

EFFECTIVE DATE: MARCH 14, 1988

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NO SECURITIES COMMISSION OR SIMILAR AUTHORITY IN CANADA HAS IN ANY WAY PASSED UPON THE MERITS OF THE SECURITIES HEREUNDER AND ANY REPRESENTATION TO THE CONTRARY IS AN OFFENCE.

014022

NEW ISSUE

PROSPECTUS

# MALCOLM RESOURCES LTD.

(the "Issuer")  
(Incorporated under the laws of British Columbia)  
1438 West 32nd Avenue  
Vancouver, B.C.

## NATURAL RESOURCE ISSUER

The Offering Price of the securities offered herein was established by negotiation between the Issuer and the Agent. The Offering Price of \$0.35 per Share exceeds the net tangible book value per Common Share by \$0.1884 after giving effect to this Offering, representing a dilution of 53.83%. Reference is made to "Dilution". An investment in the securities offered herein should be regarded as speculative. Reference is made to "Risk Factors".

THERE IS NO MARKET THROUGH WHICH THESE SECURITIES MAY BE SOLD.

**475,000 Common Shares @ \$0.35 per Share**  
**125,000 "Flow-Through" Shares @ \$0.35 per Share**

	Price to Public	Commissions	Net Proceeds to be received by Issuer
Share .....	\$0.35	\$0.05	\$0.30
Flow-Through Share .....	\$0.35	\$0.05 **	\$0.30
.....	\$210,000	\$30,000	\$180,000 *

\* Amount of cost of offering payable by the Issuer estimated not to exceed \$15,000.  
\*\* Commission will be paid out of the proceeds from the sale of the Common Shares.

ON THE DATE OF THIS OFFERING, THIS ISSUE WILL REPRESENT 34.88% OF THE SHARES THEN OUTSTANDING AFTER THE COMPLETION OF THIS OFFERING AS COMPARED TO 48.26% THAT WILL BE OWNED BY PROMOTERS, DIRECTORS AND OFFICERS ISSUED FOR CASH PRIOR TO THE DATE OF THIS PROSPECTUS. SEE PAGES 4 AND 17 HEREOF.

THE ISSUER'S COMMON STOCK HAS BEEN CONDITIONALLY LISTED ON THE VANCOUVER STOCK EXCHANGE AS OF THE DATE OF THIS PROSPECTUS. LISTING IS SUBJECT TO THE ISSUER FULFILLING ALL THE LISTING REQUIREMENTS OF THE VANCOUVER STOCK EXCHANGE ON OR BEFORE SEPTEMBER 12, 1988 AND COMPLYING WITH THE PRESCRIBED DISTRIBUTION AND FINANCIAL REQUIREMENTS.

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WE, AS AGENT, CONDITIONALLY OFFER TO THE PUBLIC, SUBJECT TO PRIOR SALE, THESE SECURITIES, IF, AS AND WHEN ISSUED BY THE ISSUER AND ACCEPTED BY US IN ACCORDANCE WITH THE CONDITIONS CONTAINED IN THE AGENCY AGREEMENT REFERRED TO UNDER "PLAN OF DISTRIBUTION" ON PAGE 1 AND 2 HEREIN.

**CANARIM INVESTMENT CORPORATION LTD.**  
22nd Floor - 609 Granville Street  
Vancouver, B.C.

**DATED: MARCH 9, 1988**

093A 132  
PROPERTY FILE  
93A / 11W 512  
Nov Claims

## PROSPECTUS SUMMARY

The information given below is intended to provide a summary only of the principal Features of the Offering. Reference is made to the more detailed information appearing elsewhere in this Prospectus.

### THE OFFERING

**ISSUER:** MALCOLM RESOURCES LTD. (the "Issuer")

**GROSS AMOUNT:** \$210,000.00

**NET AMOUNT:** \$180,000.00

**PRICE:** \$0.35 per Share

**ISSUE:** 475,000 Common Shares and 125,000 Flow-Through Shares. This Issue will represent 34.88% of the Common Shares outstanding after the completion of this Offering as compared to 48.26% that will then be owned by promoters, directors and officers issued for cash prior to the date of this Prospectus. See Pages 4 and 17 hereof.

**USE OF PROCEEDS:** The Issuer will have funds on hand upon completion of this Offering totalling \$207,153 comprised of \$27,153 working capital currently on hand and net proceeds of \$180,000 from this Offering. The Issuer intends to expend \$110,000 including the \$43,750 from the proceeds of the Flow-Through Shares to explore for gold on its property located in the Cariboo Mining Division, in the Province of British Columbia and more fully described under "Description of Business" herein. The remaining funds will be added to working capital. See "Use of Proceeds".

**DILUTION:** The offering price of \$0.35 per Share exceeds the net tangible book value per Common Share by \$0.1884 after giving effect to the Offering, representing a dilution of 53.83%. See "Risk Factors".

**RISK FACTORS:** Investment in the Common Shares offered under this Prospectus must be considered as speculative. A prospective investor should consider carefully the following factors.

Mining exploration involves a high degree of risk which even a combination of experience, knowledge and careful evaluation may not be able to overcome.

The Issuer's mining properties are in the exploration and development stage, no land surveys have been conducted to determine the boundaries of its mineral

Note 3 Capital Stock

The current period's common share transactions are summarized as follows:

	<u>Number of Shares</u>	<u>Amount</u>
Issuance of shares for cash		
By subscription agreement	130,001	\$ 32,500
By CEE agreement	240,000	60,000
By escrow agreement	<u>750,000</u>	<u>7,500</u>
Balance, end of the period	<u>1,120,001</u>	\$ <u>100,000</u>

Management and Employee Incentive Stock Options

The company has granted a director of the company options to purchase up to 86,000 common shares of the company at \$0.35 per share. These options expire October 14, 1989.

The company has granted employees of the company options to purchase up to 40,000 common shares of the company at \$0.35 per share. These options expire October 14, 1989.

Note 4 Canadian Exploration Expense (CEE)

In accordance with agreements between certain investors and the company, the investors have incurred \$60,000 on exploration of the company's mineral claims. These CEE expenses were incurred by the investors in consideration of the company agreeing to issue 240,000 common shares to the investors. The expenses so incurred will be deducted by the investors for tax purposes and are not available to the company for tax purposes.

Note 5 Directors' Remuneration

No remuneration was paid to any of the directors or officers of the company during the period.

**SUMMARY REPORT**

**Exploration in the Eastern Portion of the**

**NOV Claim Group**

**Cariboo Mining Division**

**Likely Area, B.C.**

Latitude: 52° 38'N  
Longitude: 121° 29'W  
NTS Number: 93 A/11 & /12

**For:**

**MALCOLM RESOURCES LTD.  
1550 - 609 Granville Street  
Vancouver, B.C. V7Y 1C6**

**By:**

**Stuart A.S. Croft, P.Eng.  
NEVIN SADLER-BROWN GOODBRAND LTD.**

**Dated:**

**7 October 1987**

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**Dated:**

**7 October 1987**

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GEOLOGISTS AND ENGINEERS

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SPECIALISTS IN MINERAL AND GEOTHERMAL RESOURCE EXPLORATION

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**SUMMARY**

Malcolm Resources Ltd. holds, by way of an option agreement, the NOV mineral claim group, situated 7 km northeast of Likely, in B.C.'s central Cariboo. The four contiguous claims comprising 57 metric units are located on the lower 2 km of Spanish Creek near its junction with the Cariboo River. In addition to extensive historic and active placer gold mining in the immediate vicinity of the NOV group, limited development of several auriferous quartz vein exposures has been recorded.

Mineral exploration activity in the Likely region was spurred to record levels in the early 1980's by a coincident release of the B.C. government's Regional Geochemistry Survey results, and discovery of gold at Dome Minerals (Placer Dome's) QR deposit 20 km west of the NOV group. Intensive exploration activity has subsequently resulted in gold discoveries at the Frasergold and CPW prospects, 70 and 5 km southeast of the NOV property respectively.

The NOV claims are underlain predominantly by rocks of an unnamed black phyllite unit which forms the basal sequence of the Quesnel terrane - a belt of volcanic rocks formed by intensive activity in an island arc environment during the upper Triassic. Characteristically, the dark-grey graphitic phyllite is complexly deformed, and, particularly near the top of the sequence, contains numerous tuffaceous sedimentary horizons.

Trenching conducted on the NOV property has exposed several major northwesterly trending phyllite-hosted quartz vein structures. Pyrite, galena and gold mineralization is commonly associated with the altered

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calc-silicate selvage contained within these veins. An assay of 0.818 oz Au/ton obtained by the author helps to corroborate earlier reports of grades as high as 1.84 oz/ton from veins exposed in Spanish Creek.

Soil sampling on a grid installed on the eastern portion of the claim group has identified four distinct areas characterized by coincident anomalies in gold pathfinder elements silver, lead, zinc and strontium. While thick overburden and a complex Quaternary history complicate interpretation of the geochemical results, the data supports a southeastward extension of the auriferous quartz vein structure from exposures in "Spanish Canyon". A series of weak but distinctive conductors identified by a VLF-EM survey further corroborate the presence of a southeasterly trending mineralized quartz vein structure.

Based on data obtained during the course of both recent and earlier work, exploration should proceed on the NOV claim group with the objective of identifying a Frasergold-type phyllite hosted precious metal deposit. A two phase work program designed to delineate outward extensions of known mineralized structures in the vicinity of Spanish Creek by trenching, drilling and ongoing geological mapping is estimated to cost \$160,000.

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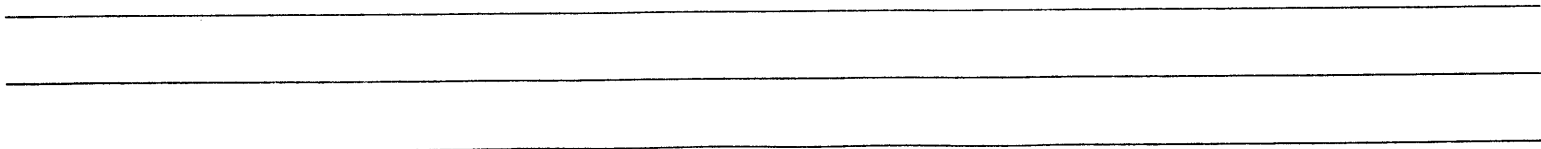
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## 1.0 INTRODUCTION

### 1.1 Terms of Reference

This report on the NOV Claim Group was prepared by Nevin Sadlier-Brown Goodbrand Ltd., Consulting Geologists and Engineers (NSBG), at the request of the management of Malcolm Resources Ltd. It is based primarily on information obtained during the course of an exploration program conducted by NSBG, a review of literature reporting previous work on the property, and upon research of available publications on the region.

The report is intended to provide a description of the NOV Claim Group and to summarize recent exploration undertaken by Malcolm Resources. A set of recommendations for further exploration and development, and an estimate of the cost of such a program are included.

### 1.2 Location and Access

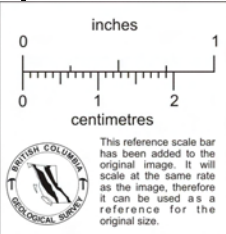
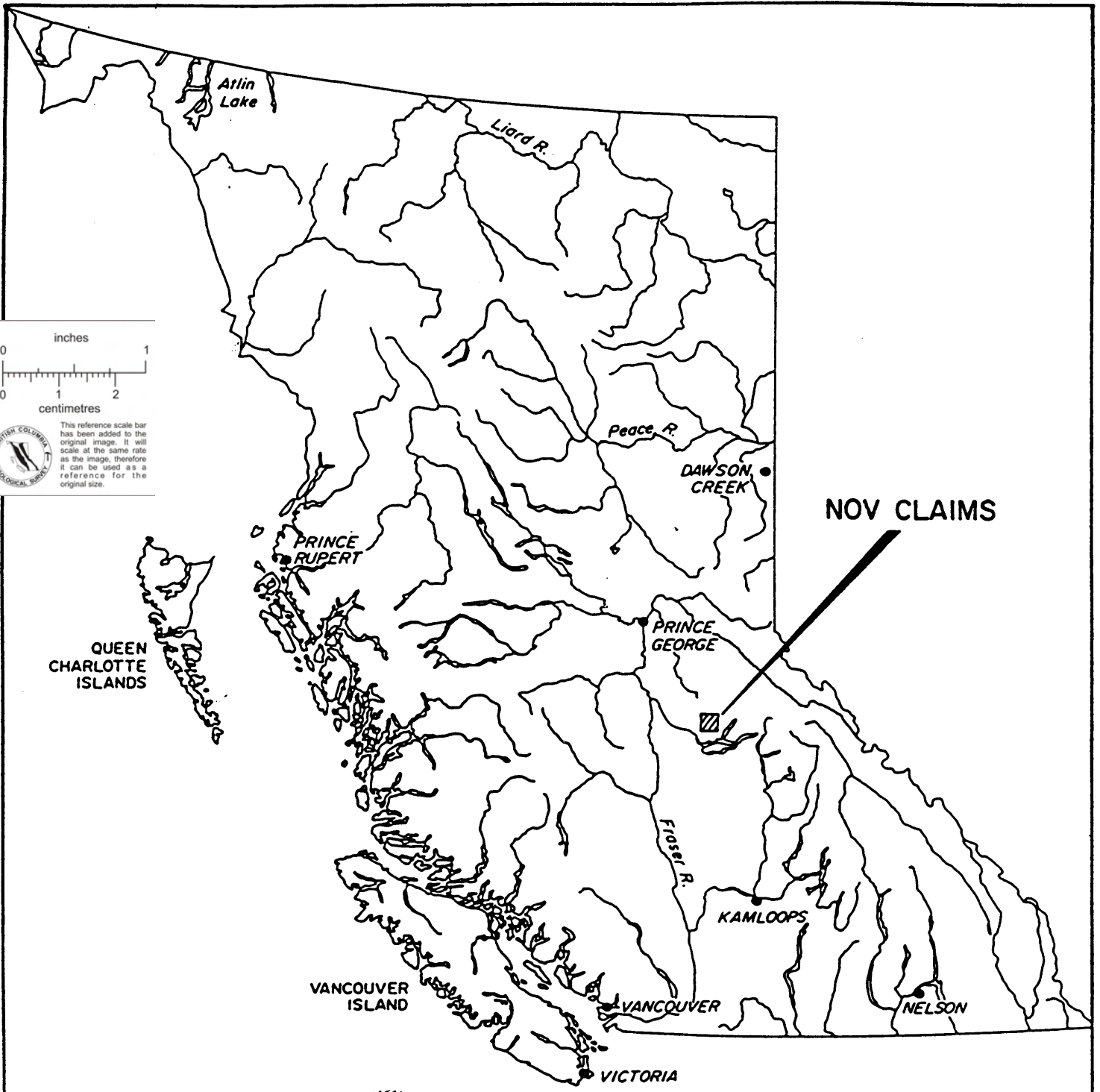
The NOV Claim Group is situated 7 km northeast of Likely, in central B.C. (Figure 1). The claims comprise an area of approximately 1400 ha covering the lower 2 km of Spanish Creek near its junction with Cariboo River (Figure 2). The claims are located at latitude 52° 38'N and longitude 121° 29'W (NTS Mapsheets 93A/11 and /12) within the Cariboo Mining Division.

Likely is situated approximately 95 km by paved highway northeast of Williams Lake, the nearest major supply centre. From Likely, an all-weather road leading to Keithly Creek traverses the NOV 3 claim approximately 1 km after the bridge crossing the Cariboo River. Access to the remainder of the claim group is readily afforded by way of an

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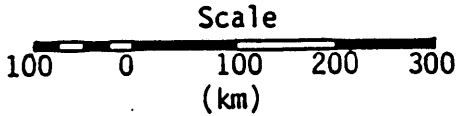


QUEEN CHARLOTTE ISLANDS

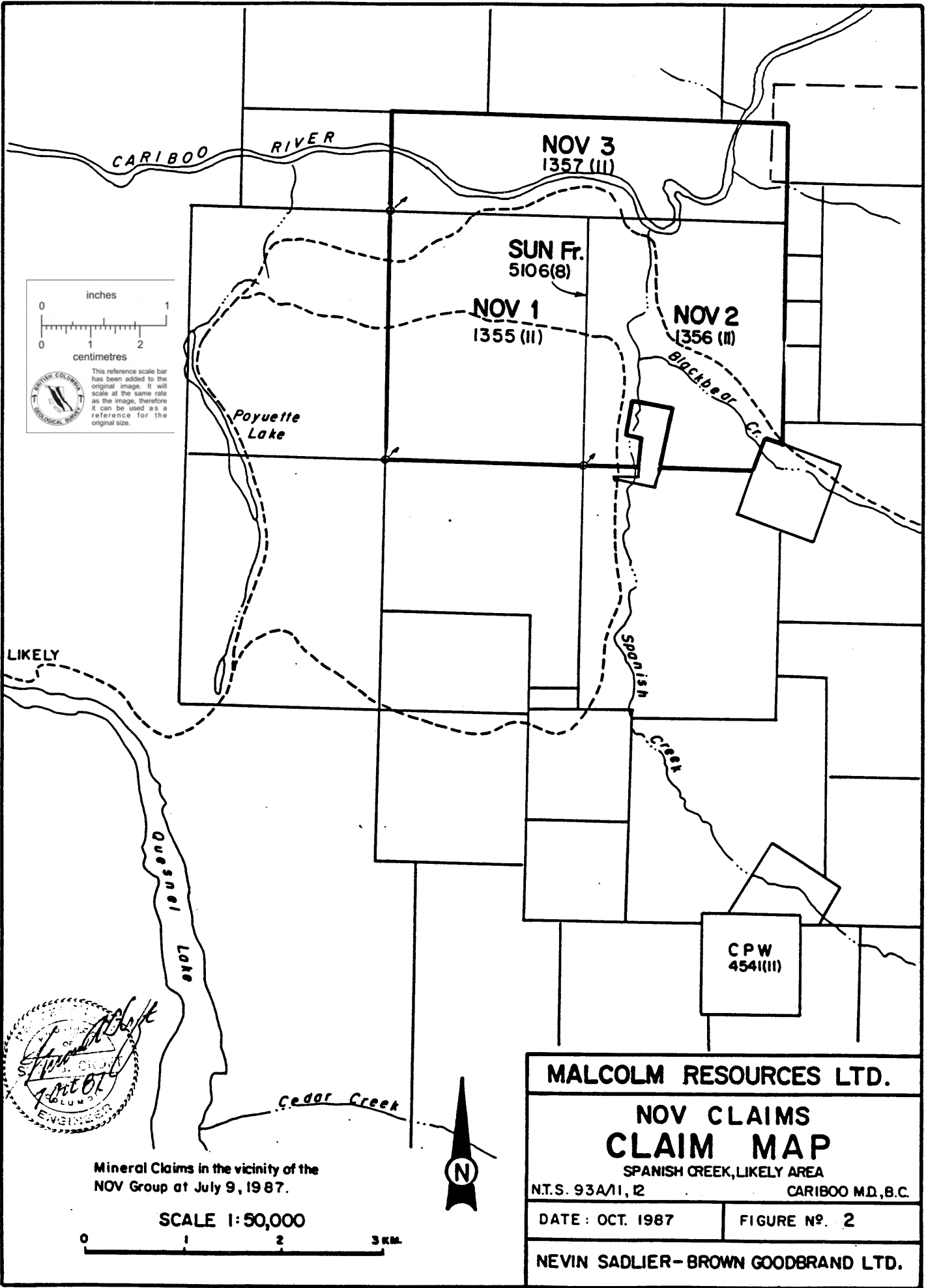
VANCOUVER ISLAND

VICTORIA

NOV CLAIMS



<b>MALCOLM RESOURCES LTD.</b>	
<b>NOV CLAIMS LOCATION MAP</b>	
SPANISH CREEK, LIKELY AREA	
N.T.S. 93A / II,12	CARIBOO M.D., B.C.
DATE : OCT. 1987	FIGURE N <sup>o</sup> . 1
NEVIN SADLER-BROWN GOODBRAND LTD.	



inches  
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centimetres  
0 1 2

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BRITISH COLUMBIA  
GEOLOGICAL SURVEY

LIKELY

Mineral Claims in the vicinity of the NOV Group at July 9, 1987.

SCALE 1:50,000

0 1 2 3 km

**MALCOLM RESOURCES LTD.**

**NOV CLAIMS  
CLAIM MAP**

SPANISH CREEK, LIKELY AREA

N.T.S. 93A/1, 2

CARIBOO M.D., B.C.

DATE: OCT. 1987

FIGURE NO. 2

NEVIN SADLIER - BROWN GOODBRAND LTD.

extensive network of well maintained forestry roads. A number of roads suitable only for four-wheel drive vehicles, and bulldozer access trails have been constructed during the course of exploration on the claims.

### 1.3 Property Description

By way of an Option Agreement dated 7 July 1987, Malcolm Resources Ltd. has obtained the exclusive right to acquire an undivided 100% interest in the NOV Claim Group. The property consists of 4 contiguous metric mineral claims staked under the modified grid system, as follows:

Claim Name	Units	Record No.	Expiry Date	Owner of Record
NOV 1	20	1355(11)	29 November 1987	W.H. Greyson
NOV 2	20	1356(11)	"	"
NOV 3	16	1357(11)	"	"
SUN Fraction <u>1</u>		5106(8)	25 August 1988	"

TOTAL 57 units

During the course of the property examination, the author inspected the NOV 3 legal corner post. Claim lines flagged and blazed some seven years earlier remain clearly visible, corroborating earlier observations made by MacLeod, (1982). In the writer's opinion, the claims were staked in a manner consistent with the B.C. Mineral Act regulations.

The SUN Fraction was staked three years subsequent to the location of the NOV claims when Apex Energy Corp., owners of the claims at the

time, identified a 35 m gap between the NOV 1 and NOV 2 claims. The properties have been grouped under the name "NOV". Much of the NOV mineral claims area has also been staked under the Placer Mining Act.

Sufficient work has been conducted during the current year to fulfill the assessment requirements of the B.C. Mineral Act regulations to maintain the claims in good standing.

#### **1.4 Physiographic Features**

The NOV claim group is situated on the western flanks of the Quesnel Highland in B.C.'s central Cariboo. The region is characterized by numerous large lakes, such as Horsefly, Quesnel, and Cariboo, occupying elongate valley structures formed within the mountainous Highland terrain. The Cariboo and Quesnel Rivers generally follow the Quesnel trough, draining northwestward towards the Fraser River.

Elevations on the NOV claims range from 715 m (2450') in the valley on the northwest corner of the Group to 1160 m (3800') on a height of land central to the NOV 2 claim. The Cariboo River divides the northern portion of the property, cutting through tens of meters of fluvial and glaciofluvial gravels that form its steep left bank. Atop the ancient river terraces, topographic relief on the claims is generally subdued, with slopes seldom exceeding 5°. However, Spanish Creek and its major tributary, Blackbear Creek, have deeply incised the eastern portion of the property, forming steep canyon walls in both bedrock and Quaternary sediments.

Its location with respect to the Quesnel Highland has produced a moderated interior climate in the Likely area. Summers tend to be warm and reasonably dry, although heavy rainfall can be expected occasionally. Winters are cold and, particularly at higher elevations, a snowpack of 1 to 2 m should be anticipated.

Where forested, vegetation on the property consists primarily of mature fir and spruce with moderate to thick undergrowth. Deciduous forest, and perennial shrubs and flowers typify ground cover in the logged or placer mined areas which comprise approximately half of the surface of the claims. Overburden several meters deep in some locations mantles much of the property. With the exception of outcrop in Spanish and Blackbear Creek canyons, bedrock exposure on the NOV claims is sparse.

A thriving mining and mineral exploration infrastructure in the Cariboo region has been re-established as a result of record levels of activity in the area. The NOV claims are well serviced by industrial roads, and the local availability of labour, heavy equipment and transportation is excellent.

### **1.5 History**

The Cariboo district has been pivotal in the development of British Columbia's mining industry since the discovery of placer gold along Quesnel River and its tributaries nearly 130 years ago. Placer mining activity in the region is highlighted by the Bullion Mine, situated 4 km west of Likely. Hydraulic mining of the buried valley fill occurred principally between 1894 and 1905 (producing about 60,000 oz of gold) and sporadically since that time (Clague, 1987). Remnants of

an old dam and flume system attest to the hydraulic sluicing operations once conducted on Spanish Creek, and extensive historic and active placer workings are present in the vicinity of the NOV claims.

Despite a rich placer gold mining history, no significant lode gold production has been recorded from the Likely area. Early exploration for lode gold deposits on the NOV group is documented in various B.C. Ministry of Mines' reports. Bowman (1887) describes a vein on Spanish Creek from 5' to 7' in width containing galena in streaks about 1" wide, near the outlet of Blackbear Creek. No results appear to have been published of subsequent work on the Spanish Creek veins although two short (3 to 5 m) adits were developed in the area, and remain accessible to present. Bowman also describes numerous large quartz-vein occurrences along Cariboo River, including the "Stephenson Ledge". In reference to work on the Sunshine Group in the 1933 B.C. Ministry of Mines Annual Report, the quartz vein is described as exposed over approximately 12 feet in width striking northwesterly, with good, but ambiguous gold grades recorded.

#### **Current Activity**

Bedrock exploration in the Quesnel Lake area intensified in the late 1960's when much of the region was staked during the "porphyry copper boom". The Cariboo Bell deposit at Boot Jack Lake, 15 km southwest of Likely, was the focus of much of this activity. Exploration dwindled until, in 1980, Dome Explorations began drilling on their QR Claim Group situated on the Quesnel River, 16 km northwest of Likely. Activity further intensified in 1981 following release of results of the B.C. Geology Branch's 1980 Regional Geochemical Survey. Most of the claims that currently surround the NOV property were staked at that time.



In October 1983, gold bearing zones were obtained in the drilling of Eureka Resources' Frasergold project, situated approximately 70 km southeast of the NOV claim group. Here, gold mineralization is associated with pyrite, pyrrhotite and chalcopyrite, and occurs as disseminations in the black graphitic phyllite and in quartz veins. Eureka reports that underground testing and bulk sampling had been planned for 1987 (GCNL, 1986a). Work designed to expand both surface and underground ore reserve estimate was to be undertaken.

Approximately 5 km south of the NOV group, recent work on the CPW Claim has identified significant gold mineralization within phyllite-hosted quartz veins and shears within grey knotted phyllites. Current operators Pundata Exploration Ltd. continue surface exploration on the deposit, recently reported to contain proven reserves of 40,000 oz gold in ore grading 0.1 oz Au/ton or better (GCNL, 1986b).

At its QR deposit, Placer Dome - formerly Dome Explorations (Canada) Limited - has reported discovery of approximately 1.1 million tons of near surface mineralization in altered basalts, containing some 250,000 oz of gold reserves (Fox et al., 1987). Placer Dome is increasing its land holdings in the region, and along with numerous smaller operators, are continuing an intensive investigation of the Quesnel belt for volcanic- and phyllite-hosted gold deposits.

#### **1.6 Previous Work on the NOV Claims**

"Modern" exploration work on the NOV property began in 1980 with a prospecting program conducted by R.E. Mickle, and in 1981, with airborne magnetometer and VLF-EM survey of the claim group (Shelldrake, 1981). Diamond drillhole DDH 82-1, a vertical AQ hole was

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collared in phyllites on the edge of Spanish Creek canyon and was drilled towards the "Upper Adit", though no significant results were reported.

A comprehensive exploration program began in 1983 when the property was optioned to Apex Energy Ltd. Over the course of two years, Apex conducted a geochemical survey, and ground magnetometer, VLF-EM, and IP geophysical surveys which blanketed the southwestern portion of the claim block. In 1985, Apex relinquished their option on the NOV claims.

Prospecting and backhoe trenching since 1985 has focussed primarily on the Spanish Canyon showings and has successfully identified potentially significant gold-bearing quartz vein and shear structures. A program of trenching and drilling recommended by DeLeen (1984) on the basis of results collected by Apex has yet to be conducted.

## 2.0 GEOLOGY

### 2.1 Regional Geology

The NOV Claim Group is situated within the eastern fringes of the Quesnel terrane, described by Panteleyev (1987) as;

an allochthonous belt of predominantly Upper Triassic-Lower Jurassic basic to intermediate volcanic rocks that lies along the eastern margin of the Intermontane Belt. Quesnel terrane can be followed as a disrupted but nearly continuous narrow belt, from the southern to northern provincial boundaries.

A basal sequence of unnamed black phyllites underlies the Quesnel belt volcanic rocks, forming a linear band adjacent to the boundary of the Intermontane Belt and the Omineca Belt farther to the east (Campbell, 1978). Extensive distribution of basic to intermediate volcanic rocks throughout the Cordillera is generally attributed to intensive volcanic activity within an island arc environment during the upper Triassic (Figure 3).

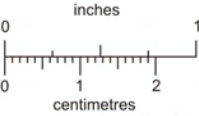
In the Quesnel Lake map-area, the north-northwesterly trending Quesnel belt (once commonly referred to as the Quesnel trough) is approximately 60 km in width. The Eureka thrust separates the Quesnel terrane from the Precambrian to Paleozoic rocks of the Omineca belt to the east; the Pinchi Fault system forms the western boundary with Paleozoic rocks of the Cache Creek terrane.

Significant economic copper-gold and gold mineralization has been identified within rocks of Quesnel terrane in the Cariboo region. Altered volcanic rocks proximal to small intrusive stocks or intrusive-extrusive breccia zones (QR deposit), and distinctive phyllitic horizons within the basal sequence containing both

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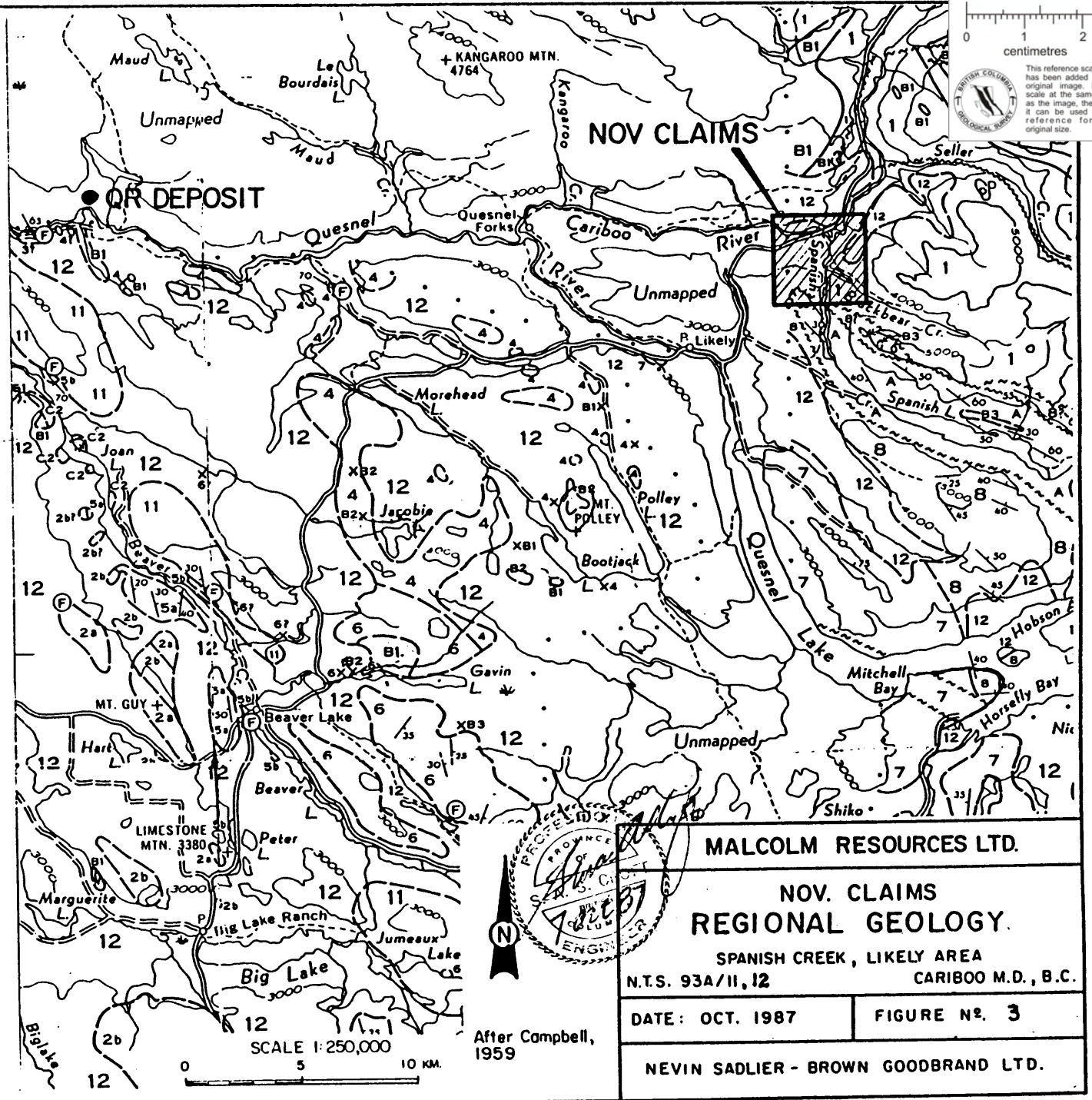
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**LEGEND**

- QUATERNARY  
PLEISTOCENE AND RECENT**
- 12 Glacial deposits and recent alluvium; till, gravel, sand, and silt
- TERTIARY  
MIOCENE AND/OR PLIOCENE**
- 11 Basalt; minor tuff, conglomerate, and sandstone
- PALEOCENE AND/OR EOCENE**
- 10 Brown and buff rusty weathering dacite and rhyolite
- PALEOCENE (?) TO PLIOCENE (?)**
- 9 Sandstone, shale, and tuff
- JURASSIC AND (?) CRETACEOUS  
MIDDLE JURASSIC (?) TO CRETACEOUS (?)**
- 8 Green andesitic tuff, agglomerate, and flows; minor argillite, chert, and conglomerate
- JURASSIC  
MIDDLE AND/OR UPPER JURASSIC**
- 7 Dark green andesitic agglomerate, breccia, and flows; minor tuff; may be equivalent to unit 6
  - 6 Green andesitic agglomerate, breccia, and flows; minor tuff, argillite, and limestone; may be equivalent to unit 7
- LOWER JURASSIC (?)**
- 5 5a, purplish brown, brown, and grey pebble and cobble conglomerate and sandstone; minor shale; 5b, soft, friable, black and brown, carbonaceous shale
- LOWER JURASSIC**
- 4 'Purple' volcanic rocks; purplish brown, dark grey, and rarely green andesitic agglomerate, breccia, and flows; near contact with 3 may contain analcite; minor limestone argillite, and conglomerate
- TRIASSIC AND (?) JURASSIC  
UPPER TRIASSIC AND (?) LOWER JURASSIC**
- 3 Pebble and cobble conglomerate, sandstone, limestone, and argillite; minor volcanic rocks
- PERMIAN AND (?) EARLIER  
CACHE CREEK GROUP**
- 2 2a, dark and light grey, finely crystalline, massive limestone; 2b, chert, argillite, and greenstone; minor limestone
- CAMBRIAN AND/OR LATER  
CARIBOO GROUP**
- 1 Argillite, quartzite, slate, and phyllite; minor limy rocks
- AGE UNCERTAIN**
- A Slate and argillite; minor volcanic rocks and tuff; shows similarities to both units 1 and 8
- INTRUSIVE ROCKS**
- B B1, granite, granodiorite, and quartz-diorite; B2, gneiss and monzonite; B3, diorite
  - C C1, trachyte porphyry; may be volcanic; C2, andesite and fine-grained diorite; may all or in part be volcanic
  - D Serpentinite; serpentinitized ultramafic rocks



**MALCOLM RESOURCES LTD.**

**NOV. CLAIMS  
REGIONAL GEOLOGY.**

SPANISH CREEK, LIKELY AREA  
N.T.S. 93A/11, 12 CARIBOO M.D., B.C.

DATE: OCT. 1987	FIGURE NO. 3
NEVIN SADLER - BROWN GOODBRAND LTD.	

disseminated gold and auriferous quartz vein systems (Frasergold deposit) have proven to be attractive exploration targets within the area. Some of the placer gold deposits in the region may have been released during a lengthy period of Tertiary weathering and denudation of Quesnel terrane rocks.

## 2.2 Property Geology

Most of the NOV Claim Group is underlain by the sequence of unnamed "Black Phyllites" (described by Bloodgood, 1987) which comprise the basal unit of the Quesnel belt. The knotted graphitic phyllite which predominates much of the sequence exposed on the property includes numerous bands of quartz sandstone or possibly tuff horizons ranging in width from 40 cm to 3 m in thickness (Figure 4). Particularly in the vicinity of the Spanish Canyon showings, the phyllite is sooty, is characterized by a strong graphitic foliation, and commonly contains 1 to 3 mm porphyroblasts of completely weathered iron oxides. Pyrite cubes up to 2 cm in width have been observed within some sections of the sequence.

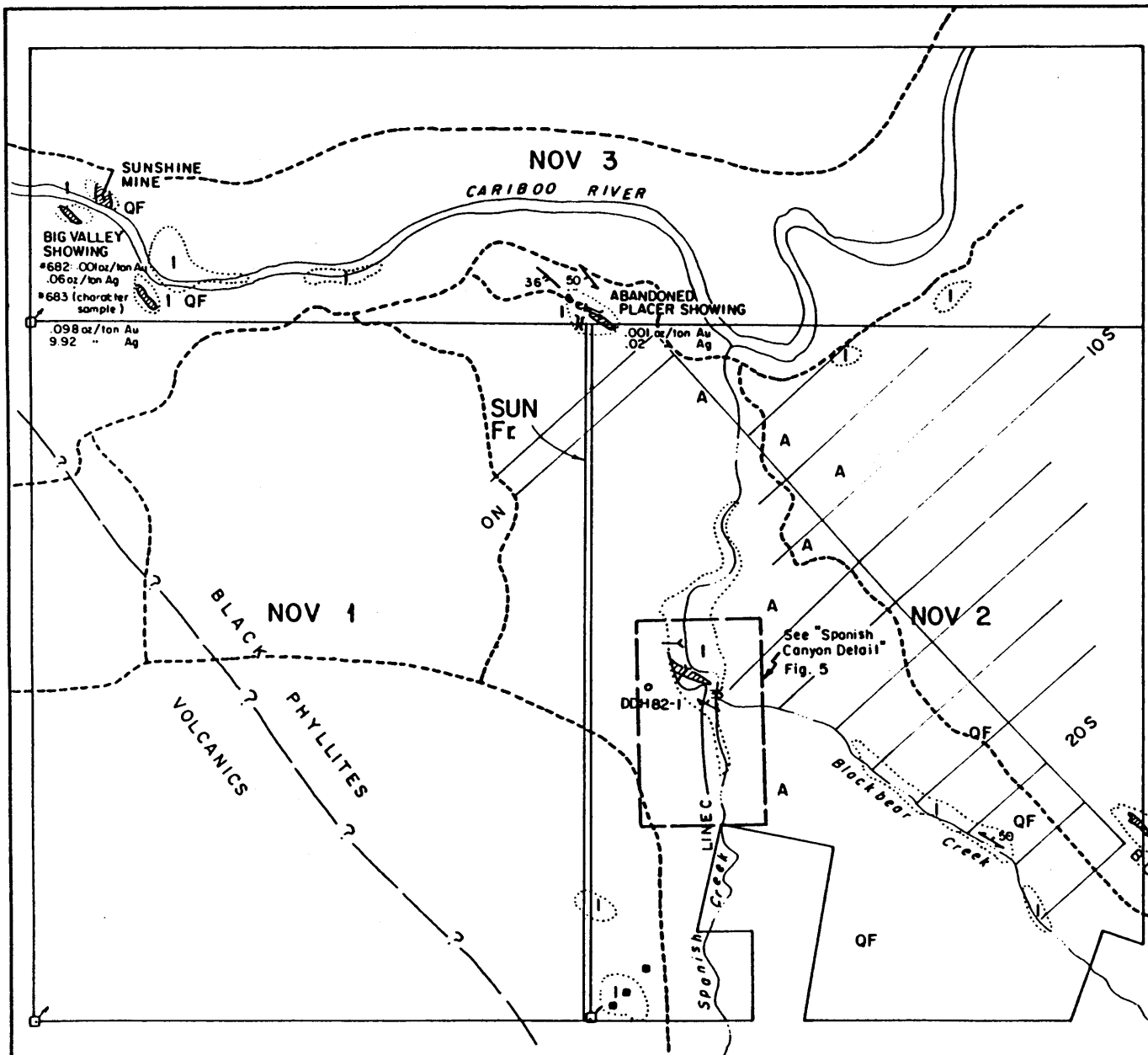
Complex deformation of the phyllite package is evidenced by extensive small-scale (1 to 3 mm) crenulations, a warping of bedding, and discordant bedding relations across numerous small fault zones. A southeasterly trend characterizes the strike of graphitic foliation planes although the dip is extremely variable.

The southwestern portion of the claim group is mapped as being underlain by volcanic rocks of the Quesnel terrane (Campbell, 1978),

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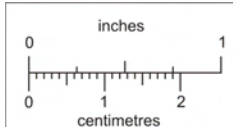
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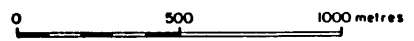
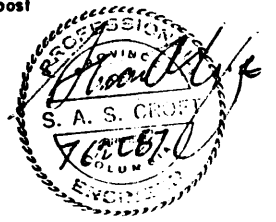


**LEGEND**

- Black Phyllite - friable, dark grey to black graphitic phyllite containing sandstone (tuff?) horizons; pyrite cubes & limonite porphyroblasts common.
- Outcrop area
- Quartz vein
- Approximate contact
- Strike & dip of foliation
- " " " quartz vein
- Area of abundant quartz in float
- Area of alluvium (5-30 m. thick)
- Trench
- Adit
- Exploration pit
- Legal corner post
- Road



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.



<b>MALCOLM RESOURCES LTD.</b>	
<b>NOV CLAIMS PROPERTY GEOLOGY</b>	
SPANISH CREEK, LIKELY AREA	
N.T.S. 93A/1, 12	CARIBOO M.D., B.C.
DATE : OCT. 1987	FIGURE NO. 4
NEVIN SADLER - BROWN GOODBRAND LTD.	

though none are observed in outcrop. The northwesterly trending contact between the phyllites and overlying volcanics bisects the NOV 1 claim.

### **Economic Geology**

Within the Black Phyllite underlying the NOV claims are numerous sizable quartz vein structures. Best exposed by trenches in the "Spanish Canyon Zone", the veins trend approximately east-southeastward and dip moderately to steeply northward. Typical widths are 10 to 50 cm, although locally, widths to several meters have been observed. To date, mapping has been insufficient to firmly establish the continuity of the structures along strike.

Quartz veins mineralized by pyrite+galena commonly contain associated values in gold and silver (refer to Section 4.1, Figure 5). Sulfides commonly occur within a calc-silicate selvage. Particularly in the vicinity of the Upper Adit on the Spanish Canyon Zone, sericitic to talcose alteration to 2 m in width envelopes the quartz veins, and localized intense shearing is common. Steeply dipping shear- and vein-structures which intersect the more shallow dipping major quartz veins appear to play an important role in localizing sulfide deposition.

Elsewhere in the 1987 Target Area, major graphitic phyllite-hosted quartz vein exposures have been mapped near the southeastern corner of NOV 2, the southwestern corner of NOV 3, and within old placer workings on the south bank of Cariboo River (Figure 4).

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### **3.0 1987 EXPLORATION PROGRAM**

#### **3.1 Survey Rationale**

Mineral exploration conducted on the NOV claims during the early 1980's focussed primarily on investigation of the potential for precious metal deposits within metamorphosed volcanic horizons of Quesnel belt rocks. Extensive geochemical and geophysical work was confined largely to the southwestern portion of the claim group. In addition to delineating several large areas of interest on the NOV 1 claim during the course of these programs, numerous small geochemical anomalies were identified on the northern portion of the work, and in reconnaissance east of Spanish Creek.

Re-interpretation of geochemical data derived from the earlier work identified a strong, northwesterly trending zone of soils anomalous in gold. To evaluate the hypothesis that the zone was an extension to the auriferous quartz vein system identified in Spanish Canyon, the recent work program was designed to test the areas both southeast and northwest of these showings.

#### **3.2 1987 Program Description**

Survey control was established by the installation of a 14 km grid on the northeast portions of the NOV 1 and 2 claims. The grid was designed as an extension to an existing grid installed by Apex, and was placed to facilitate correlation with earlier results. Thirteen northeasterly oriented lines were turned-off perpendicularly to a tight-chained baseline (run at a bearing of 140°) at 200 m intervals. Stations on the crosslines were flagged at 10 m intervals.



- 16 -

Once established, ground magnetometer and VLF-EM geophysical surveys, and a geochemical survey were conducted on the control grid. An orientation survey was conducted over a small portion of the old grid to provide a comparison between the different surveys. Reconnaissance geological mapping was conducted in order to determine the extent of outcrop exposure in this area of the claims.

A small scale backhoe trenching and road restoration program was conducted at three sites on the property (Figure 4). Most of the program was conducted at Spanish Canyon where several trenches and pits were dug to investigate reports of gold+galena+pyrite bearing quartz veins in this area. In order to assess a variety of sampling techniques, a 620 m contour sample line (collection of soil and rock samples along a line maintaining the same topographic elevation) was also run in this vicinity.

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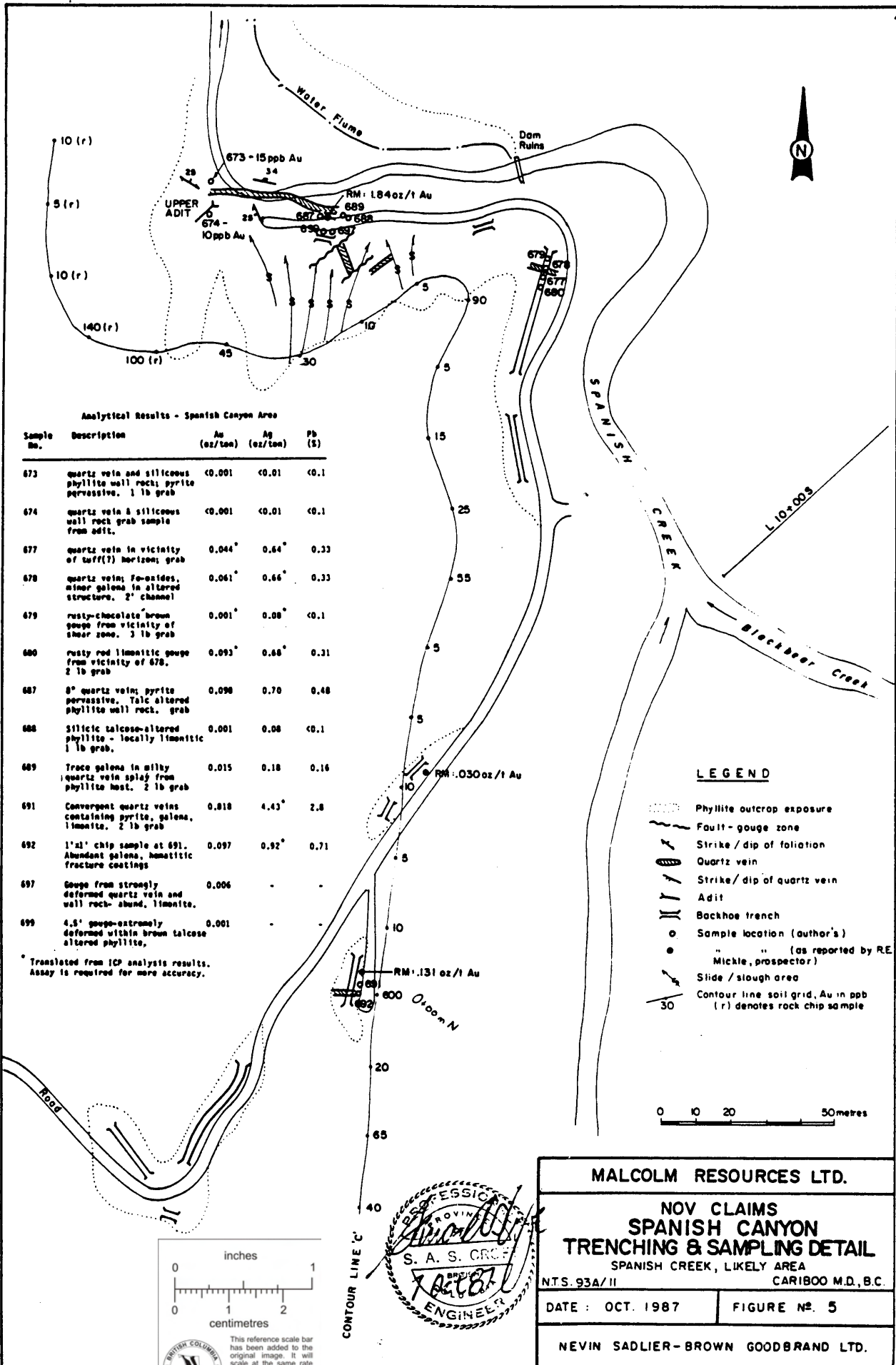
## 4.0 SURVEY RESULTS AND DISCUSSION

### 4.1 Geological Reconnaissance and Trenching

Geological mapping focussed primarily on identification and assessment of potential gold-bearing structures hosted by the Black Phyllite sequence in the Spanish Canyon area. Figure 5 depicts the results of trenching and sampling conducted in this area. Table 1 compiles rock sample descriptions and assays in this, and other areas of the property.

Of note are several assays on mineralized quartz vein structures exposed by recent trenching. The highest assays (0.818 oz Au/ton and several of approximately 0.1 oz Au/ton) were obtained from galena-bearing quartz veins 15 to 40 cm in width with a southeasterly strike and a shallow northerly dip. The vein system is hosted primarily by an incompetent dark-grey graphitic phyllite sequence which was noted to include bands of sandstone or tuff to 2 m thickness. Trenching in the vicinity of the Upper Adit could not identify a structure which, during prospecting in 1986, purportedly yielded an assay of 1.84 oz Au/ton for galeniferous quartz vein material.

In general, galena+pyrite mineralization was concentrated in the vicinity of narrow, steeply dipping quartz cross-veins. Invariably, sulfide mineralization within the quartz veins has an associated sericitic-talcosite alteration halo 50 cm to 2 m in width enveloping the host structure. The continuity of the gold-bearing vein structures, both along strike and with depth, has yet to be established.



Analytical Results - Spanish Canyon Area

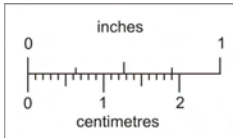
Sample No.	Description	Au (oz/ton)	Ag (oz/ton)	Pb (%)
673	quartz vein and siliceous phyllite wall rock; pyrite pervasive. 1 lb grab	<0.001	<0.01	<0.1
674	quartz vein & siliceous wall rock grab sample from adit.	<0.001	<0.01	<0.1
677	quartz vein in vicinity of Tuff(?) horizon; grab	0.044*	0.64*	0.33
678	quartz vein; Fe-oxides, minor galena in altered structure. 2' channel	0.061*	0.66*	0.33
679	rusty-chocolate brown gouge from vicinity of shear zone. 3 lb grab	0.001*	0.08*	<0.1
680	rusty red limonitic gouge from vicinity of 678. 2 lb grab	0.093*	0.68*	0.31
687	8" quartz vein; pyrite pervasive. Talc altered phyllite wall rock. grab	0.096	0.70	0.48
688	Silicic talcose-altered phyllite - locally limonitic 1 lb grab.	0.001	0.08	<0.1
689	Trace galena in milky quartz vein spaly from phyllite host. 2 lb grab	0.015	0.18	0.16
691	Convergent quartz veins containing pyrite, galena, limonite. 2 lb grab	0.818	4.43*	2.8
692	1" x 1" chip sample at 691. Abundant galena, hematitic fracture coatings	0.097	0.92*	0.71
697	Gouge from strongly deformed quartz vein and wall rock- abund. limonite.	0.006	-	-
699	4.5' gouge- extremely deformed within brown talcose altered phyllite.	0.001	-	-

\* Translated from ICP analysis results. Assay is required for more accuracy.

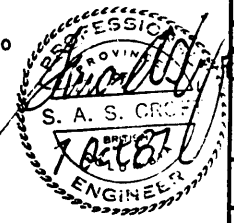
LEGEND

- Phyllite outcrop exposure
- Fault - gouge zone
- Strike / dip of foliation
- Quartz vein
- Strike / dip of quartz vein
- Adit
- Backhoe trench
- Sample location (author's)
- " " (as reported by R.E. Mickle, prospector)
- Slide / slough area
- Contour line soil grid, Au in ppb (r) denotes rock chip sample

0 10 20 50 metres



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.



MALCOLM RESOURCES LTD.

NOV CLAIMS  
SPANISH CANYON  
TRENCHING & SAMPLING DETAIL  
SPANISH CREEK, LIKELY AREA  
NTS. 93A/11 CARIBOO M.D., B.C.

DATE: OCT. 1987      FIGURE NO. 5

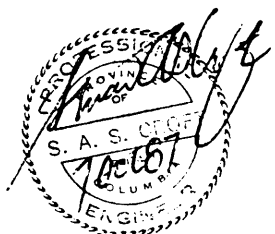
NEVIN SADLER-BROWN GOODBRAND LTD.

**Table 1**

**Analytical Results - NOV Claims**

Sample No.	Description	Au (oz/ton)	Ag (oz/ton)	Pb (ppm)	Zn (ppm)	Sr (ppm)
<b>Spanish Canyon Area</b>						
673	quartz vein and siliceous phyllite wall rock; pyrite pervasive. 1 lb grab	15 ppb	1.2 ppm	42	164	480
674	quartz vein & siliceous wall rock grab sample from adit.	10 ppb	0.5 ppm	29	104	94
677	quartz vein in vicinity of tuff(?) horizon; grab	1500 ppb	22.1 ppm	3308	995	337
678	quartz vein; Fe-oxides, minor galena in altered structure. 2' channel	2100 ppb	22.8 ppm	3306	1396	153
679	rusty-chocolate brown gouge from gouge from vicinity of shear zone. 3 lb grab	50 ppb	2.8 ppm	105	196	140
680	rusty red limonitic gouge from vicinity of 678. 2 lb grab	3200 ppb	23.2 ppm	3113	859	115
687	8" quartz vein; pyrite pervasive Talc altered phyllite wall rock. grab	0.098	0.70	0.48%	4060	576
688	Silicic talcose-altered phyllite locally limonitic. 1 lb grab	0.001	0.08	49	121	79
689	Trace galena in milky quartz vein splay from phyllite host. 2lb grab	0.015	0.18	1559	195	472
691	Convergent quartz veins containing pyrite, galena, limonite. 2 lb grab	0.818	151.9 ppm	28123	974	20
692	1'x1' chip sample at 691. Abundant galena, hematitic fracture coatings.	0.097	31.4 ppm	7093	130	15
697	Gouge from strongly deformed quartz vein and wall rock - abund. limonite.	0.006	1.1 ppm	50	71	369
699	4.5' gouge-extremely deformed within brown talcose altered phyllite.	0.001	0.8 ppm	44	59	218
<b>Abandoned Placer Area</b>						
693	Largely unmineralized quartz vein with assoc. limonite, hematite. 3' chip.	0.006	1.1 ppm	106	29	12
694	3' chip sample extended from 693.	0.001	0.8 ppm	47	33	13
695	Unmineralized quartz vein in grey phyllite. 2' channel	0.001	0.9 ppm	15	89	24
696	10-15 cm wide quartz vein - highly limonitic though no sulfides observed. 2 lb character sample.	0.001	0.3 ppm	19	35	5
<b>Big Valley Showings</b>						
682	3' channel sample across kaolinitic altered vein structure with iron oxides.	0.001	0.06	100	41	33
683	Character sample of small pod of massive galena from quartz vein structure.	0.098	9.92	18.90%	266025	345
<b>Sunshine Adit area</b>						
684	Massive pyrite pods within quartz vein. 2 lb character sample	0.007	0.18	0.04%	466	27
685	Small quartz vein separating phyllite and tuff(?); pervasive sericitic alteration in 1 lb grab.	0.013	267.7 ppm	40401	45617	304

Note: 34,300 ppb = 1 oz/ton  
 34.3 ppm = 1 oz/ton  
 Values reported in ppm or ppb are from ICP analysis and may be conventional units only approximately.



### **"Abandoned Placer" Trenches**

Trenching was also conducted at grid coordinates L 400N by 1300E in the vicinity of a recently abandoned placer gold mining operation. A large quartz-vein had been exposed by the operation, and trenching was conducted to further delineate its extent.

The phyllite-hosted quartz vein was exposed for approximately 50 m along a west-northwesterly trend. The structure displayed a variable thickness (ranging between 20 and 150 cm) typical of quartz vein boudins within incompetent host rocks.

Although iron oxides occur throughout the vein, no other sulfides were observed. Weak assay results indicate either that gold does not occur within this particular structure or that it has been weathered from the rock as a result of the near surface exposure.

### **"Big Valley" Showings**

Active placer mining operations by Big Valley Resources have exposed a northwesterly trending series of quartz veins approximately 75 m south (and across Cariboo River) from the Sunshine Mine. A zone of intense phyllic alteration over the 40 m length of the showing is accompanied by spotty argentiferous galena mineralization within white quartz veins 20 cm to 5 m in width.

Assays of selected samples of the galena mineralization indicate a silver:lead ratio of approximately 0.5 oz Ag/per cent Pb. Gold graded 0.097 oz/ton in this sample; somewhat lower than might have been anticipated for this amount of galena based on results obtained from

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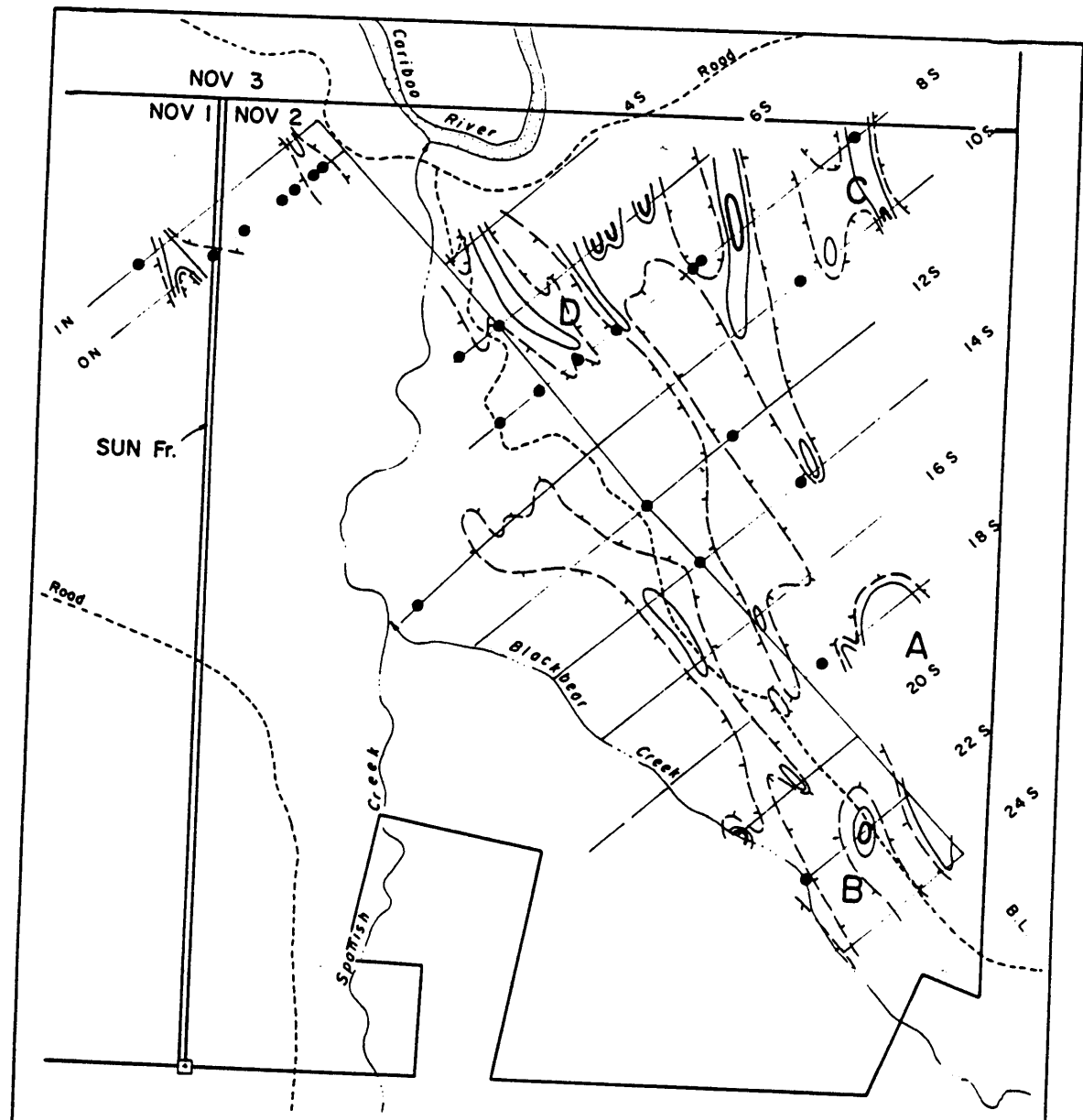
Spanish Canyon. ICP analysis results indicate elevated values in zinc (approx. 25%) and strontium. Analysis of a 1 m channel sample of unmineralized quartz vein material and wall rock, however, indicates only trace amounts of precious and base metals are present.

#### 4.2 Geochemical Survey

Figures 6 through 9 summarize soil geochemistry distribution as detailed in Croft (1987). The presence of silver (Ag), lead (Pb), zinc (Zn) and strontium (Sr) in soils is considered significant because of their association with anomalously high gold content in rock samples collected from the Spanish Canyon Zone. Furthermore, they indicate a distinctive geochemical signature which should distinguish locally derived geochemical anomalies from those attributable to alluvial or glaciofluvial gold deposits.

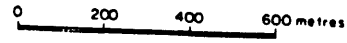
Conducted largely for orientation purposes, gold geochemistry of soils collected along Line C (Figure 5) clearly identifies known gold mineralization immediately above station 0+00. A well defined threshold and higher peak:background ratios for gold are noted in these samples collected specifically from locally derived soils. Pathfinder elements Ag, Pb, Zn and Sr are also enriched in soil samples anomalously high in gold.

On the eastern portions of the claim group, anomalous gold values within soils are generally scattered and erratic. No persistent gold geochemical pattern was identified despite the presence of several strong single-station anomalies. However, four distinctive areas on the 1987 grid are characterized by anomalous values in the pathfinder elements Ag, Pb, Zn and Sr identified on Line C.



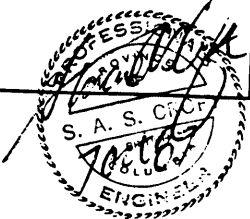
**LEGEND**

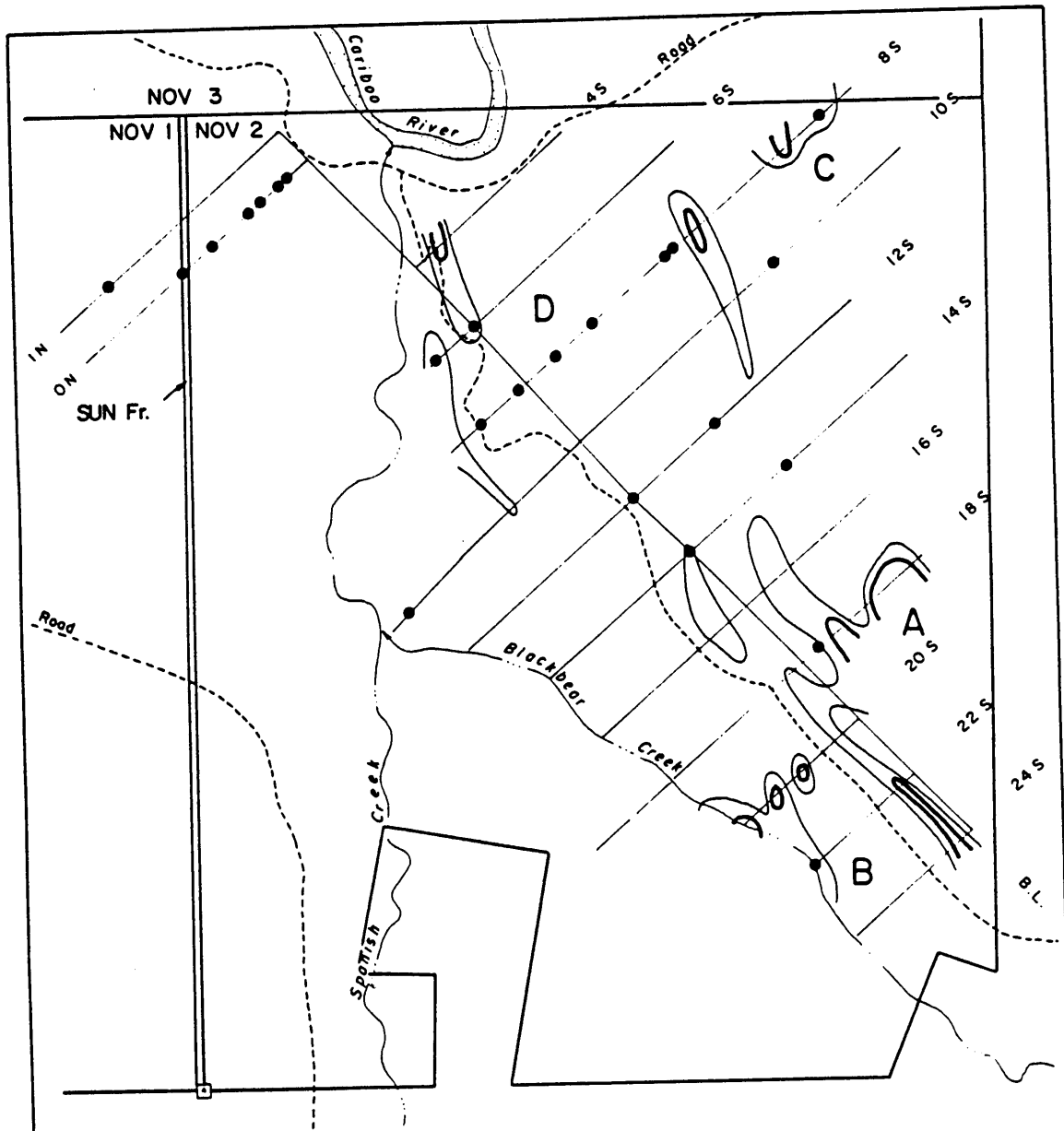
- SOIL GOLD (> 35 ppb)
- 2.4 ppm SILVER
- 1.7 " "
- - - 1.3 " "



CHONG

<b>MALCOLM RESOURCES LTD.</b>	
<b>NOV. CLAIMS</b>	
<b>SUMMARY SOIL GEOCHEMISTRY - Ag</b>	
SPANISH CREEK, LIKELY AREA	
N.T.S. 93A/II CARIBOO M.D., B.C.	
DATE: OCT. 1987	FIGURE NO. 6
NEVIN SADLER - BROWN GOODBRAND LTD.	





**LEGEND**

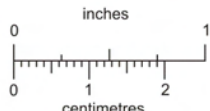
- SOIL GOLD (> 35 ppb)
- 50 ppm LEAD
- 40 " "

0 200 400 600 metres

<b>MALCOLM RESOURCES LTD.</b>	
<b>NOV. CLAIMS</b>	
<b>SUMMARY SOIL GEOCHEMISTRY - Pb</b>	
SPANISH CREEK, LIKELY AREA N.T.S. 93A/11 CARIBOO M.D., B.C.	
DATE: OCT. 1987	FIGURE NO. 7
NEVIN SADLIER - BROWN GOODBRAND LTD.	

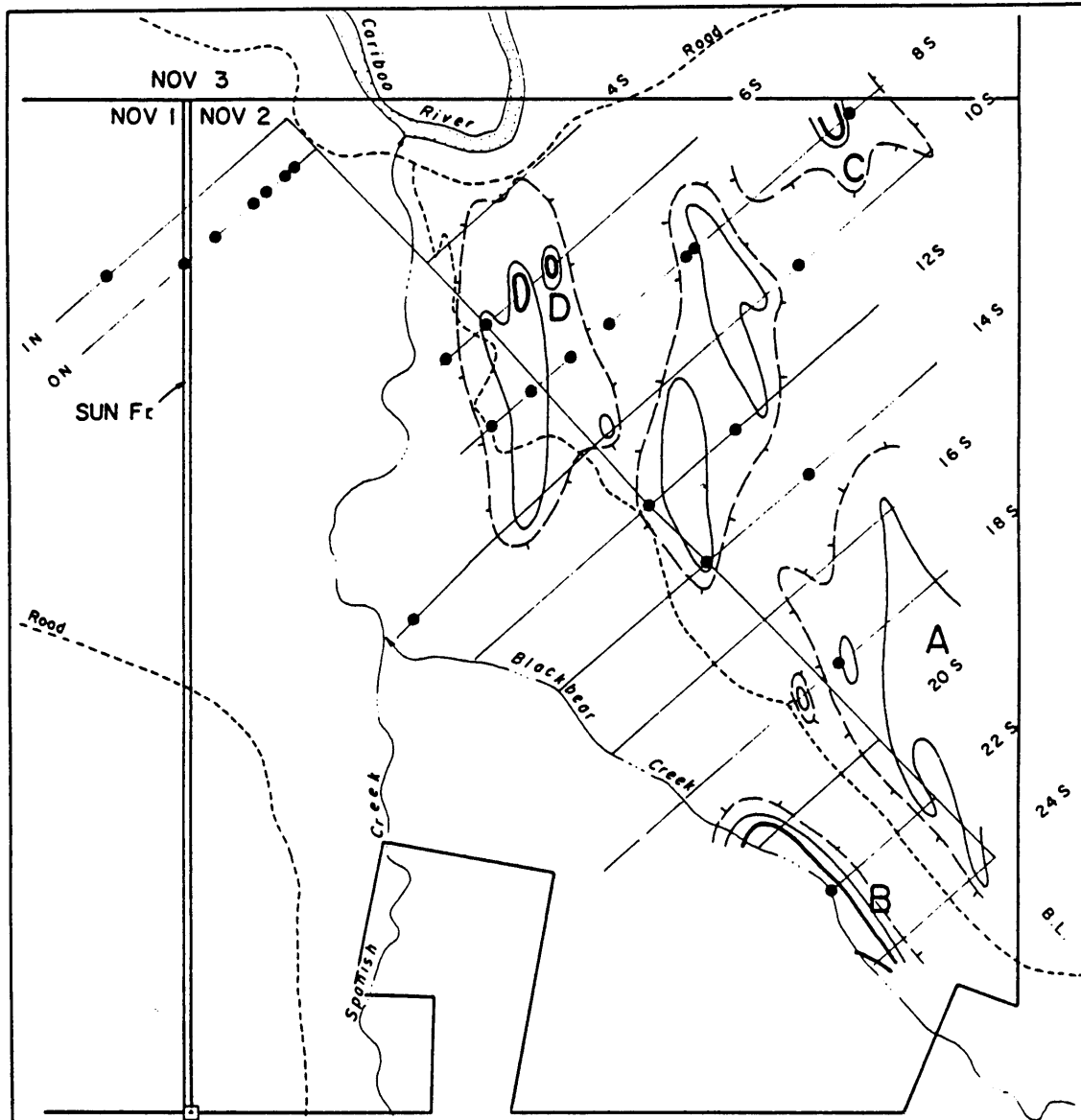


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**LEGEND**

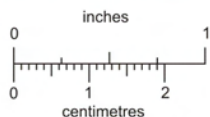
- SOIL GOLD (> 35 ppb)
- 295 ppm ZINC
- 175 " "
- - - 145 " "

0 200 400 600 metres

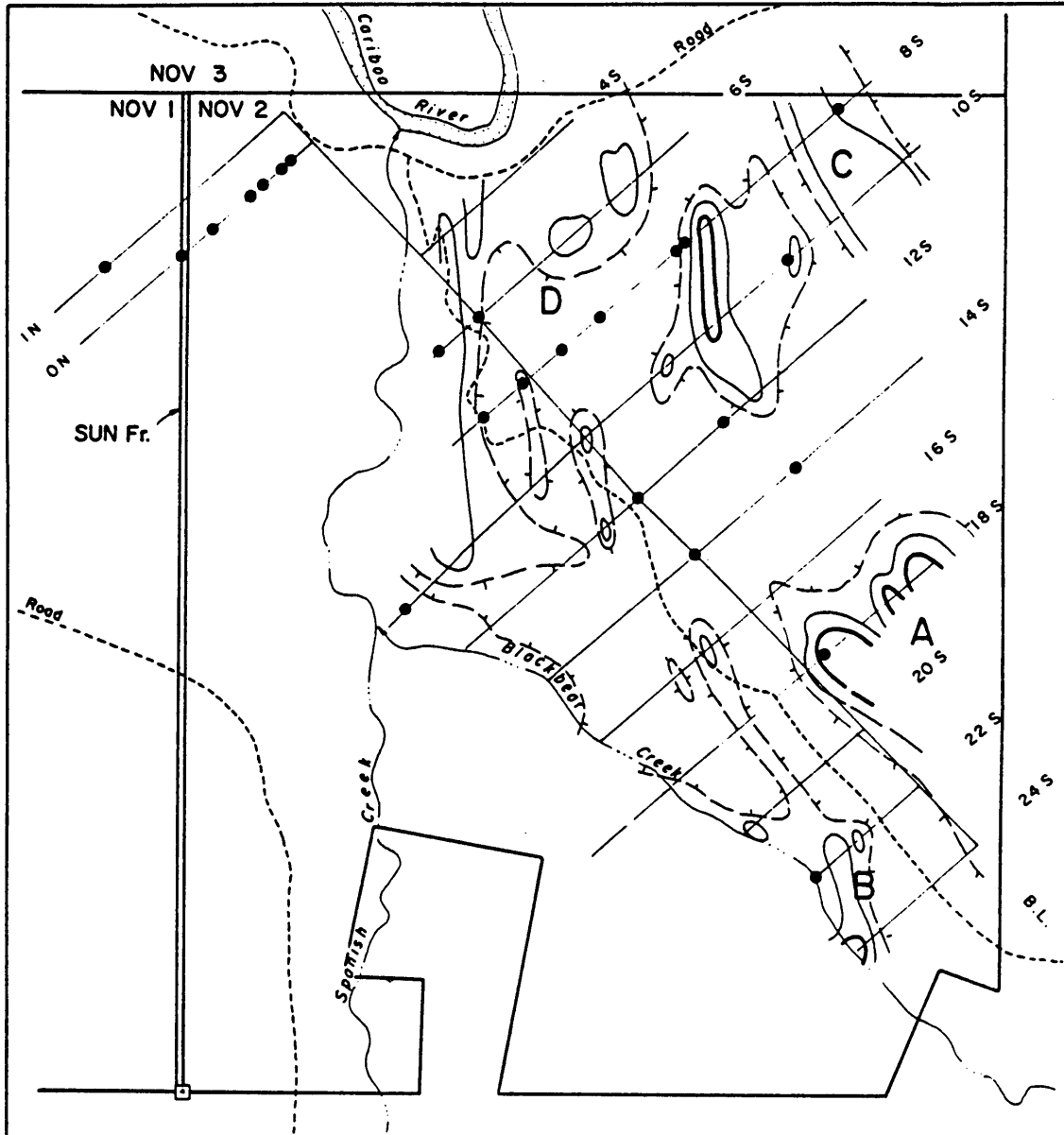


<b>MALCOLM RESOURCES LTD.</b>	
<b>NOV. CLAIMS</b>	
<b>SUMMARY SOIL GEOCHEMISTRY-Zn</b>	
SPANISH CREEK, LIKELY AREA	
N.T.S. 93A/11 CARIBOO M.D., B.C.	
DATE: OCT. 1987	FIGURE NO. 8
NEVIN SADLER - BROWN GOODBRAND LTD.	

CHONG



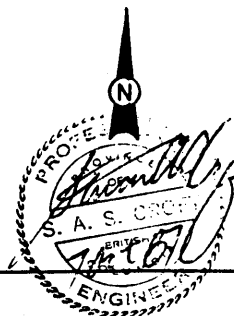
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**LEGEND**

- SOIL GOLD (> 35 ppb)
- 100 ppm STRONTIUM
- 40 " "
- - - 25 " "

0 200 400 600 metres



**MALCOLM RESOURCES LTD.**

**NOV. CLAIMS  
SUMMARY SOIL GEOCHEMISTRY - Sr**

SPANISH CREEK, LIKELY AREA

N.T.S. 93A/11

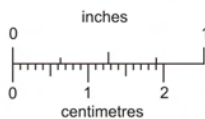
CARIBOO M.D., B.C.

DATE: OCT. 1987

FIGURE NO. 9

NEVIN SADLER - BROWN GOODBRAND LTD.

CHONG



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The strongest of these areas (Zone "A") is situated near the eastern boundary of the claims on Line 18 S. Here, highly anomalous values in Ag and Sr correlate to moderately elevated Pb and Zn. Although arsenic in soil is weak and erratic elsewhere, the element is present in anomalously high amounts in this area. Zone A is generally restricted to the northern portion of Line 18. The anomaly is open to the southeast and may be expressed on the northern ends of Lines 22 S and 24 S. Data on Line 16 S indicate that the anomaly is truncated to the northwest.

Zone B is situated within Blackbear Creek canyon at the southwestern end of Lines 20 S, 22 S and 24 S. Because of the steepness of the terrain, this anomaly is considered indicative of a very localized feature. Very strongly anomalous values in zinc correspond with weakly to moderately elevated Ag, Sr, and Pb along a northwesterly trending geochemical feature 60 to 100 m in width which parallels the creek for approximately 600 m. The values substantiate a weakly anomalous gold value at the end of Line 22 S. Abundant quartz float was noted on a geological traverse of this anomaly.

Zone C is an area situated on the northeastern ends of Lines 8 S and 10 S characterized by weak to moderate anomalies in each of the tracer elements. Although the extent of the anomalous zone is somewhat limited, it is highlighted by a centralized, strongly anomalous single-station gold value.

Zone D is characterized by anomalous values in each of the tracer elements although none exhibits a particularly good correlation with the others. The broad area in the northwestern area of the grid is typified by the geochemical patterns displayed by zinc which shows a

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- 27 -

series of elongate, moderately anomalous bands traversing the Zone on a northwest to northerly trend. Strongly anomalous values, notably in Ag on Line 4 S, are present though discontinuous. Spotty, weakly anomalous single station gold values occur throughout the zone. The thick layer of alluvial gravels mapped in this area will have a profound affect on geochemical response.

### **Interpretation**

Despite the limited extent of gold within soil samples collected on the NOV claims, pathfinder elements silver, lead, zinc and strontium exhibit strongly coincident anomalous patterns in a contour line run along Spanish Canyon, and at four other areas elsewhere on the 1987 grid.

Zone A is a substantial geochemical anomaly with a signature similar to that of rock specimens from Spanish canyon which proved to contain economic grades of gold mineralization. As overburden cover in this immediate area is relatively thin, the anomaly is probably indicative of a nearby source. Conceivably, the anomaly results from erosion of a large quartz vein mapped near the eastern boundary of the property and traced northwestward into the grid area.

The geochemical anomaly in Zone B is probably a direct result of shedding from a nearby geological structure. As the anomaly is situated within locally derived soils from near the base of the deeply incised Blackbear canyon, the anomaly, particularly that defined by zinc directly overlies the structure. Again, the geochemical signature is similar to Spanish Canyon-type of gold mineralization.

Although anomaly C is somewhat limited in extent, it is significant because the coincident geochemical anomalies in the pathfinder elements support a strongly anomalous gold value. Erratic, highly anomalous gold values were observed elsewhere on the property lacking a correspondence with pathfinder elements is considered indicative of a placer gold-type geochemical response. However, at Zone C, a high tracer element correspondence is observed.

Zone D is an area mantled by fluvial gravels tens of meters thick at some locations. Complex glacial and fluvial processes have probably resulted in the elongate northerly to north-northwesterly trending anomalies observed in this area. Silver in particular exhibits an anomalous pattern observed over several lines. The distribution of anomalous geochemical patterns is consistent with down-ice dispersion from glaciers draining Spanish Creek valley.

#### 4.3 Geophysical Survey

A VLF-EM survey was conducted on the eleven north-easterly oriented lines east of Spanish Creek at 10 m intervals. Coverage totalled 10 km utilizing the Seattle, Washington signal and approximately 4 km were surveyed when the instrument was tuned to receive Annapolis, Maryland.

An orientation magnetometer survey was also conducted on Line 18 S. Because a maximum magnetic contrast of approximately 150 gamma was observed over the length of the line, no further work was conducted using this technique.

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## Results

The VLF-EM data were processed and analysed by GeoSci Data Analysis Ltd. Pezzot (1987) discusses the results of the VLF-EM survey as follows:

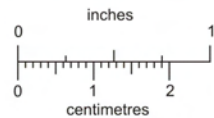
The VLF-EM data gathered across this portion of the NOV 2 claim does not indicate the presence of any highly conductive, near-surface bodies. Individual dip angle anomalies observed are reflection of small and subtle, near surface increases in conductivity. The relative field strength data reflects both regional trends and smaller, discreet conductivity zones.

Only one, weak response, indicative of increased conductivity, was observed in the Annapolis frequency data. This anomaly is most clearly evident on the profile map (Figure 11) as a dip angle crossover and weak field strength increase on Line 400S at station 1730E and coincides with a contact zone mapped in the Seattle frequency data. A definitive shift in the Annapolis field strength measurement immediately east of this position supports a geological contact interpretation.

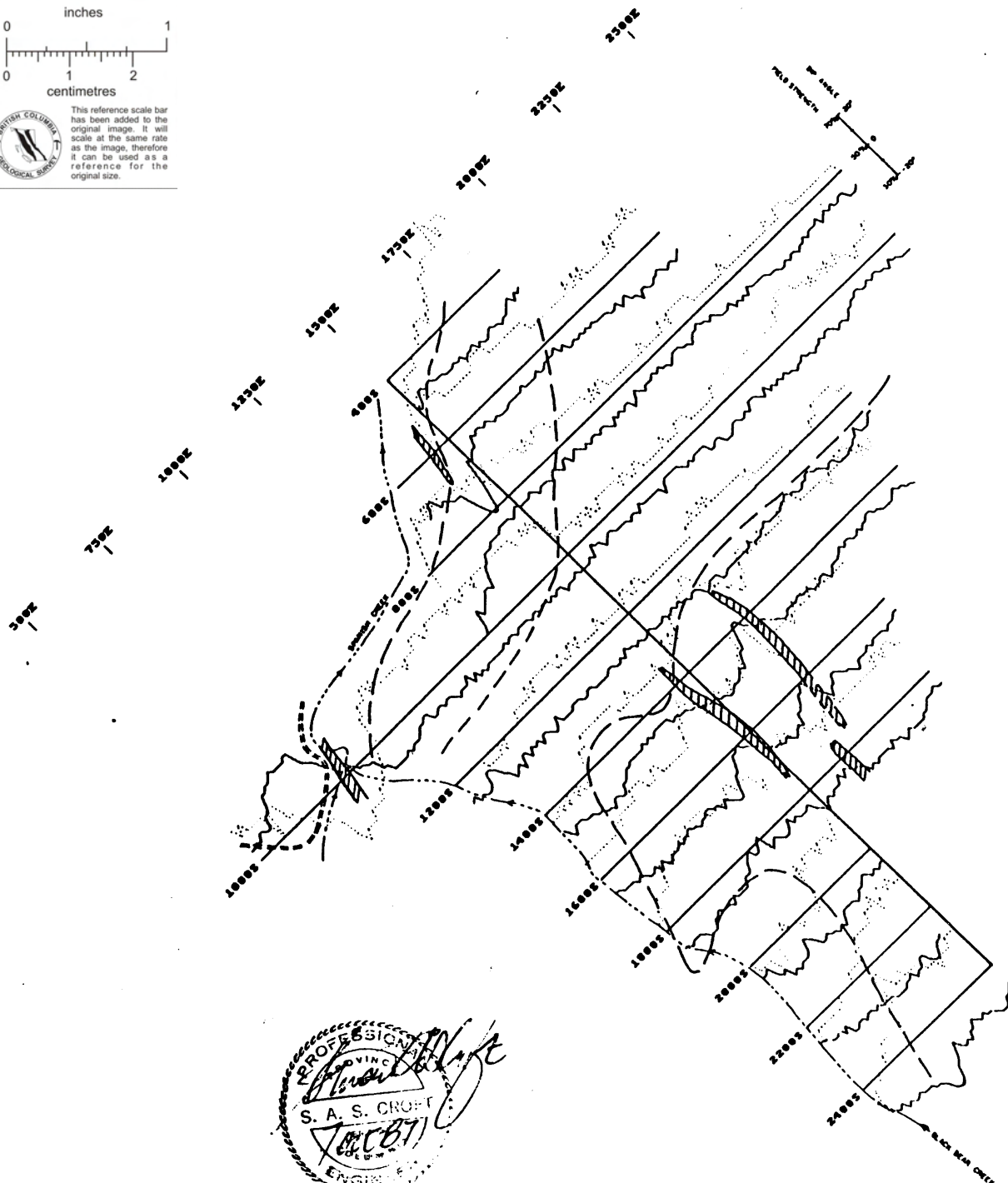
The majority of the lineations indicated are extremely weak and within the noise envelope of this system. The field strength measurements suggest a relatively uniformly conductive halfspace in this area with the exception of a subtly more resistive zone on Line 400S near station 1850E.

Five significant conductivity anomalies are observed in the Seattle frequency data as delineated on Figure 10. The most interesting of these are two, or possibly three lineations, grouped between 1500E and 1750E from Lines 1400S to 1800S. These anomalies show significant correlation between dip angle and field strength responses to be considered weak but valid conductivity trends. They also correlate with EM anomalies detected by the airborne survey [Shell Drake, 1981].

The strongest dip angle anomaly measured is observed on the southwest end of Line 1000S at the confluence of Blackbear Creek and Spanish Creek. This anomaly coincides with a strong low in the relative field strength measurement which continues to the north, being observed on the southwest end of Lines 800S, 600S and 400S. This trend closely follows Spanish Creek and is likely related to a combination of the



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

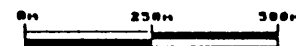
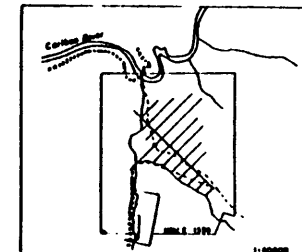


**KEY**  
**INSTRUMENT:** Sabro EM-27  
**STATION:** Seattle, B.C. (34.8 kHa)  
**PLOTTED VALUES:** Solid Line -> Dip angle (°)  
 Dashed Line -> Field strength (kV)

Facing Direction: Dip angle -> NE  
 Field Strength -> SE

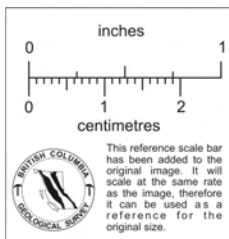
Interpreted Conductor Axis  
 Interpreted Contact

NBS: 93A/11M



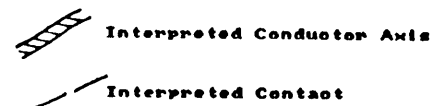
PROFESSIONAL  
 ENGINEERING  
 S. A. S. CROFT  
 (Seal and signature)

MALCOLM RESOURCES LTD.	
"NOV" GROUP MINERAL CLAIMS LIKELY B.C.	
VLF-EM SURVEY STACKED PROFILE MAP (Seattle)	
Survey by: NEVIN SADLIER-BROWN GOODBRAND LTD.	
Processing by: GEOSCI DATA ANALYSIS LTD.	
DATE: SEPT. 13/1987	FIG: 10

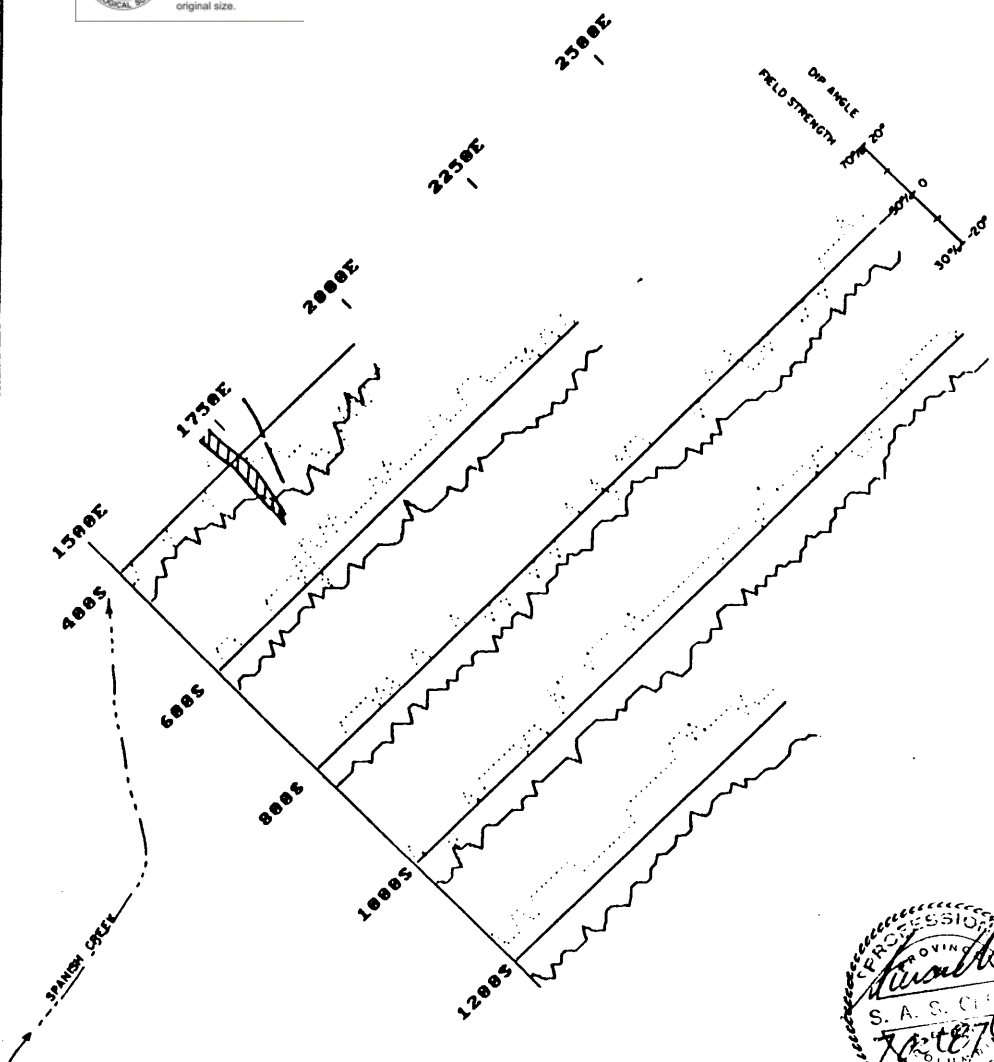
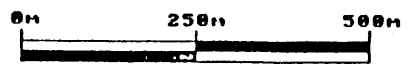
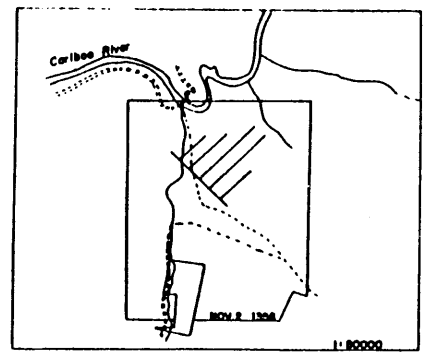


**KEY**  
**INSTRUMENT:** Sabre EM-27  
**STATION:** Annapolis, Md (21.4 kHz)  
**PLOTTED VALUES:** Solid Line -> Dip angle (°)  
 Dashed Line -> Field strength (X)

**Facing Direction:** Dip angle -> SE  
 Field Strength -> SW



NTS: 93A/11W



<b>MALCOLM RESOURCES LTD.</b>	
<b>"NOV" GROUP MINERAL CLAIMS LIKELY B.C.</b>	
<b>VLF-EM SURVEY STACKED PROFILE MAP (Annapolis)</b>	
Survey by: <b>NEVIN SADLIER-BROWN GOODBRAND LTD.</b>	
Processing by: <b>GEOSCI DATA ANALYSIS LTD.</b>	
DATE: SEPT.15/1987	FIG: 11

GeoSci Data Analysis Ltd.

To accompany the geophysical report on the Nov. claims



topographic influence of the drainage system and the underlying geology. The airborne magnetic survey indicates a change from the regional northwesterly striking geology to a northerly orientation in this area. The combination of these results strongly suggests that Spanish Creek is following a geological break and that the anomalous dip angle measurement observed on Line 1000S and another anomalous response noted on the southwest end of 600S are all related.

The Seattle frequency field strength measurements indicate northerly trending regional structures. Three areas of field strength lows are delineated. The strongest is a narrow feature which closely follows Spanish Creek along the southwest ends of Lines 1000S through 400S. The second is a broader feature extending from the southwest ends of Lines 1400S and 1200S to the northeast corner of the grid. The third feature is located on the southwest ends of Lines 2000S through 2400S and may be related to Blackbear Creek.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Conclusions

Recent investigation of the NOV Claim Group further confirms the property as an excellent exploration target. Numerous positive attributes, including its geological setting within a sequence known elsewhere in the region to host economic gold mineralization, the presence of gold and silver bearing structures on the property, and the well established access to the area suggest that the property is one of strong merit.

Recent exploration has confirmed the presence of a sequence of quartz vein structures containing gold mineralization up to 0.818 oz Au/ton (though values as high as 1.84 oz Au/ton have been obtained in earlier work). Exploration conducted on the eastern portion of the NOV claims during August 1987 indicate that mineralized quartz vein structures extend southeastward, running roughly parallel to Blackbear Creek. Several large quartz vein exposures northwest of Spanish Canyon help confirm that the mineralized structures have continuity along strike. Although assays to date have proven erratic, the structures have yet to be adequately tested.

The results corroborate earlier work which indicates that the structure is expressed as a sequence of quartz veins situated along a broad northwest-southeast trending zone within strongly deformed graphitic phyllite. The geological setting of the NOV Claim Group is very similar to those of the Frasergold deposit, 65 km to the southeast and, 5 km to the south, the CPW prospect.

Gold mineralization occurs most commonly in the vicinity of intersecting quartz veins, particularly those that are contained within an envelope of hydrothermal sericitic-talcosite alteration of the surrounding phyllites. Argentiferous galena and associated pyrite within a calc-silicate selvage is commonly present in samples assayed as containing economic gold values. Gold mineralization appears to be strongly associated with galena in samples collected to date.

The distribution and configuration of geochemical anomalies in soils is strongly influenced by the complex Quaternary history of the region. The dispersion of soil anomalies is most likely affected by glacial processes. Notable is a lead-silver anomaly originating near the eastern boundary of the claims. A dispersion train extends north-northwestward for approximately 1 km before a mantle of Quaternary alluvium deposited by the Cariboo River obscures its definition. Shedding into the alluvium-talus may be indicated by stronger silver concentrations occurring within exposed river terraces although, because the source of material comprising this geologic unit is uncertain, the credibility of this anomaly is somewhat questionable.

Elsewhere on the property, particularly on a grid installed by previous operators west of Spanish Creek, similar dispersion trains are observed. Of reconnaissance work performed on Dome Exploration's Quesnel River gold prospect, Fox et al., 1987 report that significant down-ice dispersion trains have been identified, and that "geochemical sampling of tills proved to be an effective prospecting tool that lead directly to the discovery of the two deposits".

Contour soil sampling along Spanish Creek canyon appears to be very effective at identifying localized gold mineralization. Strongly anomalous gold values and a distinctive geochemical signature were

obtained in soil samples collected below a known auriferous quartz vein structure. Spurious geochemical effects resulting from such processes as glaciation, overburden masking, and placer deposit contamination are avoided, making contour sampling particularly effective in areas of thin soil covering subcrop. Because the sampling technique is largely unaffected by erosional processes other than localized weathering, soil distribution should correlate directly with gold occurrences. Contour sampling in the steep canyons formed by Spanish and Blackbear Creeks may well prove to be an effective tool at identifying further gold occurrences in these areas. Unfortunately, extensive overburden covering much of the rest of the property will limit a broader application of this effective technique.

Of the VLF-EM survey, Pezzot (1987) concludes:

The VLF-EM data reflects a northerly bias to the geological structures underlying this grid. This contradicts the dominant northwest strike mapped elsewhere in the claim group but is supported by the results from a previous airborne magnetic survey. This change in the regional strike appears to be a direct result of a northerly striking fault zone which is closely followed by Spanish Creek and evident as an airborne magnetic gradient and surface VLF-EM field strength low.

Two increased conductivity zones are mapped in the Seattle frequency data along this structure: at line 1000S station 750E and line 600S station 1450E. A third conductivity zone mapped by the Annapolis frequency on line 400S station 1750E is also likely related to the fault lineation.

A series of anomalous conductivity responses are observed in the Seattle frequency data on line 1400S to 1800S between stations 1500E and 1750E. These anomalies are relatively weak features mapped by a previous airborne survey. A reoccurrence of the phyllites mapped to the northwest could cause anomalies of this nature.

The northwestward extensions of geochemical anomaly "Zone A", located primarily on Line 1800, correspond reasonably closely to these conductive zones. Reconnaissance mapping indicates that the entire area is underlain by phyllites and accordingly, the conductors appear representative of a conductive horizon within the phyllites such as a graphitic horizon or, possibly, sulfide mineralization. It is encouraging to note that anomalous conductivity response was observed in the vicinity of the Spanish Canyon Zone.

The northward trending geochemical dispersion patterns correspond well with the alignment of the field strength anomalies noted by Pezzot (1987). He indicates that the north-south aligned subtle variations in field strength in the central portion of the grid may also be attributable to the VLF-EM response of fluvial gravel sediments. A follow-up survey will be required to investigate these responses.

## 5.2 Recommendations

Exploration should proceed on the NOV Claim Group with the objective of identifying a Frasergold-type phyllite hosted precious metal deposit. Gold mineralization of both a sequence of northwesterly-trending quartz veins and shears, and of associated silicified, altered phyllites should be investigated by trenching, drilling, and ongoing geological and geophysical evaluation.

The next phases of exploration should be conducted with the specific objectives of:

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- 37 -

- identifying and evaluating known mineralized structures in the vicinity of the Spanish Creek - Blackbear Creek confluence, and;
- delineating outward extensions of these mineralized structures.

A phased work program should be conducted firstly in the immediate vicinity of the Spanish Canyon showings. It should include additional contour soil sampling to identify new targets and to further delineate those identified by the current survey. This work should be followed by trenching and drilling to evaluate known gold-bearing structures. As part of this phase, a follow-up geological investigation of anomalous areas identified by the current survey, particularly in the east-central area of NOV 2, should be conducted.

Contingent upon favourable results from the first phase, a Second Phase of exploration designed to test the extent of known precious metal mineralization should be implemented. Such a program would involve an intensified drilling and trenching effort, and detailed geological mapping and sampling. Geophysical and geological surveys should also be expanded outwards in order to re-assess the findings of previous operators in the light of the latest information.

#### Cost Estimate

Subject to minor budget reappportionments which may result from an inherently flexible field program, the cost of the proposed exploration is estimated as follows:

##### Phase 1

Soil sampling	\$ 1,800
Trenching	8,000
Drilling	22,500
Geological supervision	9,600
Support costs (meals, accom., rentals)	6,900
Assaying and analysis	6,600
Administration, reporting	<u>4,600</u>

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SUB-TOTAL            \$60,000



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Phase 2

Trenching	\$ 11,500
Drilling	50,000
Geological supervision	13,300
Geophysical surveys	5,000
Assaying	1,200
Support costs (meals, accom., rentals)	12,000
Administration, reporting	<u>7,000</u>
SUB-TOTAL	<u>\$100,000</u>
TOTAL	<u>\$160,000</u> =====

Respectfully submitted

NEVIN SADLIER-BROWN GOODBRAND LTD.

  
Stuart A.S. Croft, P.Eng.  


7 October 1987

REFERENCES

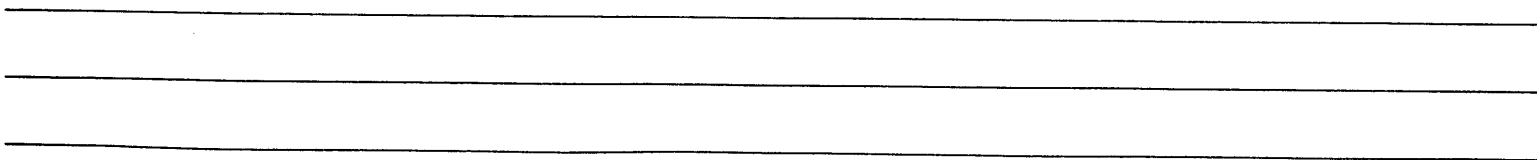
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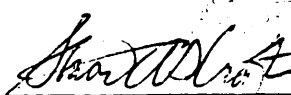
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CERTIFICATE AND STATEMENT OF QUALIFICATIONS

I, Stuart A.S. Croft, hereby certify that:

1. I reside at 1340 Inglewood Ave., West Vancouver, B.C. V7T 1Y9.
2. I am a consulting geologist with the firm of Nevin Sadlier-Brown Goodbrand Ltd., 401-134 Abbott Street, Vancouver, B.C. V6B 2K4.
3. I hold a B.A.Sc. in Geological Engineering from the University of British Columbia and have been practicing my profession since 1981.
4. I am a registered member of the Association of Professional Engineers of British Columbia (Geological).
5. This report is based upon knowledge of the NOV claim group obtained during a personal examination of the property June 9, 1987, and upon information obtained during the course of an exploration program on the NOV claim group. I personally supervised and participated in work conducted in August, 1987 by Nevin Sadlier-Brown Goodbrand Ltd., the findings of which are subject of this report.
6. I hold no interest, direct or indirect, in the properties or securities of Malcolm Resources Ltd., nor do I expect to receive such interest at any time.
7. I hereby consent to the use by Malcolm Resources Ltd. of my name and of this report, in its entirety, in a Statement of Material Facts or such other documents as may be required by the Vancouver Stock Exchange, the Superintendent of Brokers, Insurance and Real Estate of B.C. or similar regulatory authorities of the Province of British Columbia.


  
Stuart A.S. Croft, P.Eng.

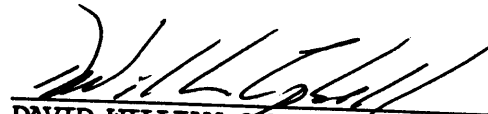
October 7, 1987

**CERTIFICATE**

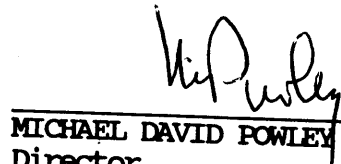
The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by the Securities Act and its regulations.

DATED at Vancouver, British Columbia this 9th day of March, 1988.

  
\_\_\_\_\_  
DAVID WILLIAM CAMPBELL  
Chief Executive Officer

  
\_\_\_\_\_  
DAVID WILLIAM CAMPBELL  
Chief Financial Officer

  
\_\_\_\_\_  
HAROLD STEVENSON  
Director

  
\_\_\_\_\_  
MICHAEL DAVID POWLEY  
Director

**PROMOTERS**

  
\_\_\_\_\_  
DAVID WILLIAM CAMPBELL

