

GEOCHEMICAL REPORT  
MINERAL RESOURCES INC.

Dry and Lake claims, Princeton area, B. C.  
Similkameen Mining Division, B. C.

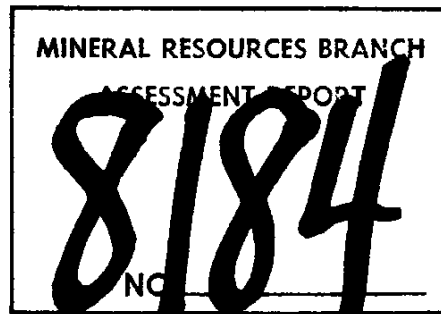
Lat.  $49^{\circ}38'N$  Long.  $120^{\circ}38'W$  N.T.S. 92 H/10

AUTHOR: Glen E. White, B.Sc., P. Eng.

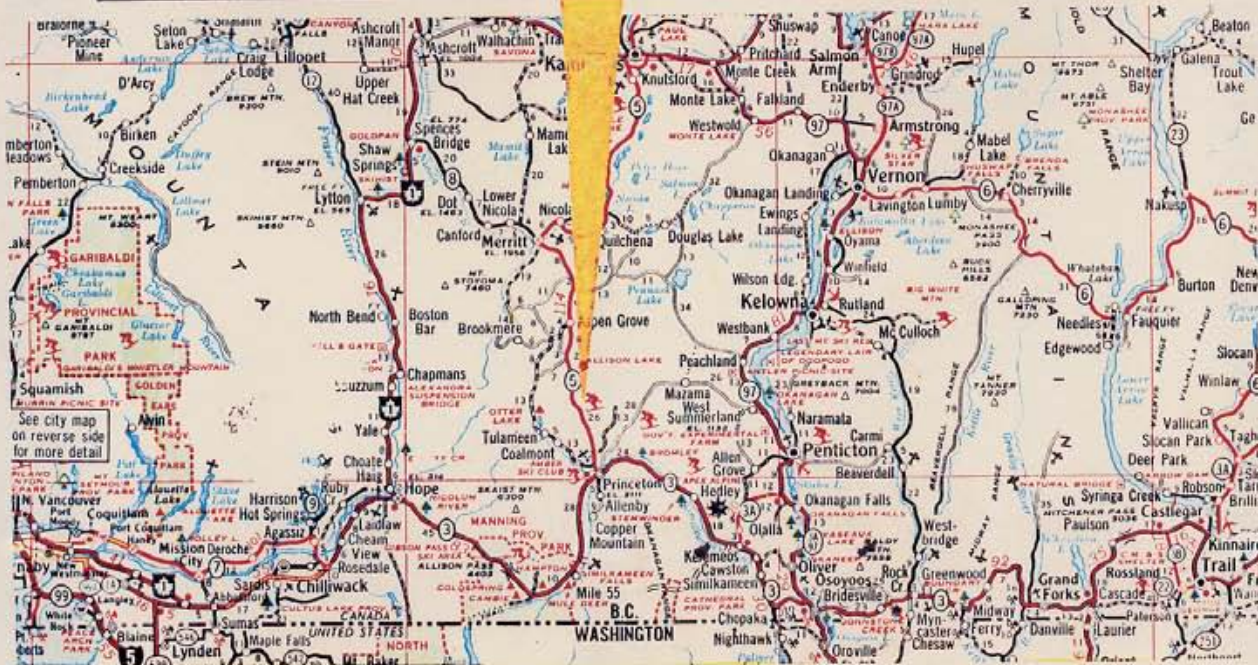
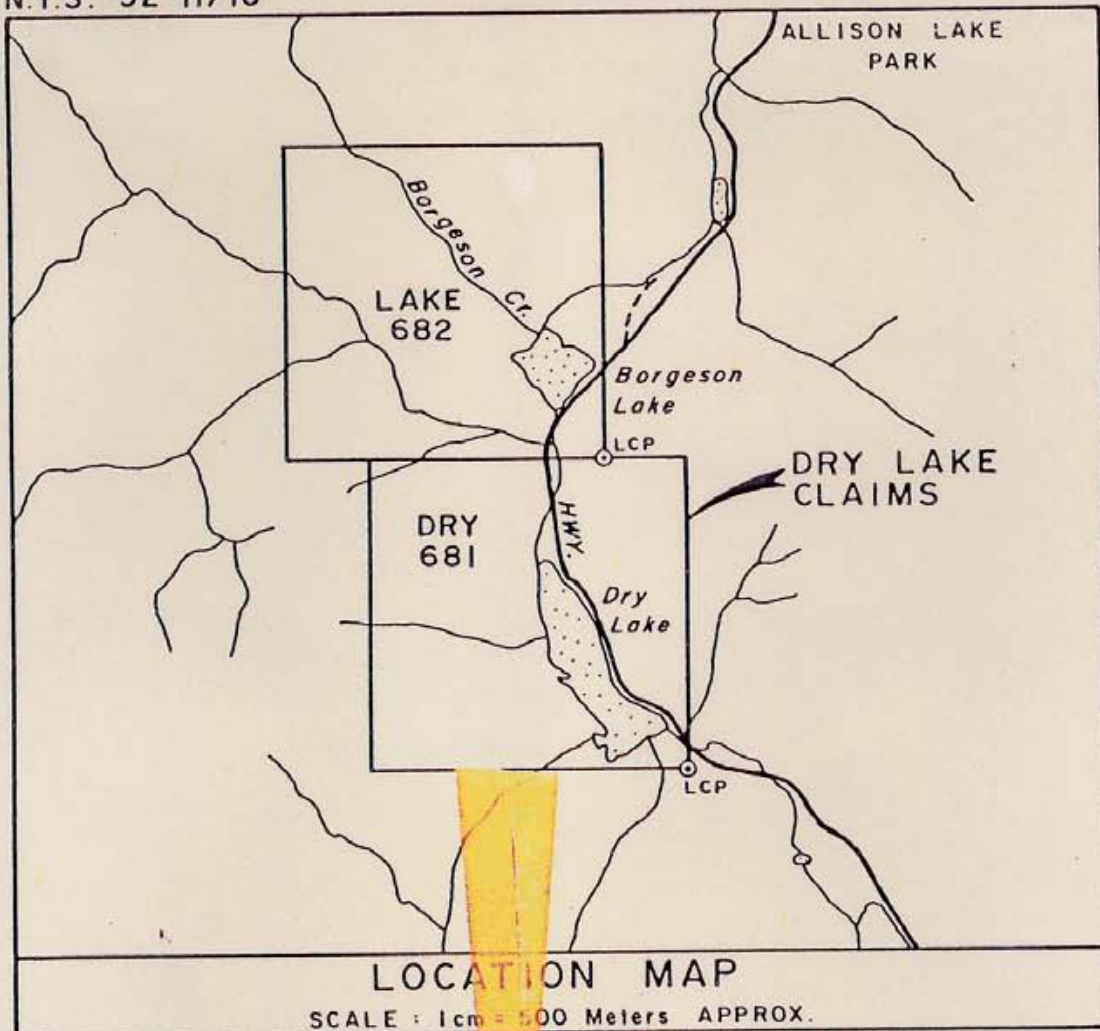
DATE OF WORK: May 5 - 20, 1980

DATE OF REPORT: June 24, 1980

SD-#419-# 8184



N.T.S. 92 H/10



**NUFORT RESOURCES INC.**  
**DRY LAKE CLAIMS**  
**LOCATION AND CLAIMS MAP**

SIMILKAMEEN MINING DIVISION - BRITISH COLUMBIA

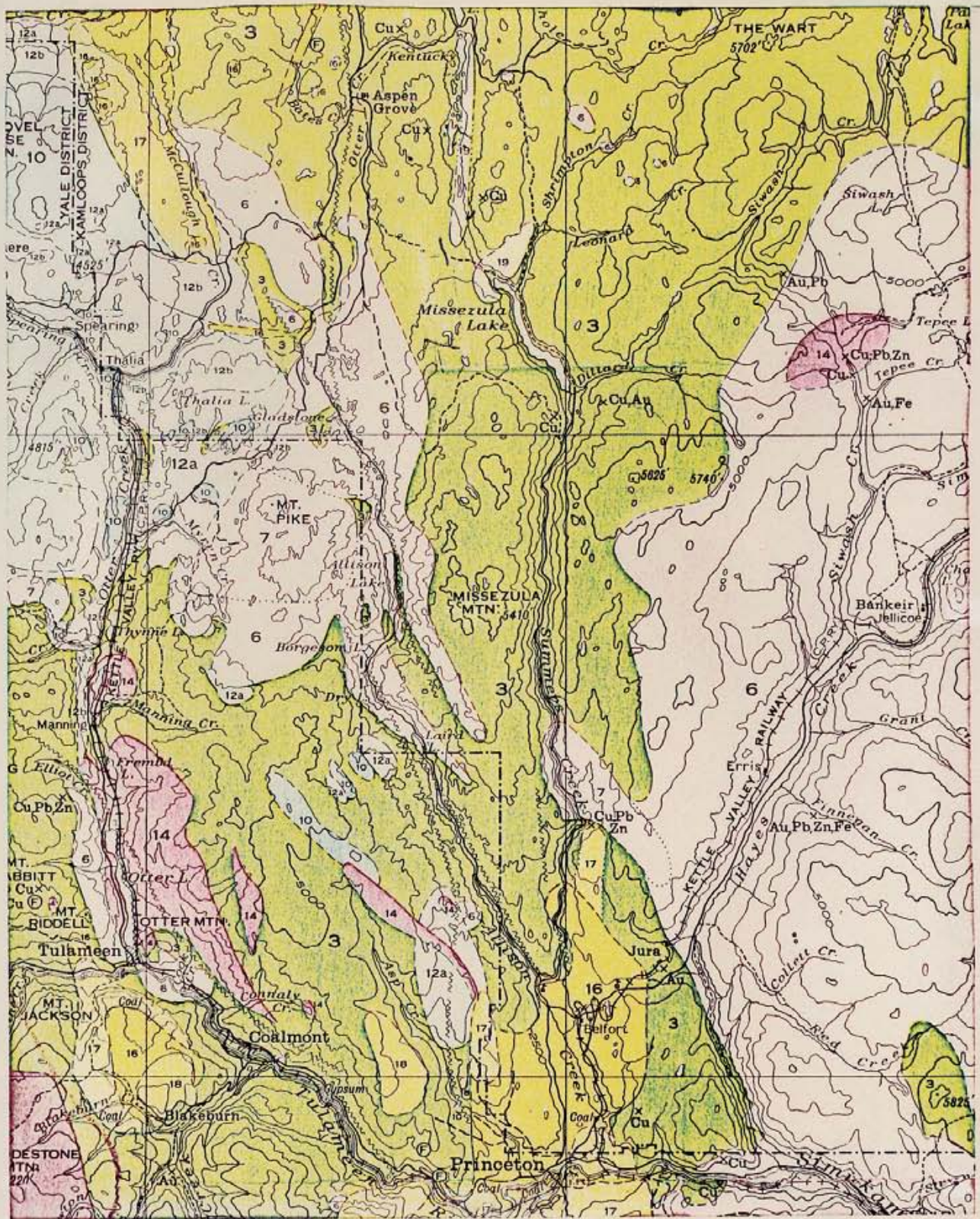
*Glen E. White*  
 geographical consulting  
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## CONTENTS

	<u>PAGE</u>
Introduction.....	1
Property.....	1
Location and Access.....	1
General Geology.....	1 - 2
Survey Grid.....	2
Geochemical Survey.....	2
Discussion of Results.....	2 - 4
Conclusion and Recommendations.....	4 - 5
Statement of Qualifications.....	6
Cost Breakdown.....	7

### Illustrations

- Figure 1 - Location and Claims Map
- Figure 2 - Geochemical Map - Copper
- Figure 3 - Geochemical Map - Lead
- Figure 4 - Geochemical Map - Silver
- Figure 5 - Geochemical Map - Zinc
- Plate 1 - General Geology



MAP 888A

# PRINCETON

Glen E. White  
 geophysical consulting  
 &  
 services, Ltd.

### INTRODUCTION

At the request of NuFort Resources Inc., Glen E. White Geophysical Consulting & Services Ltd. conducted a program of linecutting and soil sampling over the Dry and Lake claims in the Princeton, area, B. C.

The purpose of the survey was to try and locate any mineral zones that could be associated with or parallel the small mineral showing located along a creek flowing south-eastward into Dry Lake.

### PROPERTY

The property consists of the Dry and Lake claims #681 and #682 respectively which form a block of 32 contiguous units as illustrated on Figure 1.

### LOCATION AND ACCESS

The property is situated some 20 km north of the village of Princeton B. C., along the Princeton to Merritt road. Latitude  $49^{\circ}38'N$ , Longitude  $120^{\circ}38'W$ , N.T.S. 92 H/10, Similkameen Mining Division, B. C.

Access is by regular motor vehicle from either Princeton or Merritt.

### GENERAL GEOLOGY

Plate 1 illustrates the general geology of the mineral claims. Dry Lake and Borgeson Lake appear to be underlain by granitic rocks of the Coast Intrusions which form a southeast directed finger into the Nicola group of rocks which consists of varicolored lava argillite, tuff, limestone

chlorite and sericite schist. Allison Creek, which flows through these two lakes in a southeast direction, also appears to represent a major fault lineament.

### SURVEY GRID

The survey grid consists of numbered, blazed and flagged lines orientated in an east-west direction. The lines were turned off at right angles every 100 m from a central north-south baseline. Some 80 km of traverse grid was established and sampled.

### GEOCHEMICAL SURVEY

Soil samples of the upper "B" horizon were taken along the traverse lines at 50 m intervals. The soil samples were then placed in soil envelopes provided by Chemex Labs Ltd. of North Vancouver, B. C. The samples were delivered to the above lab where -80 sieving, digestion by hot perchloric/nitric acid and analysis by atomic absorption were carried out under the supervision of professional geochemists. Samples were obtained and analysed for p.p.m. copper, lead, silver and zinc. 1265 samples were obtained.

### DISCUSSION OF RESULTS

The geochemical data shows three areas of interest, of which only one area contains all three elements, copper, lead and zinc. Figure 2, the copper map, indicates a pronounced vein-like feature west of Dry Lake which reaches a high of 390 p.p.m. above a background of some 20 p.p.m. This anomaly may consist of two north-northwest directed vein-like structures as the anomalous values along

the baseline a general alignment with other more spotty values to the north. The second area of interest lies along the lowlands between Borgeson Lake and Dry Lake. Here the highs are generally 80 - 90 p.p.m. with one spot high of 470 p.p.m. The third area of interest is the northwest quadrant of the survey area where several spotty highs were obtained. This area shows up strongly on the zinc map.

Lead, which is a relatively immobile element, gives spotty highs in areas 1 and 3. However, area 2 shows broad highs of 30 - 40 p.p.m.

The zinc map gives the strongest response in area three. Values of 1720 and 1160 p.p.m. occur on one side of the southeast flowing creek and values of 800 - 900 p.p.m. on the other side. The creek is in a deep V-shaped valley. Thus, the geochemical highs are on opposite facing hillsides. Lines 2200M and 2300M could not be sampled due to the steep terrain. The known mineral occurrence is along the creek in this area. Area 2, between the two lakes, gives moderately high values in the order of 300 - 400 p.p.m. above a background of some 75 p.p.m.

The silver map gives no interpretable responses over areas 1 and 3; however, area 2 shows a good silver anomaly which reaches a high of 20 p.p.m. This high has some contribution from organic ion fixing.

Correlation of the data shows a good copper anomaly with no lead, zinc or silver values, in the southwest quadrant of the survey grid, area 1.

Area 3, which is northwest of Borgeson Lake, has strong zinc values with no definite copper, lead or silver anomalies. This is an area of relatively shallow overburden; thus, any argentiiferous zinc blende should have been evident by a strong silver anomaly.

Area 2, which is situated between the two lakes, shows a moderately anomalous geochemical anomaly with coincident copper, lead, silver and zinc values. An examination of this area by the author found much of this anomaly to be covered by normal glacial material rather than heavy organic swamp. There is no reason to expect overly deep overburden conditions over all of the anomaly. Moreover, it is comprised of all four elements versus areas 1 and 3 which are copper and zinc respectively. There is always the possibility that the anomaly is caused by glacial till or a change in pH associated with possibly an alkaline valley bottom. However, since area 2 covers the Allison Creek fault and is at the contact of the Nicola series and the coast range intrusives, it is an area of excellent exploration potential and should be further examined.

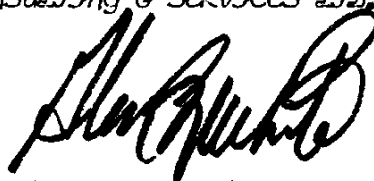
#### CONCLUSION AND RECOMMENDATIONS

During the month of May 1980, a program of linecutting and soil sampling was conducted over the Dry and Lake claims on behalf of Noront Resources Inc. The survey delineated three areas of interest, area 1 which is largely a copper anomaly, area 3 a zinc anomaly and area 2 a composite copper, lead, silver and zinc one. Area 2 lies between Borgeson Lake and Dry Lake along a regional fault which follows Allison Creek. A change in the topography would suggest a SW - NE crossfault extending from Borgeson Lake towards Allison Lake. The intersection of these two faults would occur in area 2 in conjunction with a projected contact between the Nicola rocks and the coast intrusives.



Therefore, it is recommended that soil profiles be obtained in Area 2 and the pH measured to test for a superficial anomaly. Areas 1, 2 and 3 should be covered by ground magnetometer and VLF electromagnetic surveys to try and delineate rock contacts and structure. Deep penetrating vector pulse electromagnetic surveying or possibly induced polarization surveying should be conducted over area 2 if the geochemical anomaly appears to be valid.

Respectfully submitted,  
GLEN E. WHITE GEOPHYSICAL  
CONSULTING & SERVICES LTD.



Glen E. White, B.Sc., P. Eng.  
Consulting Geophysicist

STATEMENT OF QUALIFICATIONS

NAME: *WHITE, Glen E., P. Eng.*

PROFESSION: *Geophysicist*

EDUCATION: *B.Sc. Geophysics - Geology  
University of British Columbia*

PROFESSIONAL ASSOCIATIONS: *Registered Professional Engineer,  
Province of British Columbia*

*Associate member of Society of Exploration Geophysicists.*

*Past President of B. C. Society of Mining Geophysicists.*

EXPERIENCE: *Pre-graduate experience in Geology - Geochemistry -  
Geophysics with Anaconda American Brass.*

*Two years Mining Geophysicist with Sulmac Exploration Ltd. and Airborne Geophysics with Spartan Air Services Ltd.*

*One year Mining Geophysicist and Technical Sales Manager in the Pacific north-west for W. P. McGill and Associates.*

*Two years Mining Geophysicist and supervisor Airborne and Ground Geophysical Divisions with Geo-X Surveys Ltd.*

*Two years Chief Geophysicist Tri-Con Exploration Surveys Ltd.*

*Nine years Consulting Geophysicist.*

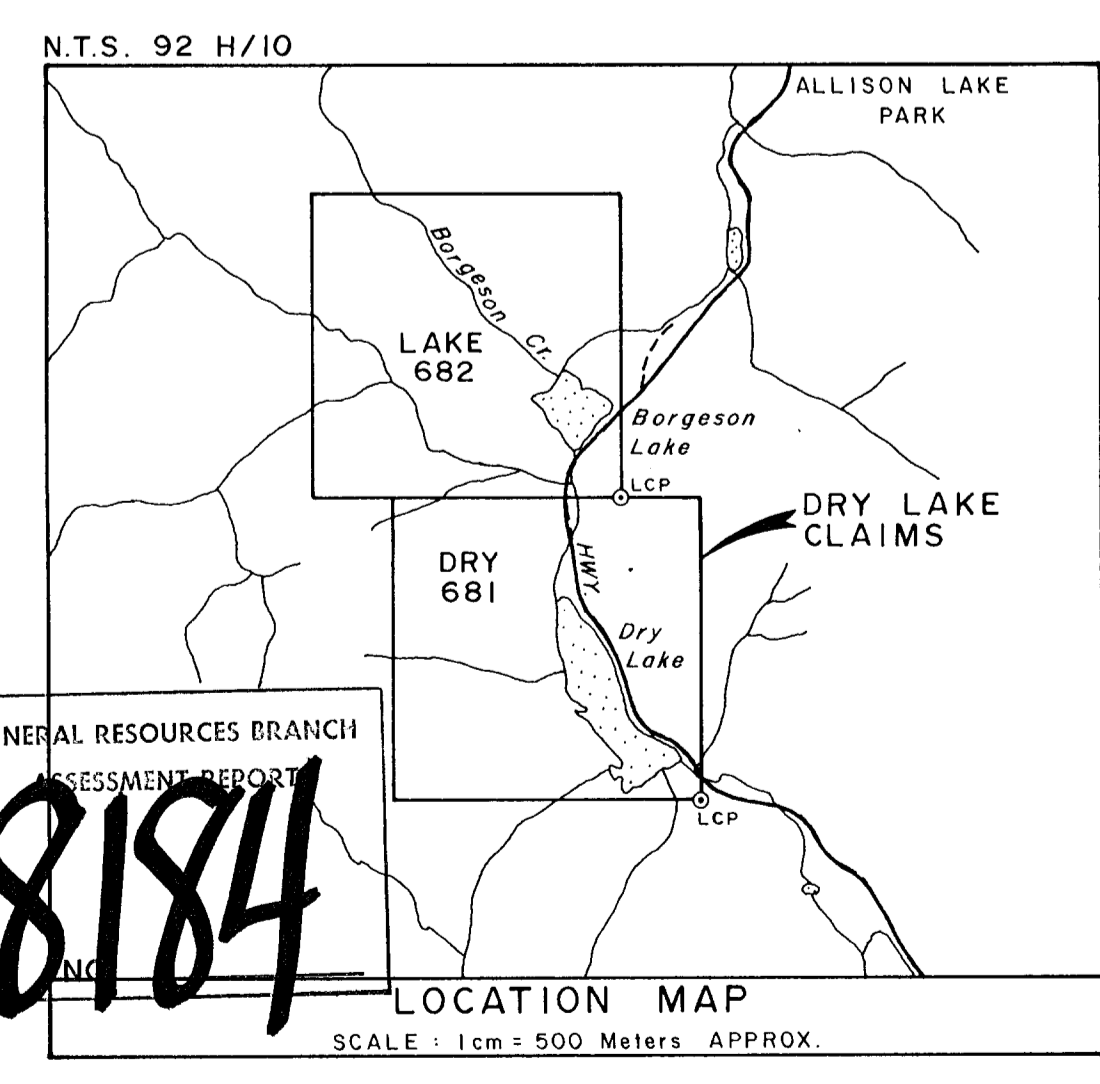
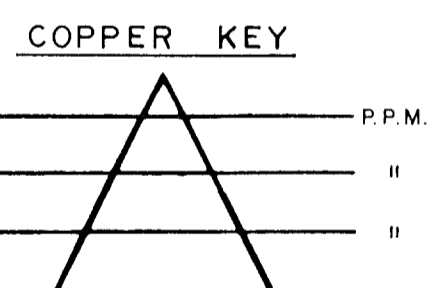
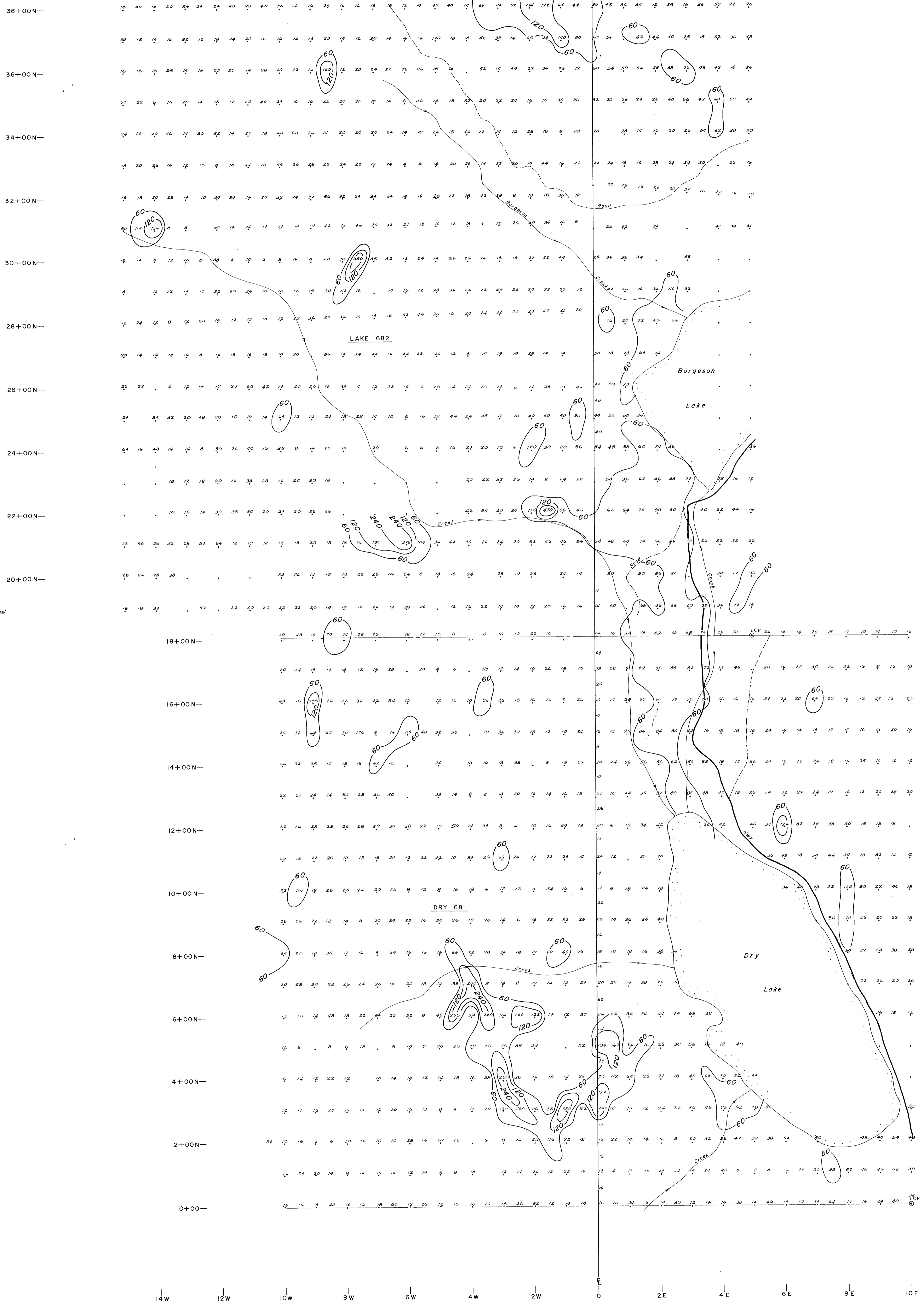
*Active experience in all Geologic provinces of Canada.*

COST BREAKDOWN

<u>Personnel</u>	<u>Date</u>	<u>Wages</u>	<u>Total</u>
R. Paesler.....	May 5-20/80.....	\$138/day.....	\$2208.00
M. Smyth.....	"...".....	110/day.....	1760.00
J. Muir.....	"...".....	110/day.....	1760.00
G. McKenzie.....	"...".....	110/day.....	1760.00
Geochemical Analysis.....			4575.00
Meals and Accomodations.....			2240.00
Vehicle, all inclusive @ \$55/day.....			880.00
Materials.....			117.00
Drafting, Interpretation and Reports.....			850.00
			<u>16,150.00</u>
		Total.....	<u>\$16,150.00</u>

120°39'

14W 12W 10W 8W 6W 4W 2W 0 2E 4E 6E 8E 10E



**NUFORT RESOURCES INC.**  
**DRY LAKE CLAIMS**  
 SIMILKAMEEN MINING DIVISION - BRITISH COLUMBIA  
**GEOCHEMICAL MAP**  
 - COPPER P.P.M. -

*Glenn E. White*  
 geophysical consulting  
 services Ltd.

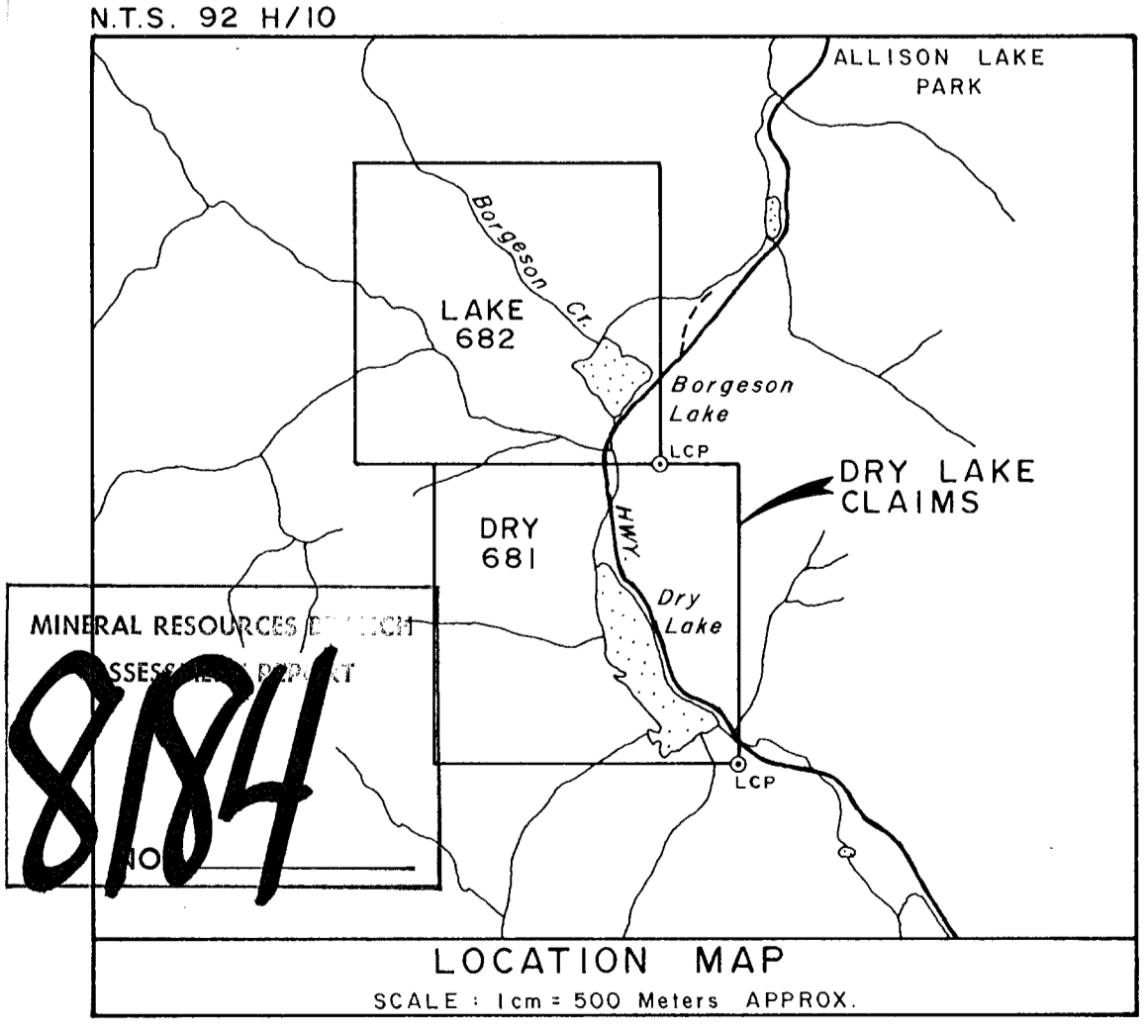
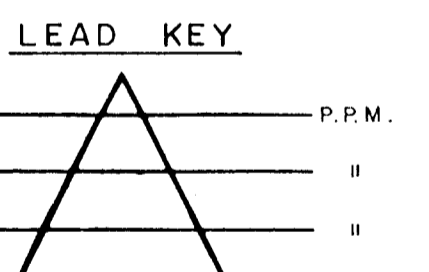
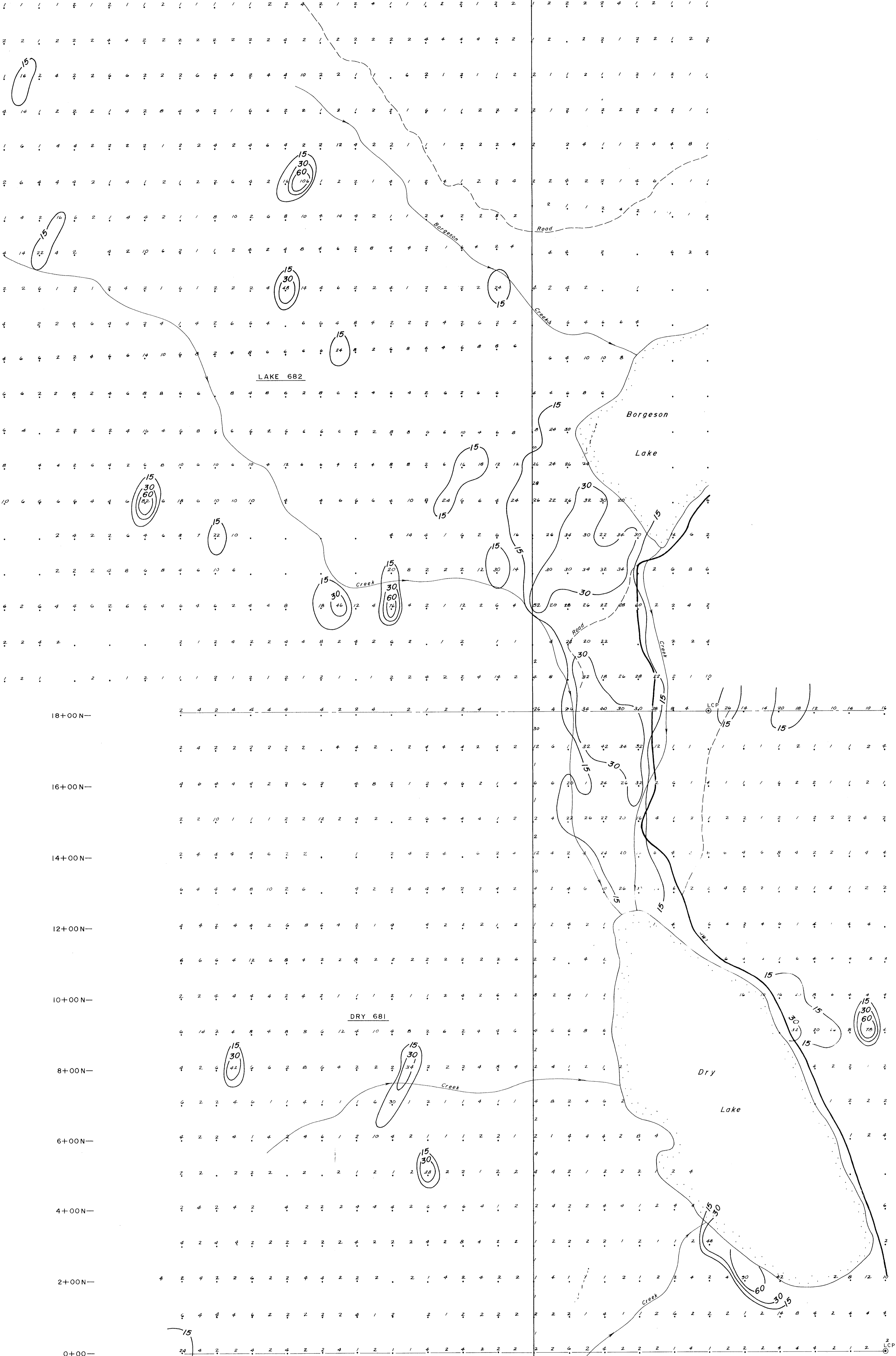
INTERPRETED BY: G.E.W.  
 DRAWN BY: T.M.  
 CHECKED BY: G.E.W.  
 DATE: JUNE 1980  
 FIG. No: 2

To Accompany Geophysical Map of  
 THE DRY LAKE CLAIMS  
 Date: JUNE 1980  
 By: GLENN E. WHITE  
 GEOPHYSICIST

120°39'

14W 12W 10W 8W 6W 4W 2W 0 2E 4E 6E 8E 10E

38+00N  
36+00N  
34+00N  
32+00N  
30+00N  
28+00N  
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2+00N  
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**NUFORT RESOURCES INC.**  
**DRY LAKE CLAIMS**  
 SIMILKAMEEN MINING DIVISION - BRITISH COLUMBIA

**GEOCHEMICAL MAP**  
**- LEAD P.P.M. -**

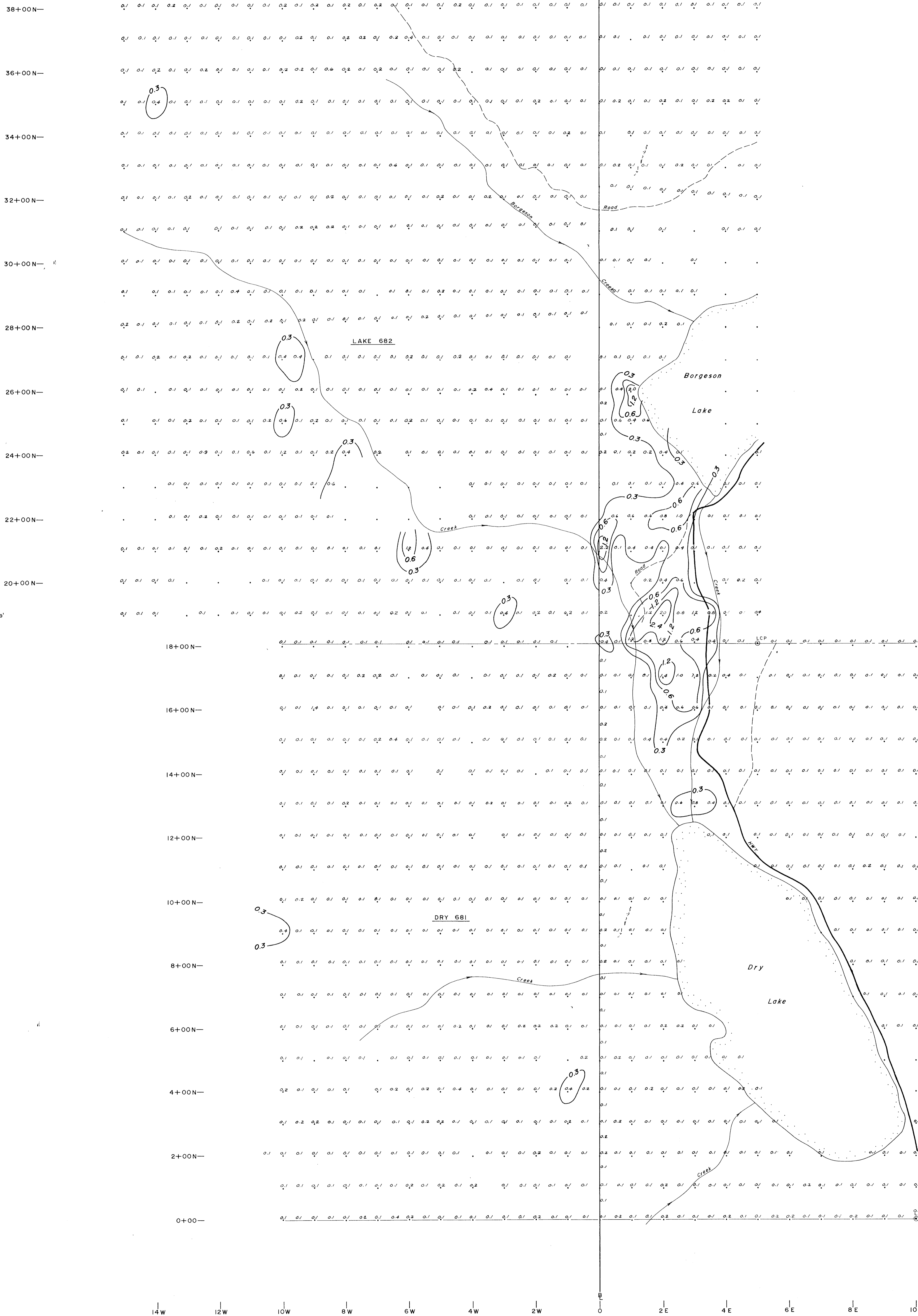
*Glen S. White*  
 geophysical consulting  
 services Ltd.

INTERPRETED BY G.E.W.  
 DRAWN BY T.M.  
 CHECKED BY:  
 DATE: JUNE 1980  
 FIG. No. 3

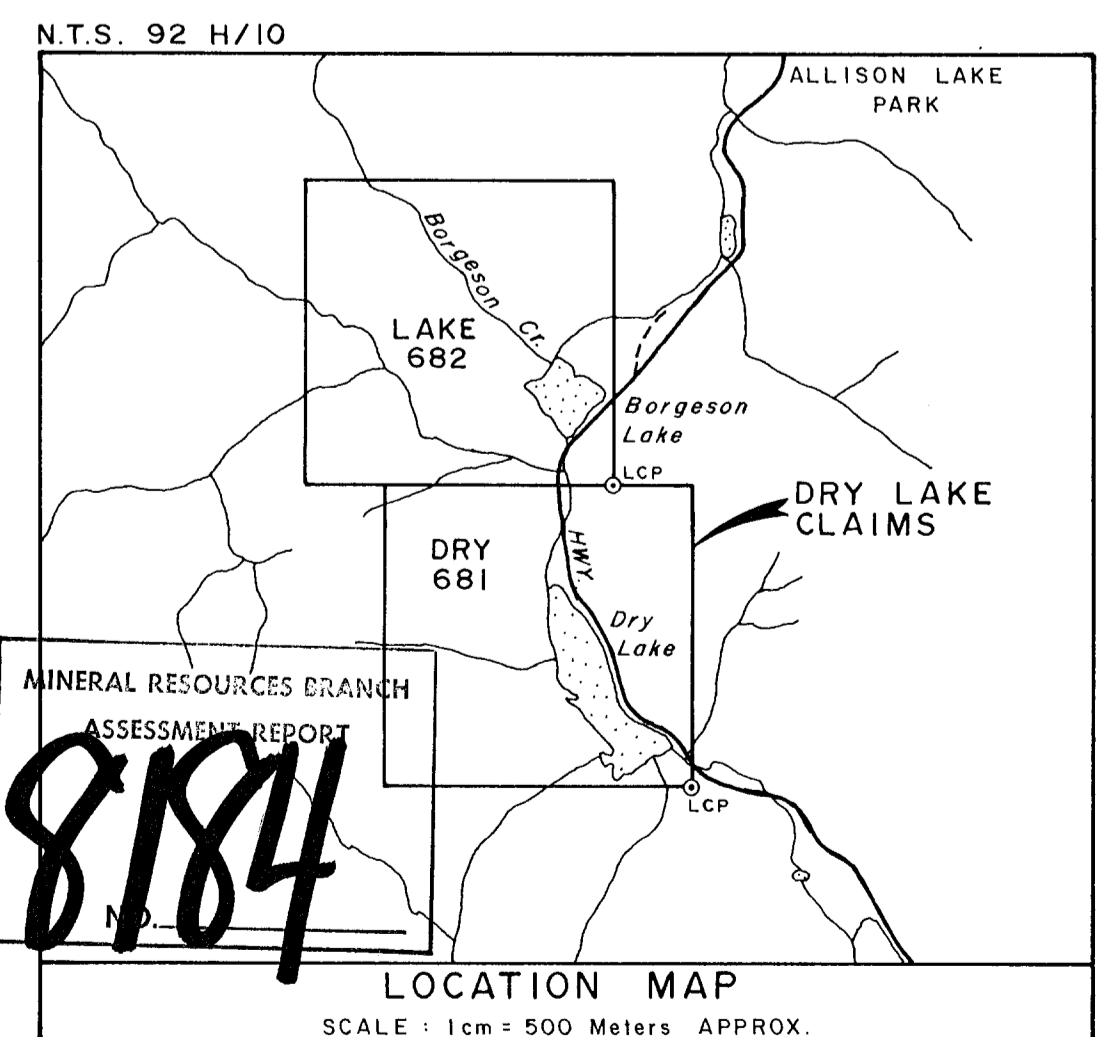
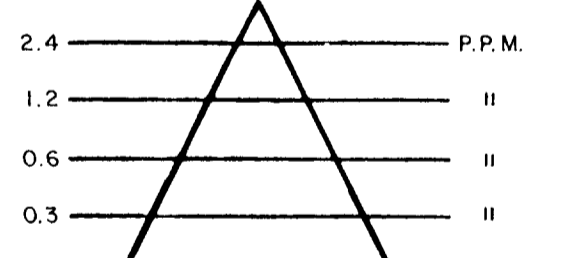
To Accompany Report on  
 THE DRY LAKE CLAIMS  
 Date: \_\_\_\_\_  
 By GLEN S. WHITE  
 GEOPHYSICIST

120°59'

14W 12W 10W 8W 6W 4W 2W 0 2E 4E 6E 8E 10E



SILVER KEY

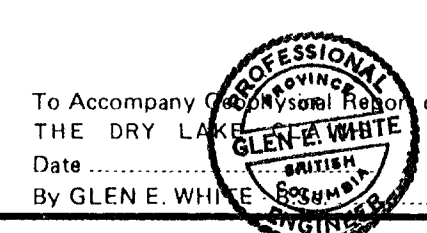


100 50 0 100 200 300 400 Meters

**NUFORT RESOURCES INC.**  
**DRY LAKE CLAIMS**  
 SIMILKAMEEN MINING DIVISION - BRITISH COLUMBIA  
**GEOCHEMICAL MAP**  
 - SILVER P.P.M. -

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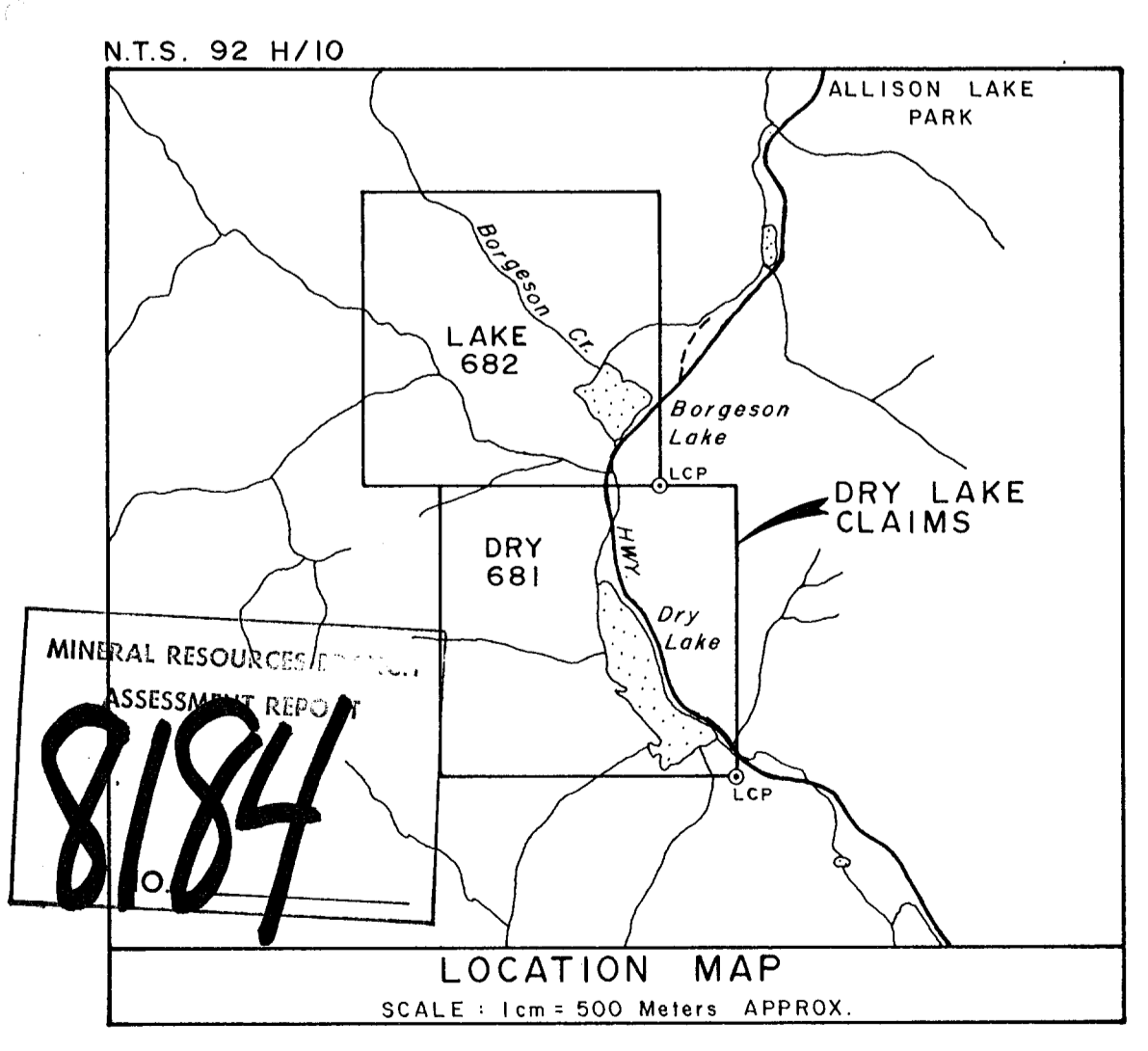
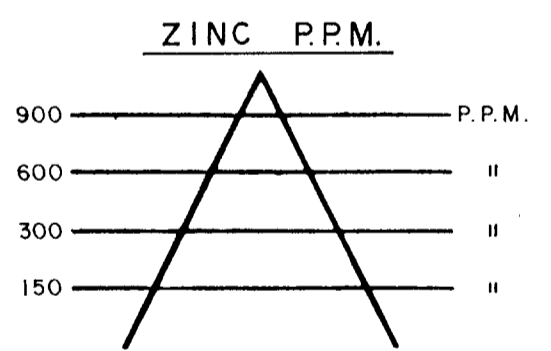
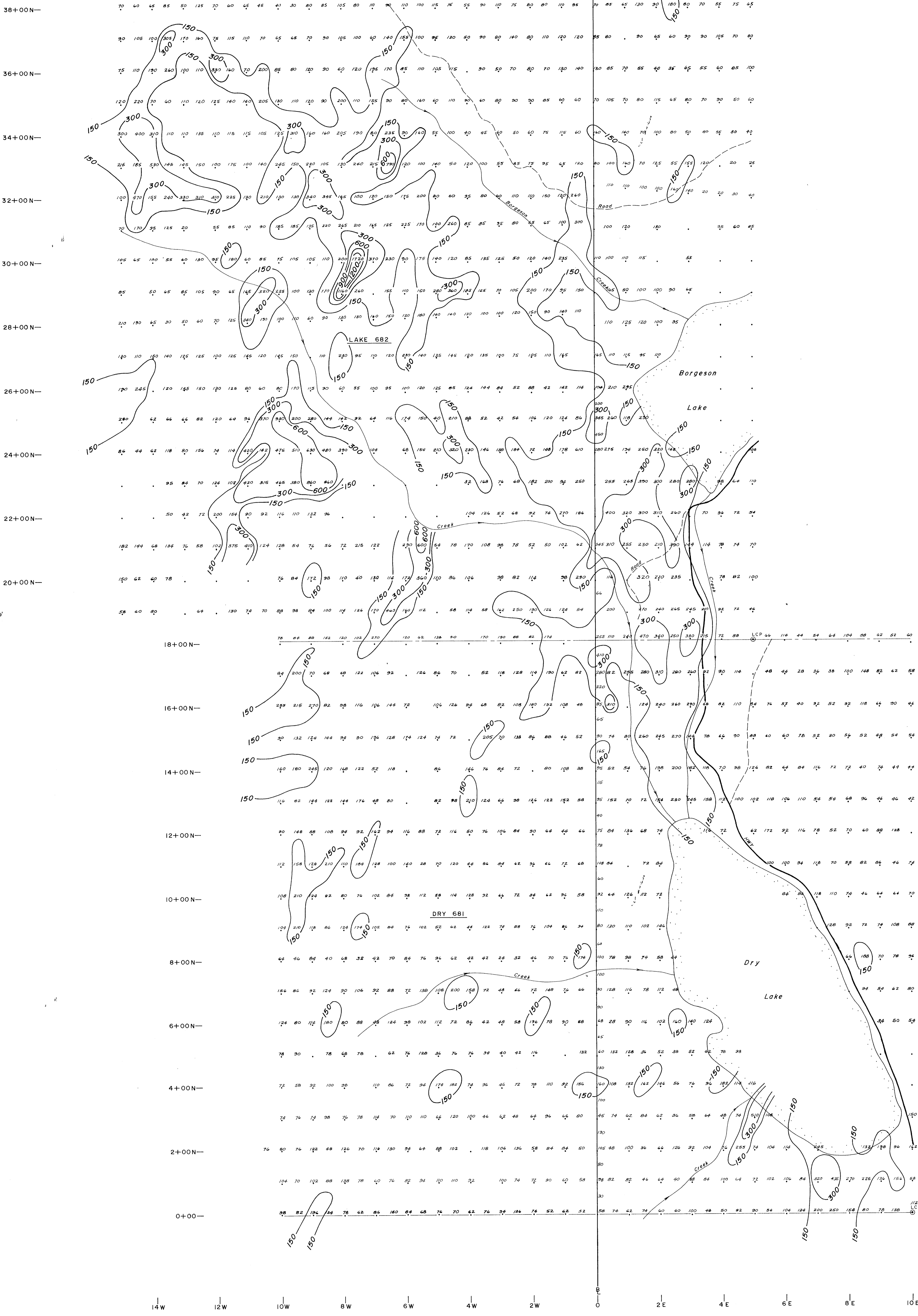
INTERPRETED BY: G.E.W.  
 DRAWN BY: T.M.  
 DATE: JUNE 1980  
 FIG. No. 4



GEOPHYSICIST

120°39'

14W 12W 10W 8W 6W 4W 2W 0 2E 4E 6E 8E 10E



**NUFORT RESOURCES INC.**  
**DRY LAKE CLAIMS**  
 SIMILKAMEEN MINING DIVISION - BRITISH COLUMBIA  
**GEOCHEMICAL MAP**  
 - ZINC P.P.M. -

*Glen E. White*  
 geophysical consulting  
 services Ltd.

INTERPRETED BY: G.E.W.  
 DRAWN BY: T.M.  
 CHEKED BY:  
 DATE: JUNE 1980  
 FIG. No. 5

To Accompany Geophysical  
 THE DRY LAKE CLAIMS  
 Date: \_\_\_\_\_  
 By GLEN E. WHITE  
 GEOPHYSICIST