

2.16070



42E058W0002 2.16070 BARBARA LAKE

010

REPORT OF VLF-EM SURVEY
ON TB1195771
KEEMLE LAKE AREA G63 & BARBARA LAKE AREA G6
THUNDER BAY MINING DIVISION
THUNDER BAY, ONTARIO

James R. B. Parres
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JAMES R. B. PARRES
B. SC. ADV. GEOLOGY

Qual #
2.6227

JUNE 1, 1995



42E055W0002 2.10070 BARBARA LAKE

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Introduction

Location:

The four claim property is located on the border of the Barbara Lake Area (claim Map G-6) and the Keemle Lake Area (claim Map G-63). The claim surveyed by the VLF Electromagnetic technique was staked in June of 1992 and is located on a north-west arm of Blay Lake [co-ordinates are longitude 88° and latitude 49° 18']. NTS references are 42E/4 42E/S 52H/1 52H/8 as given on ODM Geology map 2056 (Georgia Lake Area). Until 2056 the area was located on Map 312A (GSC) published in 1921 (scale 1" = 4 miles) entitled Sturgeon River Area.

Access:

Leaving Nipigon, On. travel 35.2 kms. northeast along Highway 11 (towards Orient, MacDiarmid or Beardmore). There is a parking area 1 km past the Pipeline relay station on the east side of the highway. Turn right and travel 5 kms on the Domtar gravel road through Death Gorge to a spot where the Gorge Lake Creek crosses under the road. There is an elevated turn-off to the right. A well bedded bush road can be traversed up on Bear Mountain past Gorge Lake 5 kms to where a beaver pond has flooded the road. (The first part of this turnoff road is boulder strewn and hazardous.) .3 kms past the beaver pond there is a blazed and flagged trail for 2 kms south into the #1 post of TB1195771 and then into the main showing on the north shore of the N.W. bay of Blay Lake. The lake is presently dried up in this bay.

History:

The area first came into mining prominence in 1955 following the discovery by E. W. Hadley of a lithium pegmatite in Georgia Lake. This discovery resulted in a staking rush and the location of over 50 additional occurrences.

This surveyed claim is part of a property consisting of 4 claims (TB1195771, TB1195772, TB1195775, TB1195776) staked on June 1, 1992 when a series of leases came open. The property was formerly known as the "Brink" and was worked by Aumacho Mines. This company drilled at least 13 and as many as 19 drill holes in the area of the Brink and related veins.

This claim covers part of the old leases #67026-27, 67028 and 67029.

Drilling by Aumacho in 1955, 1956 and 1957 outlined a modest tonnage of lithium bearing material quoted by Dr. Pye in Geological Report #31 as being 760,000 tons of 1.65 lithia content. Due to the uneconomical viability of mining lithium since the 1950's the property has sat idle.

Geology:

The property area is underlain by metasediments categorized by Pye as:

- 1 (a) Biotite-quartz feldspar gneiss
- 1 (b) Staurolite gneiss
- 1 (c) Garnet gneiss
- 1 (d) Cordierite gneiss
- 1 (e) Hornblende schist or gneiss
- 1 (f) Augen gneiss

These metasediments are intruded by a sill-like body of massive to faintly foliated, grey to pinkish grey, white weathering granitic rock. The sill-like body strikes east and dips 75 - 80° N. The granite serves as the host rock for the lithium bearing pegmatites. The main pegmatite (Brink No. 1 deposit) has an average exposed width of 13 feet on surface, has an arcuate strike and dips to the west, flattening with depth. Drill hole data indicates this deposit is essentially tabular in shape.

VLF - EM Survey - Geophysics

General

A baseline starting at the #1 post of TB 1195771 was cut by chainsaw and axe 400 metres west on a bearing of 270° Az. to the #4 post of TB1195771. Wing lines were turned off every 100 metres and cut south to the claim line between the #2 and #3 of TB1195771. 2000 metres of line was cut. Stations were established every 25 metres along the baseline and wing lines.

Instrumentation and Parameters:

The survey instrument was a Geonics EM-16 which measured an In-Phase and Quadrature Component. Stations utilized were Annapolis, Md. ("NSS"-21.4 KHZ) and Cutler, Me. ("NAA"-24.0 KHZ)

Methodology:

The VLF-EM survey system uses powerful radio transmitters set up in different parts of the world for military communications. VLF stands for very low frequency, usually in the range of 15 to 25 kilocycles/second. These powerful transmitters induce electrical currents in conductive bodies, producing secondary magnetic fields which can be

detected through deviations of the normal VLF field.

Successful use of VLF requires that the strike of the conductor be in the direction of the VLF station so the lines of magnetic field generated by the transmitter cuts the conductor. The conductor location is at the inflection point marking the crossover from positive tilt to negative tilt. To simplify the interpretation, a mathematical technique of manipulating the data (Fraser Filtering), filters the results so that the crossover point becomes a positive peak making the conductor position easily recognizable.

The major disadvantage of the VLF method is that the frequencies used result in a multitude of anomalies from unwanted sources such as swamp edges, creeks and topographical highs. This tendency of the VLF to respond to poor conductors sometimes aids in mapping faults and lithological contacts.

Results:

Readings on Cutler revealed one medium strength conductor ("A") crossing the entire claim between stations 8 and 9-S with an east-west strike. A number of other crossovers were obtained but all of these conductors had very limited strike extent.

Conclusion:

The VLF-EM was successful in outlining the southern edge of the granite sill hosting the lithium bearing pegmatites.

Recommendations:

That the readings be Fraser-Filtered to provide

additional and more accurate information.

That a portable transmitter be used to transmit the VLF signal. This should pinpoint the boundaries of the granite sill.

Fraser Filter Results:

The VLF-EM In-phase readings from Cutler and Annapolis transmitters were both processed by the Fraser Filter system of data manipulation. The resultant numbers were plotted together on a map for comparison.

The results were very interesting and produced contourable data outlining three anomalous trends traversing the one claim property in an east-west striking direction.

One of the VLF-EM anomalies is of strong intensity and corresponds to Anomaly "A" received from Cutler readings.

The other two anomalies are much weaker and are labelled on the Fraser Filter map as "B" and "C".

The ability of the Fraser Filter system to outline VLF-EM anomalies not apparent from the plotting of the in-phase and quadrature data proves the value of this technique.



Report of Work Conducted After Recording Claim

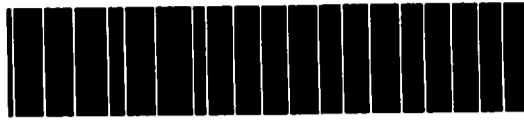
Mining Act

Transaction Number
W9540-146.

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

2010000

- Instructions:**
- Please type or print and submit in duplicate
 - Refer to the Mining Act and Regulation: Recorder.
 - A separate copy of this form must be completed
 - Technical reports and maps must accompany
 - A sketch, showing the claims the work is being performed on



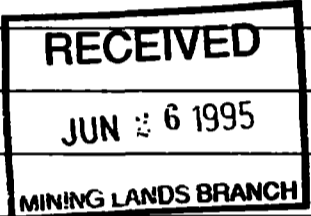
42E05SW0002 2.16070 BARBARA LAKE

900

Recorded Holder(s) AUDREY M. HAYES		Client No. 142854
Address 2175 HWY 61, P.R.#3, THUNDER BAY, ON. P7C 4V2		Telephone No. 475-3633
Mining Division THUNDER BAY	Township/Area BARBARA LAKE/KEEMLE LAKE	M or G Plan No. G6 & G63
Dates Work Performed From: MAY 27 1995	To: JUNE 1 1995	

Work Performed (Check One Work Group Only)

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



Total Assessment Work Claimed on the Attached Statement of Costs **\$908.-**

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

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

Name	Address
JAMES PARRES	2175 HWY 61, THUNDER BAY
BRENT PARRES	Box , THUNDER BAY

(attach a schedule if necessary)

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

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date JUNE 1/95	Recorded Holder or Agent (Signature) <i>James R. Parres</i>
--	--------------------------	--

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.		
Name and Address of Person Certifying JAMES R. B. PARRES 2175 HWY 61, THUNDER BAY		
Telephone No. 475-3633	Date JUNE 1/95	Certified By (Signature) <i>James R. B. Parres</i>

For Office Use Only

Total Value Cr. Recorded 908	Date Recorded	Mining Recorder <i>H. G. Wewer</i>	Received Stamp THUNDER BAY MINING DIVISION RECEIVED JUN 2 1995 AM 7,8,9,10,11,12,1,2,3,4,5,6 PM
	Deemed Approval Date Aug 31/95	Date Approved	
	Date Notice for Amendments Sent		

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units
	781195771	1
Total Number of Claims		1

Value of Assessment of Work Done on this Claim	Value Applied to this Claim
\$908.-	\$908.-
Total Value Work Done	Total Value Work Applied
\$908.-	\$908.-

Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
0	0
Total Assigned From	Total Reserve
0	0

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

- Credits are to be cut back starting with the claim listed last, working backwards.
- Credits are to be cut back equally over all claims contained in this report of work.
- Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date
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Statement of Costs
for Assessment Credit

État des coûts aux fins
du crédit d'évaluation

Mining Act/Loi sur les mines

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

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

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour 2 MAN DAYS Main-d'oeuvre	300.-	
	Field Supervision Supervision sur le terrain		300.-
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type REPORT & MAP PREPARATION		
	2 1/2 MAN DAYS	375.-	375.-
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type (1 DAY) 4 WHEELER	50.-	
	VLF (1 DAY)	50.-	
			100.-
Total Direct Costs Total des coûts directs			775.-

2. Indirect Costs/Coûts indirects

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

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type TRUCK		
	354 KM x .305	108.-	
			108.-
Food and Lodging Nourriture et hébergement		25.-	25.-
Mobilization and Demobilization Mobilisation et démobilisation			
Sub Total of Indirect Costs Total partiel des coûts indirects			133.-
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			133.-
Total Value of Assessment Credit (Total of Direct and Allowable indirect costs)			908.-
Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)			908.-

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

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

Filing Discounts

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

Total Value of Assessment Credit	Total Assessment Claimed
	x 0.50 =

Remises pour dépôt

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

Valeur totale du crédit d'évaluation	Valeur totale demandée
	x 0,50 =

Certification Verifying Statement of Costs

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

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

to make this certification

Attestation de l'état des coûts ^{AM} _{7,8,9,10,11,12,1,2,3,4,5,6} ^{PM}

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

Et qu'à titre de _____ je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature Andrey M. Hayes Date June 1/95

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

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

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

July 18, 1995

Our File: 2.16070
Transaction #: W9540.00146

Mining Recorder
Ministry of Northern
Development & Mines
435 James Street South
Suit B003
Thunder Bay, Ontario
P7E 6E3

Dear Mr. Weirmeir:

**SUBJECT: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIM
1195771 IN KEEMLE LAKE AREA**

Assessment work credits have been approved as outlined on the original report of work forms for this submission. The credits have been approved under Section 14, Geophysics(VLF), Mining Act Regulations.

The approval date is July 18, 1995. Please indicate this approval on the claim record sheets.

If you have any questions regarding this correspondence, please contact Bruce Gates at (705) 670-5856.

Yours sincerely,

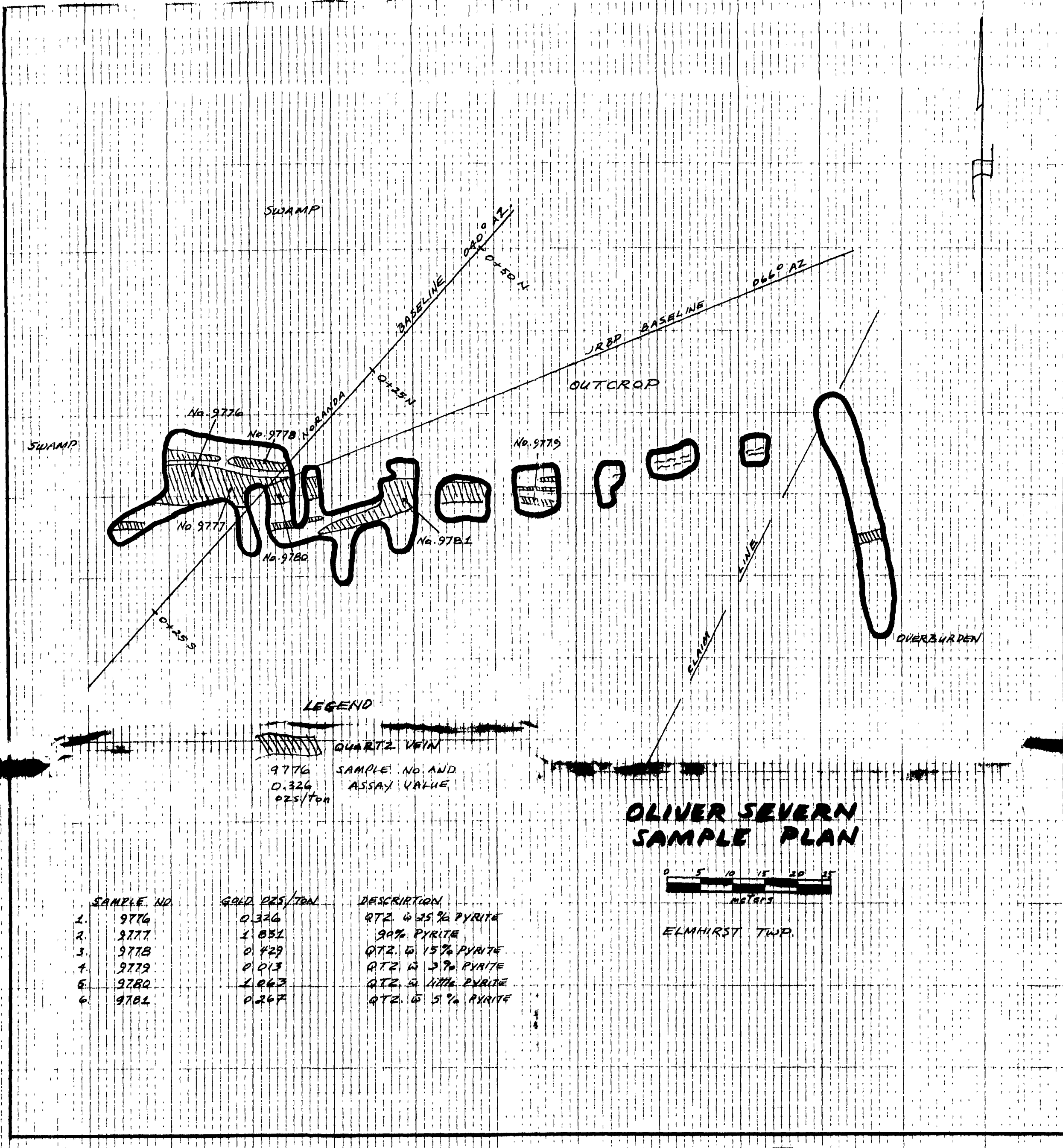


Mark Hall
Acting Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

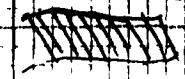
 BIG/jn

cc: Resident Geologist
Thunder Bay, Ontario

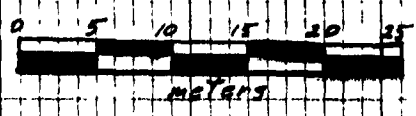
Assessment Files Library ✓
Sudbury, Ontario



LEGEND

 QUARTZ VEIN
 9776 SAMPLE NO AND
 0.326 ASSAY VALUE
 ozs/ton

OLIVER SEVERN
 SAMPLE PLAN



ELMHIRST TWP.

SAMPLE NO.	GOLD PRS/TON	DESCRIPTION
1. 9776	0.326	QTZ w 25% PYRITE
2. 9777	1.031	99% PYRITE
3. 9778	0.429	QTZ w 15% PYRITE
4. 9779	0.013	QTZ w 5% PYRITE
5. 9780	1.063	QTZ w 17% PYRITE
6. 9781	0.267	QTZ w 5% PYRITE

2.16020



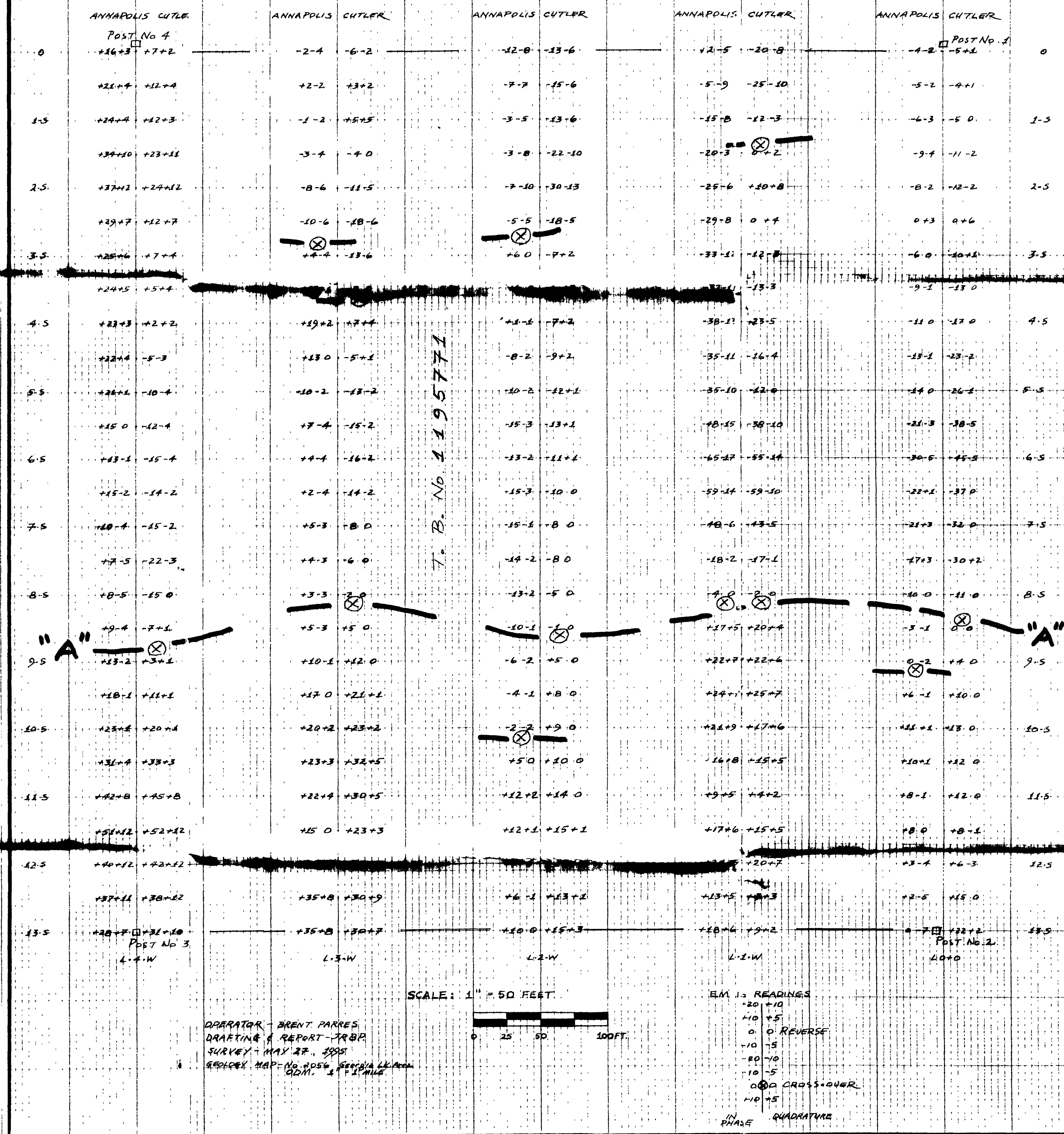
42E05W0002 2 18070 BARBARA LAKE

VLF-EM SURVEY

"AUMACHO-BRINK" LITHIUM PROPERTY

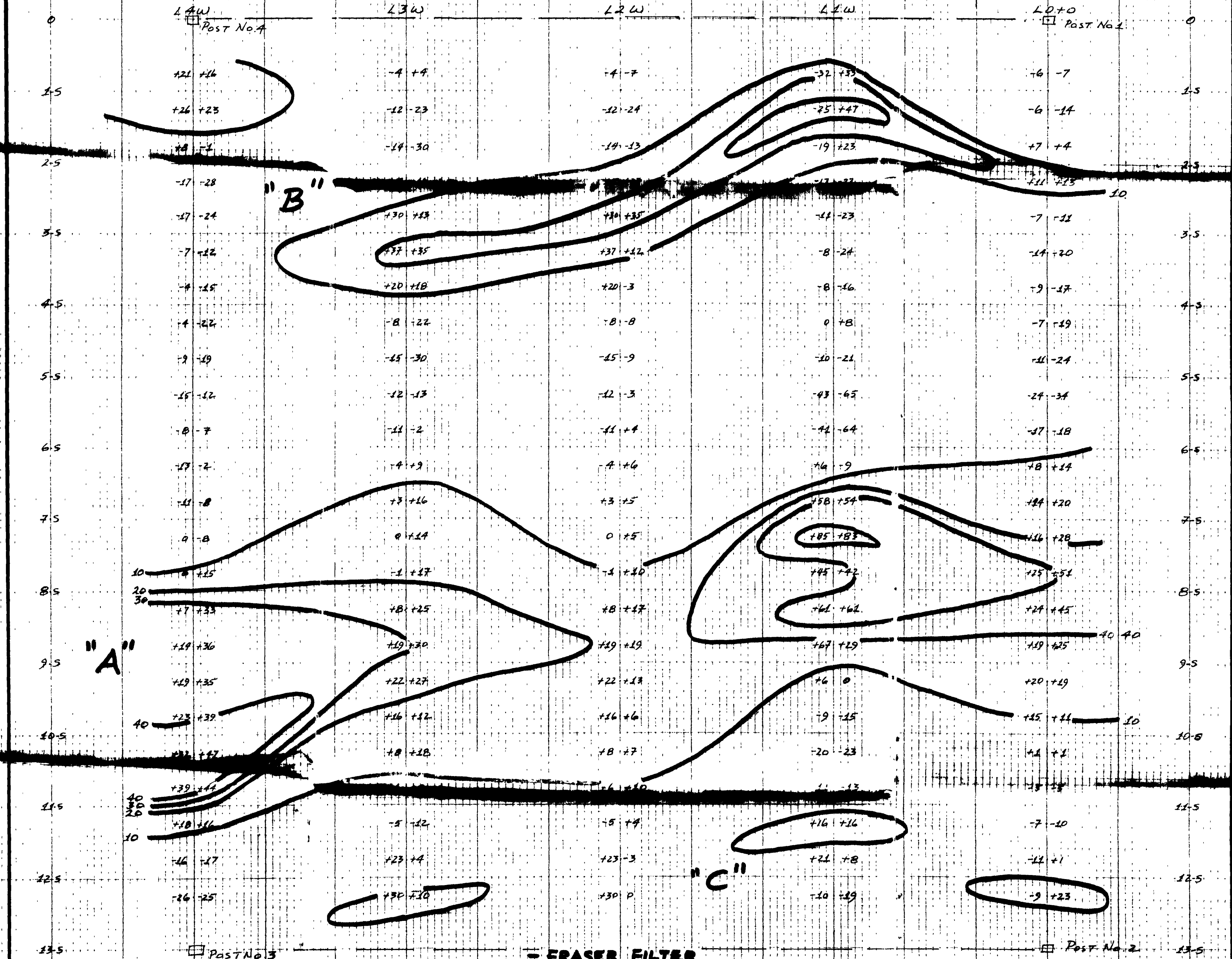
BARBARA-KEEMLE LKS. AREA, ONT.

LEGEND:
 INSTRUMENT - GEONICS EM-16
 TRANSMITTERS - CUTLER, ME. & ANNAPOLIS, MD.
 FREQUENCY - 24.0 KHZ & 21.4 KHZ.
 READING INTERVAL - 50 FEET.
 VLF-EM CONDUCTOR AXIS
 BASELINE - 090° AZ.
 N.T.S. - 42E/44S 58H/41B
 CLAIM MAP - #6 & #68



VLF-EM SURVEY
 AUMACHO-BRINK LITHIUM PROPERTY
 BARBARA KEEMLE LKS.
 AREA

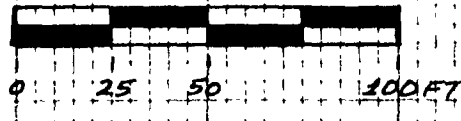
LEGEND:
 INSTRUMENT - GEONICS EM-16
 TRANSMITTERS - CUTLER, ME. & ANNAPOLIS, MD.
 FREQUENCIES - 24.0 KHZ. & 23.4 KHZ.
 READING INTERVALS - 50 FEET
 VLF-EM CONDUCTOR AXIS - CONTOURS CUTLER ONLY - 1/4 UNIT INTERVALS
 BASELINE - 090° AZ.
 N.T.S. 4.2 E/4.15 52.4/1.18
 CLAIM MARS - G.G. AND G. 63



FRASER FILTER
 READINGS -

LEFT IS ANNAPOLIS RIGHT IS CUTLER (CONTOURED)

SCALE 1" = 50 FEET



OPERATOR: B. PARRIS
 DRAFTING AND REPORT: J. PARRIS
 SURVEY: MAY 27, 1995
 GEOLOGY MAP: GDM. NO. 2056

