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ASSESSMENT REPORT

ON THE

THE DUCHESS CLAIM GROUP

ALBERNI M.D., BRITISH COLUMBIA

NTS 92E/4E & 5E

49°14'30" 125°37'30"

FOR

WEST-MAR RESOURCES LTD.  
1220-800 W. PENDER ST.  
VANCOUVER, BRITISH COLUMBIA  
V6C 2V6

by

Douglas Wood, B.Sc., FGAC

JUNE 12, 1987

FILMED

16,354

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

## CONTENTS

1.0 INTRODUCTION.....	page	1 /
1.1 Location and access.....		1 /
1.2 Topography and Climate.....		1 /
2.0 PROPERTY.....		1 /
3.0 HISTORY.....		2 /
4.0 GEOLOGY.....		2 /
4.1 Introduction.....		2 /
4.2 Mineralization.....		3 /
5.0 CONCLUSIONS AND RECOMMENDATIONS.....		5 /
6.0 STATEMENT OF COSTS.....		6 /
7.0 REFERENCES.....		7 /
8.0 CERTIFICATE.....		8 /

## FIGURES, MAPS, AND TABLES

Figure 1 Location.....	follows page	1 /
Property Map.....	at back	/
Table I Property Descriptions.....	page	2 /
Table II Sample Results.....		4 /

## 1.0 INTRODUCTION

Pursuant to a request from the directors of West-Mar Resources Ltd., a mineral exploration program consisting of heavy mineral concentrate (HMC) stream sampling, reconnaissance geological investigation, and sampling of known mining working was conducted between May 8 and 10, 1987 on the Duchess claim group located east of Tofino, B.C. in the Alberni Mining Division.

The purpose of this report is to present the results of this survey and to relate them to known copper and gold mineralization on and adjacent to the property.

### 1.1 Location and Access

The Duchess Group is located on the east side of the Tranquil creek valley approximately 3.5 km from tidewater at Tranquil Inlet. Access to the property is via loose surface roads to the southwest edge of the claims. These roads are maintained by MacMillan-Bloedel for logging purposes and are accessible by barge from near Tofino, B.C. to Rankin Cove located some 10 km south of where Tranquil Creek enters the Inlet (Figure 1).

At the time of the property visit, road access was possible to within 2 km of the property.

The claims are located at 49 degrees 14.5 min. North latitude and 125 degrees 37.5 min. West longitude. The claims straddle the boundary between NTS map-sheets 92F/4E and 92F/5E. Tofino, B.C. is located approximately 20 km ESE of the property.

### 1.2 Topography and Climate

The Duchess Group lies in an area of rugged terrain near the west coast of Vancouver Island. Elevations range from 80 to 1000 meters above sea-level (260 to 3,300 feet). Cliffs over 50 meters in height (150 feet) are common over the property area.

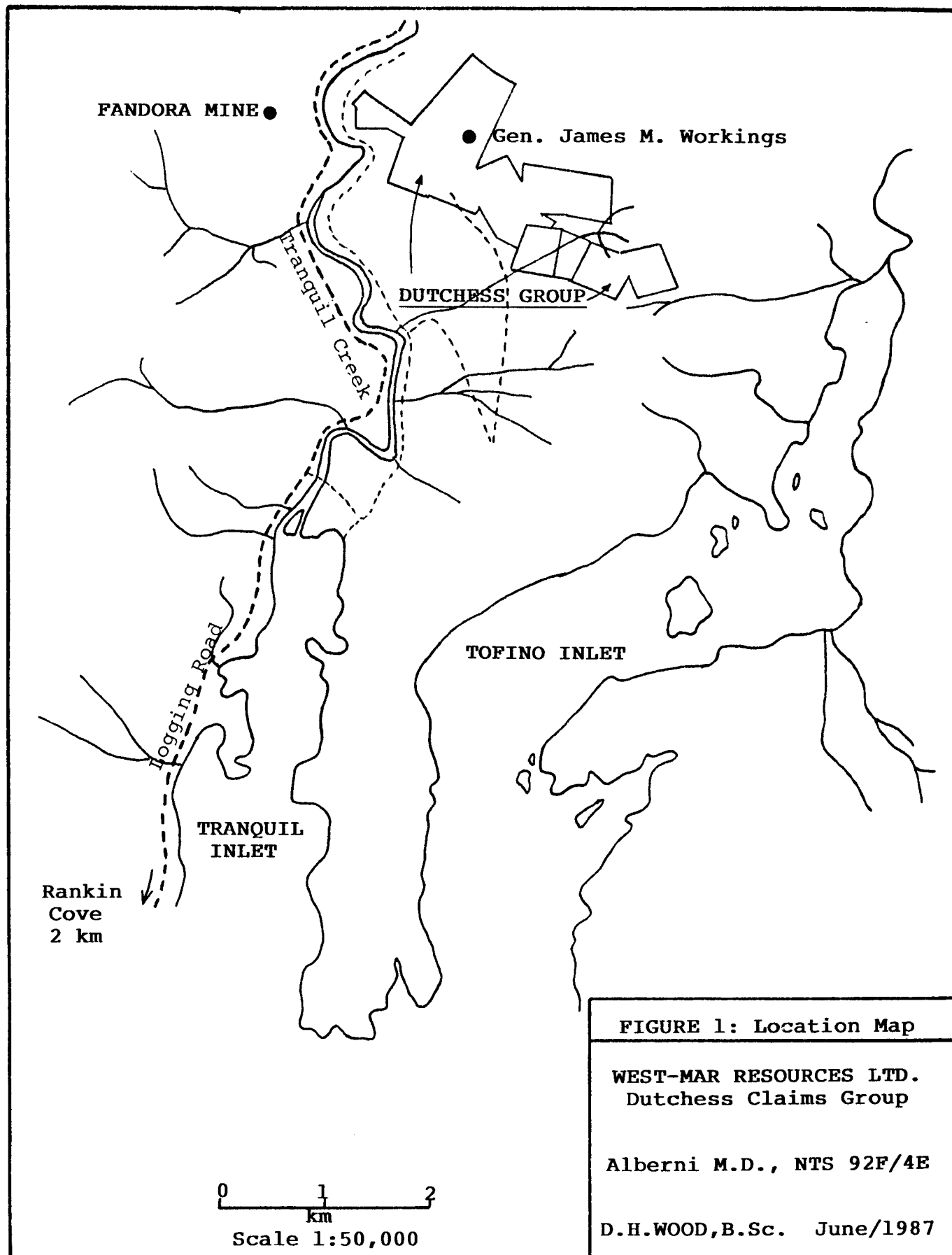
The climate in the area is temperate rain-forest with little snow in the winter months except where the elevation exceeds over 900 meters (3,000 feet). Rainfall is over 500 cm per year (200 in.) with most occurring during the period between October to June.

Outcrop exposure on the property is on the order of 15% to 35%, with most outcrops concentrated in cliff areas.

With the exception of the NW portion of the claims area, the property is covered by open mature forest consisting of red cedar, hemlock and douglas fir. The NW portion of the property is clear-cut due to logging activity during the past 10 years.

## 2.0 PROPERTY

The Duchess Group consists of 16 reverted crown grant mineral



claims as detailed in Table I. All except two of these are registered in the name of West-Mar Resources Ltd. of 1200-800 West Pender Street, Vancouver, B.C.. Assessment work covered by this report is filed for only those claims controlled by West-Mar Resources Ltd.

TABLE I

Duchess Group

Name	Lot #	Record #
Gen. James M.	318	1762
Lady Francis	319	1763
Superb	320	1764
Success	321	1765
Leviathan/Leviathan 2	322/323	1766
Count of Monte Cristo	326	1767
Condor	327	1768
American Wonder/Yankee Blade	386/387	1769
Duchess	388	1770
Countess	389	1771
Princess	390	1772
Hope	453	2896
Faith	454	2897
Leviathan Fr.	391	2931
B.C. Wonder	324	3029
Iron Duke	325	3046

### 3.0 HISTORY

Gold and copper mineralization have been known to occur in the immediate area of the Duchess property since late in the last century. However, it wasn't until the late 1930's that any significant development work was conducted. The main gold producer in the area is the Fandora property located 1/2 km west of the Duchess group on the west side of Tranquil Creek. The Fandora produced during the early 1940's and again during the early 1960's.

Although no production is recorded for the Duchess claims, underground workings on the Gen. James M. claim (lot #318) include a tracked adit with at least 30 meters of drift at one location visited during this investigation. Mining activity on the Duchess Group appears to have been for copper skarn deposits associated with the contact between intrusives and carbonate sediments.

### 4.0 GEOLOGY

#### 4.1 Introduction

The Duchess Group follows the contact between Jurassic aged diorite and quartz-diorite of the Island Intrusives and Late Paleozoic aged Sicker Group sediments and volcanics.

A regional scale NE trending fault offsets this contact clockwise toward the southwest. The fault follows the trace of Elsul Creek in the central portion of the claims area.

#### 4.2 Mineralization

Mineralization on the Duchess property is predominantly copper skarn localized by carbonaceous sediments on the north side of the contact with the intrusives. Breccia noted within veins suggests that some mineralization may have been remobilized during regional scale faulting activity. The dominant minerals are chalcopyrite and magnetite with minor pyrite and secondary copper carbonates.

In the immediate area of the Gen. James M. workings at least three steeply dipping, east-west trending, sub-parallel, copper-magnetite bearing quartz + massive sulfide vein systems are exposed. Samples were collected from each of these during the course of this investigation. Samples 8 and 9 are from the main workings, samples 5-7 are from at the entrance to a collapsed adit 30 meters due north of the main workings, and sample 4 is from a 40 cm vein exposed 20 meters east of the collapsed adit.

Vein widths vary between 0.75 and 2.5 meters. The widest vein is exposed at the small collapsed adit approximately 30 meters due north of the main Gen. James M. workings. At the entrance to the adit the vein is exposed on a cliff-side where it is 2.0 meters wide and can be traced visually for ten meters to the top of the cliff.

A close examination of this vein revealed the vein structure. The hangingwall here is porphyritic andesite below which are 10 cm of chalcopyrite and pyrite (5%) bearing milky quartz vein, .50 meters of breccia, 25 cm of massive chalcopyrite and magnetite, and 1.15 meters of breccia. The breccia contains between 5 and 30% magnetite and chalcopyrite with volcanic rock fragments.

Six rock chip samples were collected and analysed for trace gold (AA) and 30 elements (ICP) by Acme Analytical Laboratories of Vancouver, B.C. The results of the lab analyses are presented in the report as Appendix A. Sample descriptions are listed as Appendix B.

Table II lists the samples and the values for gold, silver, copper, lead and zinc.

Analysis indicates that copper mineralization in the area of the General James M. claim is associated with silver, lead, and zinc mineralization. Although gold values for samples 4 and 8 are significantly greater than for the rest of the samples, values below 100 ppb in rocks should not be considered anomalous for the Tranquil area, where gold grades often exceed several ounces

per ton in ore.

TABLE II

Sample Results

<u>Sample</u>	<u>Width(cm)</u>	<u>Au(ppb)</u>	<u>Ag(ppm)</u>	<u>Cu(%)</u>	<u>Zn(%)</u>	<u>Pb(%)</u>
BCW-87-1	HMC	2897				
BCW-87-2	HMC	N/D				
BCW-87-3	HMC	N/D				
BCW-87-4	150	64	39.6	3.38	.23	.03
BCW-87-5	25	7	13.3	1.83	.39	.008
BCW-87-6	N/A	1	28.3	.17	.53	.75
BCW-87-7	10	3	17.8	.69	.57	.31
BCW-87-8	100	32	36.7	4.32	.15	.002
BCW-87-9	75	1	3.7	.28	.04	.0002

Note: HMC = heavy mineral (panned) concentrate  
N/D = below detection limit  
N/A = not applicable

Three heavy mineral concentrate (HMC) stream sediment samples were collected along Elsul Creek to trace the origin of an anomalous rock sample collected in 1985 and reported by Mr. P.J. Gannon, B.Sc. in his report on the property dated August 20, 1985.

Sample BCW-87-1 (.042 mg Au per 14.5 g sample = 2897 ppb) was collected from the same area as the skarn specimen reported by Mr. Gannon. The low gold values from two more HMC samples collected higher up stream from this sample (BCW-87-2 & BCW-87-3) indicate that the source of gold mineralization is very likely nearby on the B.C. Wonder claim (included in the Duchess Group but not controlled by West-Mar Resources Ltd.).

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

The survey described in this report was designed to determine whether copper mineralization known to be present on the Duchess Group contained economical concentrations of precious metals as in other local mineral deposits such as the Pandora property located immediately west of the Duchess property.

The one area where encouraging gold values were encountered appears to lie outside the boundaries of the Duchess Group claims which West-Mar Resources currently controls.

Silver mineralization in samples collected from near the General James M. workings is present but not in great enough concentration to be economical at present prices.

It is this writer's opinion that no further work other than the minimum assessment be conducted on the property until such time as West-Mar Resources acquires the B.C. Wonder and Iron Duke claims (Lot #'s 324 & 325) and only then to determine the source of the high gold value encountered in sample BCW-87-1 (HMC). If at that time it is determined that potentially economical precious metal mineralization exists, I would recommend further exploration work.

Respectfully submitted,



Douglas H. Wood, B.Sc., FGAC

June 12, 1987



6.0 STATEMENT OF COSTS

Wages		
D.H. Wood	(4 days @ \$200/day)	\$800.00
J. Hawker	(4 days @ \$150/day)	600.00
Food and Accomodations		306.26
Transportation		
4x4 rental	(4 days @ \$80/day)	320.00
Gas & oil		42.50
Ferry		50.00
Float plane		380.00
Field Supplies		
Sample bags		6.00
Survey ribbon		4.00
Chain thread		4.00
Maps		8.24
Assays		129.00
Report preparation		480.00
<b>Total Costs</b>		<b>\$ 3,130.00</b>

Dated at Vancouver, Province of British Columbia, this 12th day of June, 1987.



Douglas H. Wood, B.Sc.  
Consulting Geologist

## 7.0 REFERENCES

Publications and reports, public and private, available to the writer and containing information pertinent to the property area and subject of this report are as follows:

Bacon, W.R. (1978)

Lode gold deposits in Western Canada, CIM Bulletin, Vol. 71, July 1978, p 96-104

Barr, D.A. (1980)

Gold in the Canadian Cordillera, CIM Bulletin, June 1980, p 59-76

Gannon, J.P., B.Sc. (August 1985)

Assessment Report on the Monte Cristo and Duchess Groups, Alberni M.D. for West-Mar Resources Ltd.

Muller, J.E., Ph.D (1968)

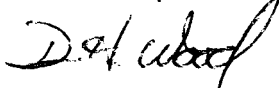
Geology and Mineral Deposits of the Alberni Map Area (92F), Geological Survey of Canada, Paper 68-50.

## 8.0 CERTIFICATE

I, Douglas Harold Wood, of the city of Vancouver, Province of British Columbia, hereby certify as follows:

1. I am a Consulting Geologist with offices at 808-1844 Barclay Street, Vancouver, British Columbia, Canada.
2. I am a graduate of the University of British Columbia, where I received the degree of Bachelor of Science in Geology in May 1981 and completed one year of post graduate studies at the University of B.C. in May 1982.
3. I am an Fellow in good standing of the Geological Association of Canada.
4. I have worked continuously as a Geologist from May 1982 to present on numerous projects throughout Canada and the western United States.
5. This report, dated June 12, 1987, is based on field examinations made by myself between May 8th and 10th, 1987 and a study of available public and private data and reports pertaining to the area.
6. I have no interest contingent or otherwise in the Duchess Group property nor in the securities of West-Mar Resources Ltd.

Dated at Vancouver, Province of British Columbia, this 12th day of June, 1987,



D.H. Wood, B.Sc., FGAC

Consulting Geologist

APPENDIX A

ASSAYERS DATA

ROME ANALYTICAL LABORATORIES LTD.  
952 E. HASTINGS, VANCOUVER B.C.  
PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED MAY 13 1987

DATE REPORTS MAILED

*May 20/87*

### ASSAY CERTIFICATE

SAMPLE TYPE : CONC.  
TOTAL AU\*\* BY FIRE ASSAY

ASSAYER *D. Toyne* DEAN TOYE . CERTIFIED B.C. ASSAYER

D.H. WOOD FILE# 87-1274A

PAGE# 1

SAMPLE	Total Au** mg	Sample wt. gm
BCW-87-1	.042	14.5
BCW-87-2	.001	9.7
BCW-87-3	.001	8.1

*4u Ppb*

2897

## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE CA P CR MG BA TI B AL NA K W SI ZR CE SN Y NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: Rock Chips AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: MAY 13 1987 DATE REPORT MAILED: *May 20/87* ASSAYER: *D. Toy* DEAN TOYE, CERTIFIED B.C. ASSAYER

D.H. WOOD File # 67-1274

SAMPLE#	MO	CU	PB	ZN	AG	NI	CD	MN	FE	AS	U	AU	TH	SR	CO	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	AU#
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPB
BCW-87-4	22	33823	32	2300	39.6	27	173	1036	23.61	152	8	ND	3	1	16	2	2	19	5.14	.006	3	1	.11	7	.01	2	.28	.03	.01	1	64
BCW-87-5	9	18336	8	3973	13.3	8	90	2820	32.12	23	6	ND	3	2	33	2	2	4	2.39	.005	3	1	.15	3	.01	2	.18	.01	.01	1	7
BCW-87-6	1	1733	7550	5308	28.3	6	45	1575	1.32	25	5	ND	1	7	50	8	59	4	3.29	.024	2	1	.25	1	.01	52	.21	.01	.01	1	1
BCW-87-7	21	6940	3155	5744	17.8	4	35	3295	8.03	24	5	ND	1	5	31	3	33	35	8.00	.013	3	1	.42	1	.01	3	.69	.04	.01	5	3
BCW-87-8	5	43160	20	1499	36.7	37	160	837	33.16	40	5	ND	2	1	11	3	2	74	.79	.012	2	1	.10	16	.02	2	.11	.01	.01	1	32
BCW-87-9	5	2784	2	349	3.7	2	25	519	38.53	2	5	ND	2	1	2	4	2	20	.33	.001	2	1	.33	2	.01	2	.25	.01	.01	1	1
STD C/AU-R	19	58	36	131	6.7	67	27	985	3.98	40	19	7	32	47	17	14	19	62	.43	.099	35	56	.83	175	.08	34	1.66	.07	.12	12	510

- ASSAY REQUIRED FOR CORRECT RESULT *for Cu > 10,000 PPM*  
*Ag > 35 PPM*

APPENDIX B

SAMPLE DESCRIPTIONS

## SAMPLE DESCRPTIONS

### BCW-87-4

Massive chalcopryrite + magnetite + pyrite from across 20-150 cm vein located 35 meters @ 035 deg Az from the main General James M. workings.

### BCW-87-5

Massive chalcopryrite+ magnetite across 25 cm within 2 meter vein system located 30 meters due north of the main General James M. workings at small collapsed adit.

### BCW-87-6

Quartz float sample containing chalcopryrite + pyrite (2%-5%). Malachite stained. Sampled from dump at small adit 30 meters north of the main General James M. workings.

### BCW-87-7

Chalcopryrite + pyrite (3%) across 10 cm in quartz at hangingwall of vein exposed at entrance to adit 30 meters north of the main General James M. workings.

### BCW-87-8

Massive chalcopryrite + magnetite across 1 meter at entrance to main General James M. workings.

### BCW-87-9

Massive magnetite from parallel 2 meter wide breccia zone located 10 meters north of the entrance to the main General James M. workings.

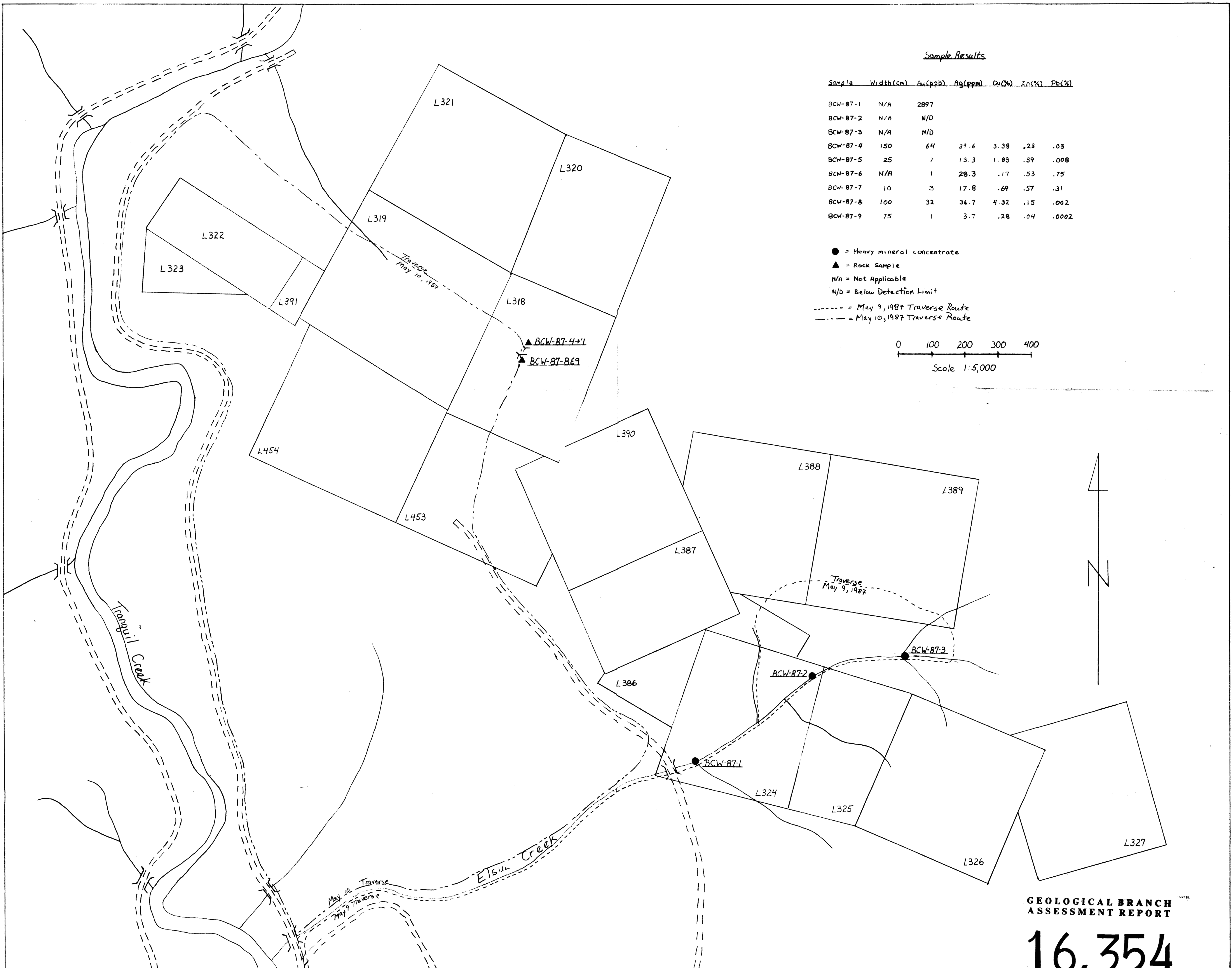
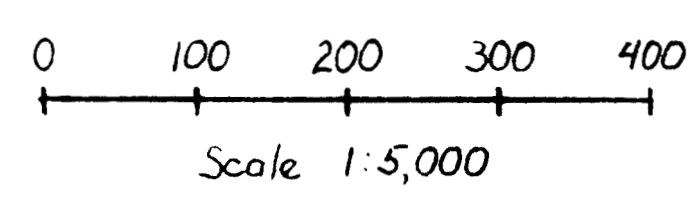


Sample Results

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BCW-87-8	100	32	34.7	4.32	.15	.002
BCW-87-9	75	1	3.7	.28	.04	.0002

- = Heavy mineral concentrate
- ▲ = Rock Sample
- N/A = Not Applicable
- N/D = Below Detection Limit

----- = May 9, 1987 Traverse Route  
 - - - - - = May 10, 1987 Traverse Route



GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

**16,354**

WEST-MAR RESOURCES LIMITED

Duchess Claims Group  
 Alberni Mining Division, B.C.  
 NTS MAP 92F/4E & 5E