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SELF-POTENTIAL SURVEY

OWL GROUP OF CLAIMS

Owen Lake, B. C.
(54° 126' S.W.)

By

W. M. SIROLA, P. Eng.

For

Farwest Mining Limited (N.P.L.)

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SELF-POTENTIAL SURVEY

INTRODUCTION:

The Owl Group consists of twelve claims held by location on the south-east end of Owen Lake roughly twenty-eight miles south-west of Huston, B. C. The claims are owned by Mr. W. F. McGowan of 3262 Marine Drive, West Vancouver, B. C. and are under option to Farwest Mining Limited (N.P.L.) of 303-1075 Melville Street, Vancouver, B. C.

The area is underlain by volcanic rocks of Jurassic age which have been intruded by post-Cretaceous (?) micro-diorites.

Numerous chalcopyrite-sphalerite and sphalerite-galena veins were explored in the early 1900's in the area immediately north-west of the Owl Group. A very considerable amount of work was done and some of the veins were found to have appreciable values in gold and silver.

We found that some of the veins were detectible by self-potential methods and the procedure was instituted on five of the Owl Claims.

SURVEY PROCEDURE

A base-line was run a distance of 4,000' east starting from a point 250' south and 400' west to the north-west corner of Owl No. 1 mineral claim. North-south picket lines were run on 400' intervals

and detail lines were established as required. Chainage pickets were set at 100' intervals on the lines.

A Sharpe V.P.-6 Voltmeter equipped with porous pot electrodes was used for the survey. Corrections were applied daily to all readings to compensate for small potential differences in the electrodes.

The base-line was read first from west to east and all profile line values were adjusted to the base station at the west end of the base-line. This station was given an arbitrary value of zero millivolts.

RESULTS

Three potentially significant anomalous zones were found. The maximum potential drop was in the 300 millivolt range and the average anomaly was between 100 and 200 millivolts. Numerous smaller anomalies were discounted.

INTERPRETATION

The anomalies found were of sufficient size and intensity to justify further exploration. In one instance a length of more than 800' was indicated. The widths suggested that the mineralization might consist of lenticular replacement deposits or discontinuous shear zones.

Since overburden was generally shallow, some of the anomalies

were stripped by bulldozer and holes were drilled into the oxidized outcrop with a portable Pionjar drill.

CONCLUSIONS

Mineralization found in the various bulldozer cuts was as follows:

Cut No. 1 - Shear zone striking N.40°W. dipping 61° N.E.
14" wide.

5% pyrite
Au. 0.4 oz.)
Ag. 35 oz.) grab sample
Pb. 6.91%)

Rock too decomposed for proper channel sample.

Cut No. 2 - 2" - 8" open fissure.
320°/85° E.
5% pyrite adjacent to shear highly altered rock.

Au. 0.02
Ag. 0.4
Pb. Trace
Cu. 0.06

Cut No. 3 - 12" wide zone
115°/85° S. Hairline to ½" veinlets of chalcopyrite plus dissemination.

Au. 0.02
Ag. 1.3 oz.
Pb. Trace
Cu. 5.05%

Cut No. 4 - Pyritized silicified rock - no assays.

Cut No. 5 - Minor pyrite in pale, highly altered volcanics (?)

Cut No. 6 - Highly altered decomposed rock.

Cut No. 7 - No mineralization. Cut made to explore source of galena float.

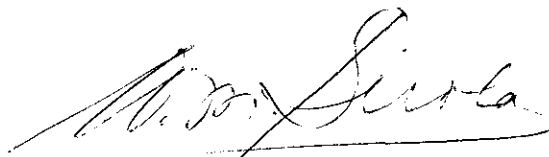
Cut No. 8 - No bedrock.

CONCLUSIONS

The high degree of decomposition made accurate appraisal difficult. A small-size diamond drill would do a much more efficient sampling job. No strong persistent mineralized zones were found and distribution of values from the limited amount of work done would appear to be quite erratic; however, sufficient encouragement was found to justify consideration of a few shallow drill holes at some later date and possibly further geophysical work.

The mineralized zones are quite amenable to detection by the self-potential method.

An effort was also made to detect mineralization by geochemical methods using a cold citrate solvent but this proved ineffectual.



W. M. SIROLA, P. Eng.

January 29, 1960.

CONTRACT LINE-CUTTING COSTS

<u>Name</u>	<u>Period</u>	<u>Footage</u>	<u>Total Cost</u>	<u>Cost Per Mile</u>
John Sirola	July 15-30/59)	10 miles	\$1,000.00	\$100.00
Norman Elliott	" ")		

CONTRACT SELF-POTENTIAL SURVEY COST

John Sirola	Aug. 1-30/59)	10 miles	\$2,000.00	\$200.00
Norman Elliott	" ")		

John Sirola

QUALIFICATIONS RECORD

NAME: JOHN SIROLA, Geophysical Contractor.

ADDRESS: 2228 Mathers Avenue, West Vancouver, B. C.

EDUCATION: Haileybury School of Mines - Graduated 1931 - Mining.

EXPERIENCE: 1931-1943 - Geological and Geophysical Field Exploration Work with reports, maps and geophysical interpretations in Ontario and Northwestern Quebec.

1943-1945 - R.C.A. F. Electronics Branch.

1946-1954 - Various mining exploration work including : Geological mapping and diamond drilling for Burrows Syndicate in northern Ontario.

Magnetometer field work and reports for W.C. Martin of Ventures Magnetic and radiometric surveys for Morrison Consolidated Co., in the Oka district, Quebec.

Geophysical surveys for Gulf Lead Mines Ltd.

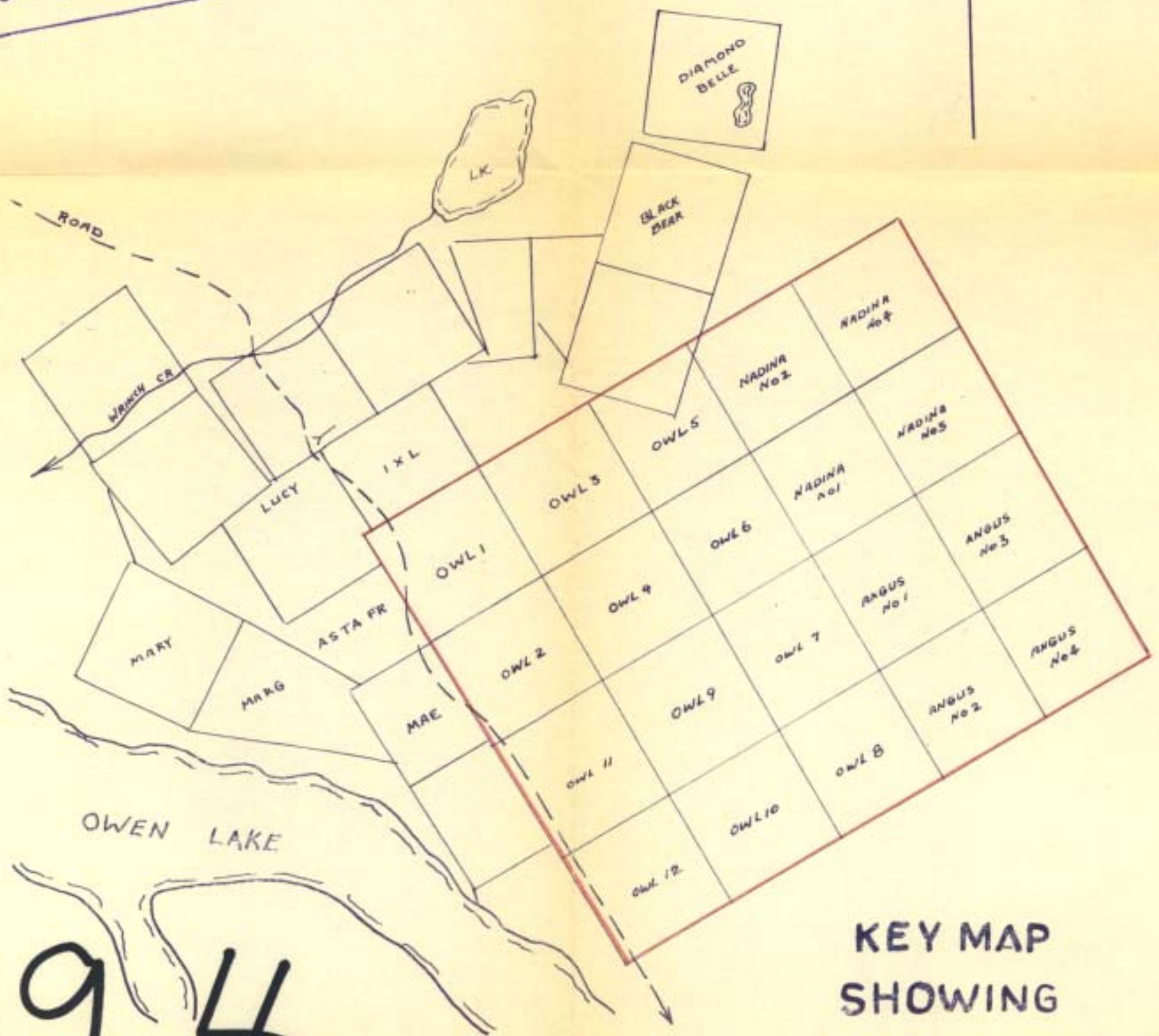
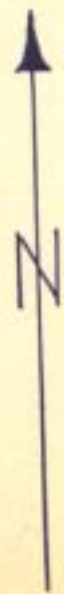
1954-1958 - Head of a private firm (Exploration Geophysics) carrying out contract airborne and ground geophysical surveys.

1958-1960 - Contract Geophysical Surveys in B.C.

John Sirola

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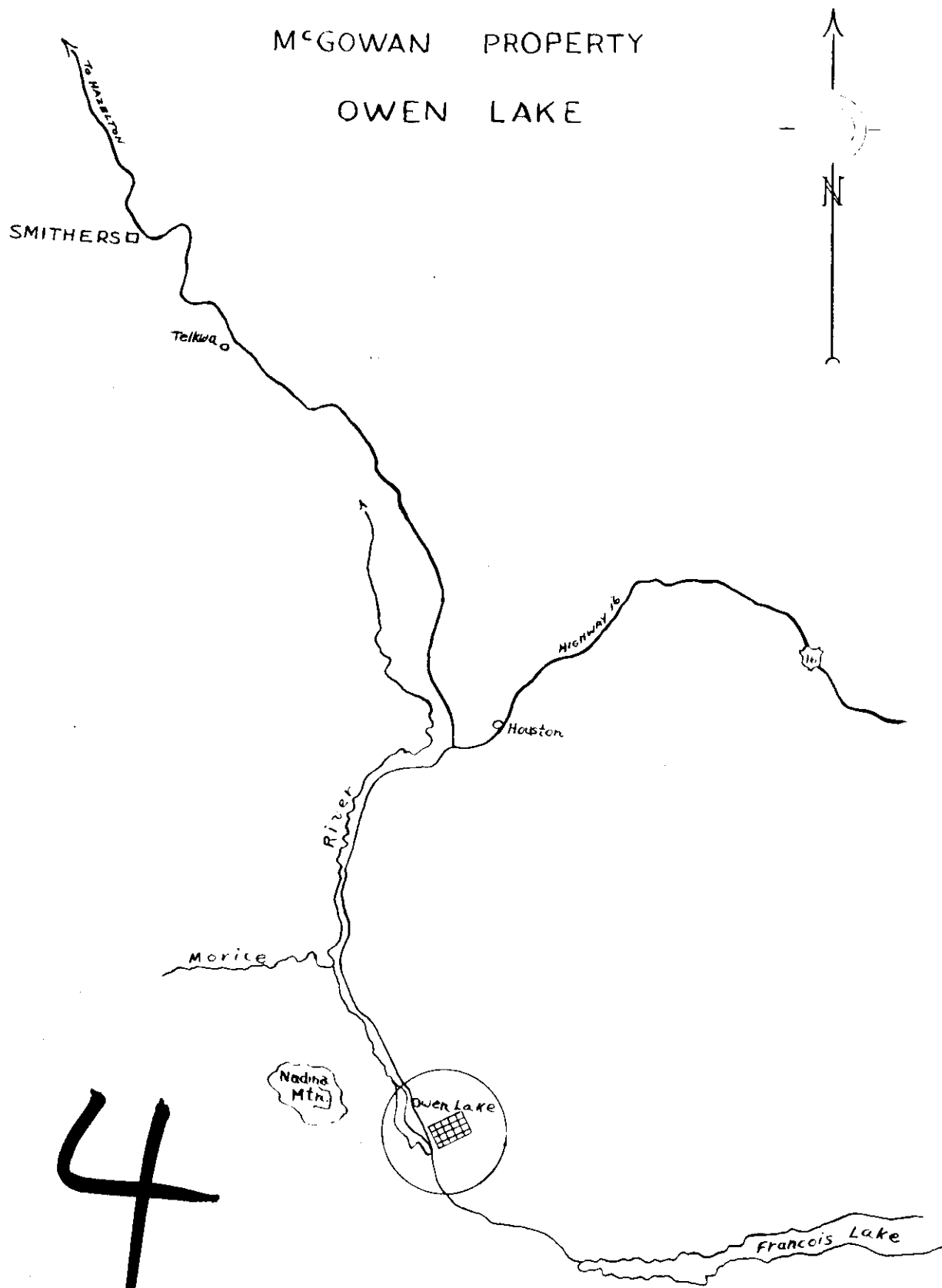
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KEY MAP
SHOWING
MCGOWAN PROPERTY

SCALE 1IN = 1500FT

OWEN LAKE BC
JAN 30/60 TJW

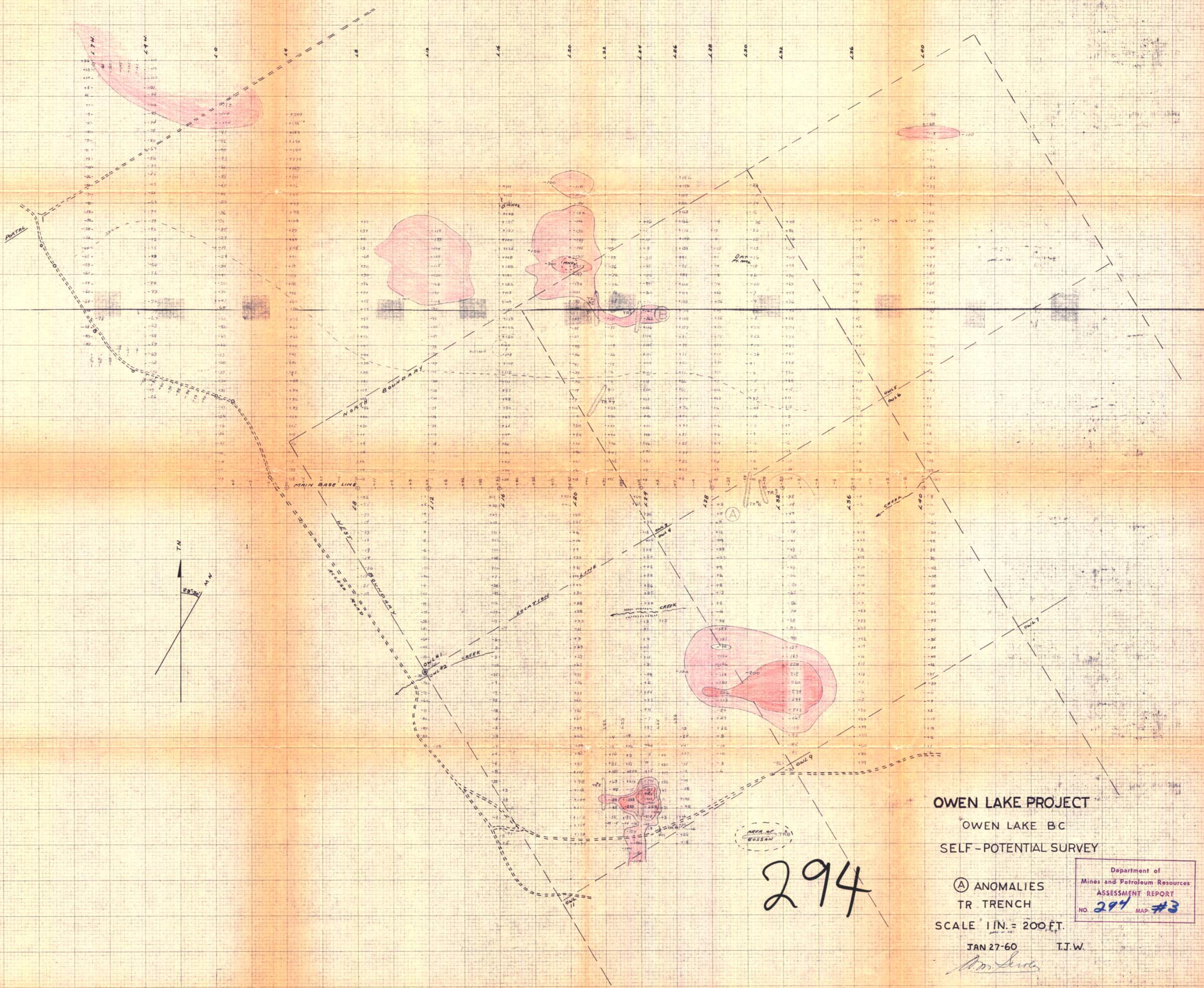
KEY MAP
M^cGOWAN PROPERTY
OWEN LAKE



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NO. **294** MAP **#2**

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Scale: 1 in = 8 mi
SEPT 30/59



OWEN LAKE PROJECT
 OWEN LAKE BC
 SELF-POTENTIAL SURVEY

Ⓐ ANOMALIES
 TR TRENCH
 SCALE 1 IN. = 200 FT.

JAN 27-60 I.I.W.

M. J. Smith

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 NO. 294 MAP #3