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Geophysical Report on the Lynn 11-16

Mineral Claims.

Highland Valley $50^{\circ} 26\frac{1}{2}'$ N., $121^{\circ} 00'$ W (NTS 92I/7W, 6E).

Kamloops Mining Division.

Highmont Mining Corporation Ltd. (N.P.L.), and

Teck Corporation Ltd.

8th March, 1976 - 26th March, 1976.

By

A. J. Reed, P. Eng.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 5835 MAP

7th April, 1976

Ashcroft, B.C.

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ILLUSTRATIONS

#1 Figure 1 - Index Map, Grid Lines, Mineral Claims
and VLF-EM Data In Pocket

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Geophysical Report on the Lynn 11-16
Mineral Claims.

Highland Valley 50 26½ N., 121 00 W(NTS 92I/7W,6E)
Kamloops Mining Division.

Hightmont Mining Corporation Ltd.(N.P.L.), and
Teck Corporation Ltd.

8th March, 1976 - 26th March, 1976.

INTRODUCTION

This report describes approximately 12 line-kilometres of VLF-EM survey performed by Hightmont Mining Corporation Ltd.(N.P.L.) on the LYNN 11-16 mineral claims from 8th - 26th March, 1976 . The survey area is located at 50° 26½' N., 121° 00' W and lies approximately 3 kilometres northnorthwest of Gnawed Mountain. The LYNN 11-16 mineral claims (record numbers 38239-38244) were staked on 8th September 1961 and recorded on 20 September, 1961 by John A. Dodd and are presently owned by Teck Corporation Ltd.

Access to the Lynn claims is by 45 kilometres of paved highway from Ashcroft to the Highland Valley and then by 6 kilometres of bush road southwards from the Lornex turnoff. Four-wheel drive vehicles were used for travel from Ashcroft to the Lornex turnoff and snowmobiles were used from the Lornex turnoff into the survey area. The survey was performed on a snow pack of approximately 50 centimetres, which is considerably less than normal for this time of year.

GEOPHYSICAL SURVEY

A VLF-EM survey was performed over the LYNN 11-16 mineral claims. Ronka EM16 Electromagnetic Detector serial number 78 was used, to monitor the VLF radio signals transmitted at a frequency of 18.6 KHz from Seattle, Washington. Readings were taken at intervals of 20 metres along east-trending blazed or cut lines spaced a nominal 122 metres apart. Inaccuracies in the inherited system of cut lines made it necessary to run a tieline due north at 1500 metres east and to survey some of the lines. Topofil and Ranger compass were used for survey control. All stations were marked with fluorescent pink flagging tape. The data was filtered by the method described by Fraser (1969,1971) and Figure 1 shows the observations and filtered data on a plan of the mineral claims and cut lines.

GEOPHYSICAL RESULTS

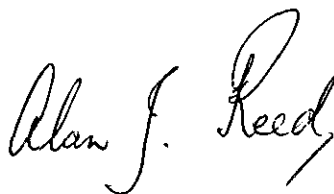
A strong VLF-EM anomaly extends NNE across the LYNN 15 and 13 mineral claims and then N across the LYNN 14 mineral claim. Filtered values exceeding +20 are continuous along a strike length of 900 metres and the anomaly has its maximum expression in filtered values of +39 which were obtained at L172N570m E and L178N670m E.

Several small anomalies with filtered values in excess of +20 occur on the LYNN 11, 13 and 15 mineral claims. The greatest concentration of these small anomalies is on the LYNN 11 mineral claim and these may be significant in view of the proximity of the LYNN 11 M.C. to the JAY 101 copper showing.

SUMMARY AND CONCLUSIONS

The present VLF-EM survey has located a NNE-trending conductor crossing the LYNN 13, 14 and 15 mineral claims and situate between Highmont Creek and Lynn Creek.

The LYNN claims were subject to a SSE-moving glaciation which could be expected to develop a SSE-trending glacial train from any mineralisation exposed at surface. Any such glacial train developed from mineralisation occurring on the LYNN 15-13-14 VLF-EM conductor would be intercepted by Highmont Creek which has cut down very nearly to bedrock. A stream sediment sampling program should be undertaken on Highmont Creek to seek any glacial trains of mineralisation originating on the LYNN 15-13-14 VLF-EM conductor.



A. J. REED. P.Eng.

7th April, 1976

REFERENCES

- Fraser, D.C. (1969) "Contouring of VLF-EM Data, Geophysics XXXIV, 6, pp. 958-967. December 1969
- Fraser, D.C. (1971) " VLF-EM Data-processing " , CIM Bulletin, January 1971, pp. 39-41.

STATEMENT OF PERSONNEL & COSTS

| | | | |
|--|-----------------|-------------------------|-----------|
| A.J. REED Box 158 Ashcroft, B.C. | Chief Geologist | 15th-26th March 1976 | \$ 850.00 |
| M.J. PORTER Box 144 Savona, B.C. | Superintendent | 8th-26th March 1976 | \$ 750.00 |
| 4 X 4 Pickup | | 8th-26th March 1976 | \$ 500.00 |
| Snowmobile rentals | | 8th-23rd March 1976 | \$ 390.00 |
| Topofil & Ronka EM16 Rental | | 8th-23rd March 1976 | \$ 25.00 |
| Preparation of Report | | | \$ 125.00 |
| | | | <hr/> |
| | | | \$2640.00 |
| | | | <hr/> |




A.J. Reed, P. Eng.
April 7th, 1976

CERTIFICATE

I, Alan James Reed of Ashcroft, British Columbia, do hereby certify that :

1. I am a geologist employed by Highmont Mining Corporation Ltd. of 1199 West Hastings Street, Vancouver, B.C.
2. I am a Professional Engineer registered in the Province of British Columbia and the Province of Ontario.
3. I am a graduate of the University of Leeds with a B.Sc. (Hons. 1963) in Geology.
4. I have practised my profession since 1963 while employed with the Geological Survey of Jamaica, Siscoe Metals of Ontario Ltd., and Highmont Mining Corporation Ltd.
5. This report deals with work performed on the LYNN 11-16 mineral claims under my supervision during the period March 8th - 26th, 1976.

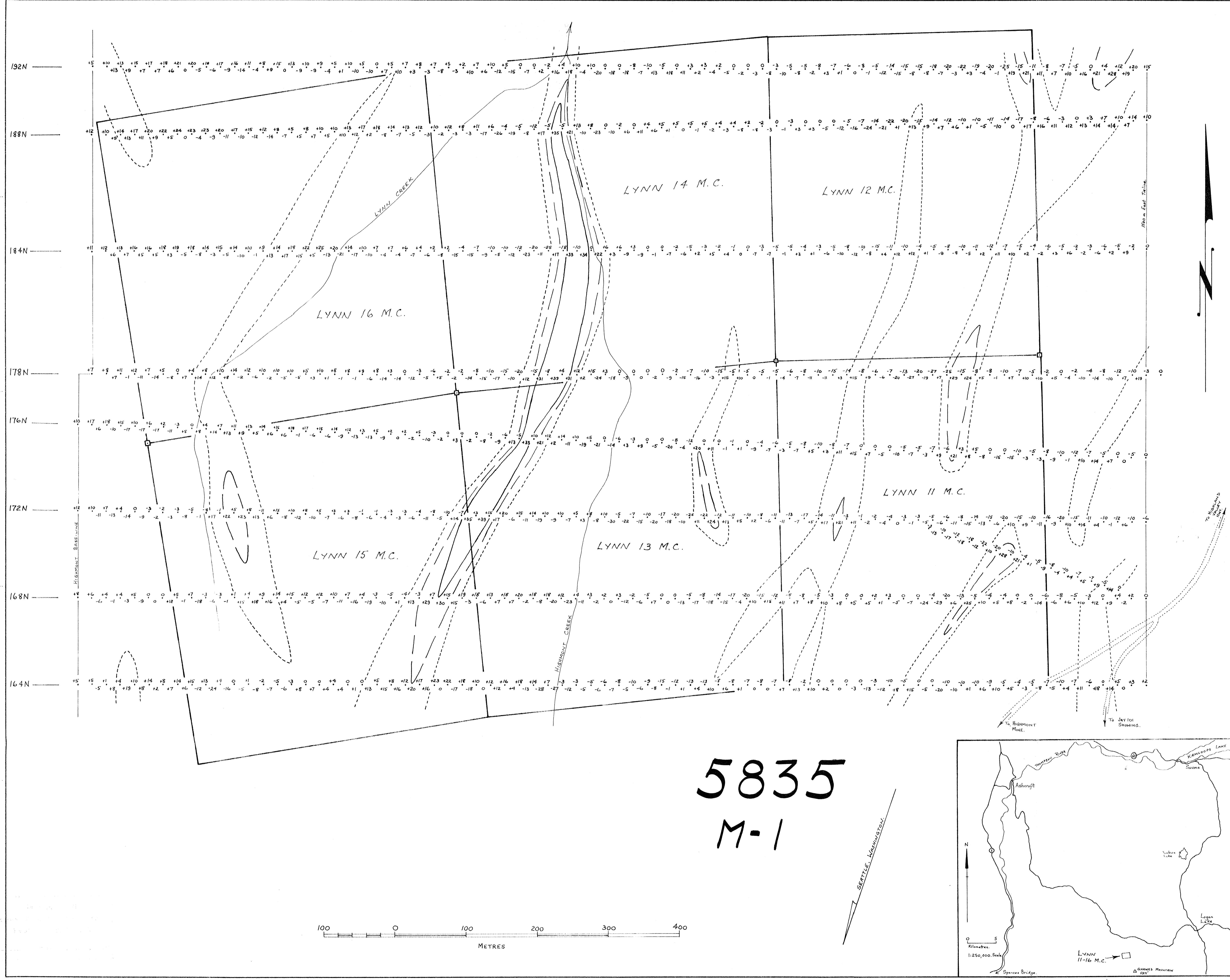
A handwritten signature in cursive script that reads "Alan J. Reed". The signature is written in dark ink and is positioned above a horizontal line.

A.J. Reed, P.Eng.

7th April, 1976

| PURCHASE ORDER | | |
|----------------|-----------|-------------|
| ORDER NUMBER | TO VENDOR | DESCRIPTION |
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| | | |
| | | |
| | | |

| ASSOCIATED DRAWINGS | |
|---------------------|--|
| | |
| | |
| | |
| | |



LEGEND

- Claimpost
- Creek
- - - - - Bush road.
- Instrument Reading Station
- ← Filtered Value

Contours drawn on filtered values:

- - - - - +10
- +20
- +30

FIGURE 1 : To accompany Geophysical Report by A. J. Reed, P. Eng. 7th April, 1976.

A. J. Reed
7th April, 1976

| ISSUE | DATE | BY | APP |
|-------|------|----|-----|
| | | | |
| | | | |
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CERTIFIED FOR CONSTRUCTION

TECK CORPORATION LTD.
HIGHMONT PROJECT

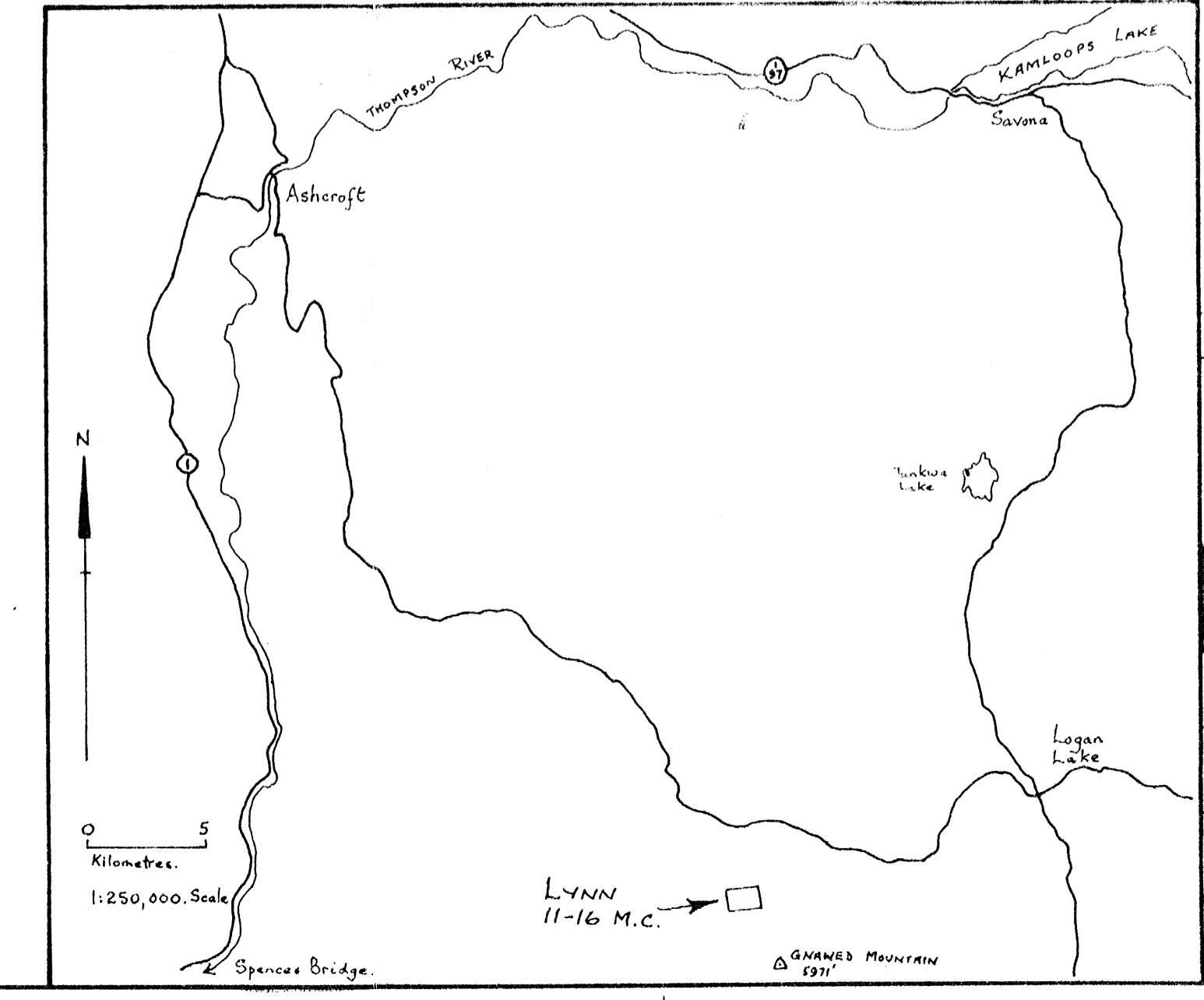
AREA: LYNN 11-16 M.C.'s. NTS. 92 I / 74 E

SUBJECT: VLF-EM SURVEY

SCALE: 1:2000
DATE: 1/25/76

TECK DRAWING NO. 11-16 M.C. ISSUE

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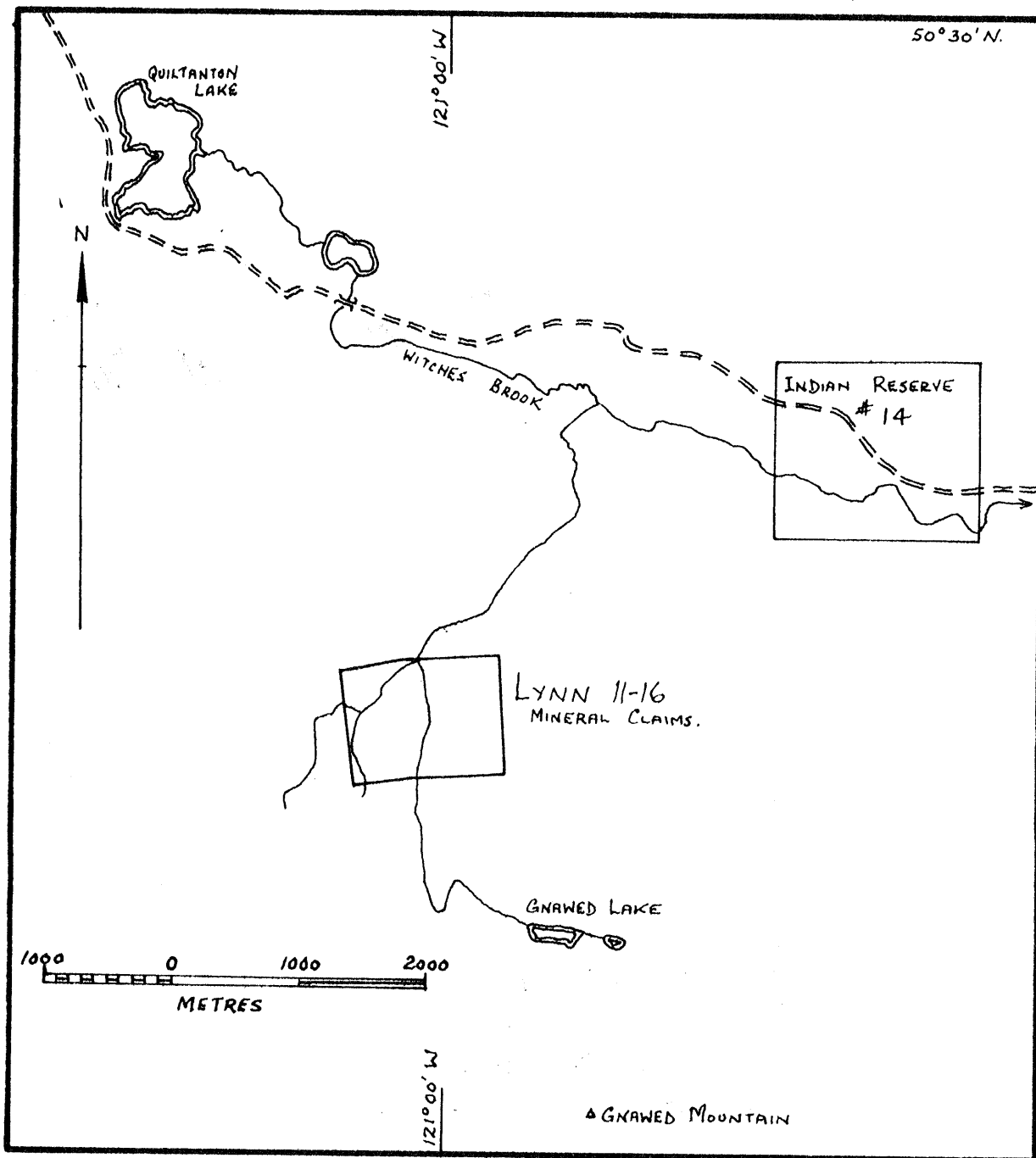


FIGURE 2: SUPPLEMENTARY INDEX MAP TO ACCOMPANY GEOPHYSICAL REPORT ON LYNN 11-16 MINERAL CLAIMS BY A. J. REED, P. ENG., DATED 27th APRIL, 1976. SCALE 1:50 000.

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M-2

Alan J. Reed
19 May, 1976