

MAGNETOMETER SURVEY REPORT ON SALEM  
CLAIM GROUP AND PINE CLAIM  
NICOLA M.D.

---

269

S.E. QUADRANT LAT. 49°N, 120°W

Claims reported on for record of assessment work:

<u>Claim</u>	<u>Record No.</u>	<u>Tag No.</u>
Salem # 1	8901	B94606
Salem # 2	8902	B94607
Salem # 3	8903	B94608
Salem # 4	8904	B94609
Salem # 5	8905	B94610
Salem # 6	8906	B94611
Salem # 7	8907	B94612
Salem # 8	8908	B94613
Pine # 1	8774	324573

Dates between which work was done:

August 8 to August 22, 1958.

REPORT BY

D.W. HEDDLE

PROFESSIONAL ENGINEER

MAGNETOMETER SURVEY REPORT ON SALFM  
CLAIM GROUP AND PINE #1 CLAIM  
NICOLA M.D.

---

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY .....	1
INTRODUCTION	
General .....	1
Location and Access .....	1
GENERAL GEOLOGY .....	2
TYPE AND PRINCIPLE OF MAGNETOMETER .....	2
FIELD PROCEDURE .....	2
SURVEY RESULTS .....	2
ATTACHMENTS .....	3

#1 *Minerals Survey and  
Structural Geology  
1" = 200'*

The group lies within one-half mile of easy access of the Westcoast Transmission pipe line road which connects with the main Coldwater River road leading southward from Merritt.

#### GENERAL GEOLOGY

Large portions of the claim area are covered by overburden, consequently the overall geological picture is very incomplete. The central portion of the area is underlain by Triassic volcanic and sedimentary rocks of the Nicola Group. The volcanic and sedimentary assemblage appears to lie in contact with an intrusive diorite body on the east. Owing to the scarcity of outcrop, little is known of local stratigraphy or structure. The general trend of sedimentary rocks within the Nicola Group appears to be northwesterly. Arkosic rocks of the Cretaceous Kingsvale Group outcrop near the western boundaries of Salem claims 5 and 7.

#### TYPE AND PRINCIPLE OF MAGNETOMETER USED

The survey was carried out with a Sharpe Model A-2 vertical force magnetometer. The instrument is a one-man type in which the compass and magnetometer head remain fixed to the tripod. The relative positions of the magnet and compass are such that when either is in the locked position it has no effect on the other. It is not necessary to remove the head and place the compass on the tripod for orientation. The tripod has a spherical levelling head which permits rapid levelling. The sensitivity of the instrument is about 20 gammas per scale division giving a resultant accuracy of better than 5 gammas on an individual reading.

#### FIELD PROCEDURE

A north-south chained and picketed base line was run through the central portion of the claim group. Magnetic values were established for a series of base station conveniently located along the base line. Magnetometer traverse lines were run by chain and compass normal to and at 200-foot intervals along the base line. Readings were normally taken at 100 foot intervals along traverse lines. In areas where significant changes in vertical magnetic intensity were encountered, readings were taken at 50-foot intervals along and on either side of main traverse lines.

A base station reading was taken at intervals of two hours or less. From these readings, the required diurnal and day-to-day corrections were calculated. Field readings were corrected for the above variations and for values of the auxilliary magnet when applicable.

Corrected values of vertical magnetic intensity were plotted on a scale of 1 inch = 200 feet as shown on the attached plan. These values were contoured at 500 gamma intervals.

#### SURVEY RESULTS

Several areas of higher than normal magnetic intensity are indicated by the survey. Considerable variations in magnetic intensity occur within areas indicated to be underlain by intrusive rocks. Since erratic readings occur in areas of almost complete outcrop of barren intrusive rock, anomalies within inferred intrusive areas are not considered to be significant.

THE CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA LIMITED  
Trail, B.C.

---

MAGNETOMETER SURVEY REPORT ON SALEM  
CLAIM GROUP AND PINE #1 CLAIM  
NICOLA M.D.

---

SUMMARY

It is requested that \$100.00 as assessment work credit be applied to each of the following mine claims:

<u>Claim</u>	<u>Record No.</u>	<u>Tag No.</u>
Salem #1	8901	B94606
Salem #2	8902	B94607
Salem #3	8903	B94608
Salem #4	8904	B94609
Salem #5	8905	B94610
Salem #6	8906	B94611
Salem #7	8907	B94612
Salem #8	8908	B94613
Pine #1	8774	324573

A magnetometer survey was carried out on these nine claims with a direct field expenditure of \$1,007.00. This report, with accompanying map and statement of expenditures, is hereby submitted to record the required assessment work.

INTRODUCTION

General

A magnetometer survey was carried out on Salem claims 1 to 8 and the Pine No. 1. The purpose of the survey was to locate possible magnetic bodies in the area which is largely underlain by volcanic and sedimentary rocks of the Nicola Group and intrusive rocks of the Coast Range Batholith.

The survey was conducted during the 15 day period from the 8th

ATTACHMENTS:

- (1) Plan of Magnetometer Survey of Salem Claim Group  
1" = 200 feet
- (2) Statement of Expenditures
- (3) Statutory Declaration relating to expenditures.

D. W. Heddle

D. W. Heddle,  
PROFESSIONAL ENGINEER.

DWH:BMcC  
17th, March 1959,  
Western Exploration Office.

Distribution: Legal (2)  
Exploration Division (1)  
Western District Exploration (1)

THE CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA LIMITED  
Trail, B.C.

---

1958 MAGNETOMETER SURVEY EXPENDITURES -  
SALEM CLAIM GROUP & PINE CLAIM - NICOLA M.D.

WAGES

1 Geologist for $\frac{1}{2}$ mos. (Aug. 8 - Aug. 22/58) @ \$800/mo.	\$ 400
1 Student Assistant for $\frac{1}{2}$ mo. (Aug. 8 - Aug. 22/58) @ \$400/mo.	<u>200</u>
	600

SUPERVISION

1 Senior Geologist for 3 days @ \$30/day	\$ 90
--	-------

TRANSPORTATION

Pick truck 560 miles @ 21¢/mile	\$ 117
---------------------------------	--------

BOARD & ROOM

33 man days @ \$6.00/day	\$ <u>200</u>
--------------------------	---------------

TOTAL: \$ 1,007

*D. W. Heddle*

---

D.W. Heddle,  
Professional Engineer

Endorsed by: \_\_\_\_\_

CANADA	)	STATUTORY DECLARATION RELATING TO EX-
	)	PENDITURES ON A GEOPHYSICAL SURVEY OF
PROVINCE OF BRITISH COLUMBIA	)	CERTAIN MINERAL CLAIMS THE PROPERTY OF
	)	THE CONSOLIDATED MINING AND SMELTING
TO WIT:	)	COMPANY OF CANADA LIMITED

I, DUNCAN W. HEDDLE, Professional Engineer, of the City of Trail, in the Province of British Columbia, DO SOLEMNLY DECLARE:

1. That I am the person who prepared a geophysical report as the result of surveys carried out of certain mineral claims, the property of The Consolidated Mining and Smelting Company of Canada Limited, situated in Nicola Mining Division.

2. That copies of the said report <sup>are being</sup> were filed with the Mining Recorder in Merritt. JWC

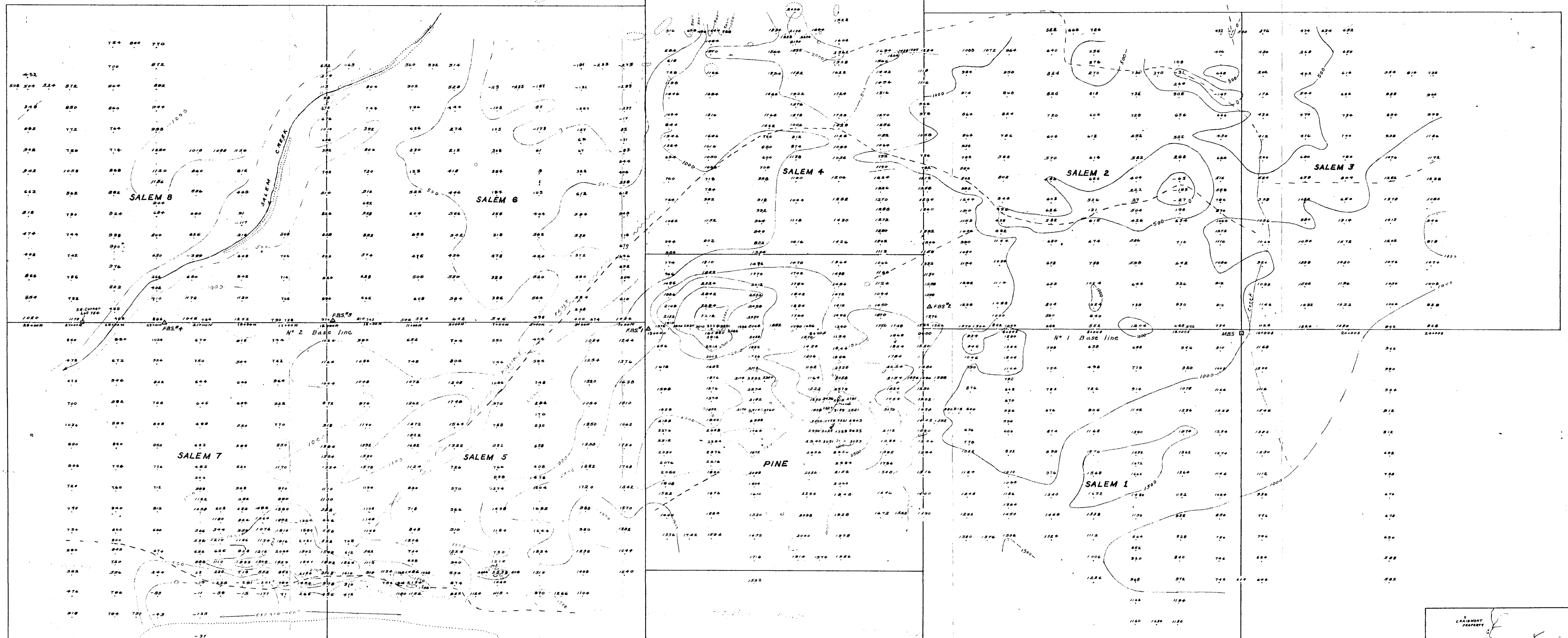
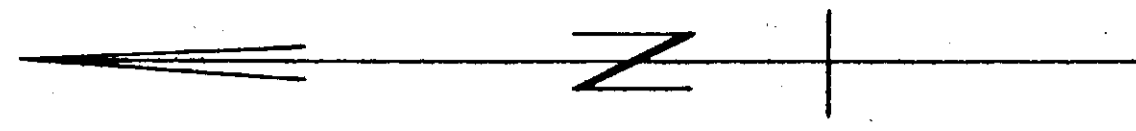
3. That attached hereto and marked with the letter "A", upon which I have signed my name at the time of declaring hereof, is a statement of expenditures incurred in connection with the geophysical survey of the said claims showing in addition the dates during which those making the said survey performed their work.

AND I MAKE this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

DECLARED before me at the Municipality of Tadoussac, in the Province of British Columbia, this 26<sup>th</sup> day of March, A.D. 1959.

[Signature]  
A Notary Public in and for the Province of British Columbia.

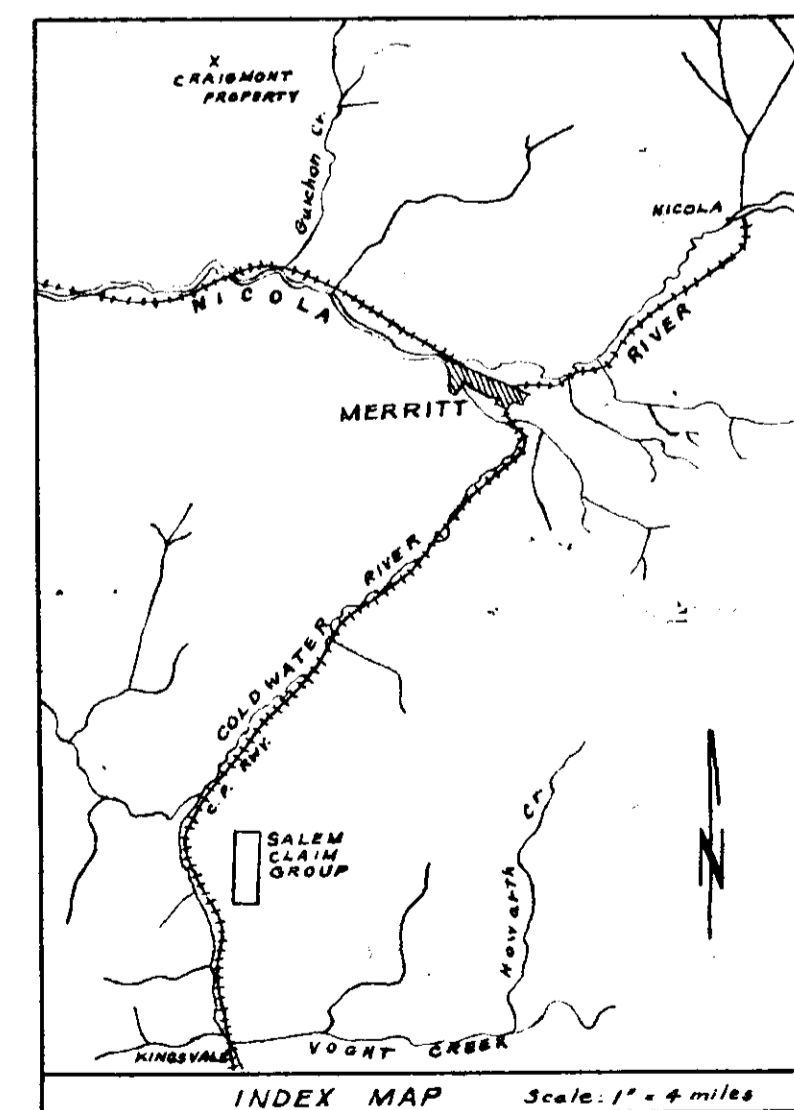
D. W. Heddle



**LEGEND**

Sulphide mineralization minor Cu, Zn, Pb  
 KINGSVALE GROUP: LOWER CRETACEOUS  
 Arkose, light grey, purplish  
 CC&ST INTRUSIVE: JURASSIC OR LATER  
 Diorite  
 NICOLA GROUP: UPPER TRIASSIC  
 Andesite; Limestone or Limy Tuffs, in part silicified.

Limits of outcrop area—approximate .....  
 Possible fault .....  
 Prominent depression .....  
 Vertical magnetic intensity in gammas 400  
 Line of equal magnetic intensity .....  
 Main Base Station ..... MBS  
 Field Base Station ..... FBS  
 Proposed drill hole .....



NOTE:  
1000 gammas added to corrected field readings.  
Magnetometer survey and geological mapping control by chain & compass.

The Consolidated Mining and Smelting Company of Canada Limited

Drawn by: D.W.N.	Traced by:
Revised by:	Date:
Revised by:	Date:

**MAGNETOMETER SURVEY  
AND GENERAL GEOLOGY OF  
SALEM CLAIM GROUP**

NICOLA M.D.  
Scale: 1" = 200' Date: AUGUST 1958 Plate: 0338