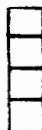


MAP No.

105 F 15

ASSESSMENT REPORT
N. M. E. A. P.
CONFIDENTIAL
OPEN FILE

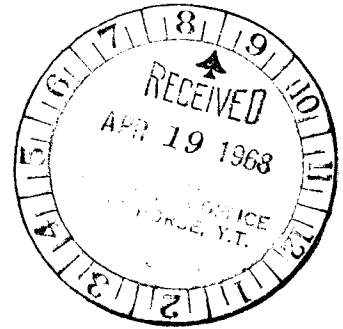


TYPE OF

WORK: GEOLOGY; GEOPHYSICS

REPORT FILED UNDER	SILVER CHIEF MINERALS LTD.	DOCUMENT NO. 091737
DATE PERFORMED	1967	DATE FILED: APRIL 19, 1968
LOCATION - LAT.	61°52'N	AREA: ROSS RIVER
LONG.	132°53'W	
CLAIM NO.	JR 19 to 34	
VALUE \$		
WORK DONE BY	J.T. COOK	
WORK DONE FOR	ROVING EXPLORATION SERVICES LTD.	
REMARKS	<p>A quartz galena vein outcrops on the road bank as observed by E.D. Kindle (G.S.C. paper 45-21, 1946.)</p> <p>A V.L.F. survey was done over the property to try to locate other quartz veins.</p>	

#34 CANUSA



A Geophysical Report

on an

Electromagnetic (EM-16) Survey

on the

JR Claims 19 to 34 inclusive

Fox Creek - Mile 117

Canol Road

ROSS RIVER AREA,

Yukon Territory

This report has been examined by
the Geological Reconnaissance Unit.
Approved as a report worth by:

KENNETH G. GIBSON

Approved as a report for a amount
of: \$

THOMAS W. GIBSON

Accepted as a report of work
under Section 20 of the Quartz
Mining Act.

COMMISSIONER OF YUKON

For

Silver Chief Minerals Ltd.

Dated: April 13, 1968

by John T. Cook, P. Geol.
Roving Exploration Services Ltd.

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ILLUSTRATIONS

Regional Location Map	<u>In Pocket</u>
Property Map - with traverse lines	<u>In Pocket</u>
EM-16 Profiles	<u>In Pocket</u>

INTRODUCTION AND SUMMARY

An electromagnetic survey utilizing a Ronka EM-16 detector was performed. The location of the lines of traverse are shown and profiles of the In Phase and Quadrature values are included in the report. No really significant anomalies were revealed, although areas of outcroppings containing quartz vein material show accentuated In Phase values. Geological observations in the outcrop areas were also made in conjunction with the EM-16 traversing.

PROPERTY AND LOCATION

The JR 19 to 34 claims are part of a group of 56 claims held by Silver Chief Minerals Ltd., being in total the JR-1 to 40 claims and JN 1-16 claims, located on and near Fox Creek around Mile Post 117 on the Canol road, 20 miles west of Ross River in the Yukon. The geophysical work was actually performed on the JN 1-16 and JR 1-18 and 35 to 40 claims and suitable grouping has been applied for in order that the work will apply to representation work for the JR 1-16 claims.

JR - 19	Y 12554	April 13, 1968
JR - 20	Y 12555	" " "
JR - 21	Y 12556	" " "
JR - 22	Y 12557	" " "

1255-515

JN - 23	Y 12558	April 13, 1968
JN - 24	Y 12559	" " "
JN - 25	Y 12560	" " "
JN - 26	Y 12561	" " "
JN - 27	Y 12562	" " "
JN - 28	Y 12563	" " "
JN - 29	Y 12564	" " "
JN - 30	Y 12565	" " "
JN - 31	Y 12530	" " "
JN - 32	Y 12531	" " "
JN - 33	Y 12532	" " "
JN - 34	Y 12533	" " "

The recorded date of these claims is April 13, 1968.

PREVIOUS WORK

Since the claims were staked by the present owners no work has been done.

However, it is reported that in 1945 the property was held by Consolidated Mining & Smelting and a certain amount of trenching and ground examinations were performed.

G.S.C. Paper 45-21, 1946, by E. D. Kindle, reports that a quartz vein was exposed in the roadside of about 3 ft. width which contained some galena mineralization with small silver and gold values. Although a number of quartz veins were observed during the present work no mineralization was seen. This could be due to sloughing of the roadside banks obscuring the thin zone of mineralization.

GENERAL GEOLOGY

The claims area is generally covered with Glacial overburden. The area is mountainous with elevations rising to 5,000 ft. The JN and JR groups lie in the Yukon Plateau Province in the Pelly Mountains of south-central Yukon.

The claims area is underlain by Paleozoic sedimentary rocks including argillites, chert, dolomite, limestone, quartzite, sandstone, black shale and slate. General strike is northwest and dip approximately 35° northeast. Local folding, faulting and contortion is evident in at least three different directions according to A. R. Parker. Most mineralization is said to be controlled by a series of northwest-southeast faulting.

The Tintina fault, a large regional fault, is located about 25 miles east of the property. A major east-west

fault lies near the south boundary of the property on the Lapie River.

Some Jurassic granitic intrusions are known in the area. The property lies on the flanks of Mt. Cook which is said to contain a granite plug. Any mineralization would, no doubt, be related to these intrusions.

SURVEY AND OPERATIONS

The field crew was flown into the area from Whitehorse and reached the property by truck on the Canol Road. Only a foot or so of snow cover remained in the bushes.

The traversing was done on foot and distances and directions between stations were measured by the pace and Brunton compass method. EM-16 stations were read at 250 to 500 ft. intervals as indicated on the profiles. Excellent "In Phase" resolution was observed but the Quadrature readings were generally weak and inconclusive. Traverses were mainly confined to the Canol roadway, the Lapie River and Fox Creek, all of which traverse the claims. Some other smaller traverses were made laterally from these main base lines and several isolated readings were made at selected localities.

EQUIPMENT

Ronka EM-16 electromagnetic detector, Unit No. 69.

PERSONNEL AND WORK PERIOD

The field work was carried out between March 29 and April 5, 1968. Map preparation and report writing were completed April 13, 1968.

Field crew consisted of:

John T. Cook, P. Geol., acting as EM-16
Operator, Party Chief and
Geologist,

Sidney Atkinson - field helper,

Isaac Dick - field helper.

INTERPRETATION

The plotted profiles contained in the pocket of the report show the In Phase and Quadrature readings taken on the various traverses. The In Phase curve shows reasonable resolution but the Quadrature is rather flat and inconclusive. Quadrature readings were difficult to obtain.

VLF transmitting station NPG at Seattle, Washington, was utilized. This station has a frequency of 17.8 kHz, and its bearing is almost due south. Orientation in the primary field was read with facility as were the In Phase angles.

A brochure describing the theory and operating principles of the Ronka EM-16 is included with the report.

Traversing along the roadway and streams a marked increase in amplitude of the In Phase readings was noted in proximity to areas of rock outcroppings - such as between Station 21 to 28 in the Canol road, and Stations 26 to 30 on the Lapie River. These readings doubtfully represent any significant mineralization. In both instances the bedrock was rather well exposed and although numerous quartz veins were noted none contained any significant mineralization.

CONCLUSIONS AND RECOMMENDATIONS

Further geophysical investigations should include a Gravimetric profile which could be carried out with facility along the Canol road. Further surface geological examinations and EM-16 traverses could be carried out during the summer months and an attempt be made to locate and expose the showing, described by Kindle in 1945.

Signed: 

John T. Cook, P. Geol.

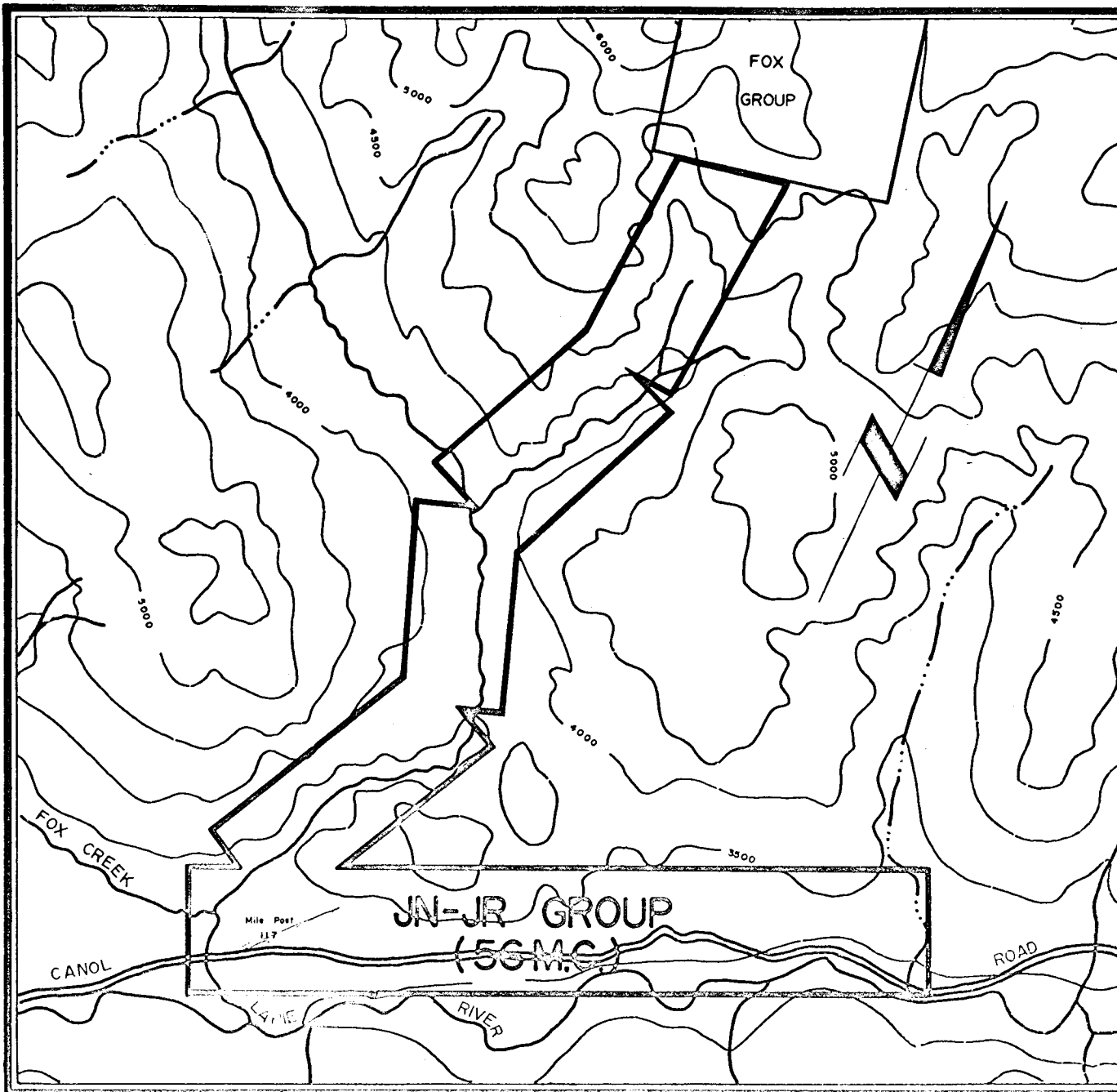
ROVING EXPLORATION SERVICES LTD.

April 13, 1968

REFERENCES

Kindle, E. D., 1946, Geological Reconnaissance Along the Canol Road from Teslin River to MacMillan Pass, Yukon Territory, G.S.C. Paper 45-21.

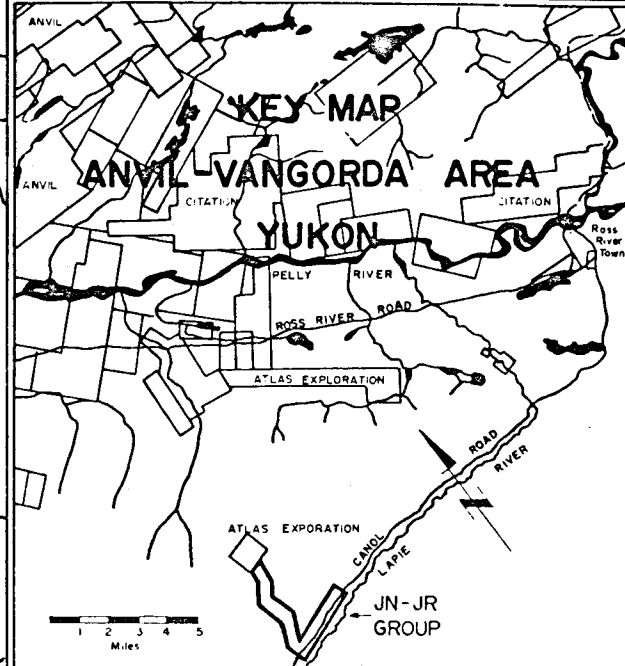
Parker, A. R., 1967, Engineer's Report on JR and JN Group for Silver Chief Minerals Ltd.



PROPERTY LOCATION MAP

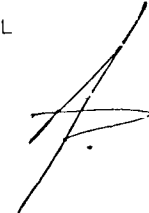
JN-JR GROUP

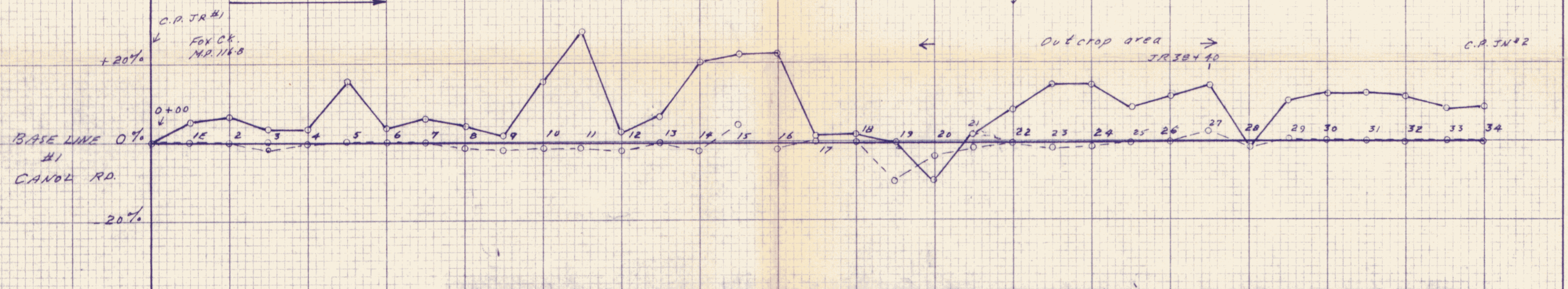
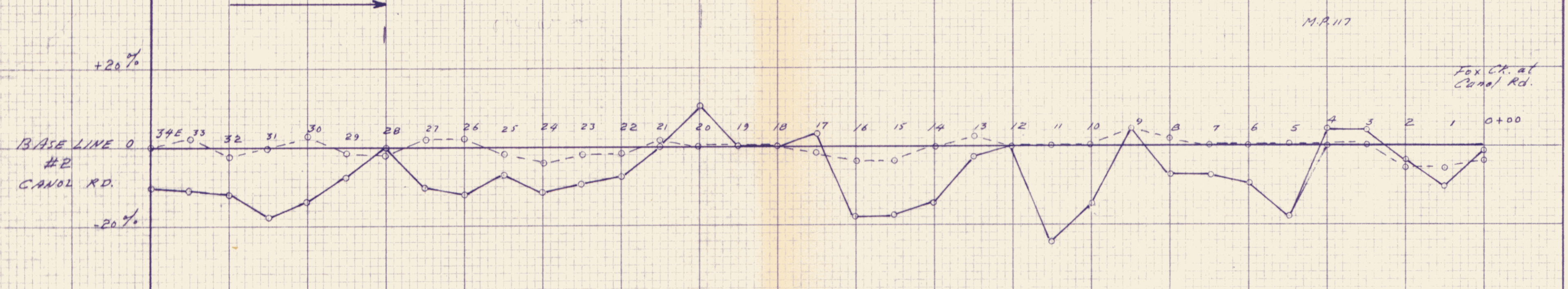
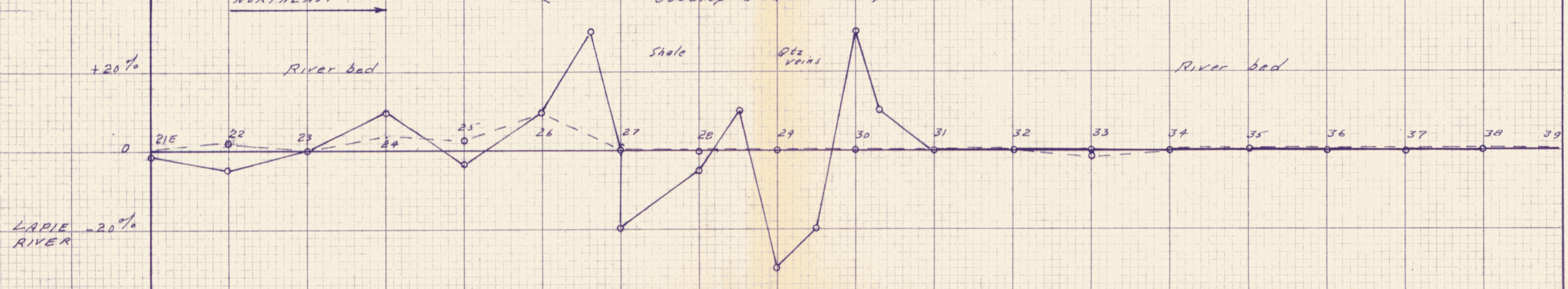
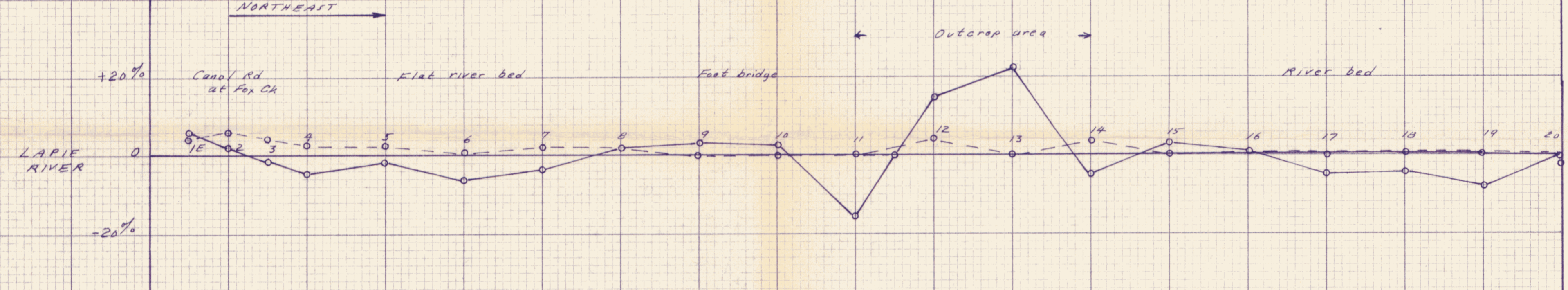
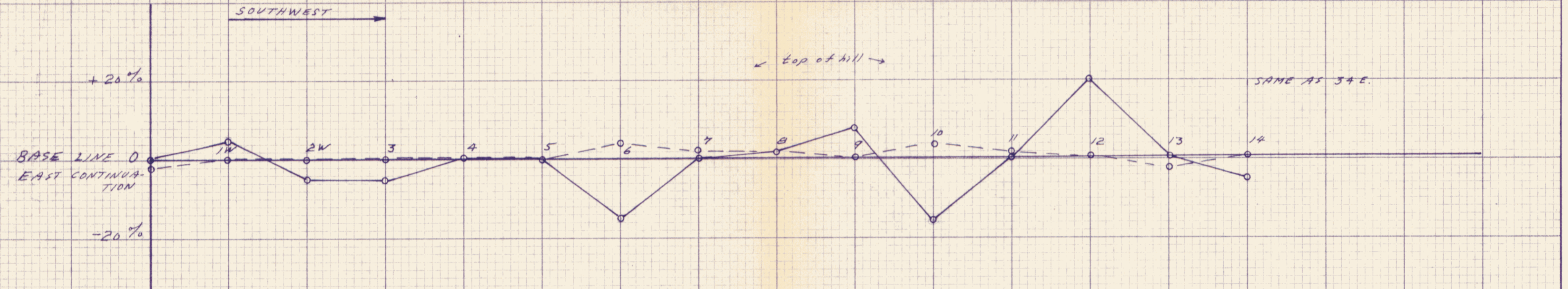
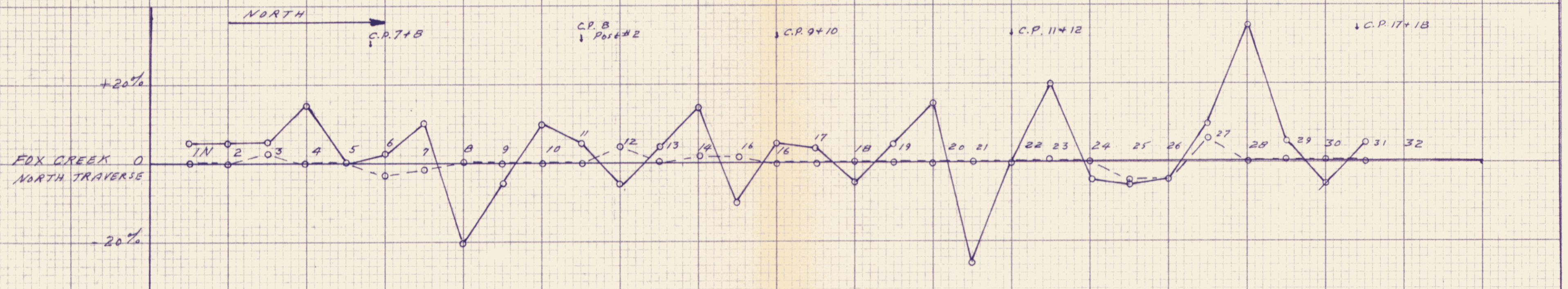
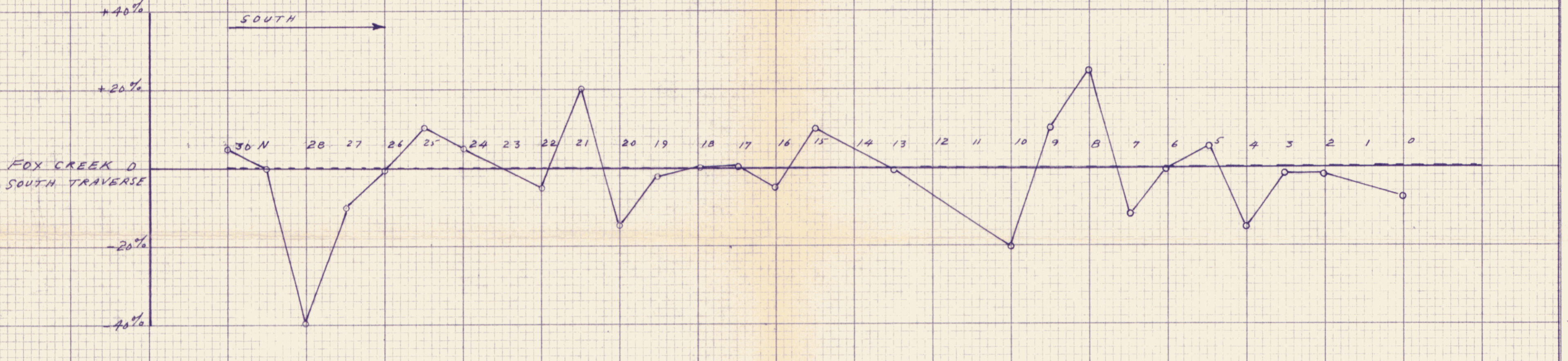
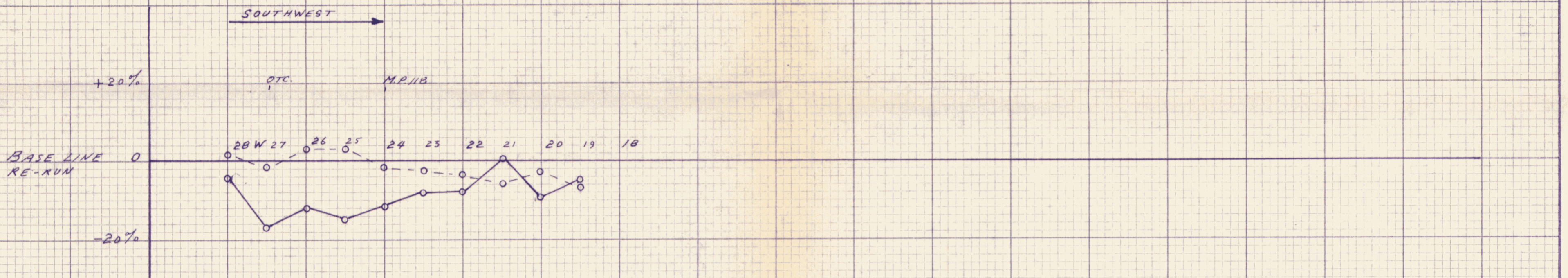
SILVER CHIEF MINERALS LTD.



ACE R. PARKER & ASSOCIATES
 Mineral Industry Consultants & Contractors

KEY MAP BASED ON GOVERNMENT CLAIM MAPS. CLAIM LOCATION APPROXIMATE.

DATE	7 APRIL, 1967	SEAL 
DRAWN	Sanyal, i.c.	
SCALE	1 in. = 1/2 mile	
DWG. No.	1	



VLF TRANSMITTING STATION - WFO, SEATTLE, WASH. - 17.8 KHz
 VLF STATION BEARING - SOUTH
 IN PHASE ○——○
 QUADRATURE ○- - -○
 EM-16 STATION ○

Survey: ELECTROMAGNETIC
 Client: SILVER CHIEF MINERALS LTD.
 Prospect: JR & JN Claims Area: Ross River, Yukon
 Contours: Profiles Instrument: Ronka EM-16
 Contour Interval: Date: March 1968
 Map Scale: 1" = 500' Approved: J.T. Cook
 Party Chief: J.T. Cook



To accompany report on
 JR and JN claims dated
 April 13, 1968

1439