claims (see Appendix A for all the claim numbers).

Two picketed grids were cut and chained in mid-May 1986 totaling 60 km. The lines on the Dougie Lake grid were cut at 100 meter intervals and picketed at 25 meter stations. South of Dougie Lake, the lines were cut at 50 meter intervals and picketed at 25 meter stations—referred to as the detailed grid. (See accompanying geology map, Appendix B). The Semia Lake grid lines were cut at 100 meter intervals and were picketed at 25 meter stations. A North-South Survey line was used for grid tie in and control. The survey post WP 12S 4m. found on the McVicar Lake Claim Sheet was used to initiate both grids. The Dougie Lake grid base line, BL-0 was cut at 115°, with all of the cross lines cut at 025°. The Semia Lake grid Base Line, BL-2N, was cut at 130°, with cross lines cut at 040°. Work done includes geological mapping, VLF, and magnetic surveys.

REGIONAL GEOLOGY

According to OGS report 207, The Geology of the Cat Lake - Pickle Lake Area by R.P. Sage and F.W. Breaks (1982), the Dougie Lake claim block area is underlain by a package of northwest-southeast trending felsic to intermediate metavolcanics, including minor pyroclastic rocks.

PROPERTY GEOLOGY

Three mappable units were found on the Dougie Lake claim group. These units consist of: an intermediate volcanic unit, a felsic crystal tuff unit, and a magnetite iron formation unit. The general strike of the area is 120°-115° with dips vertical to steep south.

The intermediate volcanic unit is composed of interbedded pillowed and massive flows, tuffs and minor agglomerates. The flows, and matrix of the pyroclastic units are commonly medium to dark green in colour, fine-grained, and weakly to moderately silicified with generally trace to nil sulphides and plus or minus carbonates. Thicknesses and extent of individual flows and pyroclastic units are indeterminate, however, several contacts were uncovered between each unit, but could only be traced for a couple of meters. The pyroclastic units are distinguishable by the presence of lapilli, and in some cases, feldspar crystals up to 40% in content. Larger bombs are also present within these units up to 30 cm in length, but are not in great abundance. Shearing is quite common throughout the unit and sometimes contains quartz veinlets and/or stringers with locally up to 5% sulphides in the form of disseminated pyrite and pyrite stringers. A total of 15 intermediate volcanic rock samples were collected from various locations on the property, mostly from shear zones. The majority of samples returned background levels of 5 ppb or less, with only one sample

being anomalous. This sample returned a 170 ppb value from a 1-10cm wide discontinuous quartz veinlet with a 2mm band of pyrite along the north edge.

The felsic crystal tuff unit (3t) found south of the intermediate unit, is characterized by abundant white feldspar crystals up to one cm or so in size ranging in content from 20% - 40%. Sparse quartz eyes are also present up to a few millimeters in size. The matrix is generally fine grained, moderately to well foliated, dark grey-green and well silicified with trace euhedral pyrite. The appearance of this unit on an outcrop scale is usually massive to weakly foliated and tuffaceous.

Shearing is not as common in this unit, but quartz stringers infilling fractures are. These stringers are in the order of a centimeter in width and are barren of sulphides. One sample was taken within this unit from a 30 cm wide quartz vein within a shear zone and analyzed <5 ppb gold.

The contact between the felsic crystal tuff unit and the intermediate volcanic unit was uncovered at three separate locations on the claim group. One was on line 17+00E, 1+10S; one was 20m east of line 2+00W 2+75N; and one was on line 3+00W 2+75N. These areas are all similar in characteristics in that the zones are sheared and contain milky white to grey quartz veins up to  $\frac{1}{2}$  a meter in width. Locally, sulphides (pyrite) are as much as 3% but are generally trace, fine grained disseminations. The quartz is quite often very strained giving it a well laminated appearance. A total of 25 samples were collected from all three zones with a single analysis of 30 ppb Au being the highest result. Generally the samples analyzed 5 ppb Au or less.



Magnetite iron formations are found through the northern part of the eastern detailed grid and in some cases found just to the south of the lake. These units, where uncovered, appear to be a metre or so in thickness of banded magnetite with minor chert (as found on line 8+00E 2+20N), or as banded magnetite chert units and brecciated magnetite chert units (as found around line 13+00E 4+10N) with quartz stringers and lenses with up to 2% disseminated pyrite. These units appear to be conformable with stratigraphy. A total of 10 samples were taken from these units. The banded magnetite units returned results of 10 ppb and <5 ppb Au, while the brecciated unit returned results ranging from <5 ppb to 280 ppb Au.

In the early 1960's, Kenlew Mines discovered a mineralized shear zone carrying gold values of up to 2 oz. Au/ton on a small island in the west end of Dougie Lake. They had blasted two trenches, but only one cut the zone. The other never hit bedrock. The old trench which cut the zone was very rotten and full of blocky debris. Digging and cleaning revealed approximately a 1½ metre rusty shear zone trending  $120^{\circ} \pm 5^{\circ}$  in intermediate volcanic host rocks. The wall rocks in the shear zone are rusty chlorite sericite schists with trace amounts of carbonate. A quartz vein of indeterminate thickness cuts through the zone, and is massive to moderately laminated, milky white with minor fine-grained pyrite disseminations. A pyritic zone roughly 30 or 40 cm. in thickness was found on the north edge in contact with the quartz. It was composed of massive pyrite. A total of 6 samples were taken from the zone, and analyzed between 15 ppb and 290 ppb Au. Abundant quartz float was found on both sides of the island. Three samples were collected of this float, two from the west shore and one from the east. The east shore sample analyzed 65 ppb Au, while the west shore samples analyzed 70 ppb and 1095 ppb Au.

All geology and assay results are plotted on the accompanying maps at a scale of 1:2,000 (see Appendix B).

#### VLF SURVEY

A Geonics EM-16 was the instrument used for the VLF EM survey. This instrument measures the in-phase and quadrature responses of the vertical magnetic field as a percentage of the total magnetic field. The resolution of the instrument is  $\pm 1\%$ . All readings were taken facing north at 5 meter intervals over the Dougie Lake grid and at  $12\frac{1}{2}$  meter intervals on the Semia Lake grid. Cutler, Maine (NAA, 24.0 kHz.) was the station used. All results are plotted on the accompanying maps at a scale of 1:2,000 (see Appendix C).

#### RESULTS

A total of eight separate conductors have been identified. See discussion of results for a complete interpretation in conjunction with the geology and magnetic results.

#### MAGNETOMETER SURVEY

A Scintrex MF 2-100 Fluxgate magnetometer was used. This instrument reads the vertical field component of earth's magnetic field and has a greater reading range than a proton magnetometer. All readings were taken at 5 meter intervals on the Dougie Lake grid and at  $12\frac{1}{2}$  meter intervals on the Semia Lake grid. Diurnal corrections were done by doubling back from line to line.

All results are plotted at a base of 51,000 gammas on the accompanying maps at a scale of 1:2,000 (see Appendix D).

## RESULTS

See discussion of results for an interpretation in conjunction with geology and VLF results.

## DISCUSSION OF RESULTS

Geological and geophysical data show iron formation trends going between Lines 3+00E and 12+00E around 2+00N (VLF conductors 1, 1A) and between Lines 4+50E and 13+50E around 4+00N (VLF conductor 4). The geophysics suggests that there are several bands of magnetic and sulphidic iron formations in association with VLF conductors 1 and 1A. Unfortunately only magnetite-rich iron formations were observed where the zone could be exposed. The cause of conductors 1 and 1A in conjunction with magnetic lows could not be visually determined because of overburden cover. However conductor 1 is on trend with the zone found on the small island. Since this zone has anomalous gold values, the rest of the 1 and 1A conductive trend remains very prospective for gold mineralization. Conductor 1 appears to die out going toward the Semia Lake grid, however conductor 1A skirts the edge of a linear outcrop ridge, just to the North of the contact between the intermediate and felsic crystal tuff units. This conductor is also in association with a magnetic high, trending in a similar fashion. Cominco drilled this horizon on the east shore of Semia Lake and found magnetite chert iron formation with minor pyrrhotite. Since Cominco never assayed for gold, this entire trend still remains prospective.

The contact zone between the intermediate volcanics and the felsic crystal tuff came up flat on both geophysical surveys. Surface sampling also returned disappointing results. Because of the nature of the contact zone, plus very limited exposure of the entire zone, this horizon still remains prospective to possible gold mineralization.

VLF conductor 2 trends along BL-0 between Lines 11+00E and Lines 17+00E and has sporadic magnetic highs and lows associated with the trend. A small pit was blasted at Line 16+00E and BL-0, and a shear zone roughly 30 cm. (as exposed) was found with a 2-3 cm. wide band of pyrite and pyrrhotite(?) It was difficult to determine the exact nature of the sulphides because the zone was so rotten from oxidation. The conductive trend is probably due to pyrrhotite and pyrite throughout the shear zone. Even though sampling results were <5 ppb the zone still remains prospective for gold.

Conductors 3 and 5 were located within a swamp, so they could be swamp related, or could be from mineralized shear zones within the felsic crystal tuff unit.

Conductors 6, 7 and 8 are limited in extent and are associated with magnetic features, so are probably due to pyrrhotite and pyrite within a narrow shear zone.

No visual evidence could be found for conductors 3, 5, 6, 7 and 8 because of overburden cover.

CONCLUSIONS AND RECOMMENDATIONS

From the geological and geophysical evidence, conductor 1 and 1A trending through the small island have a high potential for gold mineralization in association with possible sulphide facies of the iron formation. It is recommended that a series of 2 or 3 holes be drilled along the trend of conductors 1 and 1A in the area of lines 5+00E to 7+00E. A winter drill program would be necessary to test the conductive trend off of each side of the small island. A winter geophysics program could be useful in delineating the conductive trend through the lake, and aiding in proper drill hole placement.

This conductive trend extending onto the Semia Lake grid should also be explored by 2 or 3 short diamond drill holes in the vicinity of Semia Lake.

The contact between the felsic crystal tuff and the intermediate volcanic unit remains a good potential for gold mineralization, despite disappointing sample results. A series of 3 or 4 short holes should be drilled along its predicted trend over both grids. All holes could adequately test conductor 2 as well as the contact zone on the Dougie Lake grid due to the proximity of one to the other over their respective trends.

A single short drill hole should be done on conductor 4 in the vicinity of the anomalous samples in order to determine the gold potential of the brecciated magnetite-chert horizon.

Respectfully submitted,

*Mark Patell*  
Mark Patell

*for*

Bradley Leonard

WILLIAM HILL MINING CONSULTANTS LIMITED

August 8, 1986.

Toronto, Ontario.

APPENDIX A

Claims owned 50-50 by Duration Mines Ltd. and Wilshire Energy Resources Inc.

621455-621462	Total	8 Claims
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Claims owned 100% by Duration Mines Ltd.

893247-251	5 Claims
893253	1 Claim
893298-307	10 Claims
897759-761	3 Claims
897715-717	<u>3 Claims</u>
Total	22 Claims

HOLDERS OF THE PROPERTY

DURATION MINES LTD.  
Suite 704  
80 Richmond Street West  
Toronto, Ontario  
M5H 2C7

Wilshire Energy Resources Inc.  
Suite 1420  
250 - 6th Avenue S.W.  
Calgary, Alberta  
T2P 3H7

APPENDIX E

SAMPLE DATA

DOUGIE LAKE - SEMIA LAKE

<u>Sample No.</u>	<u>Location</u>	<u>Au p.p.b.</u>	<u>Description</u>
9201	L17E/1+105	<5	Grab of quartz vein and sheared wallrock.
9202	L17E/1+105	<5	18 cm chip of sheared (mafic) wallrock with minor quartz lenses (N. contact).
9203	L17E/1+105	<5	20 cm chip across 2 quartz veins (5 + 11cm) + sheared mafic wallrock (4 cm).
9204	L17E/1+105	<5	20 cm chip across quartz lenses and veinlets and sheared wallrock.
9205	L17E/1+105	<5	18 cm chip across felsic wallrock and minor amounts of quartz.
9206	L17E/1+105	<5	Grab of quartz lenses within sheared mafics.
9207	L17E/1+105	<5	25 cm chip of just quartz veins -(S contact in felsic).
9208	L17E/1+105	<5	23 cm chip of just quartz lenses and veins.

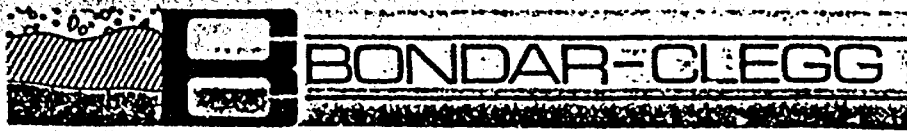


Sample No.	Location	Au p.p.b.	Description
9109	L17E/1+105	<5	10 cm chip over contact (felsic) zone.
9210	L17E/1+105	<5	Grab of quartz lens.
9211	L17E/1+105	<5	20 cm chip across N part of zone.
9212	L17E/1+105	<5	20 cm chip across central part of zone.
9213	L17E/1+105	<5	20 cm chip across S part of zone.
9214	L17E/1+105	<5	Grab of 5 cm quartz vein.
9215	L17E/1+105	<5	Grab of 50 cm quartz vein.
9216	L17E/1+105	<5	40 cm chip over S of zone.
9217	L17E/1+105	<5	60 cm chip over N of zone quartz.
9218	L17E/1+105	<5	40 cm chip across contact with quartz lens.
9219	shear on small island	25	Grab of pyritic zone in chl-ser-carb schist.
9220	shear on small island	15	Grab of sheared host (i.e. Chl-ser-car-schist)

9221	shear on small island	95	Grab of quartz and ser-chl carb. schist.
9222	shear on small island	85	Grab of quartz veins/lenses (well oxidized).
9223	shear on island	290	Grab of quartz veins/lenses (well small oxidized).
9224	shear on small island	40	Grab of pyritic (?) schisty zone.
9225	shear on island	65	Grab of quartz float (E. side of small island).
9226	L725E/4+605	5	50 cm chips over felsic chert or tuff with quartz.
9227	L8E/207N	5	15-20 cm mag-chert band (sandwiched between 2 x 50 cm mag. bands).
9228	930E/29N	5	1 m chip over carb-chl-shear (almost cherty).
9229	small island	70	Qtz. float from W side of small island.
9230	small island	1095	Qtz. float from W side of small island.
9231	930E/290-300N	10	3- cm chip over shear (chl) in int. flow (contact?).

9232	L165E/	5	Oxidized/rotted zone (py + qtz + chl schist).
9233	L165E/	5	Oxidized/rotted zone (py + qtz + chl schist).
9234	L542E/1+58N	5	50 - 70 cm shear (oxidized carb-chl schist ± sil + tr py).
9235	L10+60E/240N	5	Grab of schist crystal tuff with lenses of sulphide (py, po) found lying loose on moss near trench (from trench?).
9236	L1315E/410N	190	40 cm chip of chert and quartz.
9237	L1315E/410N	5	45 cm chip of chert and quartz.
9238	L1315E/410N	130	40 cm chip of chert and quartz.
9239	L1315E/410N	5	25 cm chip of mag, chert and quartz.
9240	L1315E/410N	280	30 cm chip of chert and quartz.
9241	L1315E/410N	5	15 cm select ship of mainly mag. and mafic wallrock.
9242	L1315E/410N	10	45 cm chip of chert, quartz mag & mafic (actinolite).

Bondar-Clegg & Company Ltd.  
4000 Hwy. 7  
Unit 10, Ontario  
L4R 1K1  
Phone: (416) 749-  
Telex: 051-3233



Geochemical  
Lab Report

REPORT: 016-2111

PROJECT: NDNE

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB
9201		<5
9202		5
9203		<5
9204		<5
9205		<5
9206		<5
9207		15
9208		<5
9209		<5
9210		<5
9211		<5
9212		<5
9213		<5
9214		<5
9215		<5
9216		<5
9217		<5
9218		<5
9219		25
9220		15
9221		95
9222		85
9223		290
9224		40
9225		65
9226		<5
9227		<5
9228		<5
9229		70
9230		1095

PORT: 016-2265

PROJECT: NONE

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Ag PPA	Au PPB	SAMPLE NUMBER	ELEMENT UNITS	Ag PPA	Au PPB
9231			10	9271		<0.1	5
9232			<5	9272		<0.1	<5
9233			5	9273		<0.1	<5
9234			<5	9274		<0.1	<5
9235			<5	9275		<0.1	<5
9236			190				
9237			5				
9238			130				
9239			<5				
9240			280				
9241			<5				
9242			10				
9243			<5				
9244			10				
9245			<5				
9246			15				
9247			5				
9248			<5				
9249			<5				
9250			5				
9251			170				
9252			<5				
9253			<5				
9254			<5				
9255			<5				
9256			30				
9257			10				
9258		<0.1	<5				
9259		<0.1	<5				
9260		<0.1	<5				
9261		<0.1	<5				
9262		<0.1	<5				
9263		<0.1	15				
9264		<0.1	<5				
9265		<0.1	<5				
9266		<0.1	70				
9267		<0.1	<5				
9268		<0.1	35				
9269		<0.1	<5				
9270		<0.1	5				

DOUGIE L.  
DOUGIE L.

APPENDIX G

Persons conducting survey.

M. Patell (Geologist)  
1691 Pinehill Drive  
Peterborough, Ontario  
K9J 7G3

B. Leonard (Geologist)  
641 Mortimer Avenue  
Toronto, Ontario  
M4C 2J9

APPENDIX H

Qualifications

I Bradley Leonard of 641 Mortimer Avenue, Toronto, Ontario do hereby swear that:

1. I am a graduate from the University of Toronto in 1983 with an honours B.Sc. in Geology.
2. I have been intermittently employed as a geologist for 7 years.
3. I was present on the property at the time the surveys were conducted.
4. I have no interest, direct or indirect in the property described herein.



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

Type of Survey(s) GEOLOGY, VLF-EM, MAGNETICS
Township or Area MEEN LAKE
Claim Holder(s) DURATION MINES LTD and WILSHIRE ENERGY RESOURCES LTD
Survey Company WILLIAM HILL MINING CONSULTANTS
Author of Report M. PATELL
Address of Author 704-80 Richmond St. W. Toronto, Ontario
Covering Dates of Survey 25/06/86 to 05/07/86
Total Miles of Line Cut 15 miles

MINING CLAIMS TRAVERSED
List numerically
KRL 621454
KRL 621453
KRL 621452
KRL 621451
KRL 621450
KRL 621449
TOTAL CLAIMS 6

SPECIAL PROVISIONS CREDITS REQUESTED
Geophysical
-Electromagnetic 20
-Magnetometer 20
-Radiometric
-Other
Geological 20
Geochemical

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

DATE: Oct 6/86 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. Qualifications 29564

Table with 4 columns: File No., Type, Date, Claim Holder. Multiple empty rows.

OFFICE USE ONLY



# GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 644 Number of Readings Approx. 2798  
Station interval 25 m Line spacing 50 m  
Profile scale 1:2000  
Contour interval \_\_\_\_\_

### MAGNETIC

Instrument Scintrex MF2-100 Fluxgate magnetometer  
Accuracy – Scale constant Standard  
Diurnal correction method double-back  
Base Station check-in interval (hours) 2-3 hrs  
Base Station location and value Baseline 50,000 gammas

### ELECTROMAGNETIC

Instrument Geonics EM-16  
Coil configuration Horizontal Loop  
Coil separation Standard  
Accuracy +/- 0.1%  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency 24 KHz NAA Cutler, Maine  
(specify V.L.F. station)  
Parameters measured In Phase/ Quadrature

### GRAVITY

Instrument \_\_\_\_\_  
Scale constant \_\_\_\_\_  
Corrections made \_\_\_\_\_  
Base station value and location \_\_\_\_\_  
Elevation accuracy \_\_\_\_\_

### INDUCED POLARIZATION RESISTIVITY

Instrument \_\_\_\_\_  
Method  Time Domain  Frequency Domain  
Parameters – On time \_\_\_\_\_ Frequency \_\_\_\_\_  
– Off time \_\_\_\_\_ Range \_\_\_\_\_  
– Delay time \_\_\_\_\_  
– Integration time \_\_\_\_\_  
Power \_\_\_\_\_  
Electrode array \_\_\_\_\_  
Electrode spacing \_\_\_\_\_  
Type of electrode \_\_\_\_\_

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken 621449-621454 (incl.)

Total Number of Samples 42

Type of Sample rock chip  
(Nature of Material)

Average Sample Weight \_\_\_\_\_

Method of Collection \_\_\_\_\_

Soil Horizon Sampled \_\_\_\_\_

Horizon Development \_\_\_\_\_

Sample Depth \_\_\_\_\_

Terrain \_\_\_\_\_

Drainage Development \_\_\_\_\_

Estimated Range of Overburden Thickness \_\_\_\_\_

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis \_\_\_\_\_  
-200 mesh

General Standard commercial analytical  
procedures

ANALYTICAL METHODS

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

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

Others Au

Field Analysis (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Field Laboratory Analysis

No. (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Commercial Laboratory (42 tests)

Name of Laboratory Bondar-Clegg

Extraction Method Aqua Regia

Analytical Method Fire and Atomic Absorption

Reagents Used \_\_\_\_\_

General See Assay Results, Appendix G

September 19, 1986

Mr. Brad Leonard  
Duration Mines Limited  
704-80 Richmond Street  
Toronto, Ontario  
M5H 2C7

Dear Mr. Leonard:

This letter is to confirm that the following invoices and corresponding analytical reports were issued to Duration Mines Limited in 1986 and that Bondar-Clegg & Company Ltd. has received the amount of \$1,115.15 as full payment.

The invoices and reports are:

	<u>Report No.</u>	<u>Invoice No.</u>	<u>Amount</u>
Dougie Lake -	016-2111	0117933	\$ 300.00
Dougie Lake -	016-2265	0118148	515.15
Meen Lake -	016-2410	0118228	<u>300.00</u>
		Total amount	<u>\$1,115.15</u>

If you have any questions with regard to any of these invoices or reports, please contact me.

Yours truly,

  
W. Wong  
Branch Manager  
Bondar-Clegg & Company Ltd.

WW/y1

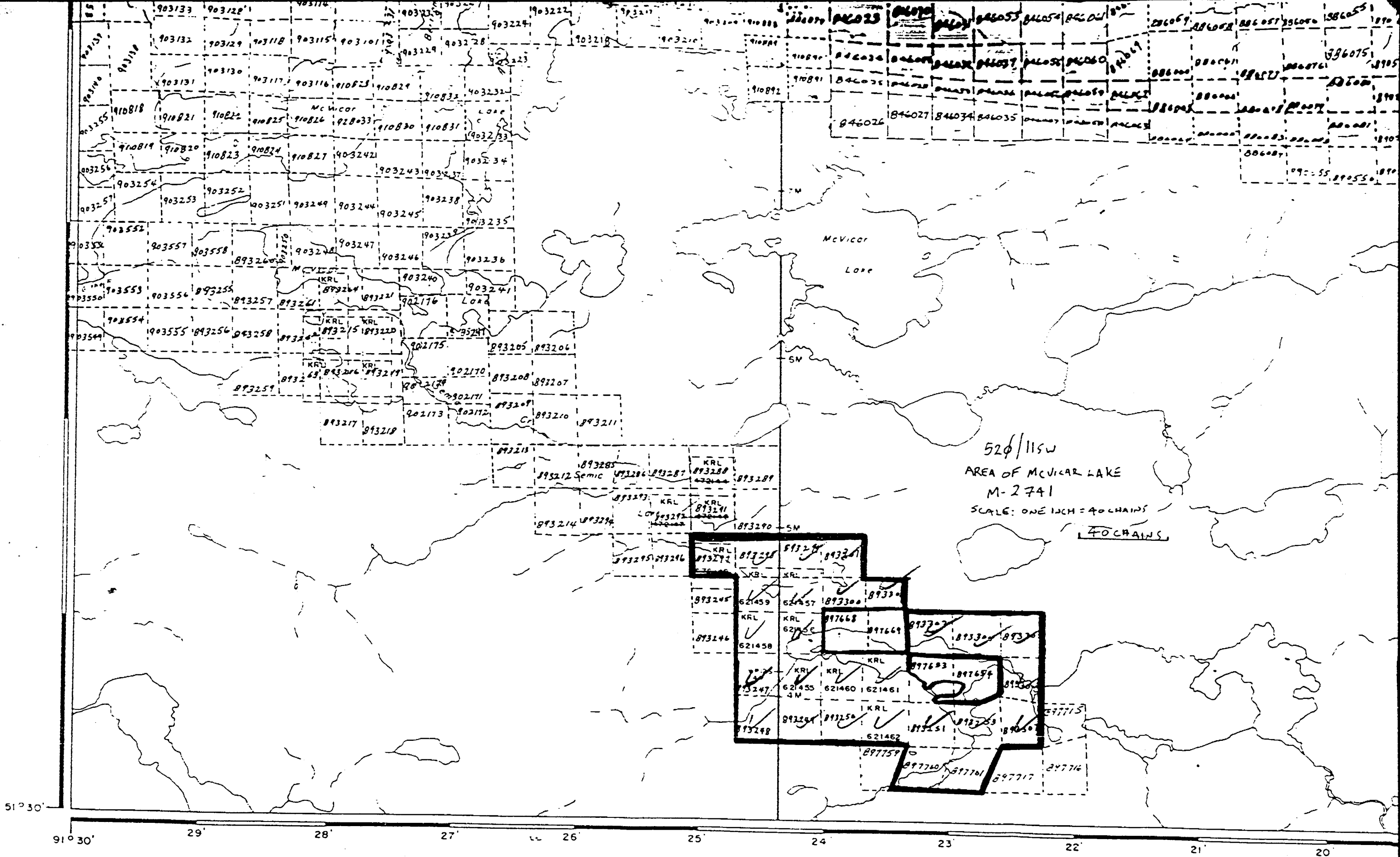
Bondar-Clegg & Company Ltd.  
5420 Canotek Road  
Ottawa, Ontario  
Canada K1J 8X5  
Phone: (613) 749-2220  
Telex: 053-3233 BONCO GLO

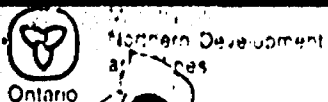
ANALYTICAL COST BREAKDOWN

DOUGIE LAKE

75 samples - Bondar Clegg - Au analyses ( 18 Ag analyses ) = \$ 815.15

APPENDIX I





Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

774 56

Mining Act

Note - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns. Do not use shaded areas below

**Type of Survey(s)** GEOLOGY, VLF-EM, MAGNETICS **Township or Area** McVicar Lake

**Claim Holder(s)** Duration Mines Ltd., Wilshire Energy Resources Inc. **Prospector's Licence No.** T1608; T1482

**Address** Suite 704, 80 Richmond St. W.; 1420-250 6th Ave., S.W. Calgary, Alberta. T2P 3H7

**Survey Company** William Hill Mining Consultants Limited **Date of Survey (from & to)** 01 May 86 to 24 May 86 **Total Miles of line Cut** 60 km/37 miles

**Name and Address of Author (of Geo-Technical report)** Brad Leonard Suite 704, 80 Richmond St. W., Toronto, Ontario. M5H 2C7

Credits Requested per Each Claim in Columns at right

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

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

Airborne Credits	Days per Claim
1ST REC'D OCT 27/86 Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic
	Magnetometer
	Radiometric

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
KRL	621455	4	KRL	893306	
	621456	10		893307	
	621457				
	621458				
	621459				
	621460	10			
	621461	10			
	621462				
	893247				
	893248				
	893249				
	893250				
	893251				
	893253	20			
	893298				
	893299				
	893300				
	893301				
	893302				
	893303				
	893304				
	893305				

RECEIVED  
DEC 18 1986  
MINING LANDS SECTION

See Revised work statement

**Expenditures (excludes power stripping)**

**Type of Work Performed** Analytical

**Performed on Claim(s)** 621455, 621456, 621460, 621461, 893253

**Calculation of Expenditure Days Credits**

Total Expenditures \$ 815.15 ÷ 15 = Total Days Credits 54

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

Total number of mining claims covered by this report of work. 24

**Date** Nov. 18/86 **Recorded Holder or Agent (Signature)** [Signature]

**For Office Use Only**

Total Days Cr. Recorded **1494** **Date Recorded** Nov. 28/86 **Miner's Recorder** [Signature]

**Date Approved as Recorded** [Signature] **Branch Director** [Signature]

**Certification Verifying Report of Work**

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

**Name and Postal Address of Person Certifying** David Green, Suite 704, 80 Richmond St. W., Toronto, Ontario. M5H 2C7

**Date Certified** Nov. 18/86 **Certified by (Signature)** David Green

? AMENDED



Northern Development Commission  
3700-17th Ave. S.W.  
Calgary, Alberta T2C 1A6

Report of Work

Geophysical, Geological,  
Geochemical and Expenditures

Instructions

Note - Only days credits calculated in the "Expenditures" section may be entered in the "Expend Days Cr." columns. Do not use shaded areas below.

3

*Richette*

Mining Act

Type of Survey: **GEOLOGY, VLF-EM, MAGNETICS** Township: **McVicar Lake**

Claim Holder: **Duration Mines Ltd., Wilshire Energy Resources Inc.** Prospector's Licence No.: **T1608; T1482**

Address: **Suite 704, 80 Richmond St. W.; 1420-250 6th Ave., S.W. Calgary, Alberta. T2P 3H7**

Survey Company: **William Hill Mining Consultants Limited** Date of Survey (from & to): **01 May 86 to 24 Oct 86** Total Miles of line Cut: **60 km/37 miles**

Name and Address of Author of Geo Technical report: **Brad Leonard Suite 704, 80 Richmond St. W., Toronto, Ontario. M5H 2C7**

Credits Requested per Each Claim in Columns at right

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

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

Airborne Credits	Days per Claim
<b>1ST REC'D OCT 27/86</b>	
Note: Special provisions credits do not apply to Airborne Surveys.	
- Electromagnetic	
- Magnetometer	
- Radiometric	

RECEIVED  
NOV 28 1986  
RED LAKE  
MINING DIV.

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
KRL	621455	4
	621456	10
	621457	
	621458	
	621459	
	621460	10
	621461	10
	621462	
	893247	
	893248	
	893249	
	893250	
	893251	
	893253	20
	893298	
	893299	
	893300	
	893301	
	893302	
	893303	
	893304	
	893305	

RECEIVED  
DEC 18 1986  
MINING LANDS SECTION

*See previous work statement.*

Expenditures (excludes power stripping)

Type of Work Performed: **Analytical**

Performed on Claim(s): **621455, 621456, 621460, 621461, 893253**

Calculation of Expenditure Days Credits

Total Expenditures	÷	Total Days Credits	=	
\$ 815.15	÷	15	=	54

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

Total number of mining claims covered by this report of work: **24**

For Office Use Only

Total Days Credits Recorded: **1494** Date Recorded: **Nov 28/86** Mining Recorder: *[Signature]*

Date Approved as Recorded: **Nov 28/86** Branch Director: *[Signature]*

Date: **Nov. 18/86** Recorded Holder or Agent (Signature): *[Signature]*

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying: **David Green, Suite 704, 80 Richmond St. W., Toronto, Ontario. M5H 2C7**

Date Certified: **Nov. 18/86** Certified by (Signature): *David Green*



Ministry of  
Northern Development  
and Mines

Technical Assessment  
Work Credits

File  
2.9565

Date  
January 15, 1987

Mining Recorder's Report of  
Work No. 74-86

AMENDED

Recorded Holder <b>DURATION MINES LTD &amp; WILSHIRE ENERGY RESOURCES INC</b>
Township or Area <b>McVICAR LAKE AREA</b>

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	\$815.15 SPENT ON ANALYSES OF SAMPLES TAKEN FROM MINING CLAIMS:  KRL 621455-56 621458 621460-61 897653-54 897760-61  54 ASSESSMENT WORK DAYS ARE ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT.

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

--

No credits have been allowed for the following mining claims

<input type="checkbox"/> not sufficiently covered by the survey	<input type="checkbox"/> insufficient technical data filed

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





Ministry of  
Northern Development  
and Mines

Technical Assessment  
Work Credits

File  
2.9565

Date  
January 15, 1987

Mining Recorder's Report of  
Work No. 74-86

AMENDED

Recorded Holder	DURATION MINES LTD & WILSHIRE ENERGY RESOURCES INC
Township or Area	McVICAR LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ 15 _____ days	
Magnetometer _____ 15 _____ days	KRL 621455 to 62 inclusive
Radiometric _____ days	893247
Induced polarization _____ days	893249 to 51 inclusive
Other _____ days	893253
	893298-99
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

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

No credits have been allowed for the following mining claims

not sufficiently covered by the survey       insufficient technical data filed

KRL 893248  
893300 to 07 inclusive

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



Recorded Holder: DURATION MINES LTD & WILSHIRE ENERGY RESOURCES INC

Township or Area: McVICAR LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical!</b> Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ 16 _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	KRL 621455 to 62 inclusive 893247 to 51 inclusive 893253 893298 - 99

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

\_\_\_\_\_

No credits have been allowed for the following mining claims

not sufficiently covered by the survey       insufficient technical data filed

KRL 893300 to 07 inclusive

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

May 20, 1987

Your File: 74-86  
Our File: 2.9565

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

Dear Sir:

RE: Notice of Intent dated January 15, 1987  
Data for Assaying and Geophysical (Electromagnetic &  
Magnetometer) Surveys on Mining Claims KRL 821455, et al,  
in the McVicar Lake Area

---

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

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

Yours sincerely,

Gary L. Weatherson, Manager  
Mining Lands Section  
Mineral Development and Lands Branch  
Mines and Minerals Division

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

Telephone: (416) 965-4888

DK/mc

cc: Duration Mines Ltd  
Suite 704  
80 Richmond Street West  
Toronto, Ontario  
M5H 2C7  
Attention: Brad Leonard

Resident Geologist  
Sioux Lookout, Ontario

Encl.

Wilshire Energy Resources Inc  
1420-250 6th Avenue S.W.  
Calgary, Alberta  
T2P 3H7

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

Mining Recorder  
Red Lake, Ontario

Trevor: Ray Spooner says

27/05/13  
87/05/13  
br 11  
12

TREVOR: RAY SPOONER SAYS

Certificate of Interest has  
CERTIFICATE OF INTEREST HAS  
been vacated. Order of  
BEEN VACATED. ORDER OF

Commissioner dated 7 May 1/87.  
COMMISSIONER DATED MAY 1/87

Can final letter be  
CAN FINAL LETTER BE  
sent out? - PLS. call  
SENT OUT? PLS. CALL

Ray.  
RAY

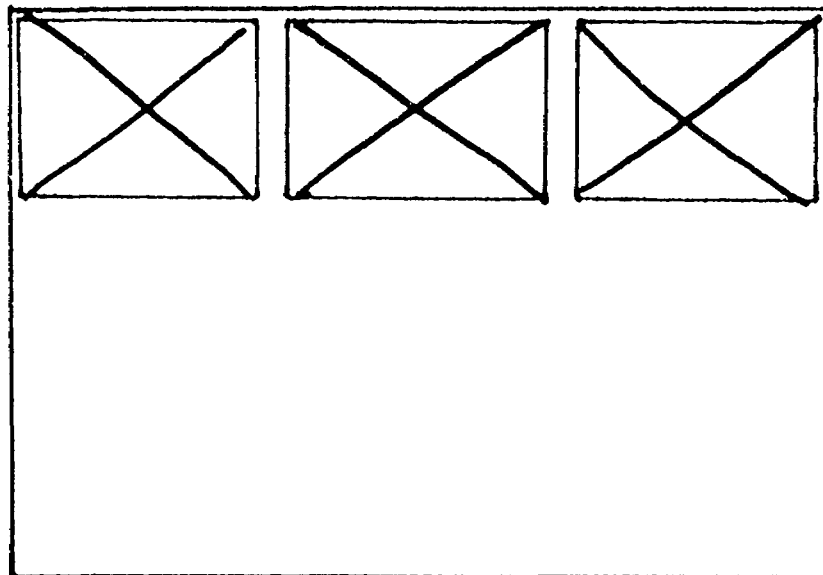
PLS. CALL  
J  
f

SEE ACCOMPANYING  
MAP(S) IDENTIFIED AS

520/11sw-0041 # 1-3

LOCATED IN THE MAP  
CHANNEL IN THE  
FOLLOWING SEQUENCE

(X)

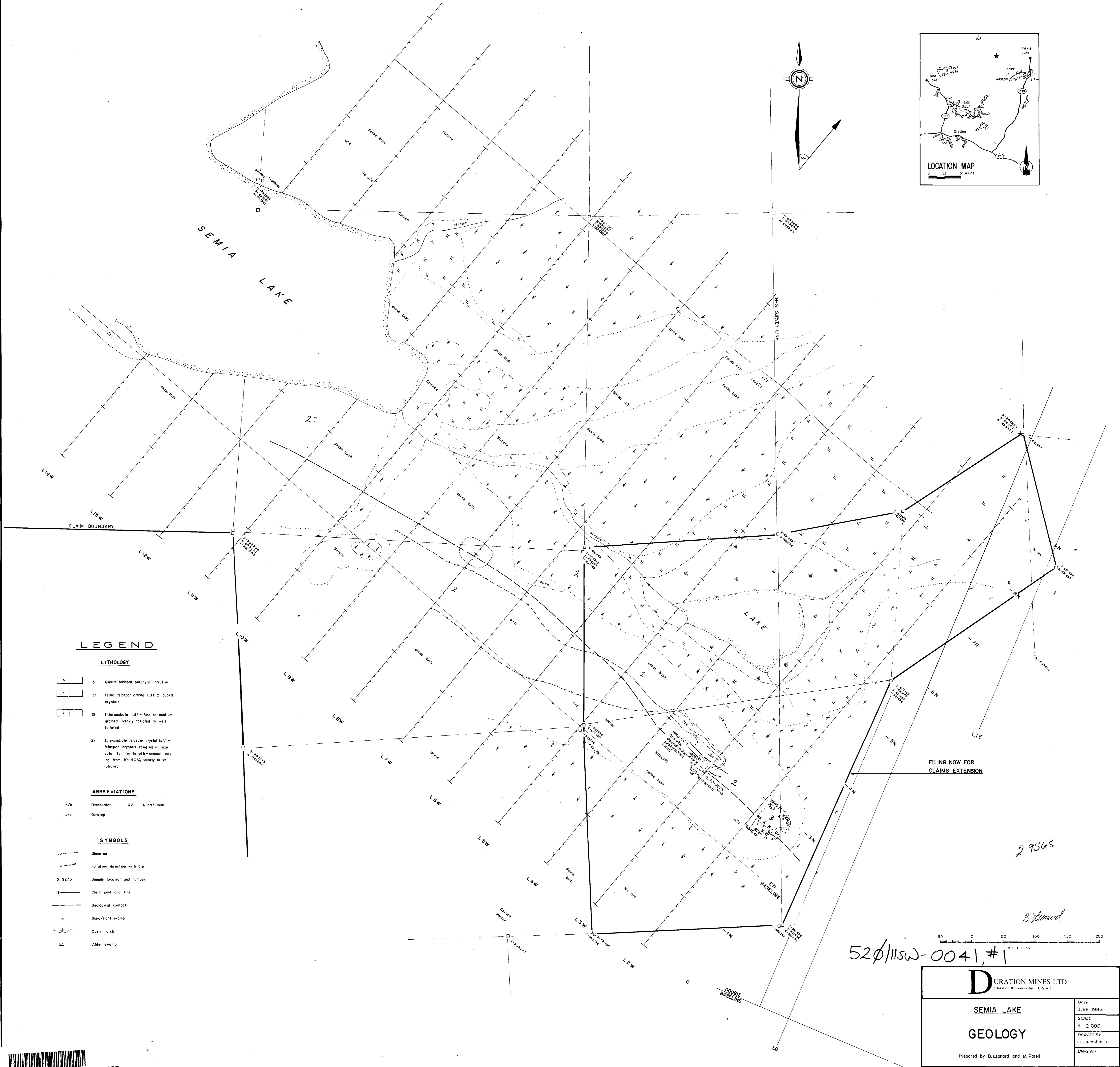
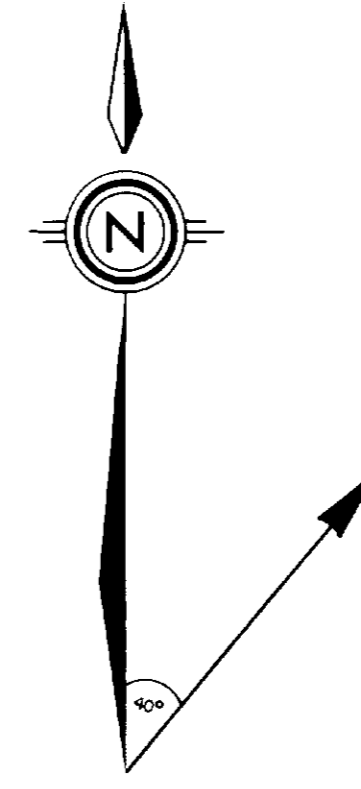
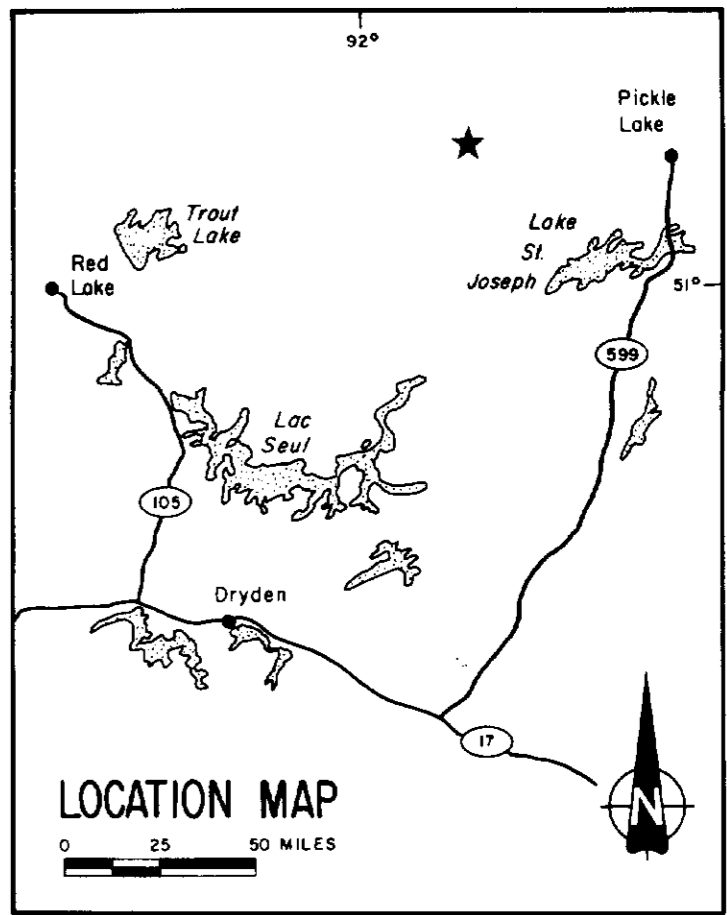


**FOR ADDITIONAL**

**INFORMATION**

**SEE MAPS**

520/115W-0041 # 4-6



**LEGEND**

**LITHOLOGY**

- 5 Quartz feldspar porphyry intrusive
- 31 Pelitic feldspar crystal tuff ± quartz crystals
- 21 Intermediate tuff - fine to medium grained - weakly foliated to well foliated
- 2x Intermediate feldspar crystal tuff - feldspar crystals ranging in size up to 1cm in length - amount varying from 10-40% weakly to well foliated

**ABBREVIATIONS**

- o/b Overburden QV Quartz vein
- a/c Outcrop

**SYMBOLS**

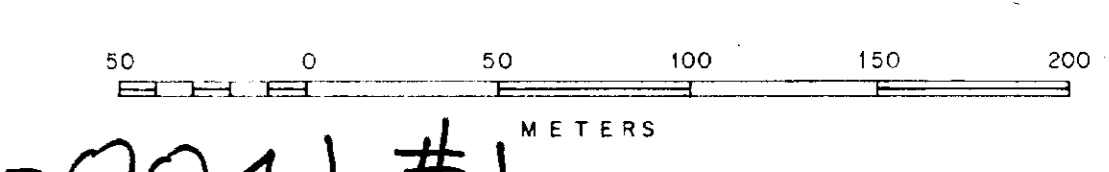
- Shearing
- Foliation direction with dip
- x 9275 Sample location and number
- Claim post and line
- Geological contact
- Skag/light swamp
- Open marsh
- Alder swamp

FILING NOW FOR CLAIMS EXTENSION

29565

B. Leonard

520/111SW-0041, #1



**DURATION MINES LTD.**  
(Duration Resources Inc., U.S.A.)

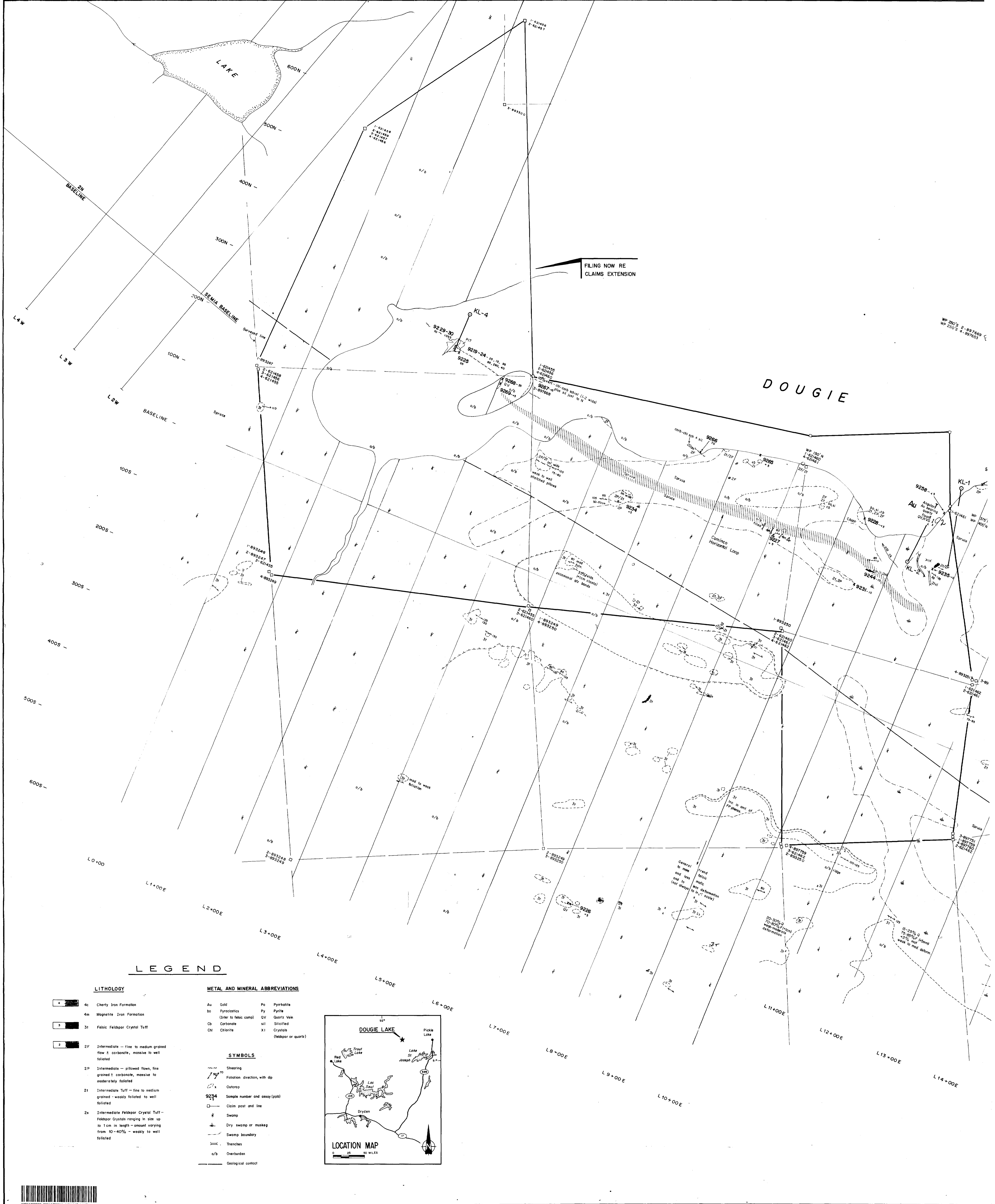
SEMIA LAKE

**GEOLOGY**

Prepared by B. Leonard and M. Patell

DATE  
June 1986  
SCALE  
1 : 2,000  
DRAWN BY  
m.j.jamshedji  
DWG No





**LEGEND**

**LITHOLOGY**

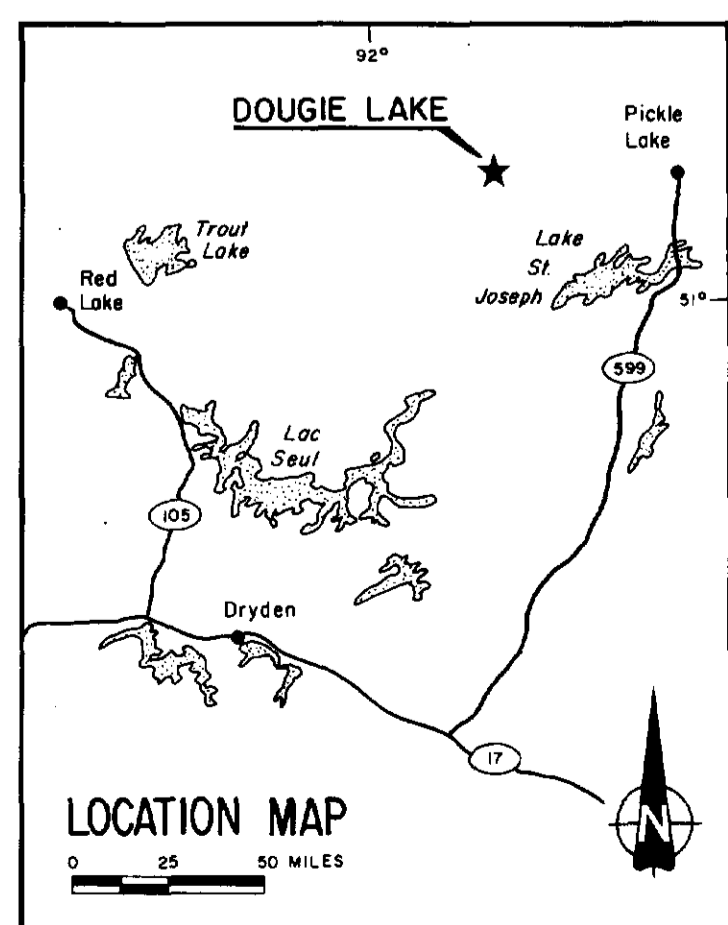
- 4c Cherty Iron Formation
- 4m Magnetite Iron Formation
- 3t Felsic Feldspar Crystal Tuff
- 2f Intermediate - fine to medium grained flow ± carbonate, massive to well foliated
- 2p Intermediate - pillowed flows, fine grained ± carbonate, massive to moderately foliated
- 2i Intermediate Tuff - fine to medium grained - weakly foliated to well foliated
- 2s Intermediate Feldspar Crystal Tuff - Feldspar Crystals ranging in size up to 1 cm in length - amount varying from 10-40% - weakly to well foliated

**METAL AND MINERAL ABBREVIATIONS**

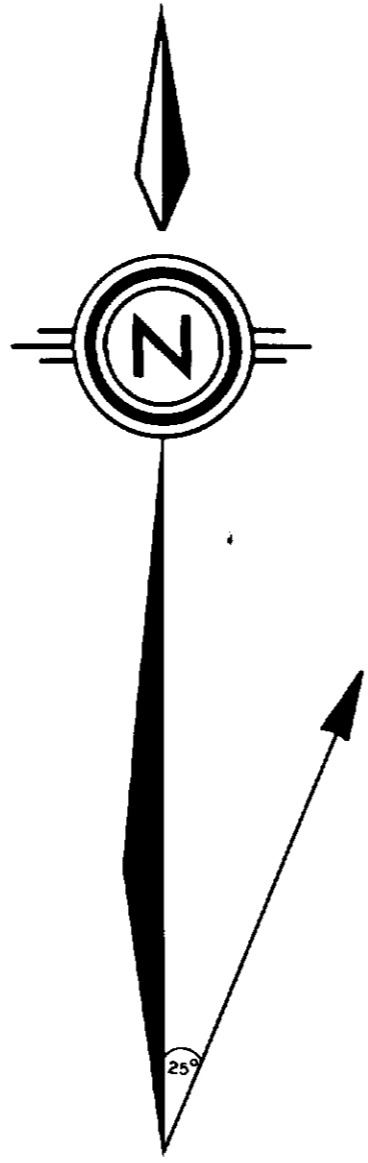
- Au Gold
- bo Pyroclastics
- cb Carbonate
- chl Chlorite
- Po Pyrrhotite
- Py Pyrite
- QV Quartz Vein
- sil Silicified
- XI Crystals (feldspar or quartz)

**SYMBOLS**

- Shearing
- Foliation direction, with dip
- Outcrop
- Sample number and assay (ppt)
- Claim post and line
- Swamp
- Dry swamp or muskeg
- Swamp boundary
- Trenches
- Overburden
- Geological contact



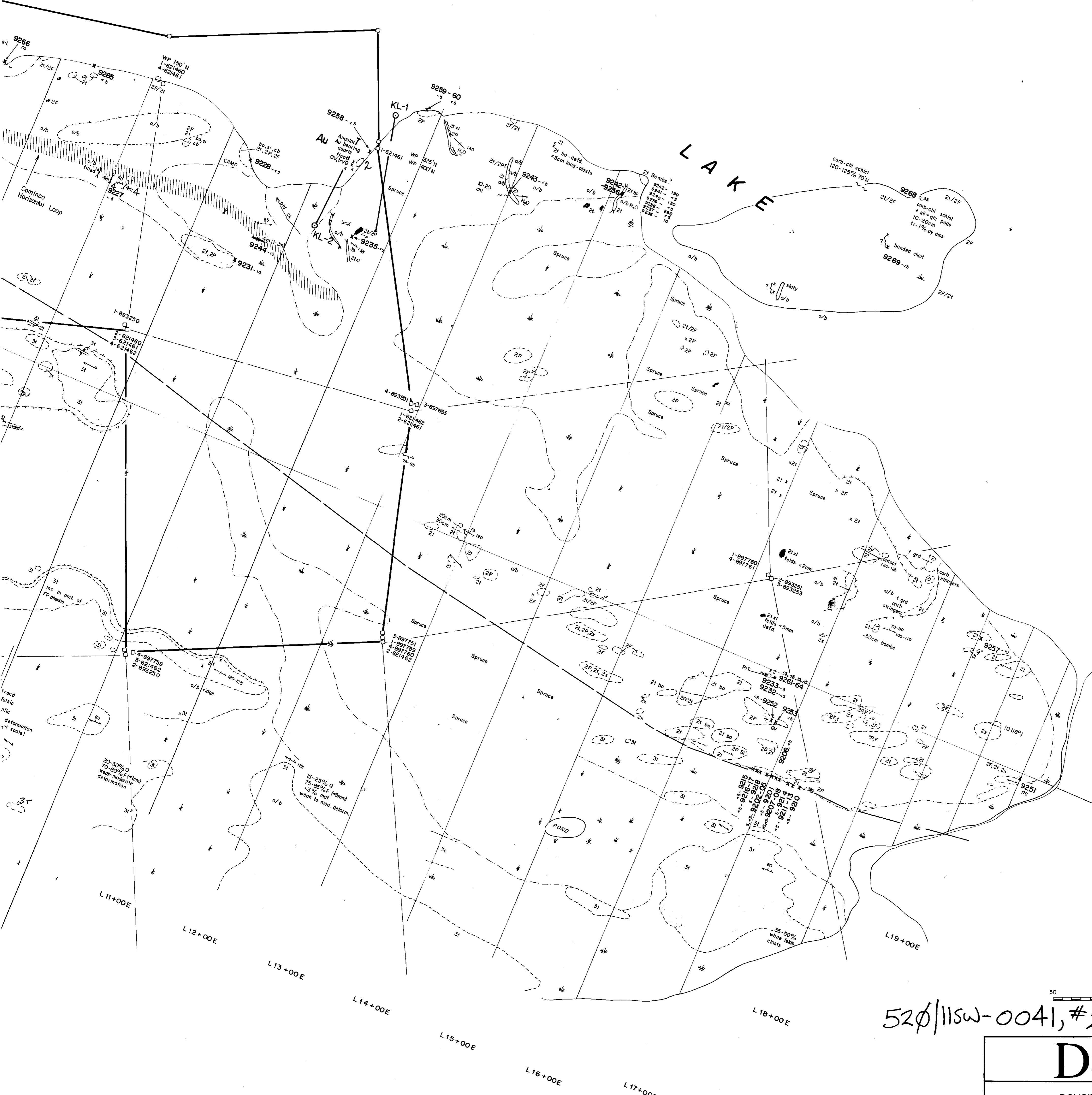




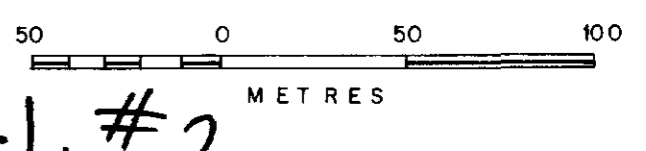
WP 250'S 2-897669  
WP 250'S 4-897653  
3-893301 WP 259'S  
L102/838N (LAKE)

DOUGIE

LAKE



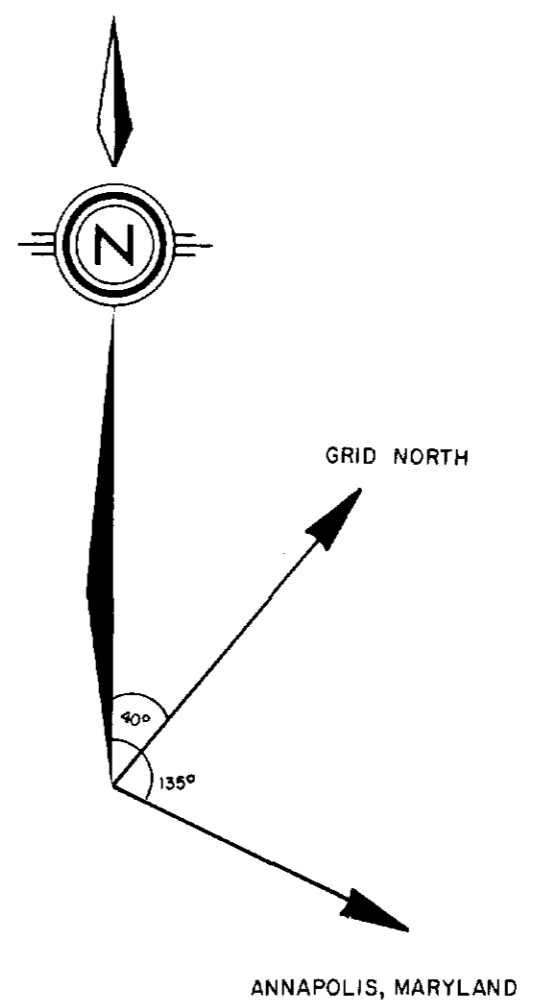
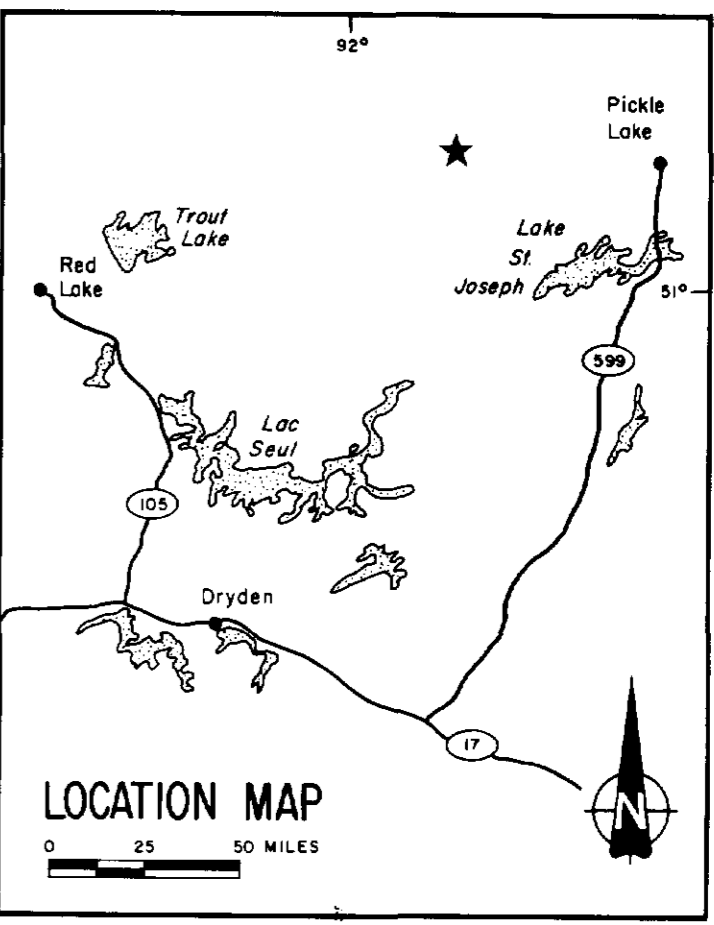
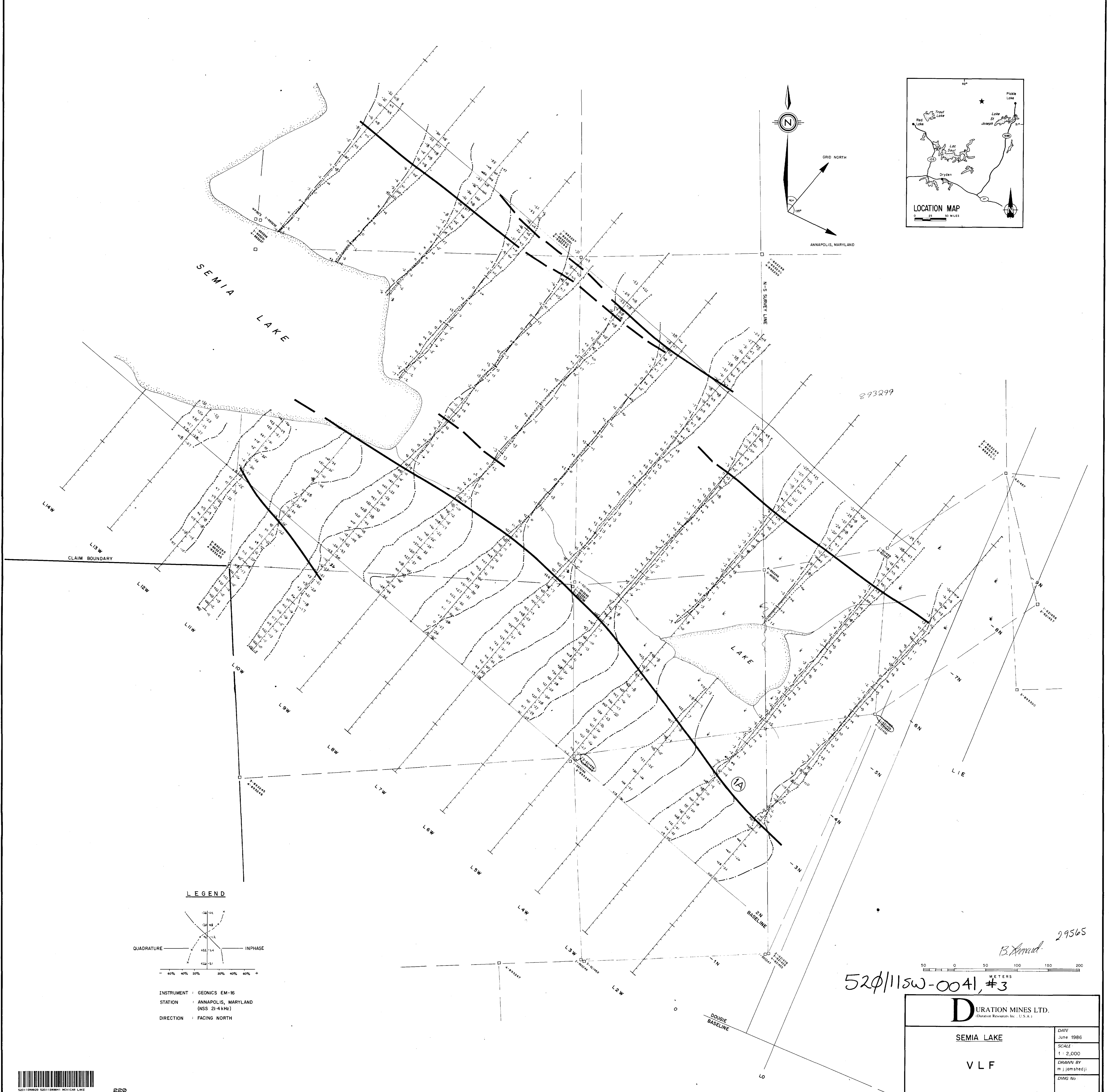
2.9565



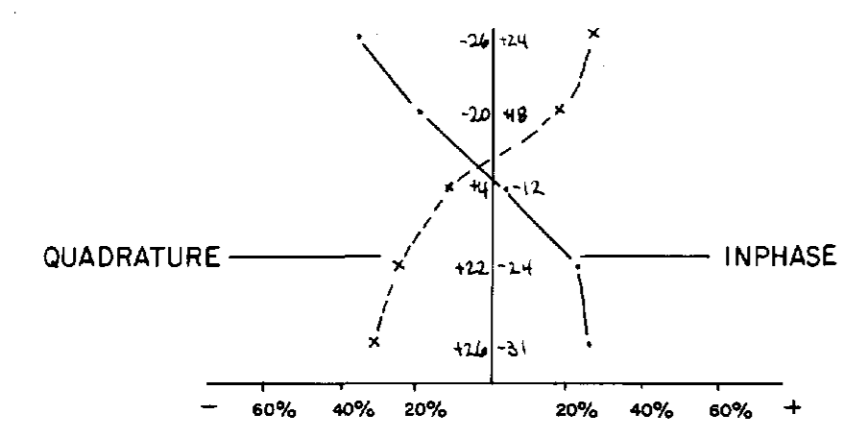
520/115W-0041, #2

<b>D</b> URATION MINES LTD. <small>(Duration Resources Inc. - U.S.A.)</small>	
<b>DOUGIE LAKE</b>	<small>DATE July 1986</small>
<b>GEOLOGY</b>	<small>SCALE 1 : 2,000</small>
<small>Prepared by B. Leonard and M. Patell June 1986</small>	<small>DRAWN BY m. j. jamshedji</small>
	<small>DWG No.</small>

*B. Leonard*



**LEGEND**

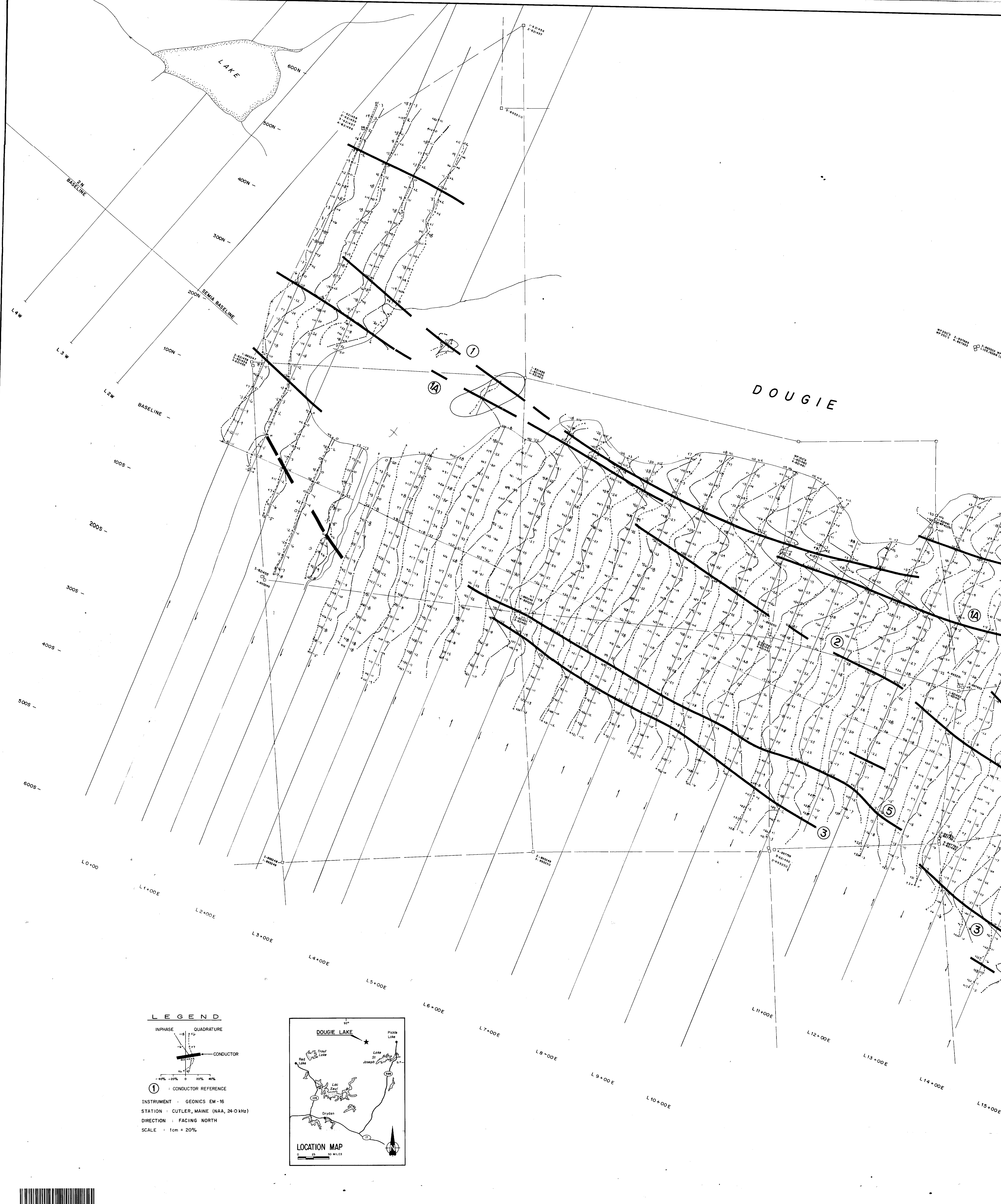


INSTRUMENT : GEONICS EM-16  
 STATION : ANNAPOLIS, MARYLAND  
 (NSS 21.4 kHz)  
 DIRECTION : FACING NORTH

520/115W-0041, #3  
 B. Ahmad 29565  
 50 0 50 100 150 200 METERS

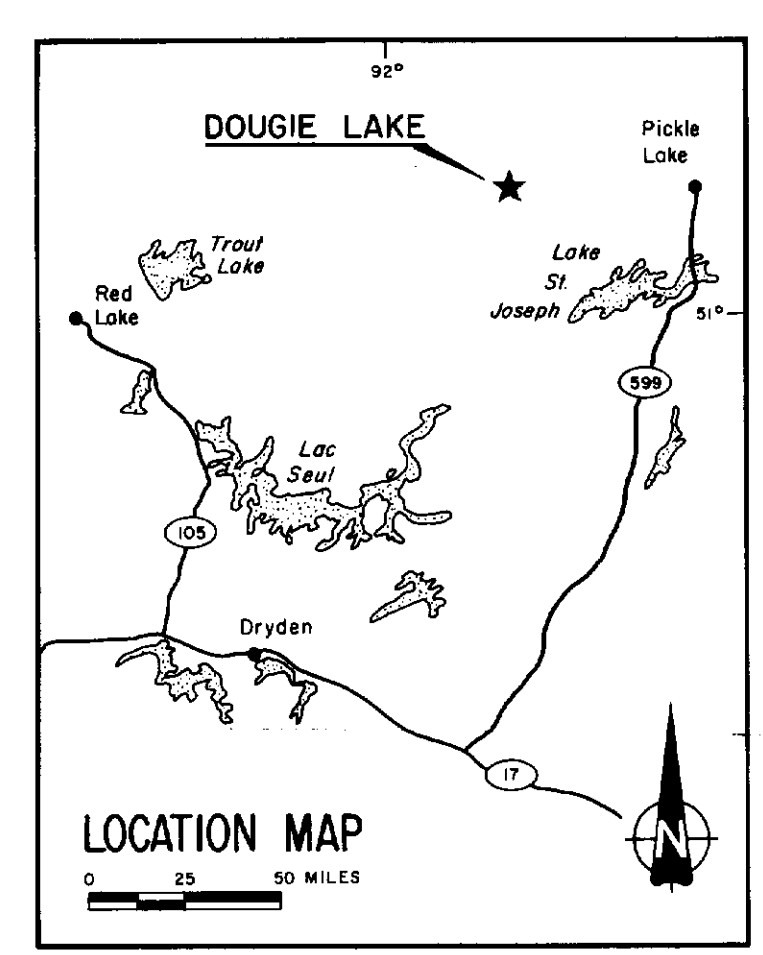
<b>DURATION MINES LTD.</b> <small>(Duration Resources Inc. - U.S.A.)</small>	
SEMIA LAKE	DATE June 1986
VLF	SCALE 1 : 2,000
	DRAWN BY m.j. jamshedji
	DWG No.

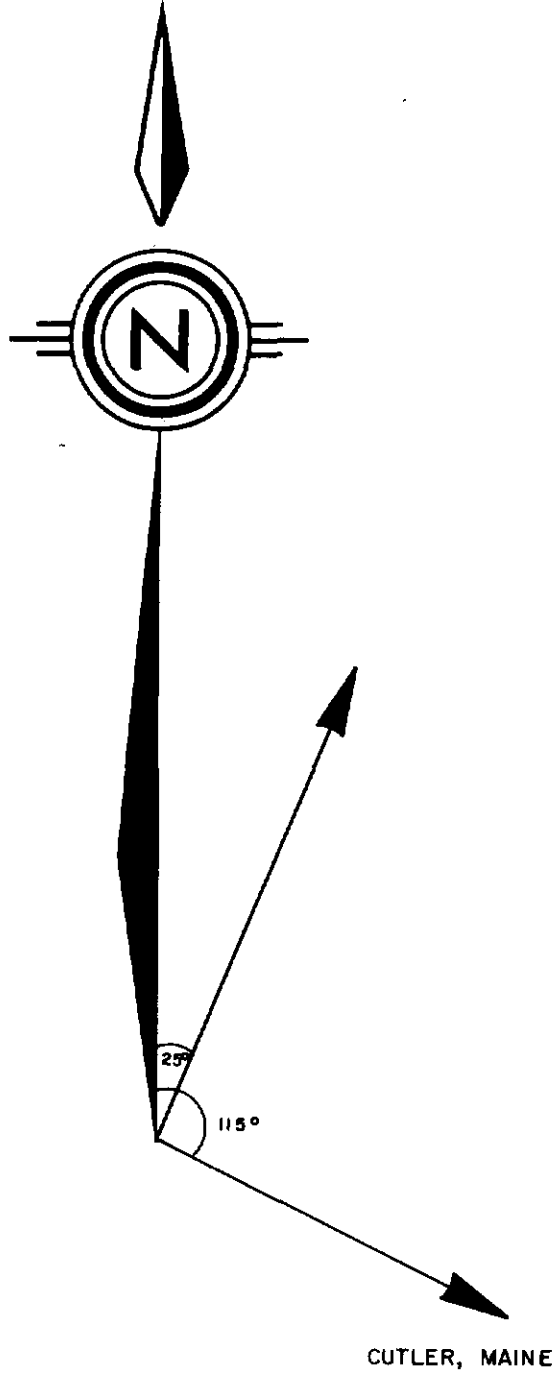




**LEGEND**

INPHASE QUADRATURE  
 CONDUCTOR  
 ① : CONDUCTOR REFERENCE  
 INSTRUMENT : GEONICS EM-16  
 STATION : CUTLER, MAINE (NAA, 24-0KHZ)  
 DIRECTION : FACING NORTH  
 SCALE : 1cm = 20%





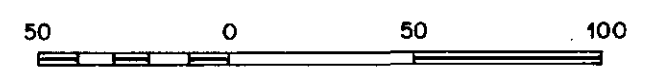
WP2503 2-89788  
 WP2503 4-89788  
 J. BOND W2503  
 C/O GORHAM (LAKES)

DOUGIE

LAKE



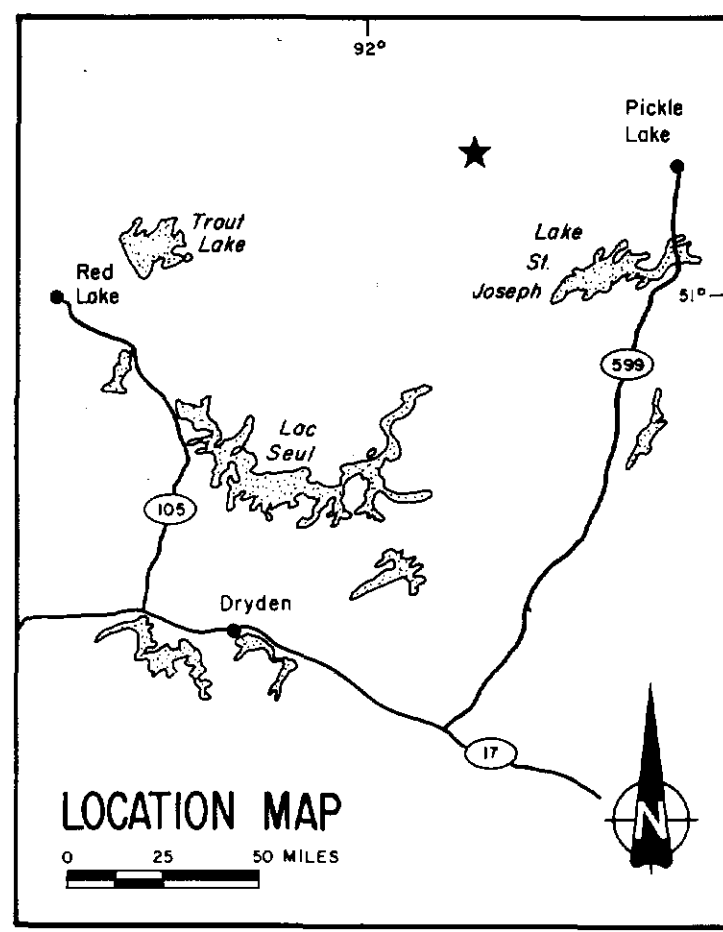
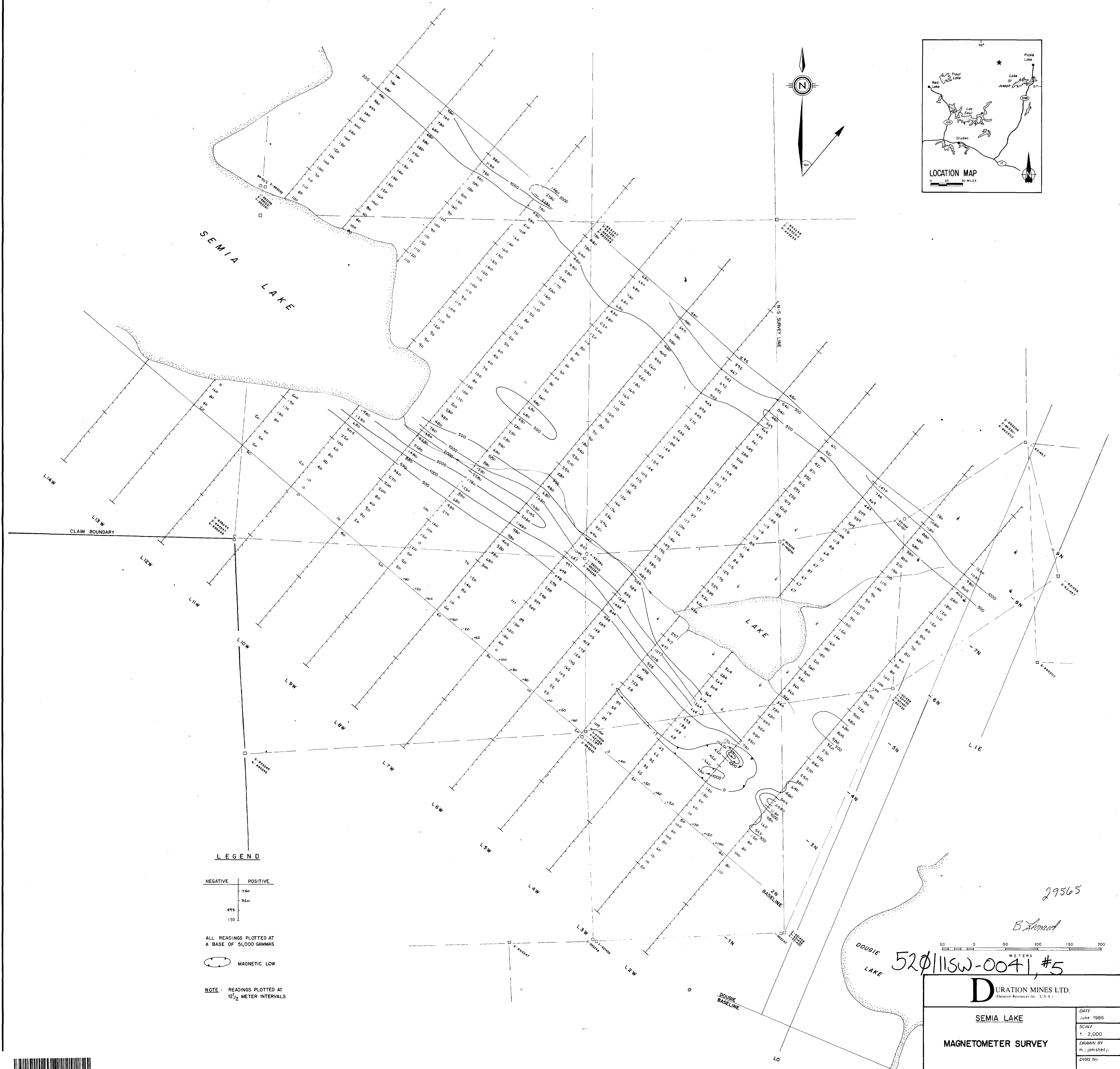
29565



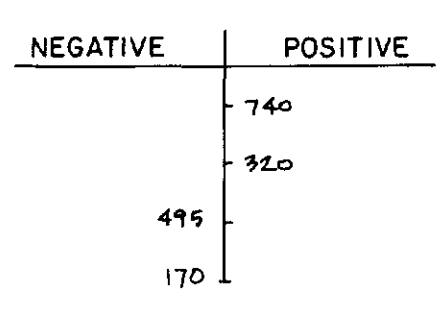
520/11SW-0041, #4

<b>D</b> URATION MINES LTD. <small>(Duramin Resources, Inc., U.S.A.)</small>	
DOUGIE LAKE	DATE July 1986
VLF SURVEY	SCALE 1" = 2,000'
	DRAWN BY m j jamshedji
	DWG No

B. Leonard



**LEGEND**



ALL READINGS PLOTTED AT A BASE OF 51,000 GAMMAS

MAGNETIC LOW

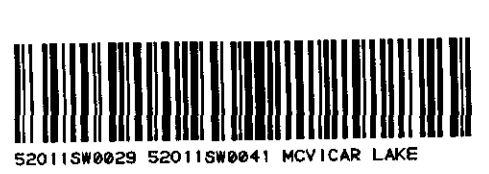
NOTE: READINGS PLOTTED AT 12 1/2 METER INTERVALS

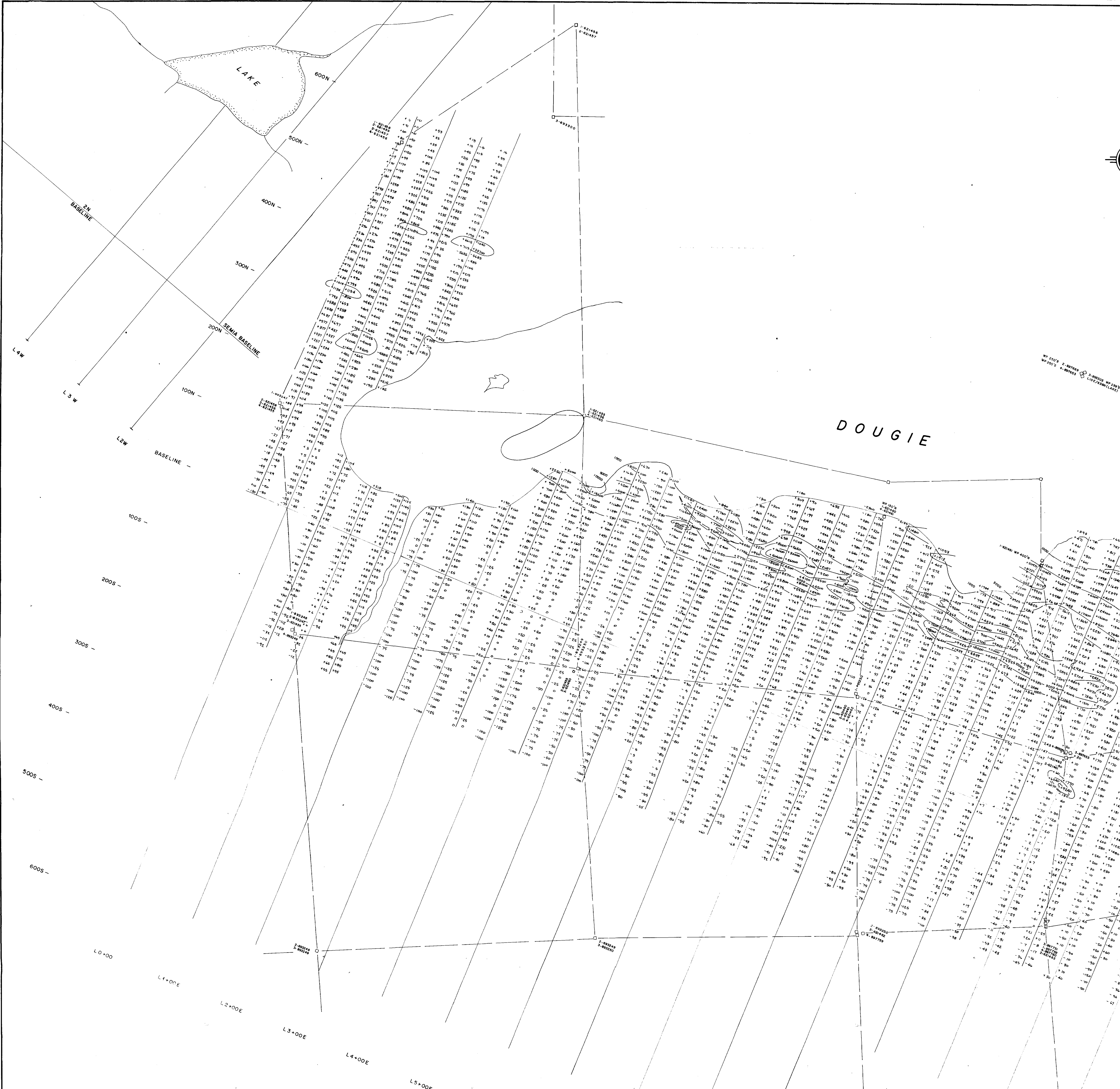
29565

*B. Arnold*

520/11SW-0041, #5

<b>D</b> URATION MINES LTD. <small>(Duration Resources Inc., U.S.A.)</small>	
<b>SEMIA LAKE</b>	
<b>MAGNETOMETER SURVEY</b>	
DATE June 1986	SCALE 1" = 2,000'
DRAWN BY m.j. jomshedji	DWG No.

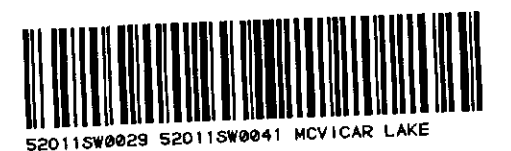
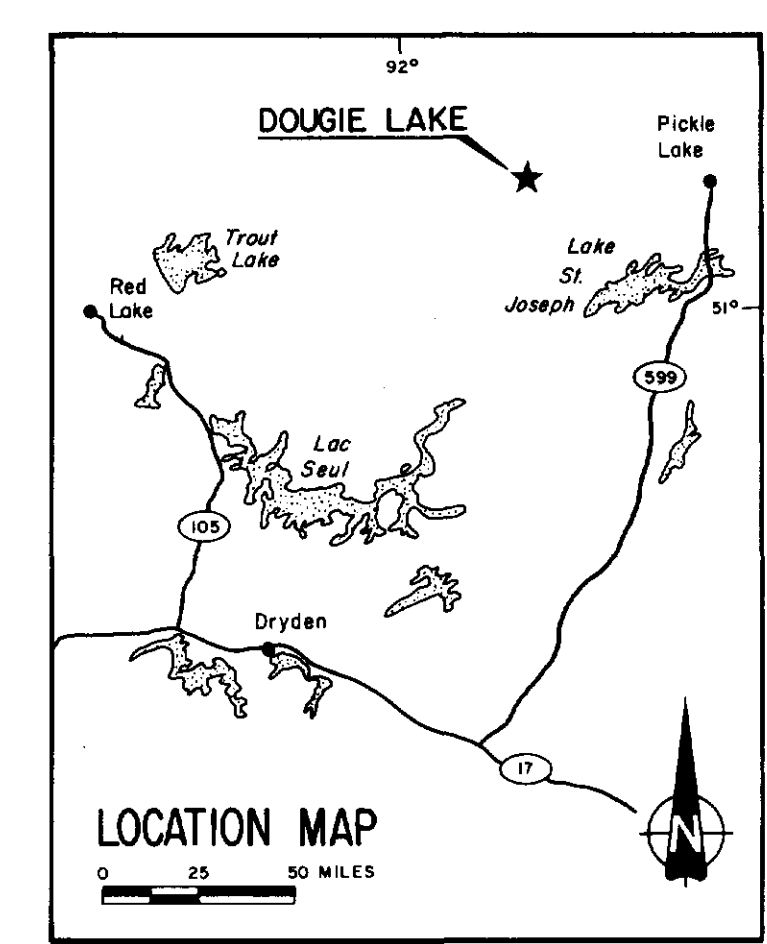


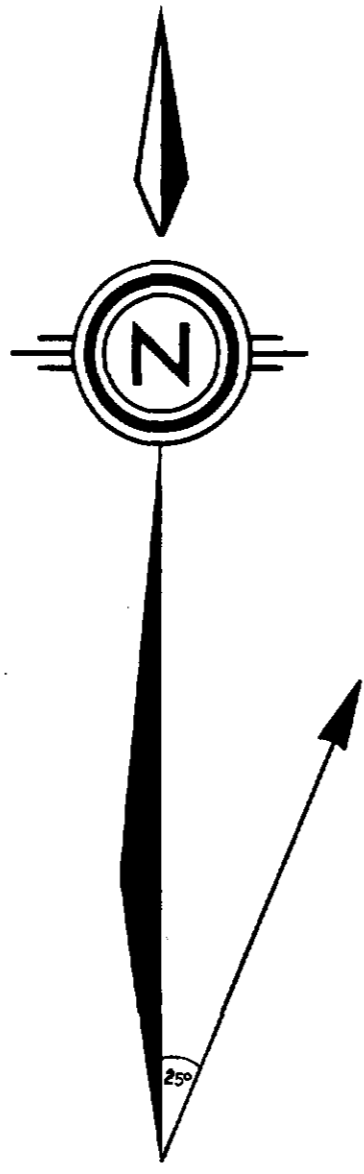


**LEGEND**

INSTRUMENT - SCINTREX MF2-100 FLUXGATE  
 ALL VALUES PLOTTED AT A BASE OF 50,000X  
 NO BASE STATION USED

- CONTOUR INTERVALS -
- 0
  - 1000
  - 5000
  - 10,000
  - 15,000
  - 20,000
  - 30,000
  - 100,000

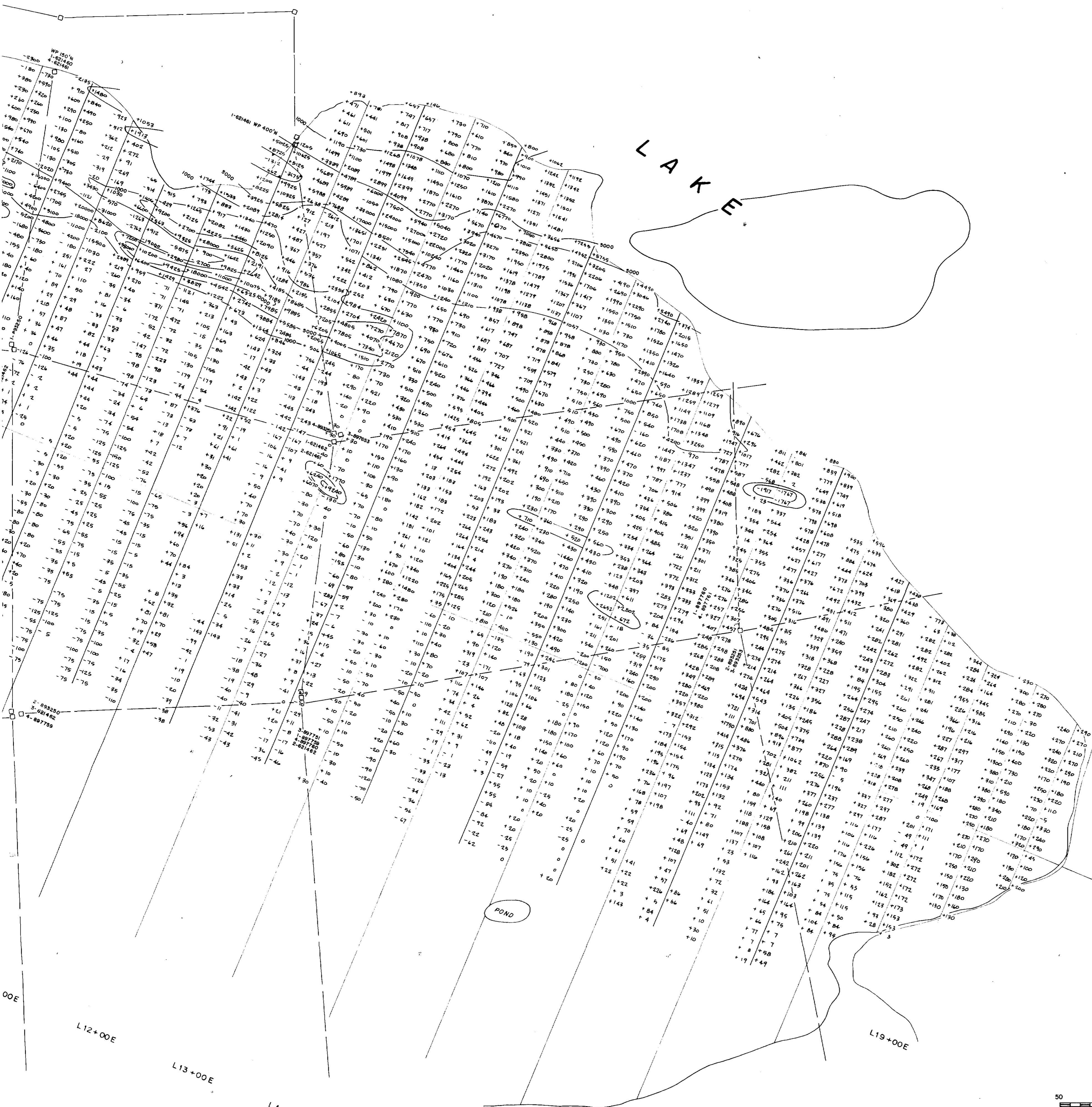




WP 200'S 2-897889  
WP 200'S 4-897883  
3-898300 WP 200'S  
L10E/ASB(LAKE)

DOUGIE

LAKE



2 9565

0 50 100  
METRES

520/115W-0041, #6

**D**URATION MINES LTD.  
(Duration Resources Inc. U.S.A.)

DOUGIE LAKE

MAGNETOMETER SURVEY

DATE	July 1986
SCALE	1 : 2,000
DRAWN BY	m. jamshedji
DWG No	

*B. Leonard*