

85-416-13803

**REPORT ON EXPLORATION AND DEVELOPMENT WORK
ON THE MISSION I CLAIM (16 UNITS)
GREENWOOD MINING DIVISION
BRIDESVILLE, B.C.
MAY 17 - 19, 1985**

**N.T.S. Ref. 82 E / 3E
Latitude 49° 02' North
Longitude 119° 06' West**

**RECORDED OWNER - RANDY C. MOLL
OPERATOR - BRITISH CHALLENGER MINING CORPORATION**

By

**M.P. DICKSON, P. ENG.
ADTEC MINING CONSULTANTS INCORPORATED
811 - 543 Granville Street
Vancouver, B.C.
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**(604) 667-1074
GEOLOGICAL BRANCH
ASSESSMENT REPORT**

June 9 1985

13,803

TABLE OF CONTENTS

	Page
Introduction	1
Location	1
Physiography	1
Topography	2
Climate	2
Access	2
Property	2
History	2
Economic Assessment	4
Physical Work	5
Prospecting	5
Geochemical Survey	5
Geological Mapping, Rock Sampling and Assaying	6
References	7
Certificate	8

Figures

Figure 1	Property Location
Figure 2	Claim Location Map
Figure 3	Map of the Area Prospected
Figure 4	Map Showing Physical Work
Figure 5	Geochem Plot Au
Figure 6	Geology, Rock Sample Plot and Chain and Compass Survey

Appendices

Appendix 1	Rock Sample Analysis With Location and Description
Appendix 2	Geochem Analysis and Sample Locations
Appendix 3	Preparation and Analysis for Soil Geochem (Chemex)
Appendix 4	Itemized Costs
Appendix 5	Statement of Exploration and Development

INTRODUCTION

Adtec Mining Consultants Incorporated was engaged by British Challenger Mining Corporation to propose a small work program and to carry out same for the purpose of completing annual assessment requirements on the above property.

The proposed program was to act as a follow-up of last year's program and the work was performed by the writer, M.P. Dickson, P. Eng. and assistant J.E. Hill, between May 17th and May 19th, 1985 and consisted of brush clearing from the main access roads, general prospecting, minor geological mapping, and geochemical soil sampling.

LOCATION

The Mission I claim is situated in the Greenwood Mining Division, 2.5 kilometers east of the town of Bridesville, just south of Highway #3, near the International Boundary. The northwest corner of the property lies just south of the main Rock Creek Bridge on #3 Highway, where the legal corner post is located at the southwest corner of the structure.

Approximate co-ordinates for the centre of the claim block are $49^{\circ} 02'$ north latitude and $119^{\circ} 06'$ west longitude, N.T.S. map sheet 82 E / 3E on a scale of 1:50,000 covers the property.

Rock Creek, which flows east from the property to join the Kettle River, crosses the northern most part of the claim.

PHYSIOGRAPHY

The Mission I property lies in the physiographic transition zone between the Cascade Mountain chain to the south and the Interior Plateau to the northeast.

TOPOGRAPHY

Topographically, the area is a glaciated and maturely eroded highland with well rounded slopes which are partially covered by a thin veneer of glacial material. Major drainage channels are deeply incised with extensive high level stream terraces of fluviatile glacial origin. Elevations range from 945 to 1,200 metres.

CLIMATE

The Bridesville area has an arid climate with vegetation that consists of scrub grasses and extensive stands of fir trees.

ACCESS

Access to the property by vehicle is easily gained by following a dirt road, which leaves Highway #3 at a point 20 kms east of Bridesville, south for 1.2 km to the old Great Northern Railway bed which leads to the property to the east and crosses the northern 1/3 of the claim on its way to Rock Creek. Several old logging roads provide access to most of the property, but need further rehabilitation to allow easy access by 4 wheel drive or all terrain vehicles.

PROPERTY

The Mission I mineral claim consists of 16 units. The legal corner post for the claim lies in the extreme northwest corner with four units to the south and four units to the east.

HISTORY

Mining history of the Rock Creek - Bridesville area dates back to the discovery of placer gold at the junctions of Kettle River and Rock Creek in the early 1860's.

As a consequence of this, several lode gold deposits were found in an area lying mostly north of the Mission I claim.

However, even with the above discoveries, very little work is recorded on the property until 1955 when claims were staked on pyrite and pyrrhotite showings in sediments on ground which was then known as the "Old Nick Claims". This property then covered most of what would now be the northern 1/3 of the Mission I claim.

The "Old Nick Property" was examined several times during the next few years, but the most extensive work was done in 1966, 1967 and 1968 by Utica Mines, Copper Ridge Mines and Newmont Mining Corporation of Canada.

Extensive trenching, percussion and diamond drilling was carried out verifying a rather significant tonnage of nickel bearing pyrite-pyrrhotite sulphide mineralization in pyrometasomatized quartzitic sediments. Nickel grades for the deposit were reported to lie in the 0.15 to 0.25% range and it was felt that good potential existed for developing additional tonnage.

However, the claims were allowed to lapse as metallurgical test work conducted at that time indicated that only 57% recovery could be achieved through a rather complicated extraction process.

As far as is known, very little has been done on the property since that time. The area in general, has received some attention as of late because of renewed interest in precious metals and the fairly large find of gold bearing sediment(?) in Wenatchee, Washington, U.S.A.

Mr. Leonard Bourgh staked the Mission I claim on May 25th & 26th of 1983 with the recorded date being May 27, 1983 (Record No. 3744).

Mr. Bourgh subsequently sold the property through Bill of Sale to Mr. Randy C. Moll, who in turn has optioned the property to British Challenger Mining Corporation of Vancouver, B.C., the present operator.

ECONOMIC ASSESSMENT

Exploration by former owner, operators on the northern part of the Mission I claim has outlined significant tonnage of nickel bearing sediments in the 0.15 - 0.25% range. This program also indicated disseminated, but fairly wide spread pyrite-pyrrhotite mineralization with accompanying lower nickel values over a rather thick series of sediments.

This mode of occurrence for nickel is considered to be rather unique in that although ultrabasic intrusives are present in the area, migration from them has never been known to be so extensive or removed as has been noted on this property. The significance of this has not been dealt with, but the author proposes that it is possible that the mineralization is original in the sediments.

Silica deposits to the south near the International Boundary could occur as original sedimentary deposits as well, and like the nickel deposit, are indications of diverse differentiation processes at work during the geological period of deposition.

Vein type deposits of gold that occur north of the claim and south of the International Boundary Border speaks well for the possibility of this type of mineral occurrence on the Mission I claim as well.

The author and Mr. George P. Krueckl, P. Eng., have further dealt with the economic assessment of the property in their report titled Report on the Mission I Property, dated February 3, 1984 and have recommended a program of exploration to further investigate the properties potential.

Due to general economic conditions, British Challenger Mining Corporation has not been able to raise funds to date to carry out this recommended program, but intends to do so when funds become available. Meanwhile, the company wishes to keep the claim in good standing with minimum expenditure on work that will be beneficial to later exploration.

PHYSICAL WORK

The main access through the property along the old railway bed was found to be blocked by fallen trees and had to be recleared this year again. In addition, 1,400 metres (Figure 4) of old logging roads were cleared to the south and west for passage by vehicle for 500 metres and the remainder allowing easy access by foot to a new logging area which enters the property for another main access. This should be further investigated and placed on a main base map when funds are available to do same. This 1,400 metres of access road was surveyed by chain and compass for location for present work.

PROSPECTING

The remaining part of the property not prospected in 1984 (Figure 3), representing some 250 hectares in size received general prospecting by way of roads, trails, etc. Emphasis was placed on locating float or bedrock similar to material found last year which indicated gold assay values in the 0.026 ozs./ton range. Some material of like nature was found but similar gold values were not found.

GEOCHEMICAL SURVEY

A total of 14 soil samples were collected for geochemical analysis over 0.6 line kms. Samples were collected with a mattock on pace and compass lines at 30 meter intervals. In all cases the B horizon was taken and was reached at a depth of from 20 to 25 cms with an organic cover of approximately 5 cms throughout most of the survey. Soils were generally fine and sandy with colours being mainly in the light to medium brown ranges.

The samples were analyzed by Chemex Labs Ltd. of North Vancouver for Au. Sample preparation and analysis was done by standard, reliable methods. (Refer to Appendix 3 for details.) Results of the analysis are plotted on Figures 5.

Gold values were low, less than 5 ppb except for one which ran 20 ppb. The significance of this higher than average value is unknown, but acquires further investigation.

Appendix 2 shows the reported values with sample locations.

GEOLOGICAL MAPPING, ROCK SAMPLING AND ASSAYING

Minor geological mapping was carried out while clearing the old logging road running south and west from the east end of the railway bed (see Figure 6). Rock samples of float which was similar to last year's gold bearing boulder were collected for analysis along the traverse, but they did not return similar values.

In addition, a rock sample of sulphide from the old nickel showings was taken to determine platinum content to make sure that this metal was not of sufficient quantity to interfere with fire assaying for gold values.

The results of analysis, performed by Chemex Labs are listed in Appendix 1 with map location reference and sample descriptions. Appendix 3 refers to analytical methods.

REFERENCES

1. J.A. Coope, W.M. Dolan, C. P. Costin of Newmont Mining Corporation - Geological, Geochemical and Geophysical Reports on Exploration of the Nickel Ridge Property, May 7, 1968.
2. W.H. Cannon. Magnetometer Survey, Budy Group, June, 1967.
3. A.R. Bullis, P. Eng. Geological Report on E.K. 281 (5) Claim, February 24, 1977.
4. Reports of the Minister of Mines B.C.

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1933 Pages A156 to A158
1957 Page 35 & 36
1958 Page 32 & 33
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1961 Page 63
5. Division of Mines and Geology - Bulletin No. 42, State of Washington, 1955, pages 70, 71, 72, 72, 73, 80, 81, 82 and 83.
6. Washington Geological Survey - Bulletin No. 5, 1911, Pages 50 & 51.
7. Krueckl, G.P., P. Eng. and Dickson, M.P., P. Eng., Report on the Mission I Property, Greenwood Mining Division, February 3, 1984.
8. Dickson, M.P., P. Eng., Report on Physical Work, Prospecting, Geological Mapping and Geochemical Surveying on the Mission I Claim (16 Units), May 23, 1984.

CERTIFICATE

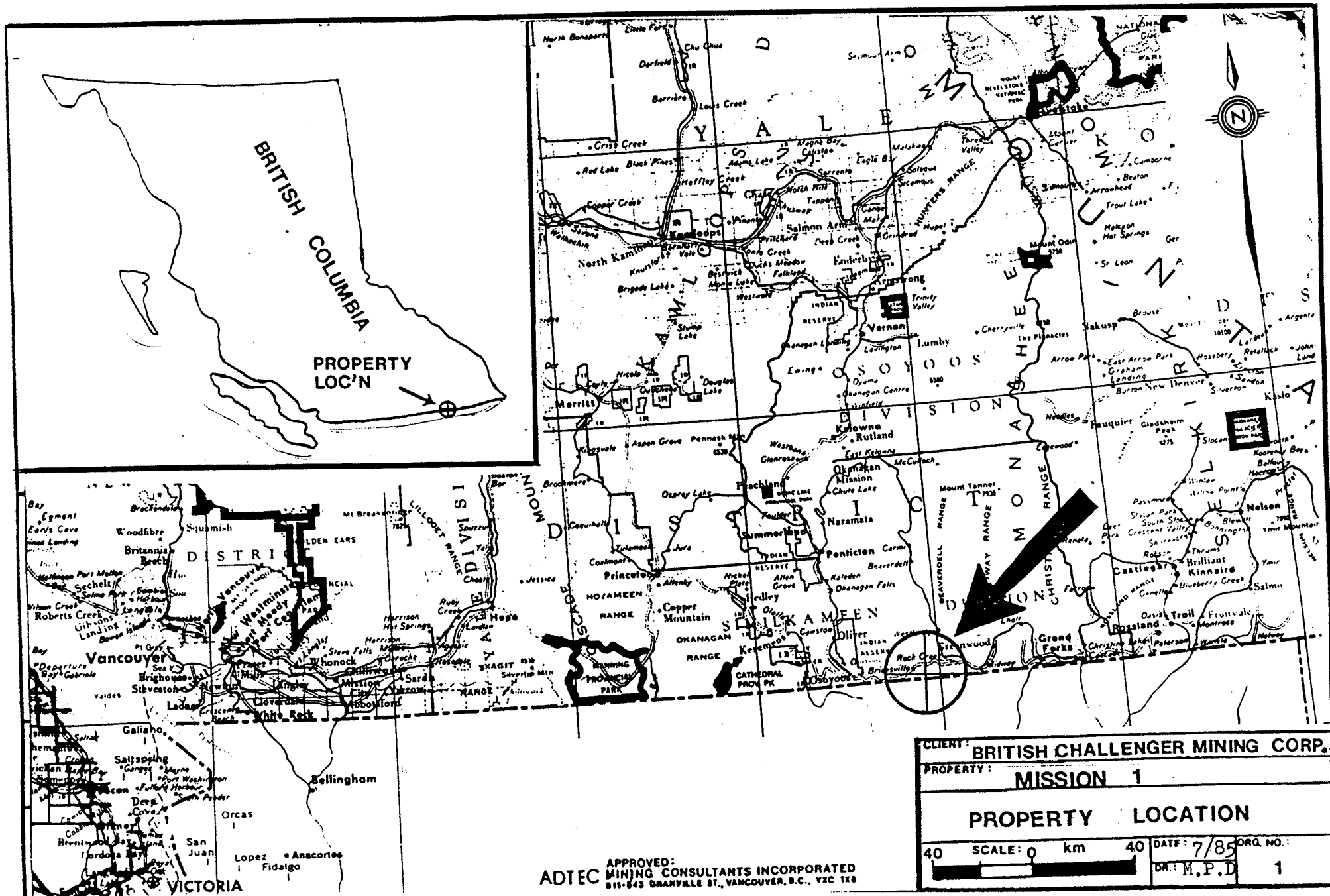
I, Melvin Plenny Dickson of 2731 Mathers Avenue, in the City of Vancouver, in the Province of British Columbia, Canada hereby certify as follows:

1. I am a graduate of Mount Allison University, Sackville, New Brunswick and hold a Bachelor of Science Degree in Geology.
2. I am a Registered Professional Engineer of the Province of British Columbia Registration No. 11456.
3. I have actively practised my profession on a full-time basis in mineral exploration, mine development, production, management and consulting since graduation in 1965.
4. That the information contained in this report is based on published and unpublished reports on the property, and work performed by the author on the property between May 17th and May 19th, 1985.

Dated at Vancouver, B.C., this 9th day of June, 1985



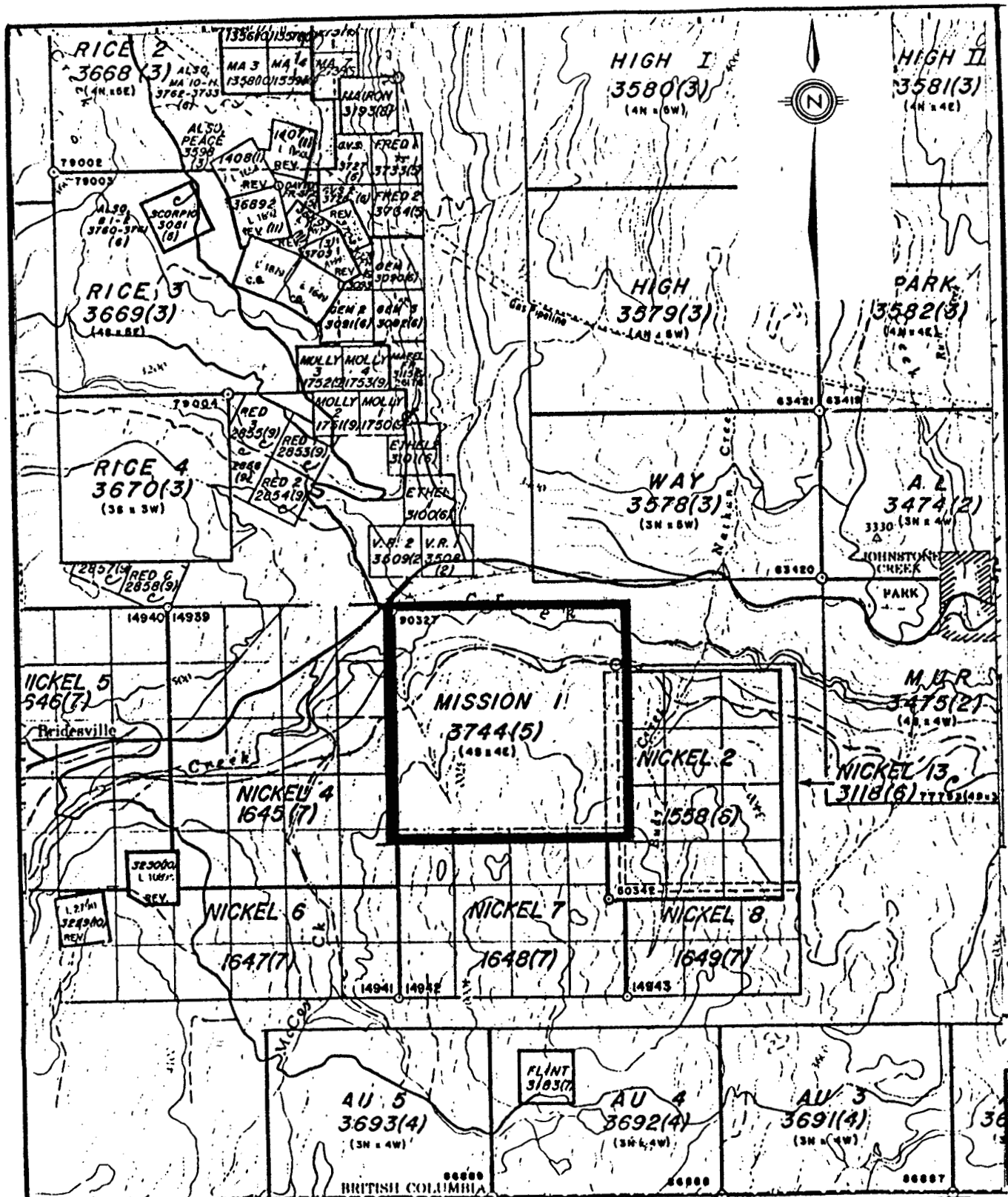
M.P. Dickson, P. Eng.



BRITISH COLUMBIA
PROPERTY LOC'N

CLIENT: BRITISH CHALLENGER MINING CORP.	
PROPERTY: MISSION 1	
PROPERTY LOCATION	
40	SCALE: 0 km 40
DATE: 7/85	DRG. NO.:
DR: M.P.D	1

APPROVED:
ADTEC MINING CONSULTANTS INCORPORATED
811-843 GRANVILLE ST., VANCOUVER, B.C. V2C 1Z8

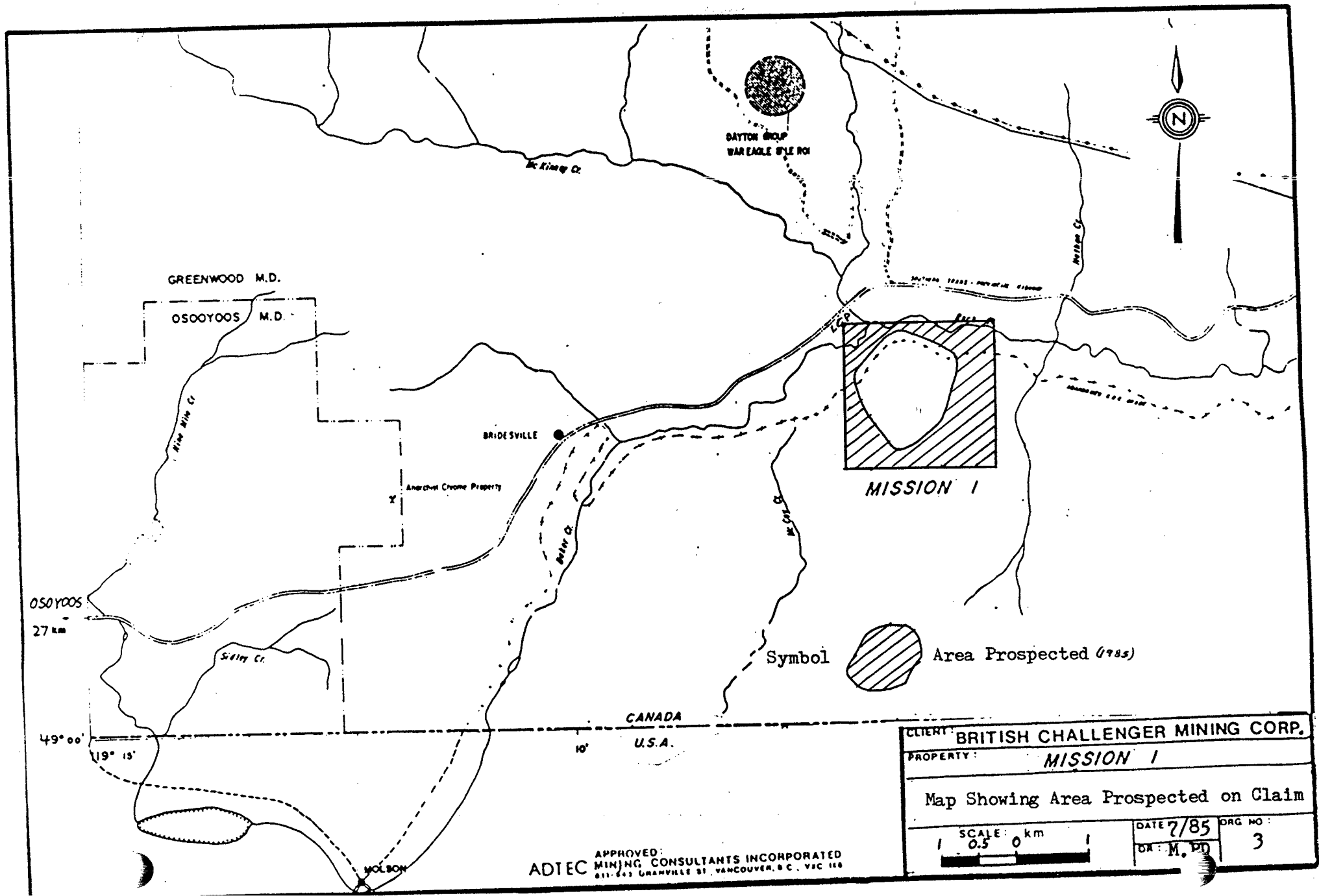


WASHINGTON — U.S.A.

From NTS-82E/3-w

ADTEC APPROVED:
MINING CONSULTANTS INCORPORATED
811-643 GRANVILLE ST., VANCOUVER, B.C., V6C 1K8

CLIENT: BRITISH CHALLENGER MINING CORP.	
PROPERTY: MISSION 1	
CLAIM LOCATION MAP	
SCALE: 0 km 1	DATE: 7/85 ORG. NO.:
	DR: M.P.D. 2



OSOYOOS
27 km

GREENWOOD M.D.

OSOYOOS M.D.

BRIDGVILLE

Anarchist Chrome Property

Sally Cr.

CANADA

U.S.A.

DAYTON GROUP
WAR EAGLE #16 PIT

MISSION 1

Symbol

Area Prospected (1985)

CLIENT: BRITISH CHALLENGER MINING CORP.

PROPERTY: MISSION 1

Map Showing Area Prospected on Claim

SCALE: km

0.5 0

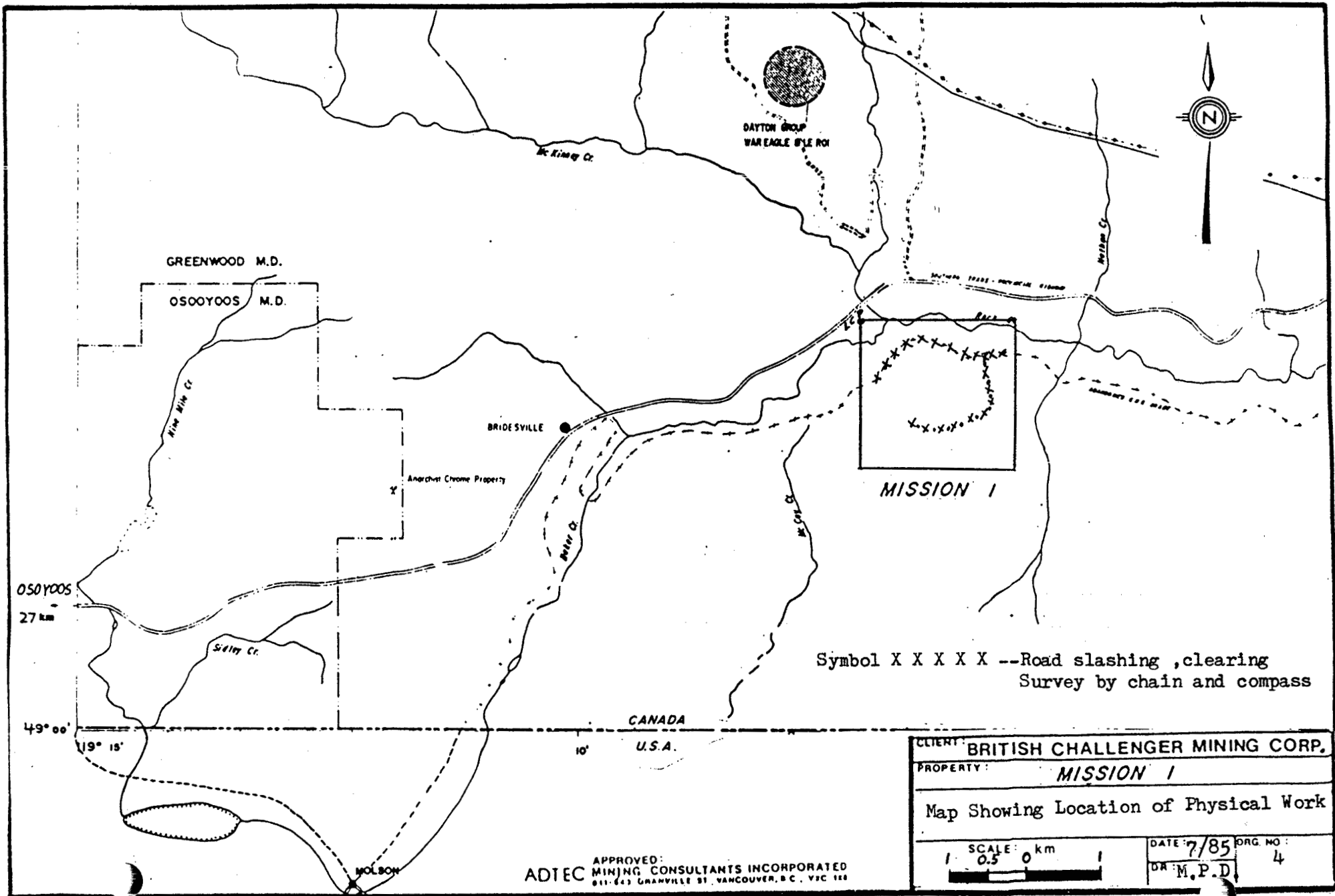
DATE 7/85

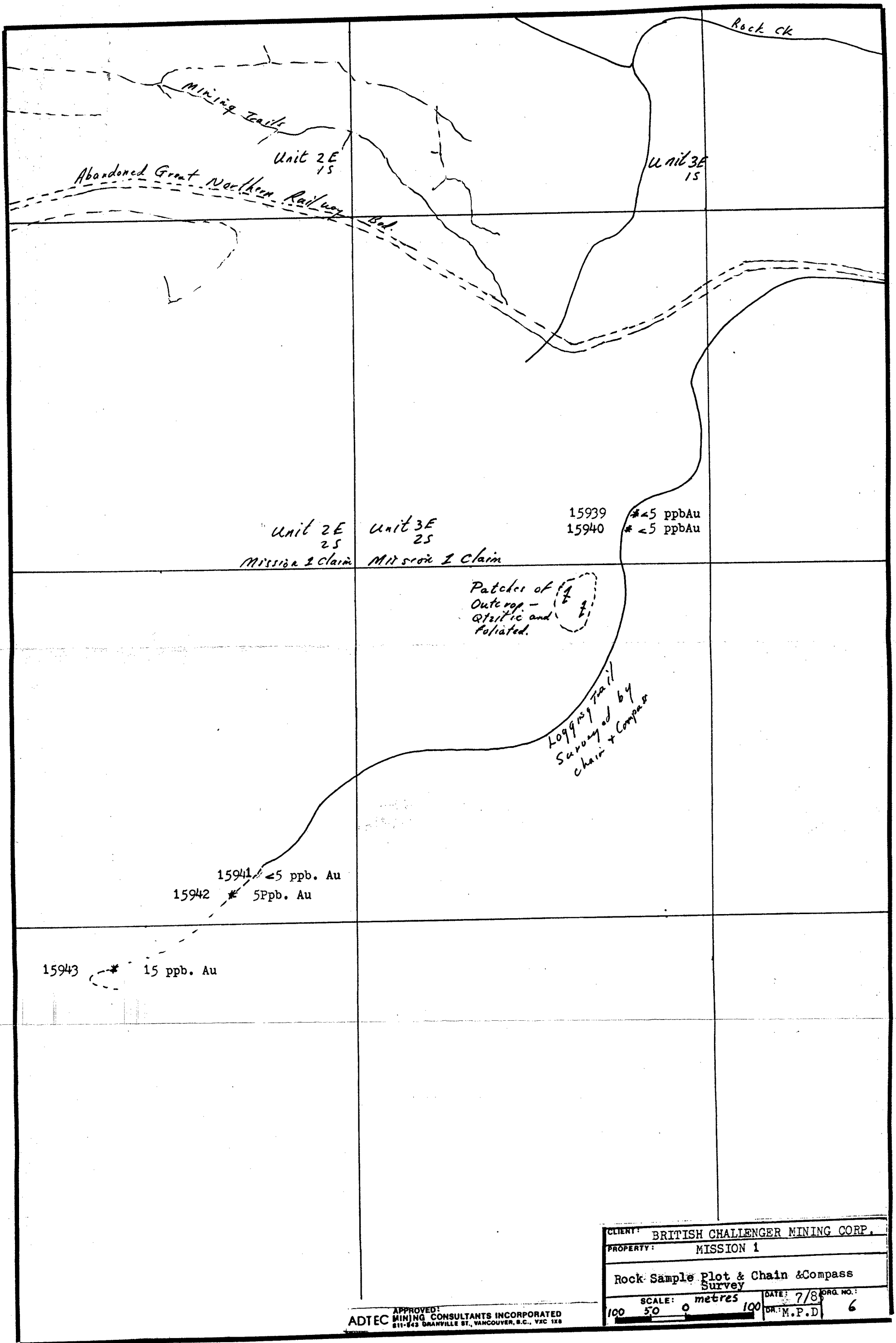
ORG NO:

DR: M. PD

3

APPROVED:
ADTEC MINING CONSULTANTS INCORPORATED
811-843 GRANVILLE ST. VANCOUVER, B.C. V6C 1E8





CLIENT:	BRITISH CHALLENGER MINING CORP.
PROPERTY:	MISSION 1
Rock Sample Plot & Chain & Compass Survey	
SCALE: metres	DATE: 7/8
100 50 0 100	DR: M.P.D. ORG. NO.: 6

APPROVED:
ADTEC MINING CONSULTANTS INCORPORATED
811-843 GRANVILLE ST., VANCOUVER, B.C., V6C 1K8



Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

APPENDIX 1
212 Brooksbank Ave
North Vancouver, B.C.
Canada V7J 2C1
Telephone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : ADTEC MINING CONSULTANTS INCORPORATED

811 - 543 GRANVILLE STREET
VANCOUVER, B.C.
V6C 1X8

CERT. # : A8512217-001
INVOICE # : 18512217
DATE : 3-JUN-85
P.O. # : NONE
ELDEN 1769

ATTN: M. P. DICKSON

Sample No.	Prep code	Au ppb FA+AA	Pt ppb					
15939	205	<5	--	--	--	--	--	--
15940	205	<5	--	--	--	--	--	--
15941	205	<5	--	--	--	--	--	--
15942	205	5	--	--	--	--	--	--
15943	205	15	--	--	--	--	--	--
15944	0	--	--	--	--	--	--	--
15945	205	20	<50	--	--	--	--	--

Sample Description

15939 Float-Minor quartz in sediments, slightly rusty
 15940 " " " " " "
 15941 Outcrop- seds. ,60% qtz. minor staining
 15942 " " 30% qtz. " "
 15943 " " 40% " " "
 15945 Special hand picked specimens of high sulphides fom outcrops in area of nickel sulphide showings.

British Challenger Mining Corp.
Mission 1 Claim
Greenwood Mining District

Certified by *Hart Bichler*





Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

APPENDIX 2

212 Brooksbank Av
North Vancouver, B.
Canada V7J 2

Telephone: (604) 984-02
Telex: 043-525

CERTIFICATE OF ANALYSIS

TO : ADTEC MINING CONSULTANTS INCORPORATED

811 - 543 GRANVILLE STREET
VANCOUVER, B.C.
V6C 1X8

CERT. # : A8512218-00
INVOICE # : I8512218
DATE : 30-MAY-85
P.O. # : NONE
ELDEN 1769

ATTN: M. P. DICKSON

Sample description	Prep code	Au-AA ppb						
L-3 30S	201	<5	--	--	--	--	--	--
L-3 60S	201	<5	--	--	--	--	--	--
L-3 90S	201	<5	--	--	--	--	--	--
L-3 120S	201	<5	--	--	--	--	--	--
L-3 150S	201	<5	--	--	--	--	--	--
L-3 180S	201	<5	--	--	--	--	--	--
L-3 210S	201	<5	--	--	--	--	--	--
L-3 240S	201	<5	--	--	--	--	--	--
L-3 270S	201	<5	--	--	--	--	--	--
L-3 300S	201	<5	--	--	--	--	--	--
L-3 330S	201	<5	--	--	--	--	--	--
L-3 360S	201	<5	--	--	--	--	--	--
L-3 390S	201	20	--	--	--	--	--	--
L-3 420S	201	<5	--	--	--	--	--	--

Line distance in metres

British Challenger Mining Corp.
Mission 1 Claim -Greenwood Mining District



Certified by Hart Buchler

GEOCHEMICAL PROCEDURES FOR GOLD AND RELATED ELEMENTS

GOLD FA-AA COMBO METHOD:

For low grade samples and geochemical materials a 10 gram sample is fused in litharge, carbonate and siliceous flux with the addition of 10 mg of Au-free Ag metal and cupelled. The silver bead is parted with dilute HNO_3 and then treated with aqua regia. The salts are dissolved in dilute HCl and analyzed for Au on an atomic absorption spectrophotometer.

Detection limit - 5 ppb.

SILVER PPM:

A 1.0 gm portion of sample is digested in conc. perchloric-nitric acid ($\text{HClO}_4\text{-HNO}_3$) for approx. 2 hours. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Silver is determined by atomic absorption technique using background correction on analysis.

Detection limit - 0.1 ppm.

COPPER, ZINC, NICKEL:

A 1.00 gram portion of sample is weighed into a calibrated test tube. The sample is digested using hot 70% perchloric acid and concentrated nitric acid. Digestion time = 2 hours. Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analyzed by atomic absorption procedures.

Detection limits using Varian atomic absorption unit are as follows:

Copper	-	1 ppm
Zinc	-	1 ppm
Nickel	-	1 ppm

GEOCHEM PROCEDURE FOR ARSENIC

A 1.0 gram sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with NaBH_4 and the arsenic content determined using flameless atomic absorption.

Detection limit: 1 ppm

GEOCHEM PREPARATION FOR SOILS & SILTS

Samples are dried at 80 deg. C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh.

ASSAY PREPARATION & ANALYSIS FOR AG & AU OZ/T

Silver and gold analysis are done by standard fire assay techniques. In the sample preparation stage the screens are checked for metallics which, if present, are assayed separately and calculated into the results obtained from the pulp assay.

0.5 assay ton sub samples are fused in litharge, carbonate and silicious fluxes. The lead button containing the precious metals is cupelled in a muffle furnace. The combined Ag & Au is weighed on a microbalance, parted, annealed and again weighed as Au. The difference in the two weighing is Ag.

Detection limit for Ag - 0.01 oz/T

Detection limit for Au - 0.003 oz/T

ITEMIZED COSTS
EXPLORATION WORK PROGRAM

FOR

MISSION I CLAIM (16 Units)

Bridesville Area
Greenwood Mining Division
May 17th - May 19th, 1985

For

BRITISH CHALLENGER MINING CORPORATION

By

M.P. DICKSON, P. ENG.
ADTEC MINING CONSULTANTS INCORPORATED
Vancouver, B.C.

June 9, 1985

Physical Work

1.3 man days @ \$120/day, May 17, 18, 1985 Clearing brush from access roads and chain and compass survey	\$ 156.00
1.3 man days @ \$70/day (helper) May 17, 18, 1985	91.00
Chain saw rental and supplies	<u>18.00</u>
Total	\$ 265.00

Prospecting

1.4 man days @ \$180/day, May 18, 19, 1985	\$ 252.00
1.4 man days @ \$60/day (helper), May 18, 19, 1985	<u>84.00</u>
Total	\$ 336.00

Geochemical Survey

May 19 - 0.3 days @ \$120/day (0.6 line kms)	\$ 36.00
May 19 - 0.3 days @ \$60/day (0.6 line kms)	18.00
Costs for supplies for above (bags, ties, flagging)	3.00
Assaying of above 14 samples for Au @ \$5.70/sample	<u>80.00</u>
Total	\$ 137.00

Geological Mapping, Rock Sampling & Assaying

May 17 - 19 - 0.3 days @ \$350/day	\$ 105.00
Assaying of 5 samples collected and assayed for Au @ \$8.75/sample	44.00
Assaying of sample collected and assayed for Au, Pt @ \$12.75/sample	<u>13.00</u>
Total	\$ 162.00

Accommodation Charges & Meals Re Above Program

May 17 - May 19, 1985 - 3.0 days for two people	
Accommodation	\$ 95.00
Food	<u>97.00</u>
Total	\$ 192.00

Transportation Costs

Vehicle rental - 3 days @ \$40/day	\$ 120.00
Gasoline for vehicle	<u>60.00</u>
	\$ 180.00

Total costs of Accommodation, Food and Transportation to be split on a pro-rated basis for physical work, prospecting, geochemical and geological is \$372.00.

To be split as:	1/3 physical work	\$ 124.00
	1/3 prospecting	\$ 124.00
	1/3 geochem & geolo.	\$ 124.00

Costs for Report Preparation

0.7 Days for P. Dickson, P. Eng. to research, interpret and write report @ \$350.00/day	\$ 245.00
Drafting maps and assay plotting as per contract price	75.00
Photocopying and printing	12.00
Binding	2.00
Typing	<u>28.00</u>
Total	\$ 362.00

Total Cost of Program including Report Preparation \$ 1,634.00

Per: M.P. Dickson, P. Eng.
Adtec Mining Consultants Incorporated



June 9, 1985