

PERCUSSION DRILLING REPORT  
on the  
CU 17, DO 4 FR. AND DO 8 FR. MINERAL CLAIMS  
HIGHLAND VALLEY AREA  
KAMLOOPI'S MINING DIVISION

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NTS Sheet - 92I/7W	UTM Grid - Zone 10
Latitude - 50° 26.2'	North - 5587500
Longitude - 120° 57.9'	East - 644750

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BETHLEHEM COPPER CORPORATION  
Suite 2100 - Guinness Tower  
1055 West Hastings Street  
Vancouver, B.C.  
V6E 2H8

January 15, 1979

J. R. Bellamy - Chief Geologist

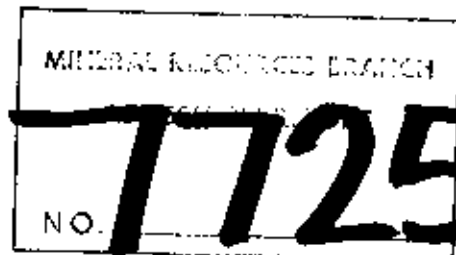
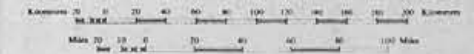


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BRITISH COLUMBIA

SCALE 1:5,000,000

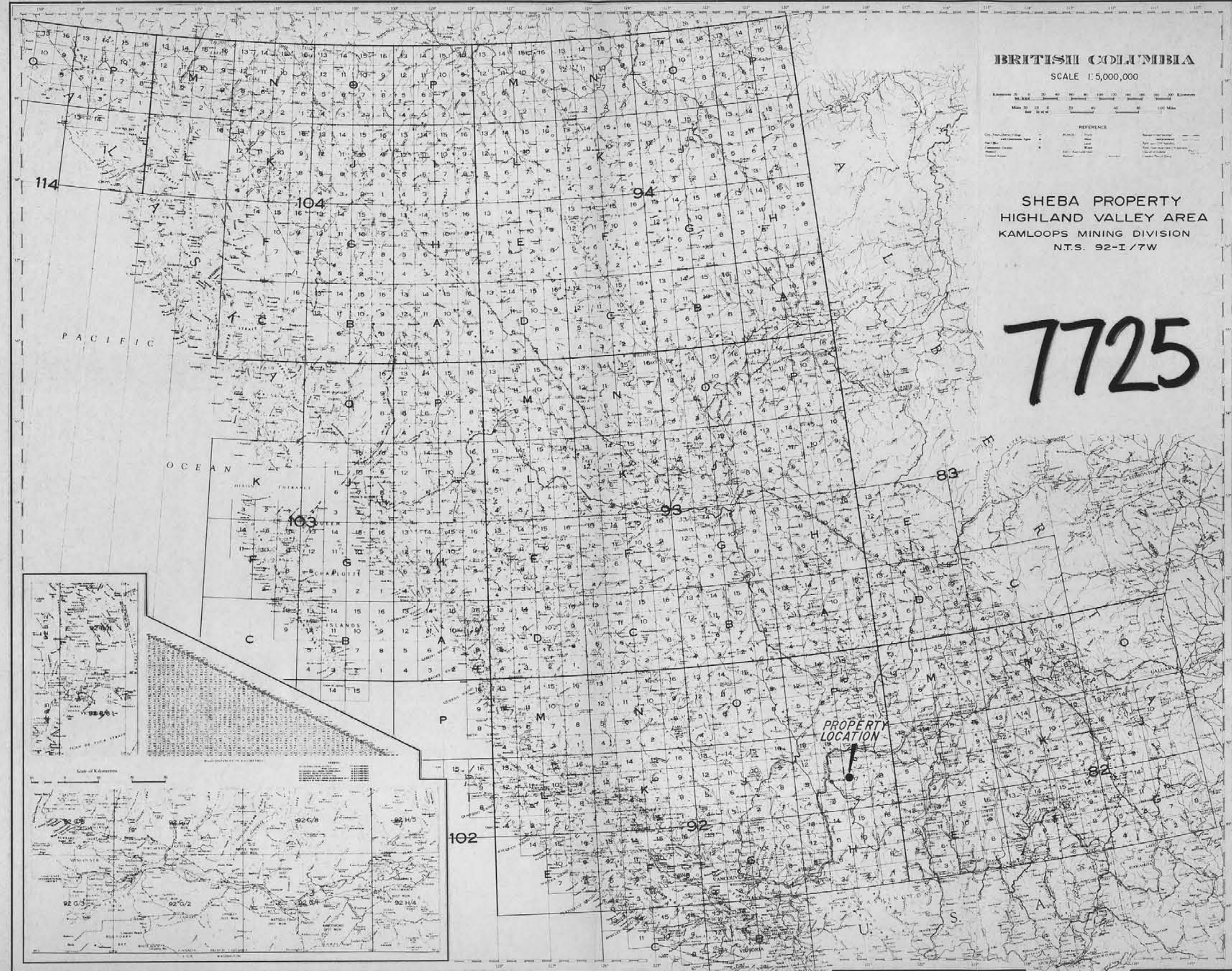


REFERENCE

City, Town, Village, Hamlet	Black	Water	Shaded Relief
Railway	Red	Ice	Spot Height
Highway	Blue	Perennial Stream	Contour Interval
Other	Green	Intermittent Stream	Contour Interval

SHEBA PROPERTY  
HIGHLAND VALLEY AREA  
KAMLOOPS MINING DIVISION  
N.T.S. 92-I/7W

7725



## SECTION A - SUMMARY OF WORK

### INTRODUCTION

In mid-December a truck-mounted percussion drill was mobilized to the southern portion of the Sheba claims to undertake a three hole drilling program. The three drill sites were located along an old exploration road that leads west to the Highmont one zone and south to the New Minex property. The purpose of the drilling program was to test molybdenum anomalies known to be associated with fault and vein structures around the Gnawed mountain breccia zones. Earlier drilling by Dowa Mining, south and west of the December drilling area, intersected scattered high molybdenum values in the upper portion of the drill holes.

Percussion drill holes S-78-1 and 2 were drilled along a north-south fault structure that cuts through Skeena granodiorites some 300 m west of the Skeena-Bethlehem rock contact. Hole S-78-1 is located 330 m north of diamond drill hole S-72-7 which contained 15 m of .21 MoS<sub>2</sub> mineralization near the top of the hole. Hole S-78-2 was drilled 274 m north of the first percussion hole and returned only background copper-molybdenum values. Similar values were encountered in hole S-78-3 which was sited 365 m west-northwest of hole S-78-2. In the last 15 m of this hole the molybdenum values increase some five times above the hole's, average to 0.015%, contained Mo. The low values returned in the three percussion holes further limit the molybdenum porphyry possibilities in the southern portion of the Sheba claims.

### LOCATION AND ACCESS

The Bethlehem mine property and the adjoining Sheba claims are located in the Highland Valley area, Kamloops Mining Division, British Columbia. The 81 claims of the Sheba property are bounded by the Bethlehem, Lornex, New Minex and Highmont mining properties and can be reached by bush roads from all of the above properties.

Continued heavy snowfalls in December necessitated the ploughing of drill access roads in order to mobilize a truck mounted percussion rig and a water truck. The access to the percussion sites was provided by an old exploration road constructed by Dowa Mining which leads off the Lornex-Hightmont mine road. The drilling sites were located on the road thereby making drill site construction unnecessary.

The drilling rig was mobilized to the property December 19 and demobilized December 27. Total cumulative drilling was 277.4 m. Water was obtained from a small lake in the immediate vicinity of the drilling and hauled to the drill sites by a water truck.

#### CLAIM STATUS

The Sheba property consists of 81 full-sized and fractional mineral claims that are owned by Sheba Copper Mines Limited of Vancouver, B.C. Bethlehem holds an option on these claims pursuant to the terms and conditions of an agreement dated July 8, 1977. One hole was drilled on each of the claims Cu 17, Do 4 Fr. and Do 8 Fr. A schedule of mineral claims is appended in Section D.

#### GENERAL GEOLOGY

The Highland Valley occupies an east-west fault system that crosses the central portion of the multi-phased, concentrically zoned, post Upper Triassic-pre Middle Jurassic aged, Guichon Creek batholith. The Sheba and Bethlehem properties straddle geological contacts of the central to intermediate phases of the batholith which are cross-cut by late stage magmatic dyke swarms and reactivated fault systems. The younger, more leucocratic, core phases grade outward to older, mafic rich, dioritic border phases which crop out east of the Bethlehem properties.

The Sheba claim group contains rock units belonging to the Bethsaida, Bethlehem and Highland Valley phases which are cut by porphyry dykes and plugs associated with the younger intrusive stages. The rock



units found in this year's drilling area belong to the Bethsaida phase of the Guichon Creek batholith. To the west and south are emplaced younger, quartz monzonites to granodiorites of the Bethsaida and Bethlehem phases.

The rock type in the drilling area is a variety of the Bethsaida phase called Skeena granodiorite. The Skeena variety is intermediate in composition and texture between Bethlehem and Bethsaida phases. North and south-west of the drilling sites can be found dykes and dyke swarms composed of quartz monzonite porphyry, slightly younger than, but related to the Bethsaida phase of intrusion in the Guichon Creek batholith.

#### DRILLING

The three percussion holes, S-78-1 to 3 were drilled in granodiorites classified as Skeena, an intermediate rock type between Bethlehem and Bethsaida phases. Fault structures have been mapped in the immediate vicinity of the three holes and it is possible the few spot copper and molybdenum values intersected in the second and third holes can be attributed to minor fracture controlled mineralization related to late-stage faulting.

The alteration noted in the drill cuttings is generally a very weak propylitic alteration consisting of chloritization and sericitization of the mafics and very weak sericitization of some plagioclase feldspars. The biotites and hornblends appear to be selectively altered with small hornblende aggregates often heavily chloritized while larger biotite books are relatively fresh. The stronger sericite alteration of the biotites in hole S-78-3, the deeper weathering of the granodiorite and the presence of vein boundary sericite-quartz-calcite-clay alteration indicates the presence of nearby fault structures and the proximity of the Highmont east zone mineral deposit.

The sulphide values intersected in the three percussion holes are indicative of the normal background values of copper and molybdenum found in the intrusive phases of the Guichon batholith. If anything the copper values are lower than that normally found on the Sheba property. The slightly higher molybdenum assays intersected in the bottom of hole P.C. S-78-3 could be influenced by the proximity of the nearby fault or be a reflection of the increased mineralization in the Trench Zone located some 730 meters to the west.

#### DRILL HOLE DATA

<u>Hole No.</u>	<u>Latitude</u>	<u>Departure</u>	<u>Elevation</u>	<u>Depth(m)</u>
PC S-78-1	81+75 S	3 E	5320'	91.46
S-78-2	72+50 S	2+50 E	5320'	79.26
S-78-3	68+75 S	9 W	5400'	106.71

#### CONCLUSIONS AND RECOMMENDATIONS

The object of the December percussion drilling program was to test the southern portion of the Sheba claim group for northward extensions of the molybdenum mineralization known to occur on the New Minex ground to the south and the Highmont ground to the west. Molybdenum values have been intersected in widely spaced diamond drill holes surrounding the drilling area and like the occurrences on the New Minex ground appear to be related to fissure veins and/or shear zones. The percussion drilling was located near major fault structures and was partly designed to test the structures for signs of sulphide remobilization.

Several other factors influencing the location of the percussion holes, were the proximity to vein breccia occurrences, weak coincident I.P. anomalies, the increase in soil molybdenum geochemical values and the ease of access.

The uniformly low tenor of molybdenum and copper values indicates the low potential of the area for a buried sulphide porphyry system. The weak to moderate chlorite-sericite alteration of the mafic minerals noted in the percussion chips is related to the adjacent fault structures or possibly to the hydrothermal alteration associated with nearby late stage porphyry dyke systems. No further drilling is recommended in this area.

Respectfully submitted,



J. R. Bellamy  
Chief Geologist



SECTION B - STATEMENT OF EXPENDITURES

Expense Period - December 15-31, 1978

1. Contractors' Expenditures (see accompanying invoices)

(a) Josco Mining Co. Ltd.		
- percussion drilling contractor		
Invoice dated January 2, 1979		\$4,561.00
(b) Robo Transport Ltd.		
- transport of TD-20 bulldozer from		
Hat Creek to Highland Valley and		
return		
Invoice dated December 20, 1978	\$181.50	
"      "      December 27, 1978	<u>\$132.00</u>	
	313.50	\$ 313.50
(c) Ed Lehman		
- bulldozer for snow removal on		
access roads		
20 hours @ \$43.00/hour		\$ 860.00
	TOTAL CONTRACTOR EXPENSES	\$5,734.50

2. Bethlehem Expenditures

(a) <u>Personnel</u>		
R. E. Anderson - Exploration Manager		
.5 day in general project supervision		
@ \$185.00/day		\$ 92.50
J. R. Bellamy - Chief Geologist		
3 days in project supervision and		
report compilation @ \$125.05/day		\$ 375.15
J. G. Collins - Field Supervisor		
December 15, 20-24, 29 (7 days)		
7 days @ \$85.13/day		\$ 595.91
E. Andersen - Property Agent		
1 day in data compilation and report		
preparation @ \$96.23		\$ 96.23

2. Bethlehem Expenditures (Contd.)

A. Emo - Secretary					
1 day @ \$55.52				\$	55.52
					<hr/>
	TOTAL PERSONNEL			\$	1,215.31
(b) <u>Transportation</u>					
J. G. Collins - Ford F-250 4WD Pick-up				\$	245.00
7 days @ \$35.00/day					
(c) <u>Assaying</u>					
90 Cu/Mo determinations performed at Bethlehem's Highland Valley laboratory				\$	787.50
90 @ \$8.75					
(d) <u>Supplies</u>					
90 61.0 x 91.4 cm 6 mil plastic sample bags for drill cuttings				\$	45.00
90 @ \$0.50					<hr/>
	TOTAL BETHLEHEM EXPENDITURES		\$2,292.80		
	TOTAL PROJECT EXPENDITURES		\$8,027.30		
	TOTAL DRILLING		277.4 m		
	AVERAGE COST		\$	28.94/metre	

3. Cost Distribution

<u>Hole No.</u>	<u>Length (metres)</u>	<u>Unit/Cost \$/m</u>	<u>Total</u>	<u>Mineral Claim</u>	<u>Record No.</u>
PC-S-78-1	93.4	\$28.94	\$2,646.36	Cu 17	34753 R
PC-S-78-2	79.2	\$28.94	\$2,293.51	Do 4 Fr.	64161 E
PC-S-78-3	106.7	\$28.94	\$3,087.42	Do 8 Fr.	64647 G

Phone: 570-9127.

JOSCO MINING CO. LTD.  
P.O. Box 565, Kooloos, B.C. V2C 5L7.

JAN - 4 1979

Jan. 2, 1979.

Sheba Copper Corporation,  
2100 - 1050 West Hastings, St.,  
Vancouver, B.C.

Dear Sirs: Attention: Mr. Robin Anderson.

Following is a statement of our account for percussion drilling on the Sheba Property in Highland Valley, during the period Dec. 19-27, 1978:

Hole No.	Bedrock Depth	Feet Cased	Total Footage Drilled	Water Truck
Sheba A-78	0 ft.	20 ft.	300 ft.	2 shifts.
Sheba B-78	0 "	10 "	260 "	1 "
Sheba C-78	10 "	10 "	350 "	1 "
Totals .....			910 ft.	4 shifts.

Drilling Charges ... 910 ft. @ \$3.50 per ft. .... \$ 3185.00

Mobilization & De-Mobilization Charges

Dec. 19....	Loaded Charges Merritt to Sheba.....	\$ 133.00
	18 man hrs. @ \$15.00 per hr.....	\$ 240.00
	4 hrs. equipment rental @ \$30.00 .....	\$ 120.00
Dec. 23	Walking Drill Out	
	8 man hrs. @ \$15.00 per hr.....	\$ 120.00
	4 hrs. Equipment Rental @ \$30.00 per hr. \$	120.00
Dec. 27	Loaded Charges- Sheba to Merritt.....	\$ 133.00
	8 man hrs. @ \$ 15.00 per hr.....	\$ 120.00

Total Mobilization & De-Mobilization Charges \$ 936.00

Water Truck Charges

	4 shifts @ \$ 60.00 per Shift.....	\$ 240.00
Dec. 24	Move Water Truck Out	
	1/2 shift @ \$60.00 per shift.....	\$ 30.00
	8 man hrs. @ \$15.00 per hr.....	\$ 120.00

Total Water Truck Charges..... \$ 390.00

Total Amount Due ..... \$ 4561.00

Yours very truly,

*John W. Scott*  
John W. Scott,  
Josco Mining Co. Ltd.

*Steve B. Bennett*  
113-944  
R.W.

# ROBO TRANSPORT LTD.

755 CARRIER ST., MT. PAUL INDUSTRIAL ESTATES  
KAMLOOPS, B.C.

TELEPHONE:

Days: 374-0084  
Nights: 376-8391

Shippers No. \_\_\_\_\_

Receiver No. \_\_\_\_\_

Truck No. 40

Trailer No. 101

## STRAIGHT BILL OF LADING - ORIGINAL NOT NEGOTIABLE

RECEIVED, subject to the classifications and tariffs in effect on the date of issue of this Original Bill of

Lading at HOT CREEK (Point of origin) DEC 20 1978 (Date)

From E.D. LEHMAN (Shipper)

The goods described below, in apparent good order, except as noted (contents and condition of packages unknown) marked, consigned, and destined as shown below, which said Carrier agrees to carry and deliver to said Consignee at said destination, if on its own route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said goods over all or any portion of said route to destination and as to each party at any time interested in all or any of said goods, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including conditions on the back hereof, and which are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to BETHLEHEM COPPER CORP.

Destination HIGHLAND VALLEY Province of \_\_\_\_\_ State of \_\_\_\_\_

Route (ATTN JOHN COLLINGS)

No. Pieces	Description of Articles and Special Marks	Gross Weight	Freight Charges
	<u>10 TRANSPORT</u>		
	<u>1 TD 20 INC TRACTOR</u>		
	<u>CA BLADE</u>		
		<u>5 1/2 lbs @ 33.00</u>	

Permit & Tolls \_\_\_\_\_ TOTAL 181.50

Mileage Highway \_\_\_\_\_ 3-851 132.

Mileage Bush 5 1/2 H 128. this amount 313.50

NOTE: ARTICLES NOT PROPERLY PACKAGED AND ADDRESSED SHIPPED AT OWNERS RISK  
LOADING & UNLOADING DONE AT OWNERS RISK

Shipper \_\_\_\_\_ Receiver [Signature] ROBO TRANSPORT LTD. No 14825

Per \_\_\_\_\_ Per [Signature] Per [Signature]

# ROBO TRANSPORT LTD.

755 CARRIER ST., MT. PAUL INDUSTRIAL ESTATES  
KAMLOOPS, B.C.

TELEPHONE:  
Days: 374-0084  
Nights: 376-8391

Shippers No. \_\_\_\_\_  
Receiver No. \_\_\_\_\_

Truck No. 40  
Trailer No. 109

**STRAIGHT BILL OF LADING - ORIGINAL NOT NEGOTIABLE**

RECEIVED, subject to the classifications and tariffs in effect on the date of issue of this Original Bill of Lading at DETHLEHEIM COPPER (Point of origin) DEC 27 1978 (Date)  
From HIGH LAND VALLEY (Shipper) ANN JOHN COLLINS

The goods described below, in apparent good order, except as noted (contents and condition of packages unknown) marked, consigned, and destined as shown below, which said Carrier agrees to carry and deliver to said Consignee at said destination, if on its own route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said goods over all or any portion of said route to destination and as to each party at any time interested in all or any of said goods, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including conditions on the back hereof, and which are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to ED LEHMAN

Destination HAR CREEK Province of \_\_\_\_\_ State of \_\_\_\_\_

Route \_\_\_\_\_

No. Pieces	Description of Articles and Special Marks	Gross Weight	Freight Charges
	<u>TO TRANSPORT</u>		
	<u>1 (T.D) 20 TRACTOR + BLADE</u>		
	<u>4/8 @ 33.00</u>		
	<u>E. Lehman H. P. [Signature]</u>		

Permit & Tolls \_\_\_\_\_ TOTAL 132.00  
 Mileage Highway 4/10 Loading \_\_\_\_\_  
 Mileage Bush \_\_\_\_\_ Unloading \_\_\_\_\_

NOTE: ARTICLES NOT PROPERLY PACKAGED AND ADDRESSED SHIPPED AT OWNERS RISK  
LOADING & UNLOADING DONE AT OWNERS RISK

Shipper \_\_\_\_\_ Receiver \_\_\_\_\_ ROBO TRANSPORT LTD. NO 15127  
 Per \_\_\_\_\_ Per \_\_\_\_\_ Per [Signature]

ED LEHMAN  
 GEN. DEL. - ASSISTANT, U. S.  
 LUMBER & BUILDING

Date Jan 8 1979  
 Bethlehem Mines  
 To Jon Collins

SOLD BY	C DO.	CHARGE	DN ACCT.	ACCT. FWD.
1		20 Kus @ \$3.00 each		
2		(Catwalk)		\$800.00
3				
4				
5				
6				
7				
8				
9				
10		Chge		
11		#13-351		
12				
13		1.2 hrs. Payment		
14		Y 200		
15				\$800.00

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John R. Bellamy

1. Attended the University of Calgary from 1966 to 1970 and graduated with a B.Sc., Geology.
2. Geologist with Cominco Ltd. from May to September 1970 carrying out field exploration in the Yukon.
3. Geologist with Cominco Ltd. from May to September 1971 carrying out exploration and mine geological work in the Pinchi Lake area of central British Columbia.
4. Commenced employment with Bethlehem Copper Corporation in September 1971 and has been continuously employed by this firm and involved in the following activities:
  - (a) September 1971 to September 1972 - engaged at the Highland Valley operations as an exploration geologist working on the J.A. Project; a large scale drilling program.
  - (b) September 1972 to April 1973 - assigned to Bethlehem's subsidiary, Betheire Mines Ltd., to conduct property evaluations and co-ordinate exploration programs in the Republic of Ireland.
  - (c) May 1973 to September 1973 - carrying out regional geological mapping programs in the Yukon and Northwest Territories.
  - (d) October 1973 to June 1974 - engaged on a large scale diamond drilling program on the Iona and Jersey zones at the Highland Valley operations.
  - (e) July 1974 to September 1974 - assigned to the Arctic Red Syndicate, a large scale regional venture in the Mackenzie Mountains of the Yukon and Northwest Territories.
  - (f) October 1974 to March 1975 - managed Bethlehem's branch office in Manila, Philippines and carried out mineral property evaluations.
  - (g) April 1975 to December 1975 - engaged as Project Geologist on a number of properties including the Rev group in the Northwest Territories and the Sierra Madre in Sonora, Mexico.



- (h) 1976 - Project Geologist working on various programs including the Bear-Twit (Northwest Territories), Victorio Mtns. (New Mexico), and general work in Nevada and British Columbia.
- (i) 1977 - Project Geologist on the Little Hatchet property (New Mexico), Frogmoore Lakes (B.C.), Arctic Red (N.W.T.), and Sheba property (B.C.).
- (j) January to June 1978 - general property examinations and reviews in British Columbia.
- (k) July to September 1978 - Project Geologist in charge of the Skeena Project, a large scale regional sampling program in northwestern B.C.
- (i) September 1978 - appointed Chief Geologist for Bethlehem Copper.

SECTION D - SCHEDULE OF MINERAL CLAIMS

The following eighty-one (81) mineral claims are owned by Sheba Copper Mines Ltd. but optioned by Bethlehem Copper Corporation under the terms of an agreement dated July 8, 1977.

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>ASSESSMENT EXPIRY DATE</u>
Ann 2 Fr.	45131 B	February 21, 1985
Ann 5 Fr.	45134 B	February 21, 1985
Ann 6 Fr.	45135 B	February 21, 1985
Ann 15 Fr.	46150 E	May 20, 1988
Ann 16 Fr.	46151 E	May 20, 1985
Ann 17 Fr.	46152 E	May 20, 1985
CS 1 Fr.	36023 D	April 19, 1988
CS 1 & 3	36021 D	
	36022 D	April 19, 1988
CU 1 - 6	38610 A -	
	38615 A	January 12, 1985
CU 17 - 20	34763 R -	
	34766 R	December 14, 1984
DEE 3 Fr.	62540 A	January 25, 1985
DO 1	64166 E	May 19, 1985
DO 2	64167 E	May 19, 1985
DO 3	64168 E	May 19, 1988
DO 4	64169 E	May 19, 1985
DO 5 - 6	64164 E	
	64165 E	May 19, 1985
DO 1 Fr.	64170 E	May 19, 1988
DO 2 Fr.	64171 E	May 19, 1987
DO 3 Fr.	64172 E	May 19, 1986
DO 4 - 6 Fr.	64161 E -	
	64163 E	May 19, 1986
DO 7 - 8 Fr.	64646 G	
	64647 G	June 15, 1985
J 1 - 4	38223 M -	
	38226 M	September 20, 1988
J 5 - 7	38227 M -	
	38229 M	September 20, 1985
J 8	38230 M	September 20, 1986
J 11	36456 E	May 23, 1986
J 31 - 32	38986 D	
	38987 D	April 2, 1988
J 41 - 42	36463 E	
	36464 E	May 23, 1988
J 33 FR.	38988 D	April 2, 1988
J 34 - 36 FR.	36457 E -	
	36459 E	May 23, 1988

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>ASSESSMENT EXPIRY DATE</u>
J 37 Fr.	36460 E	May 23, 1988
J 38 Fr.	36461 E	May 23, 1988
J 40 Fr.	36462 E	May 23, 1988
Jay 9 - 10	38345 N	
	38346 N	October 11, 1988
Jay 12	44814 R	December 18, 1985
Jay 13, 15, 17	38348 N	
	38350 N	
	38352 N	October 11, 1988
Jay 14	38349 N	October 11, 1988
Jay 16	38351 N	October 11, 1988
Jay 18	38353 N	October 11, 1988
Jay 19	38354 N	October 11, 1988
Jay 20	38355 N	October 11, 1988
Jay 101	37921 K	August 9, 1985
Jay 104 Fr.	37924 K	August 9, 1985
JJ 1 Fr.	36455 E	May 23, 1986
JJ 2 Fr.	38816 O	March 12, 1986
Lynn 1	38571 R	December 11, 1988
Lynn 3 & 5	38573 R	
	38575 R	December 11, 1988
Lynn 7 Fr & 10 Fr.	38577 R	
	38579 R	December 11, 1988
Sheba 21 - 24	38700 B -	
	38703 B	February 8, 1985
Sheba 25 - 26	44812 R	
	44813 R	December 18, 1985
VI 1 Fr.	95213 B	February 23, 1985

SECTION E - DRILL HOLE DATA

Drill Hole Record

Drill Hole Logs

PC-S-78-1

PC-S-78-2

PC-S-78-3

Assay Reports



DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION

SHEET No.

Property	Sheba	Hole No.	PC-S-78-1	Bearing	Elevation	5320'	Logged by	J. Bellamy
District	Kankops	Length	91.46 m	Dip	Overburden	0'	Date	Jan. 15, 1979
Commenced	20.12.78	Latitude	81+75 S	Hor.Comp.	Recovery			
Completed	20.12.78	Departure	3 E	Vert.Comp.	Purpose			

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo			% Recovery	
	Py: Cp	Be: Cp	% Py	Sec	Chl	Ep	K-spr	Faults	Fractures	Qtz Veining	Aphitic Veins									
Sheba Granodiorite												0	10		.01	Tr				
The Sheba rock type is a medium grained mafic-mafic granular granodiorite composed of euhedral plagioclase, subhedral orthoclase, and biotite, with interstitial medium-coarse grained sub rectangular quartz and fine sub-hedral orthoclase. Fine biotite and magnetite fine about ground mass. Biotite clumps partially replaced by chlorite, sericite, epidote and clay mineral clumps of specular hematite in fine grained ground mass. Chlorites and clay on fractures.												10	20		.01	Tr				
												20	30		.02	Tr				
												30	40		.01	Tr				
												40	50		.01	Tr				
												50	60		.02	Tr				
													60	70		.01	Tr			
													70	80		.01	Tr			
													80	90		.01	Tr			
													90	100		.03	.003			
													100	110		.08	.025			
													110	120		.04	.006			
													120	130		.02	.002			
													130	140		.03	.002			
												140	150		.01	.002				
												150	160		.03	.002				
												160	170		.02	.002				
												170	180		.02	.001				
Composition:												180	190		.05	.002				
Quartz 20% subhedral												190	200		.05	.002				
Plagioclase 50% euhedral												200	210		.05	.002				
Orthoclase 10% subhedral												210	220		.05	.002				
Biotite 10% sub-euhedral												220	230		.05	.002				
Hornblende 5% subhedral												230	240		.05	.002				
Groundmass Si, Si, sphene, apatite												240	250		.05	Tr				
At depth biotite looks like coarse grained, fractured sericitized and calcite lined												250	260		.02	Tr				
biotites have quartz between laminae.												260	270		.03	Tr				
												270	280		.04	Tr				
												280	290		.04	Tr				
												290	300		.06	Tr				
												End of hole								

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION

SHEET No.

Property	Sheba	Hole No.	FC-S-78-2	Bearing		Elevation	5320'	Logged by J. Bellamy	
District	Kanloops	Length	79.25 m	Dip	-90	Overburden	0'	Date Jan. 15, 1978	
Commenced	21.12.78	Latitude	72+50S	Hor. Comp.	-	Recovery			
Completed	21.12.78	Departure	2+50E	Vert. Comp.	-	Purpose			

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo			% Recovery
	Py: Cp	Su: Cp	% Py	Set	Chl	Ep	K-spar	Faults	Fractures	Qtz Veining	Apitic Veins								
Sheba Granodiorite																			
A medium coarse-grained granodiorite with low K feldspar sections approaching diorite in composition. The feldspars are unaltered except near fractures where biotite becomes sericitized and the anhedral poikilitic hornblends clays chloritized and epidotized. Biotite bodies contain quartz inclusions while groundmass biotites and hornblends are intergrown with quartz, k-feldspar spheres and magnetite.												0	10		.03	.001			
												10	20		.11	.001			
												20	30		.08	.001			
												30	40		.04	.002			
												40	50		.05	.003			
												50	60		.05	.002			
												60	70		.03	.001			
												70	80		.02	.001			
												80	90		.01	.003			
												90	100		.03	.002			
												100	110		.01	.001			
												110	120		.01	.001			
												120	130		.01	.001			
												130	140		.01	.001			
												140	150		.01	.002			
												150	160		.01	.002			
												160	170		.02	.002			
												170	180		.02	.001			
												180	190		.03	.001			
												190	200		.01	.001			
												200	210		.02	.001			
												210	220		.02	.001			
												220	230		.02	.001			
												230	240		.01	.001			
												240	250		.02	.001			
												250	260		.02	.001			
													End of Hole						



DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION

SHEET No.

Property	Shaba	Hole No.	PC S-78-3	Bearing		Elevation	5400'	Logged by J. Bellamy	
District	Katloops	Length	106.71 m	Dip	-90	Overburden	3.05 m	Date Jan. 15, 1979	
Commenced	22.12.78	Latitude	58°75' S	Hor. Comp.		Recovery			
Completed	22.12.78	Departure	9W	Vert. Comp.		Purpose			

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	% Cu	% Mo			% Recovery
	Py	Cp	Bn	Sec	Chl	Ep	X-spar	Faults	Fractures	Ox. Veining	Aplitic Veins								
Exposed Diorite												10	20		.04	.002			
A medium grained dioritic hypidiomorphic granular quartz rich intrusive that is weakly propylitically altered. Near surface alteration consists of magnetite being altered to hematite, calcic groundmass being altered to kaolin and nonmuscovite, mafics are weakly sericitized; hematite oxidized, biotite altered to sericite and calcite and the rock stained by iron oxides.												20	30		.03	.005			
Specialite common near surface. Alteration of the mafic minerals is higher in this hole than S-78-1 and 2 and reflects the proximity to a large fault. At depth chlorite, sericite alteration of the hornblendes and biotites is well advanced. Fractures contain gypsum-clay partings. Sericite clay selvages are noted along quartz veins. Note: Sulphides were observed, minor cp in quartz.												30	40		.01	.001			
												40	50		.05	.002			
												50	60		.05	.002			
												60	70		.03	.002			
												70	80		.04	.002			
												80	90		.16	.004			
												90	100		.06	.004			
												100	110		.03	.003			
												110	120		.03	.002			
												120	130		.03	.002			
												130	140		.02	.004			
												140	150		.02	.002			
												150	160		.04	.002			
												160	170		.02	.001			
												170	180		.03	.001			
												180	190		.02	.002			
												190	200		.01	.001			
												200	210		.02	.002			
												210	220		.02	.002			
												220	230		.10	.011			
												230	240		.11	.023			
												240	250		.02	.002			
												250	260		.03	.003			
												260	270		.03	.004			
												270	280		.03	.003			
												280	290		.03	.004			
												290	300		.02	.005			
												300	310		.08	.012			
												310	320		.08	.017			
												320	330		.08	.018			
												330	340		.08	.015			
												340	350		.07	.013			
												End	of Hole						

File - Sheba  
- Assays

BETHLEHEM COPPER CORPORATION LTD.  
ASHCROFT, B. C.

HGE EA  
REA JRB

Geology - Percussion

January 2, 1979

SAMPLE No.	DESCRIPTION	OZS. PER TON			PER CENT			
		GOLD	SILVER	COPPER	MO	SULPHUR		
S-78-1 ("A")	0 - 10			.01	Tr			
	10 - 20			.01	"			
	20 - 30			.02	"			
	30 - 40			.01	"			
	40 - 50			.01	"			
	50 - 60			.02	"			
	60 - 70			.01	"			
	70 - 80			.01	"			
	80 - 90			.01	"			
	90 - 100			.03	.003			
	100 - 110			.08	.025			
	110 - 120			.04	.006			
	120 - 130			.02	.002			
	130 - 140			.03	.002			
	140 - 150			.01	.002			
	150 - 160			.03	.002			
	160 - 170			.02	.002			
	170 - 180			.02	.001			
	180 - 190			.05	.002			
	190 - 200			.05	.002			
	200 - 210			.05	.002			
	210 - 220			.06	.002			
	220 - 230			.05	.002			
	230 - 240			.05	.002			
	240 - 250			.05	Tr			
	250 - 260			.02	"			
	260 - 270			.03	"			
	270 - 280			.04	"			
	280 - 290			.04	"			
	290 - 300			.06	"			

*EA Love* ASSAYER

# BETHLEHEM COPPER CORPORATION LTD.

ASHCROFT, B C

Geology - Percussion

January 2, 1979

SAMPLE No.	DESCRIPTION	OZS. PER TON			PER CENT			
		GOLD	SILVER	COPPER	MO	SULPHUR		
S-18-2	0 - 10			.03	.001			
("B")	10 - 20			.11	.001			
	20 - 30			.08	.001			
	30 - 40			.04	.002			
	40 - 50			.05	.003			
	50 - 60			.05	.002			
	60 - 70			.03	.001			
	70 - 80			.02	.001			
	80 - 90			.01	.003			
	90 - 100			.03	.002			
	100 - 110			.01	.001			
	110 - 120			.01	.001			
	120 - 130			.01	.001			
	130 - 140			.01	.001			
	140 - 150			.01	.002			
	150 - 160			.01	.002			
	160 - 170			.02	.002			
	170 - 180			.02	.001			
	180 - 190			.03	.001			
	190 - 200			.01	.001			
	200 - 210			.02	.001			
	210 - 220			.02	.001			
	220 - 230			.02	.001			
	230 - 240			.01	.001			
	240 - 250			.02	.001			
	250 - 260			.02	.001			

*E. A. King*

ASSAYER

# BETHLEHEM COPPER CORPORATION LTD.

ASHCROFT, B. C.

Geology - Percussion

December 26 1978

SAMPLE No.	DESCRIPTION	OZS. PER TON			PER CENT			
		GOLD	SILVER	COPPER	MO	SULPHUR		
S-78-3 ( "C" )	10 - 20			.04	.002			
	20 - 30			.03	.005			
	30 - 40			.01	.001			
	40 - 50			.05	.002			
	50 - 60			.05	.002			
	60 - 70			.03	.002			
	70 - 80			.04	.002			
	80 - 90			.16	.004			
	90 - 100			.06	.004			
	100 - 110			.03	.003			
	110 - 120			.03	.002			
	120 - 130			.03	.002			
	130 - 140			.02	.004			
	140 - 150			.02	.002			
	150 - 160			.04	.002			
	160 - 170			.02	.001			
	170 - 180			.03	.001			
	180 - 190			.02	.002			
	190 - 200			.01	.001			
	200 - 210			.02	.002			
210 - 220			.02	.002				
220 - 230			.10	.011				
230 - 240			.11	.023				
240 - 250			.02	.002				
250 - 260			.03	.003				
260 - 270			.03	.004				
270 - 280			.03	.003				
280 - 290			.03	.004				

*E. A. L. E.*

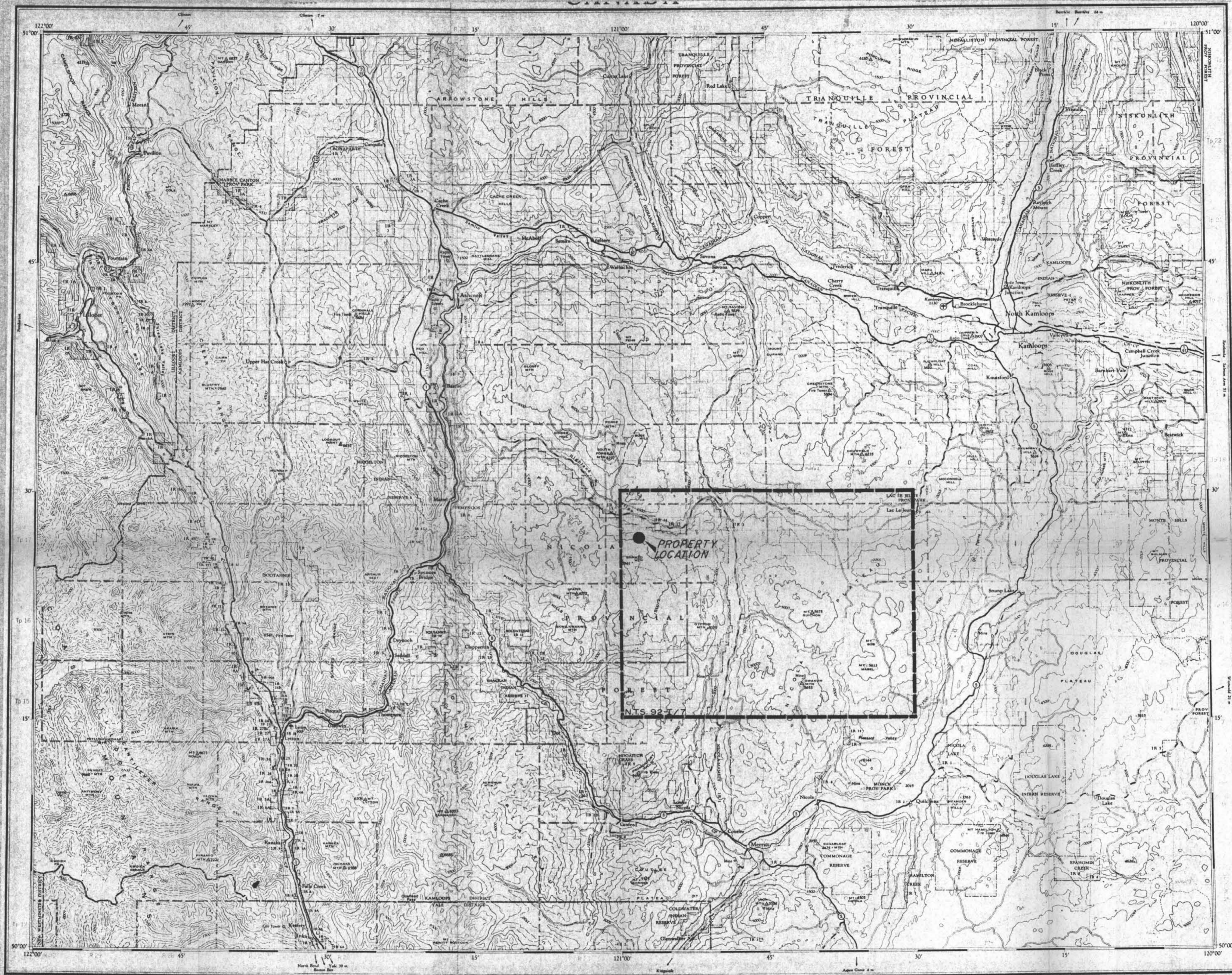
ASSAYER



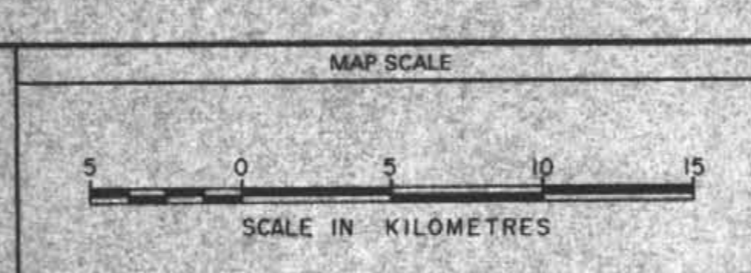
SECTION F - ILLUSTRATIONS

<u>Drawing No.</u>	<u>Title</u>	<u>Scale</u>
BS-78-1A	General Location Plan	1:250,000
BS-78-2A	Location Plan	1: 50,000
BS-78-3A	General Geology Plan	1: 25,000
BS-78-4A	Geologic Plan with drill holes and mineral claims	1: 4,800





MINERAL RESOURCES BRANCH  
**7725**  
 NO.



REVISIONS	No.	Date	MADE BY	DESCRIPTION
1				
2				
3				
4				
5				

DATE	DRAWN BY	CHECKED	APPROVED
NOV. 1977		E.A.	

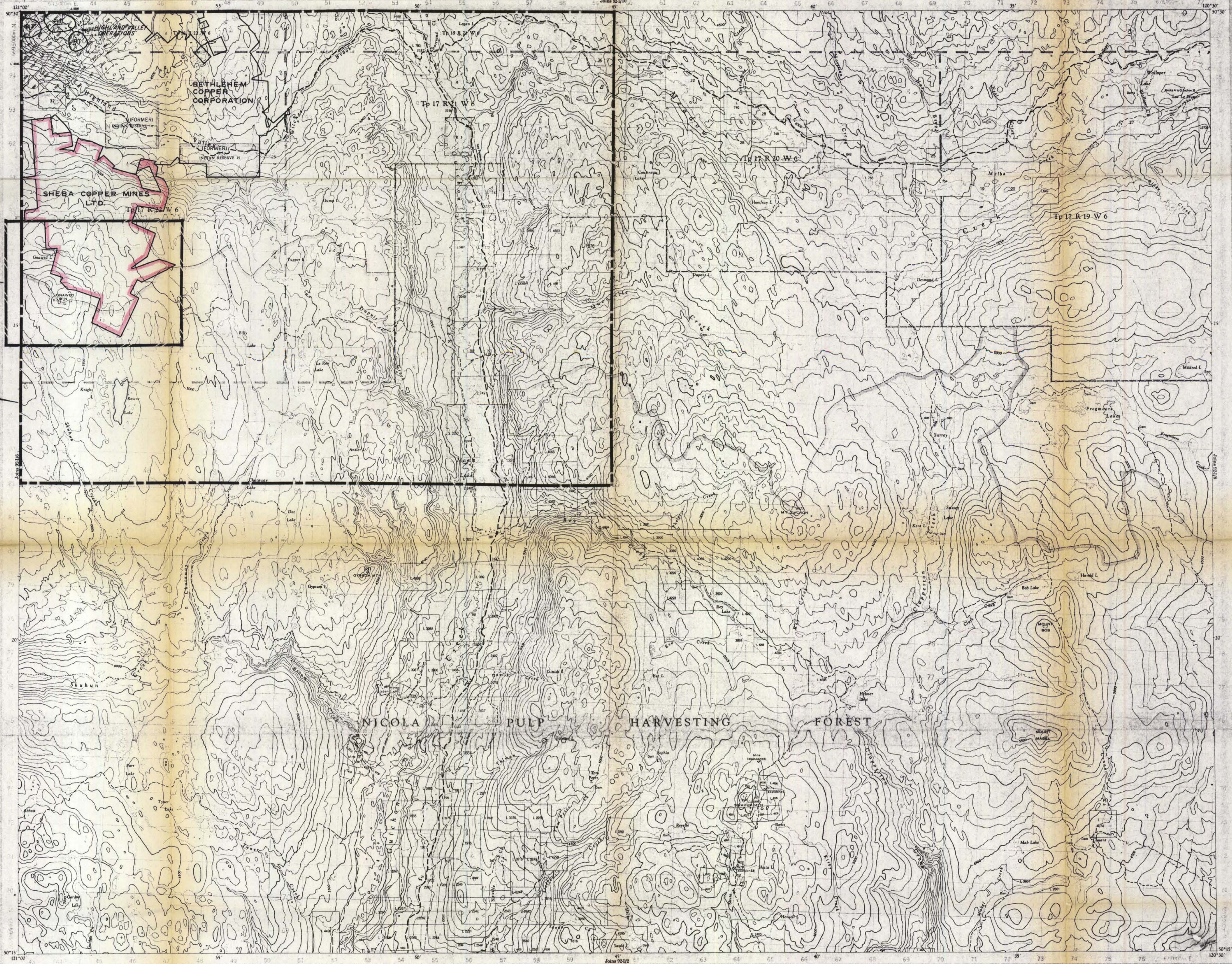


BETHLEHEM/SHEBA DRILL PROGRAM  
 GENERAL LOCATION PLAN

OFFICE	DEPARTMENT	MAP INDEX NUMBER	SCALE	DRAWING NUMBER
VANCOUVER	EXPLORATION	N.T.S. 92-1	1:250,000	BS-7B-1A

NO. 194-A1-E.C.

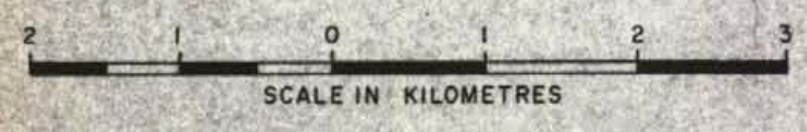




SEE DRAWING NO.  
BS-78-4A

SEE DRAWING NO.  
BS-78-3A

MINERAL RESOURCES BRANCH  
NO. **7725**

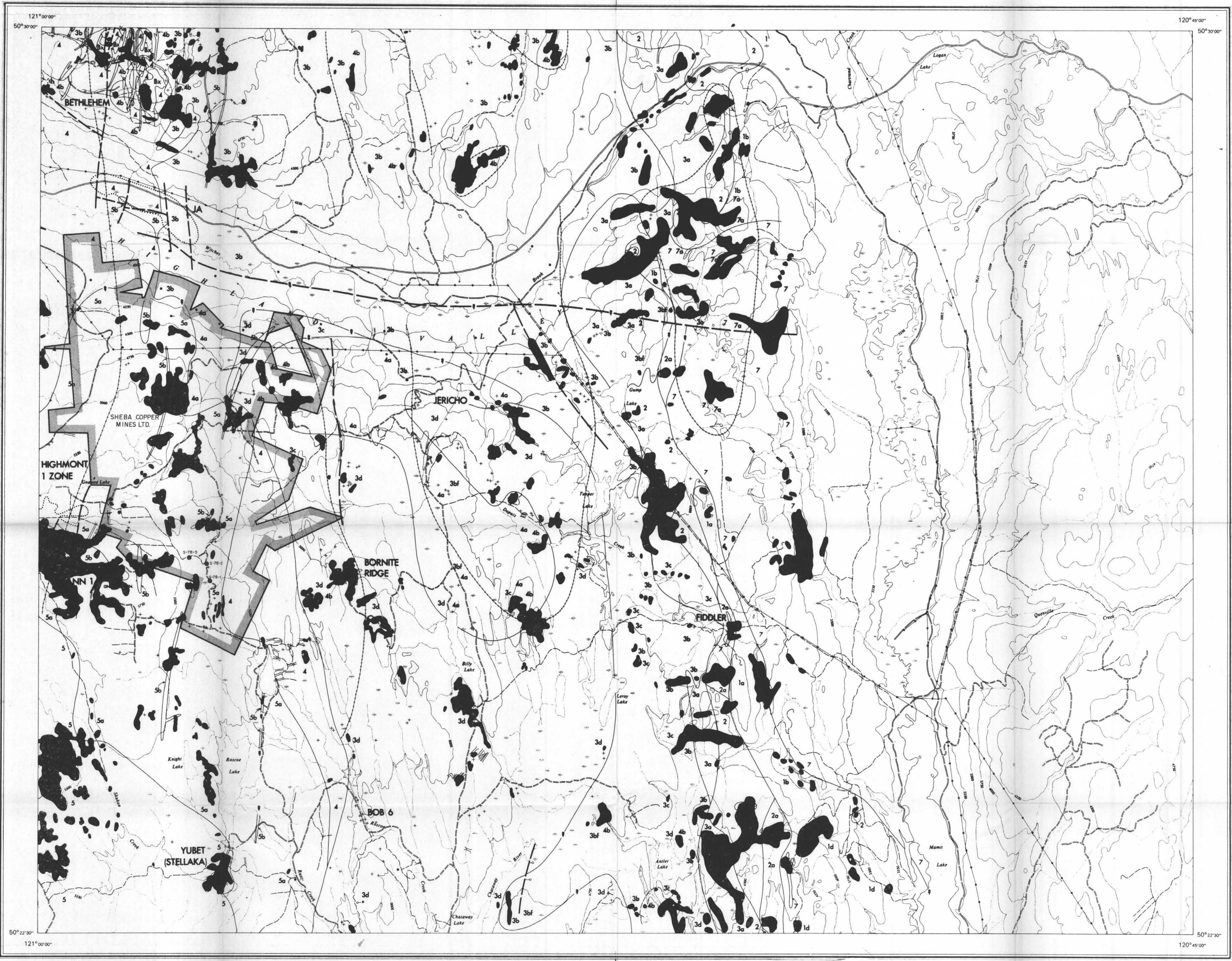


DATE REVISED	BY	DEPT. - EXPLORATION
		DRAWN BY -
		CHECKED - E. A.
		APPROVED -
		DATE - NOV. 1977
		SCALE - 1:50,000



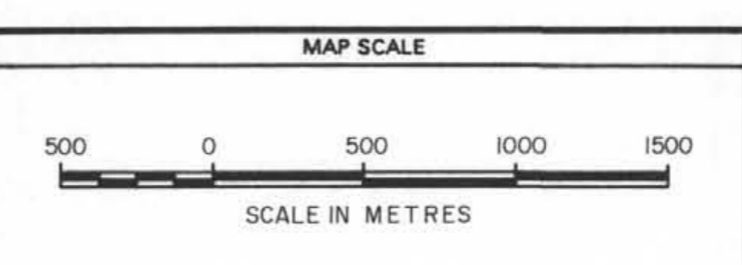
TITLE - BETHLEHEM/SHEBA DRILL PROGRAM LOCATION PLAN	
FILE NUMBER - N.T.S. 92-1/7	DRAWING NUMBER - BS-78-2A





MINERAL RESOURCES BRANCH  
 7725  
 NO.

NOTE  
 Drawing from Preliminary Map No. 30  
 "GEOLOGY OF THE GUICHON CREEK BATHOLITH"  
 By W.J. McMillan, 1978 (Sheet 6 of 10)



NO.	DATE	MADE BY	DESCRIPTION
1			
2			
3			
4			
5			
6			

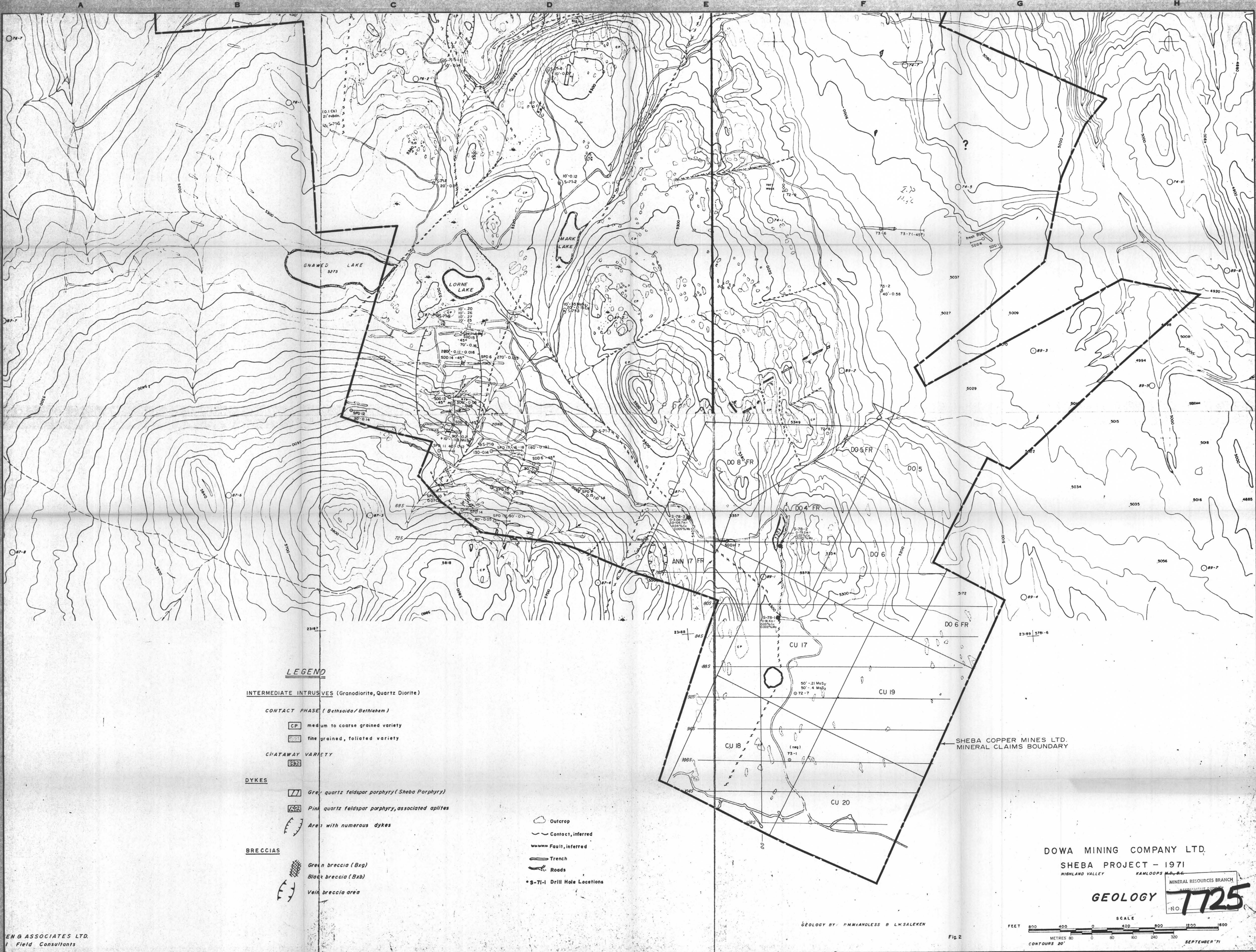
  

DATE	DRAWN BY	CHECKED	APPROVED
JAN 1979		E.A.	

**B** BETHLEHEM  
 COPPER  
 CORPORATION

OFFICE	DEPARTMENT	MAP INDEX NUMBER	SCALE	DRAWING NUMBER
VANCOUVER	EXPLORATION	NTS. 92-1/7 e,f	1:25,000	BS-78-3A





EN & ASSOCIATES LTD.  
Field Consultants

**LEGEND**

**INTERMEDIATE INTRUSIVES (Granodiorite, Quartz Diorite)**

**CONTACT PHASE (Bethsaida/Bethlehem)**

- medium to coarse grained variety
- fine grained, foliated variety

**CHATAWAY VARIETY**

**DYKES**

- Grey quartz feldspar porphyry (Sheba Porphyry)
- Pink quartz feldspar porphyry, associated apfites
- Area with numerous dykes

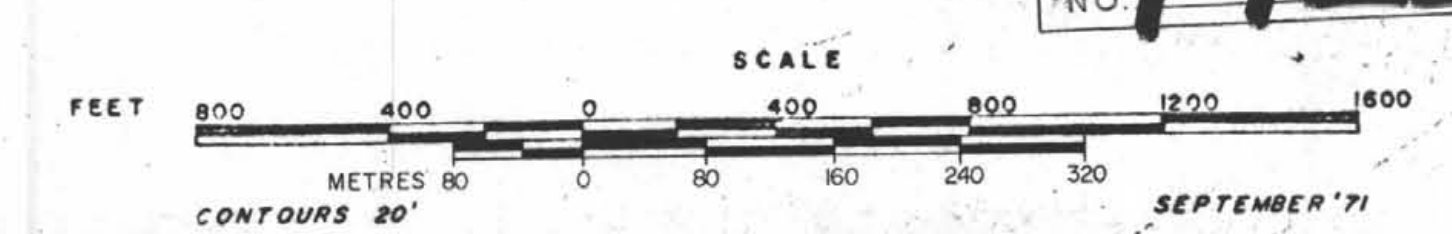
**BRECCIAS**

- Green breccia (Bxg)
- Black breccia (Bxb)
- Vein breccia area

- Outcrop
- Contact, inferred
- Fault, inferred
- Trench
- Roads
- S-71-1 Drill Hole Locations

DOWA MINING COMPANY LTD.  
SHEBA PROJECT - 1971  
HIGHLAND VALLEY KAMLOOPS B.C.

**GEOLOGY T125**  
NO. 125



GEOLOGY BY: P.M. CANDLESS & L.H. SALEKEN

Fig. 2

DATE REVISION	BY	DEPT. - EXPLORATION		TITLE - BETHLEHEM / SHEBA DRILL PROGRAM GEOLOGICAL PLAN WITH DRILL HOLES AND MINERAL CLAIMS FILE NUMBER - DRAWING NUMBER - BS - 78 - 4A
		DESIGNED BY -		
		CHECKED BY - E.A.		
		DATE - JAN 1975		
		SCALE - 1" = 400'		