

WEYMARK ENGINEERING LTD.

*Consulting Engineers*

3310 WESTMOUNT ROAD  
WEST VANCOUVER, B.C.  
CANADA

82-#815-10815

TELEPHONE  
922-1536

DRILLING ASSESSMENT REPORT

TANACANA MINES LTD

WINGDAM MINERAL CLAIMS

CARIBOO MINING DIVISION

BRITISH COLUMBIA

GEOGRAPHICAL CO-ORDINATES

LATITUDE: 53° 02' North

LONGITUDE: 121° 58' West

DRILLING CONTRACTOR: H. Allen Drilling, Merritt, B. C.

CORE LOGGING: William J. Weymark P. Eng. Vancouver, B. C.

CHEMICAL ANALYSIS: Barringer Magenta, Calgary Alberta

December 12<sup>th</sup>, 1982

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

10,815

TANACANA MINES LTD.  
DRILLING ASSESSMENT REPORT  
WINGDAM MINERAL CLAIMS GROUPS  
CARIBOO MINING DIVISION  
BRITISH COLUMBIA

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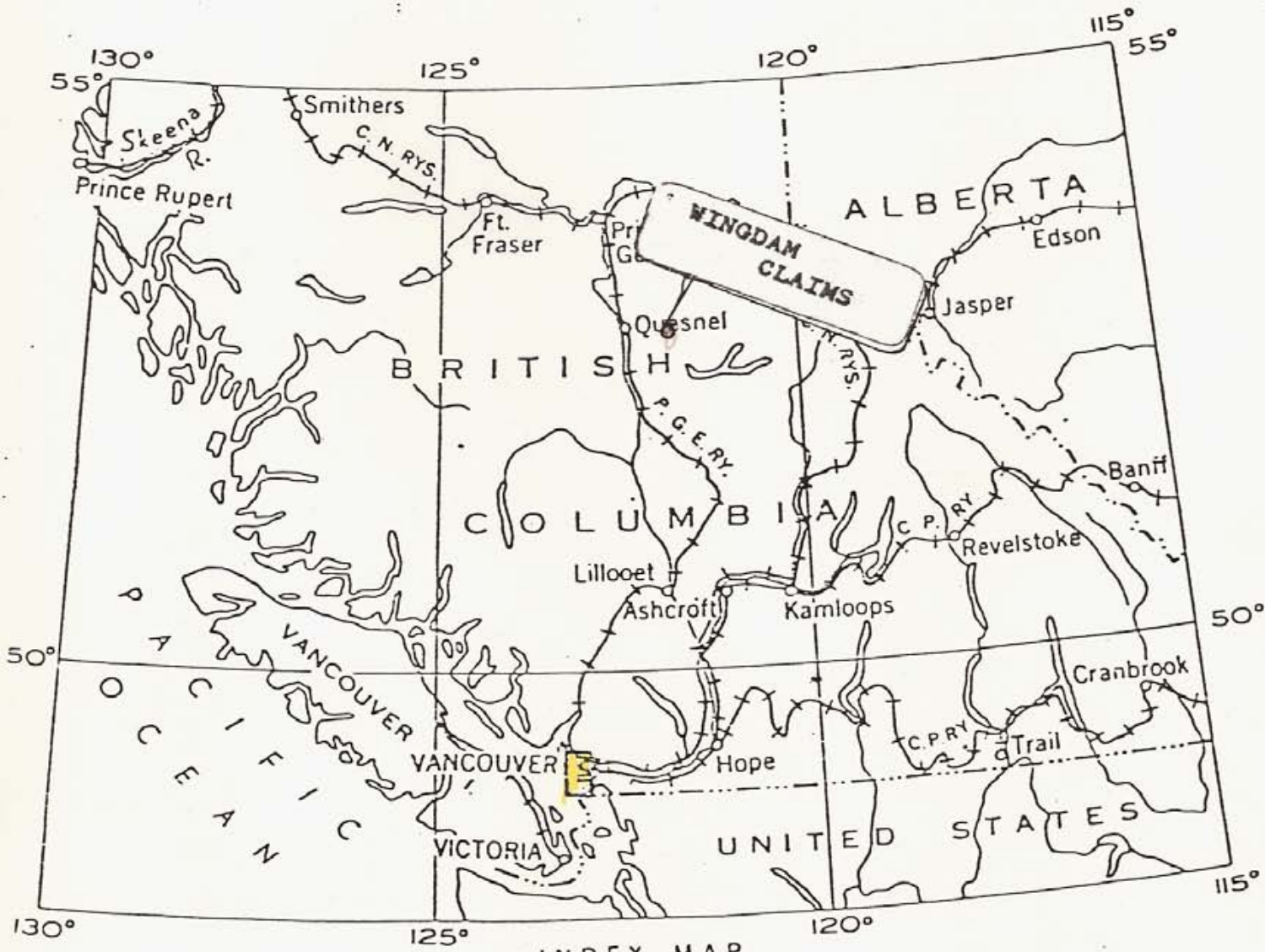
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LOCATION

WINGDAM MINERAL CLAIMS  
 CARIBOO MINING DIVISION

BRITISH COLUMBIA



Drilling Assessment Report, Wingdam Mineral Claims, Cariboo MD.

Property, Continued:

DAM GROUP

Wingdam 3	20 Units	Record No: 759(8)	23 June 1978
Wingdam 5	16 Units	Record No: 1802(8)	11 August 1980
Wingdam 6	16 Units	Record No: 1803(8)	11 August 1980
Wingdam 7	18 Units	Record No: 1804(8)	11 August 1980

The Reference Mineral Claim Map is 93H/4W of the British Columbia Department of Mines, see Figure: 1

Check surveys have not been made of the claim boundaries, posts, tags etc. relative to conformity with the requirements of the Mineral Act of British Columbia. The claims are currently in good standing with respect to Assessment Work requirements for the 1982 - 1983 period, except finalization of this Drilling Assessment Report, See Annex 9.

2.0 Location:

The Wingdam Mineral Claims are situated in the Lightning Creek Area, 48 Km east of Quesnel, British Columbia on the paved Highway No: 26, Quesnel - Wells Highway, being centered about the settlement of Wingdam and about 450 highway miles northeasterly from Vancouver, British Columbia.

The Geographic Reference is 53° 02' North Latitude and 121° 58' West Longitude. The Land District is Quesnel with Registry Office in Quesnel and the Mining Division is Cariboo with Recording Office in Quesnel, British Columbia. See Figure: 2.

3.0 Access:

The claims are readily accessible by automobile from Quesnel a distance of about 30 miles by Highway No: 26, paved. This is open year round except in severe winter and fire peril periods. Most sections of the claims area are accessible via the logging roads, see Figured: 5 and 6. All communication facilities are available in Quesnel, including rail, truck and air facilities.

4.0 Description:

The Wingdam claims were staked in 1978 - 1980 in conjunction with Placer Leases held by Tanacana Mines Ltd. in the area. The Lightning Creek area has had a long history of Placer mining operations with the Wingdam operation being the most notable.

No hard rock mines have been operated in the immediate area except at Wells - Barkerville.

Exploration work on the property has consisted of Geophysical and some geological surveys and the current diamond drill programme.

There are several references in the B. C. Minister of Mines of British Columbia annual reports, especially about the Wingdam and other properties.

5.0 Physiography:

The Claims area is within the Quesnel Highlands and the Cottonwood Forest Range. Elevations range on the claims area from about 3000 to over 3900 feet above sea level, see Figure: 3.

Physiography: Continued.

The area is forest covered with deciduous and coniferous trees, which in many places have been logged. Overburden consists of glacial and alluvial till, gravels and other debris. Rock outcrops are scattered. Depths of overburden range to 50 or more feet.

Drainage on the claims area is in the Lightning Creek basin a part of the Fraser River System.

6.0 Geology:

Geological Reference is Geological Survey of Canada, Paper 72 - 35, Geology of McBride Map-Area, British Columbia authored by R. B. Campbell, E. W. Mountjoy and F. G. Young with related maps and references.

With the exception of a few plutonics (intrusives) the majority of the base formations are sediments and volcanics. The sediments consist mainly of phyllites, argillites, conglomerates, sandstone and shales - siltstones. The volcanics consist of tuffs, basalt, greenstones and breccia. Most of these rocks have been metamorphosed fractured and schistosed. A few volcanic dykes intrude the base formations. The general strike in the area is to the North - West.

The Chronological sequence of the formations, insofar as the claims area is:

Quaternary

Pleistocene alluvial and glacial deposits

Cretaceous or Tertiary

Bowron River Coal beds, conglomerate, shale, etc

Triassic

TRS - Phyllite, argillite, limestone, quartzite

Mississippian or Younger

Serpentinite - MS

Antler Formation - basalt, breccia, tuff, gabbro etc

Guyet Formation - Conglomerate, argillite, phyllite sandstone, limestone, etc

Devonian

Black Stuart Formation - basalt, chert, argillite etc

Lower and Upper Cambrian

Dome Creek Formation - shale, siltstone, argillite etc

Lower Cambrian

Mural Formation - shale, phyllite, siltstone, sandstone

Cambrian and/or Hadrynian Fcrmation

Midal Formations - shale, siltstone, phyllite, etc

Yanks Peak Formation - quartzite, siltstone, conglomerat

Yankee Belle Formation - shale, siltstone, limestone etc

Cunningham Formation - limestone, dolostone, shale etc

Isaac Formation - Phyllite, argillite, schist, shale etc

Kaza Group - Snowshoe Formation - feldspathic sandstone, conglomerate, argillite, phyllite etc

Geology, (Continued)

Figure 4, a print of Geological Map 1356A, McBride, covers the Wingdam Claim area. The formations principally underlying the area are :-

Triassic Trs - Phyllite, Argillite, minor limestone and quartzite

Kaza Group and Snowshoe Formation, - HK/HKS - Feldspathic Sandstone, granule conglomerate, micaaceous and schistose argillite, phyllite and schist, minor conglomerate, limestone and marble.

7.0 Drilling Programme

According to the records, Tanacana Mines Ltd initiated a Diamond Drilling Programme in July 1982 with the objective to test the geophysical anomalies indicated by the Geophysical Surveys conducted on the claims area.

Four Holes were drilled on Wingdam Claim No: 8, the Wing Group and two on the Dam Group, claim No: 7.

The location of these holes is given on Figures 5 and 6. and the logs on Annexes 1 - 6 inclusive.

Drilling was contracted to H. Allen Diamond Drilling Ltd of Merritt, see Annexes 10 and 11.

The core was transported from the Drill Sites on the Claims to Merritt and stored on the premises of H. Allen Diamond Drilling Ltd. During before transport, the core for Drill Hole 82 -1 was lost, although the records indicate that 100 feet was drilled.

Holes 2 and 3 could not be completed because of drilling problems.

Hole No 4 was drilled to 200 feet and the core logged

Hole No:5 was drilled to 200 feet, NQ and the core logged

Hole No: 6 was drilled to 200 feet and the core logged

T. Boucher took samples of the cores from the holes and had them analyzed for Gold, Silver, Copper, Lead and Zinc. See Annex 7. The sections analyzed could not be identified, however, the results are sparse, except for some indications of Zinc.

In Hole No: 82 - 5, a veinlet of asbestos was revealed in a strongly sheared section, 163 - 165.

8.0 Recommendations:

On the basis of the information obtained from the Drilling Programme considered in conjunction with the results of the Geophysical Surveys, it is considered that further geological and geochemical investigations should be carried out on the Wingdam Claims Groups .

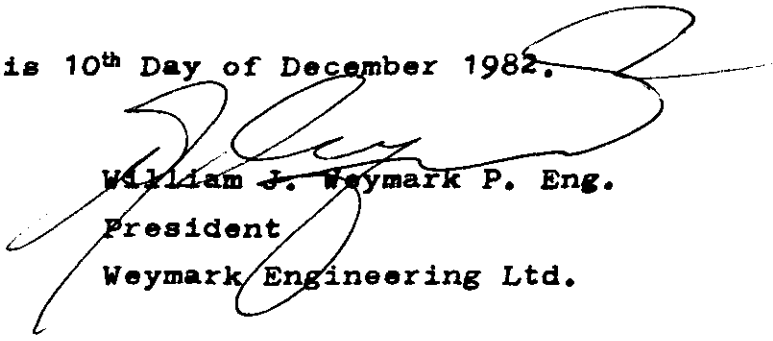
Respectfully submitted,  
William J. Weymark P. Eng.  
President

CERTIFICATE

I, William J. Weymark, B. Sc., P. Eng., Consulting Engineer President of Weymark Engineering Ltd., of the District of West Vancouver, of the Province of British Columbia, hereby certify:-

1. I am a graduate of Mining Engineering of Queens University, Kingston, Ontario, B. Sc. 1940 and have been practising my profession for thirty - five years.
2. I am a practising Consulting Engineer and reside at 3310 Westmount Road, West Vancouver, British Columbia.
3. I am a member of the Association of Professional Engineers of the Province of British Columbia, the Consulting Engineers' Division of the Association of Professional Engineers of British Columbia, and of the Association of Consulting Engineers of Canada.
4. I am a member of the Canadian Institute of Mining and Metallurgy and of the American Institute of Mining, Metallurgical and Petroleum Engineers and of the American Geophysical Union.
5. I have no direct or indirect interests whatsoever in Tanacana Mines Ltd., or in the Wingdam Mineral Claims, Cariboo Mining Division or do I expect to obtain any interest, direct or indirect in the property or affiliates.
6. The findings of the accompanying report are based on my personal logging of the Diamond Drill Core, stored on the premises of H. Allen Drilling Ltd., Merritt, British Columbia on the 4 December 1982 and the review of the available information relating to the claims area, and the Wingdam region of British Columbia, and the preparation of this Report.

DATED at West Vancouver this 10<sup>th</sup> Day of December 1982.



William J. Weymark P. Eng.  
President  
Weymark Engineering Ltd.



**APPENDICES**











# DIAMOND DRILL HOLE RECORD

MINE Tanacana Mines Ltd DATE 6 Dec 1982  
 HOLE No. 82 - 6 SIZE NQ Co-ordinates of Collar  
 LOCATION Wingdam Mineral Claim No: 8  
 DIRECTION Vertical N.            E.             
 DEPTH 200 Feet DIP Vertical STARTED 7 August 1982  
 POSITION Surface ELEV. COLLAR            FINISHED 9 August 1982

SECTION			LOG	ASSAY																					
FROM	TO	RECY		NUMBER																					
0	5		Casing - Overburden																						
5	124		Phyllite - Argillite - Variable Dark to greyish 5 - 25 Sheared foliations thin quartz stringers Quartz Vein - 54 - 55 feet milky white Quartz vein 64 - 66 feet milky white scattered sulphides - 120 - 124'																						
124	185		Feldspathic Sandstone - "Grit" - graduated contacts medium to fine grained greyish - medium sized grains																						
185	200		Phyllite - Argillite - quartz stringers																						
			Samples Taken By T. Boucher See Annex 7																						
			<table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: center;">Sample A</td> <td style="text-align: center;">Sample B</td> </tr> <tr> <td style="text-align: center;">Gold</td> <td style="text-align: center;">N.D.</td> <td style="text-align: center;">N. D.</td> </tr> <tr> <td style="text-align: center;">Silver</td> <td style="text-align: center;">N. D.</td> <td style="text-align: center;">N. D.</td> </tr> <tr> <td style="text-align: center;">Copper</td> <td style="text-align: center;">34-PPM</td> <td style="text-align: center;">36 PPM</td> </tr> <tr> <td style="text-align: center;">Lead</td> <td style="text-align: center;">12 PPM</td> <td style="text-align: center;">11 PPM</td> </tr> <tr> <td style="text-align: center;">Zinc</td> <td style="text-align: center;">406PPM</td> <td style="text-align: center;">310 PPM</td> </tr> </table>		Sample A	Sample B	Gold	N.D.	N. D.	Silver	N. D.	N. D.	Copper	34-PPM	36 PPM	Lead	12 PPM	11 PPM	Zinc	406PPM	310 PPM				
	Sample A	Sample B																							
Gold	N.D.	N. D.																							
Silver	N. D.	N. D.																							
Copper	34-PPM	36 PPM																							
Lead	12 PPM	11 PPM																							
Zinc	406PPM	310 PPM																							
			Core Missing 120 - 121' (Samples ? 115 - 116')																						

TOTAL %

REMARKS:

DRILLERS H. Allen Drilling  
Box 1397 Merritt, B. C.  
 EXAMINED BY William J. Weymark P. Eng  
 ASSAYER Barringer Magenta  
 DATE

SAMPLE ID	AU OZ/TON	AG OZ/TON	CU PPM	PB PPM	ZN PPM
1	N.D.	N.D.	20	10	119
2+3	N.D.	N.D.	93	28	252
4	N.D.	.009	28	136	213
5A	N.D.	N.D.	20	<1	16
5B	N.D.	N.D.	4	<1	39
6A	N.D.	N.D.	34	12	406
6B	N.D.	N.D.	36	11	310
7	N.D.	N.D.	18	10	81



ANNEX - 8

COST DISTRIBUTION

1. Diamond Drilling

H. Allen Diamond Drilling Ltd  
Box 1397, Merritt, B. C. .... \$19,706  
See Annex - 9

2. Chemical Analysis

Barringer - Magenta  
Suite 105 ;3750 19<sup>th</sup> Street  
Calgary, Alberta ..... 100

3. Geological Logging of Core stored  
at Merritt, B. C.

W. J. Weymark, P. Eng.  
1063 Balfour Ave  
Vancouver, B. C.

Field - One Day - 4 Dec 1982 ..... 300.  
- Mileage 510 miles @ \$0.30/mi ..... 153  
- Motel and meals ..... 50

Office

- Instructions, office review,  
preparation, interpretation,  
fair-drawing, plotting, assembly,  
collation and Report ..... 400

4. Maps, Drawings and Reproductions ..... 65

Total ..... \$20,774

  
William J. Weymark P. Eng.



Province of  
British Columbia

Ministry of  
Energy, Mines and  
Petroleum Resources

Parliament Buildings  
Victoria  
British Columbia  
V8V 1X4

*14000-9*

November 4, 1982

Mr. Tom Boucher  
Tanacana Mines  
Box 831  
Valier, Montana  
U.S.A. 59486

Dear Sir:

Re: Wingdam mineral claims - Cariboo Mining Division  
Drilling Report

Further to our telephone conversation this morning, this letter will confirm that the due date for the above mentioned report has been extended to December 12, 1982. No further extension will be granted.

Yours very truly,

B. Hemus

for Chief Gold Commissioner

bmh

c.c. Tanacana Mines Ltd.  
c/o Knott, Pollar & Morgan  
2910 - 700 W. Georgia St.  
P.O. Box 10074  
Vancouver, B.C.  
V7Y 1B6

c.c. Gold Commissioner  
Quesnel

INVOICE NO. 660.

VOK 2B0

Aug. 6, 1982.

TO: Tanacana Mines,

IN ACCOUNT WITH:

H. Allen Diamond Drilling Ltd.,  
Box 1397,  
Merritt, B.C. VOK 2B0.

This invoice is for core drilling on Wing claims located near Wingdam, B.C.

Hole No. 82-1 - 100 ft. @ \$23.00 per ft.....	\$ 2,300.00
Moving time - 12 man hrs. @ \$20.00 per hour.....	\$ 240.00
6 cat hrs. on hole @ \$50.00 per hour.....	\$ 300.00

Hole No. 82 - 2 - 50 ft. @ \$23.00 per ft.....	\$ 1,150.00
Moving time - 16 man hrs. @ \$20.00 per hour.....	\$ 320.00
6 cat hrs. @ \$50.00 per hour.....	\$ 300.00
2 pails Alcomer mud @ \$200.00 each.....	\$ 400.00

Hole No. 82 - 3 - 57 ft. @ \$23.00 per ft.....	\$ 1,311.00
Moving time - 8 man hours @ \$20.00 per hour.....	\$ 160.00
2 pails Alcomer mud @ \$200.00.....	\$ 400.00

Hole No. 82 - 4 - 200 ft. @ \$23.00 per ft.....	\$ 4,600.00
Moving time - 32 man hrs. @ \$20.00 per hour.....	\$ 640.00
8 hrs. cat time @ \$50.00 per hour.....	\$ 400.00
1 pail Alcomer mud @ \$200.00.....	\$ 200.00

Trucking costs Merritt to Wingdam and back -

600 miles @ \$3.00 per mile.. .. \$ 1,800.00

\$14,521.00

Contractor's Representative

H. Allen

Company's Representative

H. Allen

*Dam claims  
1982*

INVOICE NO. 661.

VOK 2B0.

Aug. 11, 1982.

TO: TANACANA MINES LTD.,  
2910-700 W. Georgia St.  
Vancouver, B.C. V6B 2A2.

IN ACCOUNT WITH:

H. ALLEN DIAMOND DRILLING LTD.,  
Box 1397,  
Merritt, B.C. VOK 2B0.

This invoice is for drilling on Dam Claims.

Hole No. 82 - 5 - 155 ft. @ \$23.00 per ft.....	\$ 3,565.00
2 cans Alcomer mud @ \$200.00 per can.....	\$ 400.00
10 hrs. cat time @ \$50.00 per hour.....	\$ 500.00
36 man hours moving @ \$20.00 per hour.....	\$ 720.00
	<u>\$ 5,185.00</u>

Contractor's Representative

Company's Representative

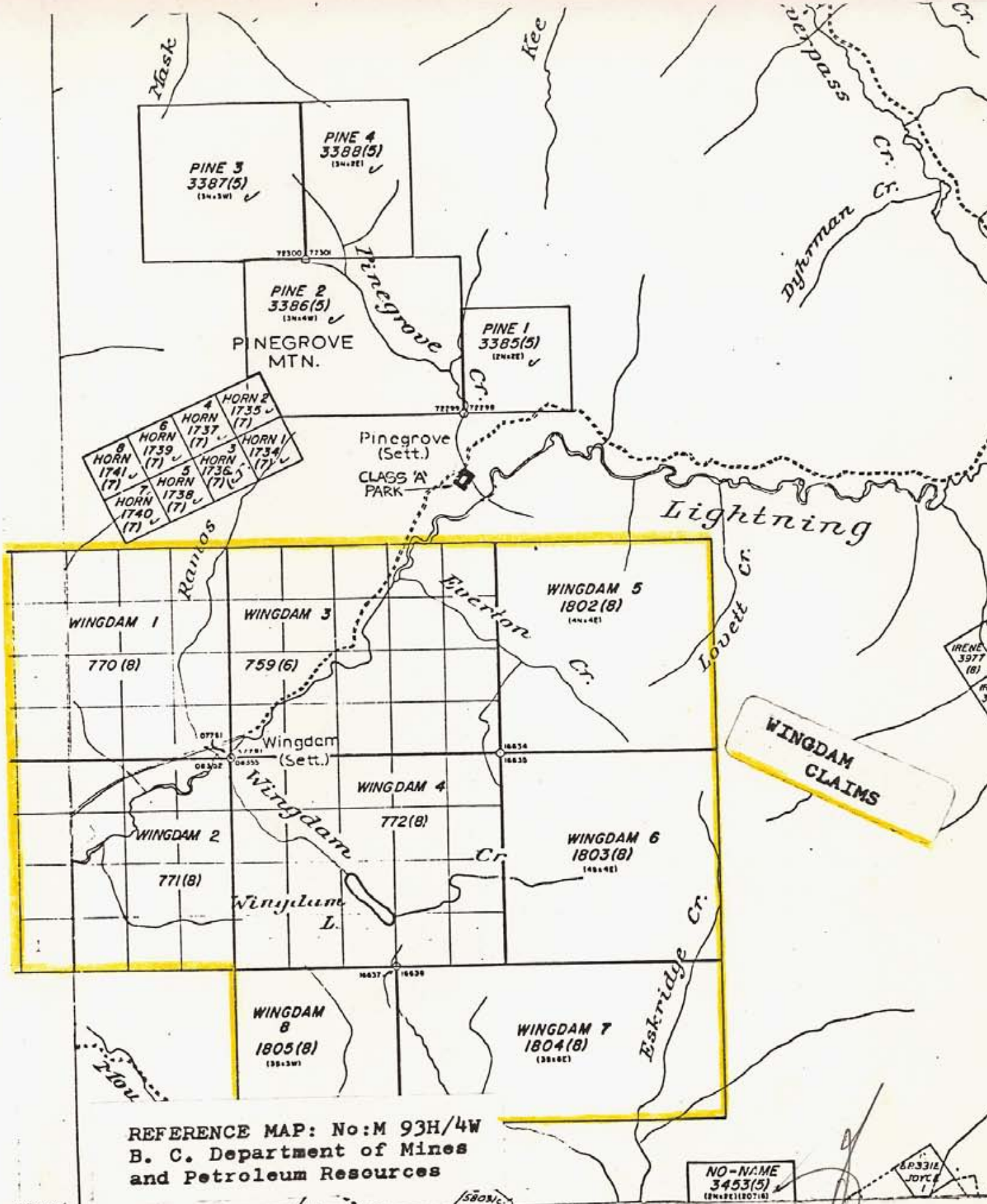
*Herb Allen*

*Halder Thomas Pendergast  
Sic.*

**ILLUSTRATIONS**

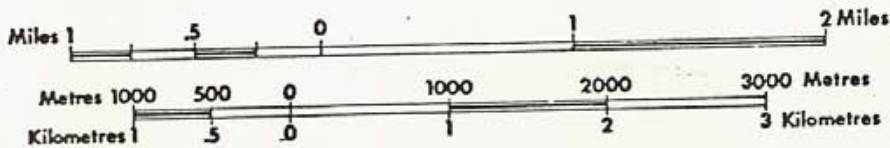
2

1



REFERENCE MAP: No: M 93H/4W  
 B. C. Department of Mines  
 and Petroleum Resources

53°00' 122°00' CARIBOO MINING DIVISION

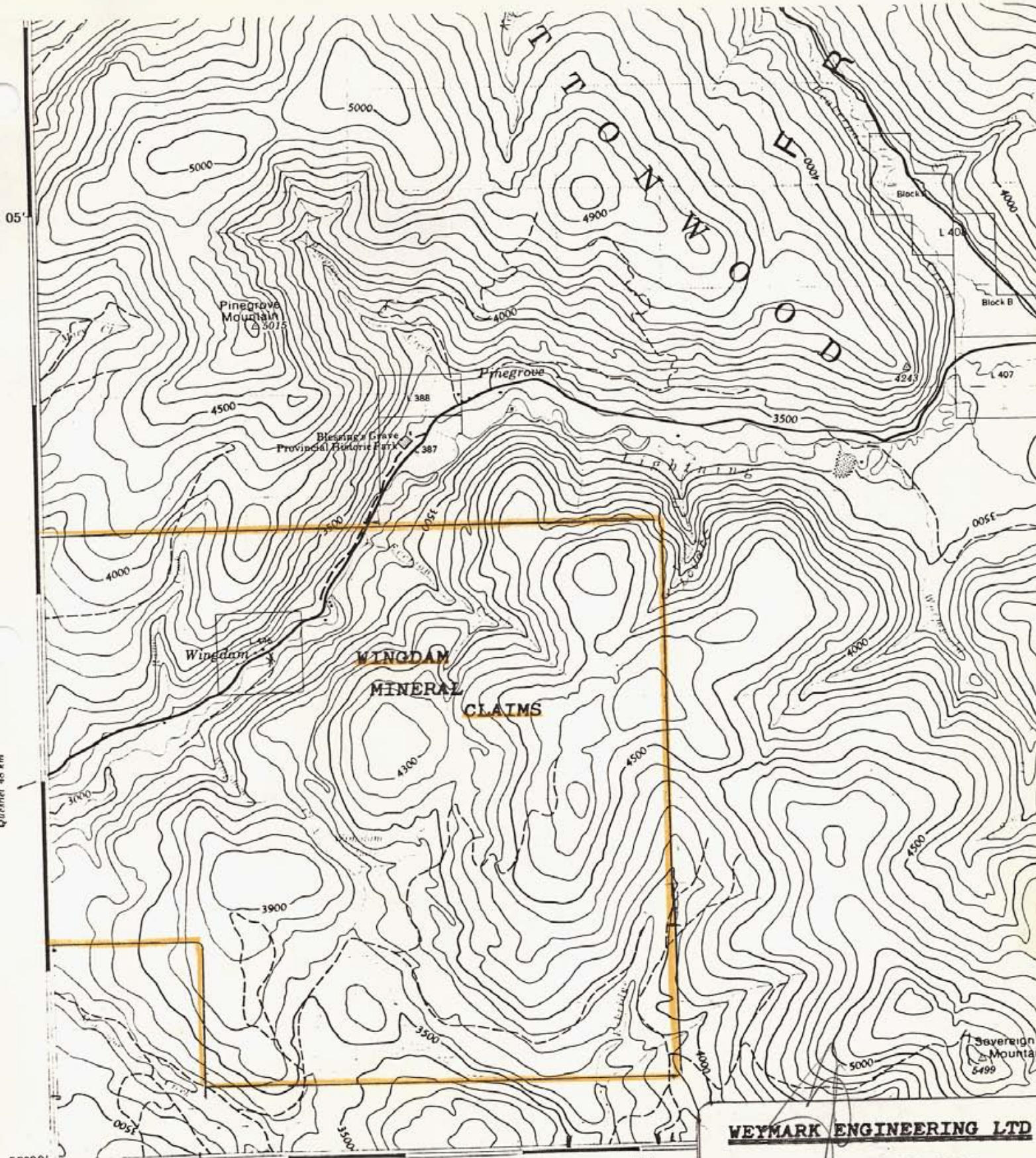


**WINGDAM CLAIMS**

NO-NAME  
 3453(5)  
 (2N4E180716)

**WEYMARK ENGINEERING LTD**  
**TANACANA MINES LTD.**  
**WINGDAM MINERAL CLAIMS**  
**CLAIMS - LOCATION**

Scale: As Shown  
 Drwn: WJW  
 Date: 3 Dec 82 FIG: 2

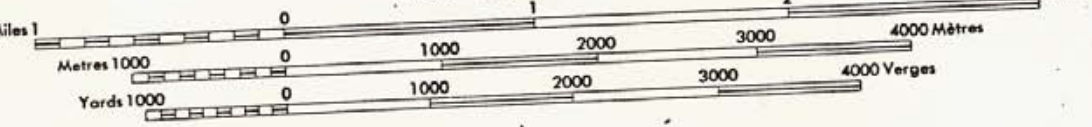


Quebec 48 km

53°00' 122°00' 55'

REFERENCE: MAP NO: 93H4 WELLS  
SCALE: 1: 50,000

Scale 1:50 000 Échelle



**WEYMARK ENGINEERING LTD**

**TANACANA MINES LTD.**

**ACCESS - TOPOGRAPHY**

Scale: As Shown  
Drwn: WJW  
Date: 3 Dec 82

**FIGURE: 3**

**LEGEND**

**TRIASSIC ?**

**TRS** - Phyllite, Argillite, minor sandstone, limestone and quartzite

**LOWER CAMBRIAN**

Kaza Group (HK) and Snowshoe Formation (HKS)

HK/HKS - feldspathic and granule conglomerate, locally micaceous and schistose; argillite, phyllite, and schist, minor conglomerate, limestone and marble



Copies of this map may be obtained from the Geological Survey of Canada, Ottawa.  
Reference: GSC Map 1356A  
Geology: McBride: Paper 72 - 35  
A. B. Campbell, Mount Joy, Young  
Scale 1:250,000

**WEYMARK ENGINEERING LTD**

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**TANACANA MINES LTD.**  
**WINDAM MINERAL CLAIMS**

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**REGIONAL - GEOLOGY**

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SCALE: As Shown  
Drwn: WJW  
Date: 3 Dec 82

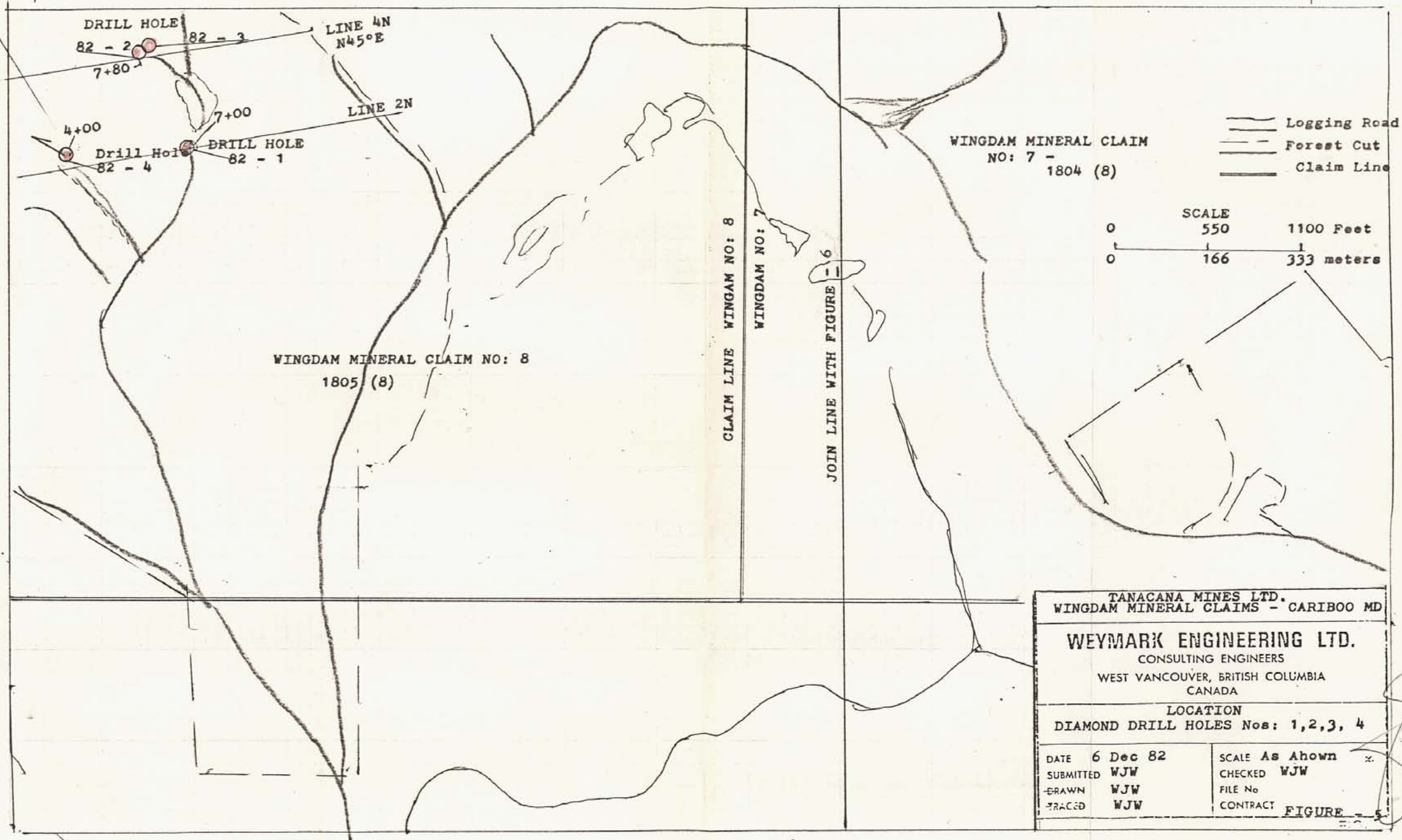
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**FIGURE: 4**





2200 Feet (666m) to NE Corner  
 Wingdam Claim No 8 common  
 to SW Corner Wingdam No: 2 , Bearing N 30° W approx



WINGDAM MINERAL CLAIM  
 NO: 7 -  
 1804 (8)

Logging Road  
 Forest Cut  
 Claim Line

SCALE  
 0 550 1100 Feet  
 0 166 333 meters

WINGDAM MINERAL CLAIM NO: 8  
 1805 (8)

CLAIM LINE WINGDAM NO: 8

WINGDAM NO: 7

JOIN LINE WITH FIGURE - 6

TANACANA MINES LTD.  
 WINGDAM MINERAL CLAIMS - CARIBOO MD

WEYMARK ENGINEERING LTD.  
 CONSULTING ENGINEERS  
 WEST VANCOUVER, BRITISH COLUMBIA  
 CANADA

LOCATION  
 DIAMOND DRILL HOLES Nos: 1, 2, 3, 4

DATE	6 Dec 82	SCALE	As Shown
SUBMITTED	WJW	CHECKED	WJW
DRAWN	WJW	FILE No	
TRACED	WJW	CONTRACT	FIGURE - 5

3000 ft (1000m)  
to SW Corner  
Wingdam No: 6 -  
Common to SE Corner  
Wingdam No: 4  
Bearing approx North 45°W

MINERAL CLAIM  
WINGDAM NO: 7  
1804 (8)

DRILL HOLE 82 - 6  
DRILL HOLE 82 - 5

2+00 W; 90ft E of 2+00

LINE 0+00

6+50 W

JOIN LINE WITH FIGURE 5

SOUTHERLY CLAIM LINE

WINGDAM NO: 7

Logging Road  
Forest Cut  
Claim Line

0 550 1100 Feet  
0 166 333 Meters

TANACAN MINES LTD.  
WINGDAM MINERAL CLAIMS - CARIBOO MD

**WEYMARK ENGINEERING LTD.**  
CONSULTING ENGINEERS  
WEST VANCOUVER, BRITISH COLUMBIA  
CANADA

LOCATION  
DIAMOND DRILL HOLES NOS: 5, 6

DATE 6 Dec 1982	SCALE As Shown
SUBMITTED WJW	CHECKED WJW
DRAWN WJW	FILE No TM - 1
TRACED WJW	CONTRACT FIGURE: 6