BETHLEHEM COPPER CORPORATION

822416

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October 8, 1974

TO THE SYNDICATE MEMBERS

Re: Copper Belt Progress
Report No. 10

Dear Sirs:

The attached Copper Belt Progress Report summarizes exploratory investigations completed during the period November 1, 1973 to September 30, 1974, and includes our proposals and recommendations for continuing exploratory programs through 1974.

This report will be reviewed at a meeting of the Syndicate members to be held in our Company Board Room at 10:30 A.M. on October 8, 1974.

Yours very truly,

BETHLEHEM COPPER COMPORATION

HGE:nh

Per: H. G. Ewanchuk

Vice President and

Assistant to the President

AGENDA

COPPER BELT SYNDICATE - COMMITTEE MEETING

- 1. Meeting to commence at 10:30 A.M., October 8, 1974
- Review of Copper Belt-Washington exploration program by R. J. Nethery

- Syndicate participants - Bethlehem Copper United Siscoe Kerr Addison

- 3. General Discussion re: 1975 Washington program and Resolution re: designated areas
- 4. Syndicate members are requested to consider the adoption of the following resolution:-
 - A. Resolved that the following be established as a designated exploration area effective Oct. 8, 1974

SNOHOMISH - KING COUNTY AREA - Bounded by the co-ordinates

From 48° 7'30" Lat. x 121°52'30" to 48° 7"30" Lat. x 121°22'30" Long. Long. Lat. x 121°22'30" 47⁰15' Long. to Lat. x 121°45' 47⁰15' Long. to 47°52'30" Lat. x 121°45' Long. to $47^{\circ}52'30''$ Lat. x $121^{\circ}52'30''$ Long. to 48° 7'30" Lat. x 121°52'30" Long. to

- 5. Review of Copper Belt-Smithers program
 Syndicate participants Bethlehem Copper
 Numac
 United Siscoe
 Kerr Addison
- 6. General Discussion re: 1975 Program and Resolution re: designated areas

- 7. Syndicate members are requested to consider the adoption of the following resolution:-
 - A. Resolved that the following designated exploration area be abolished effective Oct. 8, 1974

HOUSTON-SMITHERS - Bounded by the co-ordinates

From 54°00' Lat. x 126°44' Long. to 55°00' Lat. x 127°31' Long. to 55°00' Lat. x 127°06' Long. to 54°00' Lat. x 126°18' Long.

8. Review of Copper Belt-South program

- Syndicate participants - Bethlehem Copper
Numac
United Siscoe
Kerr Addison

- 9. General Discussion re: 1975 Program and Resolution re: designated areas
- 10. Syndicate Members are requested to consider the adoption of the following resolutions:-
 - A. Resolved that the following designated exploration area be abolished effective Oct. 8, 1974

CLEARWATER - Bounded by the co-ordinates

Northern limit 51°50' Lat. Southern limit 51°25' Lat. Eastern limit 119°45' Long. Western limit 120°20' Long.

B. Resolved that the following be established as a designated exploration area effective Oct. 8, 1974

MISSEZULA LAKE - Bounded by the co-ordinates

Northern limit 49°50' Lat. Southern limit 49°45' Lat. Eastern limit 120°30' Long. Western limit 120°40' Long.

- 11. Review of Princeton Coal Special Project
 Syndicate participants Bethlehem Copper
 Numac
 United Siscoe
- 12. Syndicate members participating in the Princeton Coal Special Project are requested to consider the adoption of the following resolution:-
 - A. Resolved that the sum of \$9845.00 be allocated for the purpose of applying for the renewal of Coal Licence Nos. 2019-2042 and 2222 to 2231 under the terms and conditions of the new Coal Act of British Columbia.

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PART 1 - COPPER BELT SYNDICATE
PART 2 - COPPER BELT WASHINGTON

PART 3 - PRINCETON COAL SPECIAL PROJECT

SECTION D - PERCUSSION DRILL HOLE ASSAYS

SECTION E - SCHEDULE OF DRAWINGS (Separate Binder)

MAP DESCRIPTION	DRAWING NO.
COPPER BELT PROJECT (WASHINGTON) - Location Plan 1:250,000	W-1
COPPER BELT-WASHINGTON - Geological Plan and Assay Plan - 1" = 2000' (2 sheets - Silverton Quadrangle - South Half Index Quadrangle - North Half Index Quadrangle - South Half Mount Si Quadrangle - North Half Mount Si Quadrangle - South Half Monte Cristo - Blanca Lake Quadrangle Baring-Evergreen Mt. Quadrangle Grotto - Skyhomish Quadrangle Snoqualmie Lake - Big Snow Mt. Quadrangle Snoqualmie Pass Quadrangle - North Half	B-8 B-9 B-10 B-11 B-12 C-9 C-10
COPPER BELT-SMITHERS - Index Plan 1" = 4 miles - N.T.S. Sheet Nos. 93E and	S-2 L
COPPER BELT-SMITHERS - Geological Plan and Assay Plan; 1:50,000	93E/11(G) and (A)
COPPER BELT-SOUTH - Index Plan 1" = 4 miles - N.T.S. Sheet No. 92H	92H

COPPER BELT-SOUTH - MISSEZULA LAKE 92H/15
PROJECT - 1:50,000

COPPER BELT PROJECT - COAL LICENCES D-11
1" = 2000'

SUMMARY:

The Washington Copper Belt was initiated in early June with the flying of the entire proposed belt and the subsequent selection of an exploration area. The designated area (Drawing No. W-1) is centered on the Snoqualmie batholith which is Tertiary in age and well noted for its copper occurrences. Favorable access, a good geological setting, and widespread copper mineralization all contributed to the selection of the aforementioned area.

A geological reconnaissance program over portions of the designated area has been underway since June. The program employs rock geochem along with geological and alteration studies. Exploration in this mountainous region is generally restricted to the covered valley and batholith border areas. The areas covered to date are:

North Fork Skykomish River, Beckler River, Williamson Creek, Sultan River, South Fork Sultan River, Elk Creek, Foss River, Proctor Creek, North Fork Tolt River, Lennox Creek, and the upper reaches of the Snoqualmie River. A group of 11 claims has been staked on the North Fork of the Skykomish River immediately south-west of Silver Creek. Another moderate copper high near Quartz Creek exhibits strong pyrite but weak alteration so the area will be further explored and sampled to determine its potential and if staking is warranted.

Introduction:

Commencing in June a geologist carried out ground reconnaissance work over the valleys which cut the western border of the Snoqualmie batholith. The aim of the project is to locate and stake favorable covered areas which are to be later tested by surface programs and percussion drilling.

Location and Access:

The Snoqualmie batholith has a north-south length of 50 miles and lies approximately 30 to 35 air miles east of Everett and Seattle, Washington. The main access to the northern part of the area is provided by Highway 2 and southern access is provided by Highway 90. A multitude of secondary roads provides further access to the majority of the western contact area.

Topography - Physical and General Features

The area covered by the batholith is extremely rugged and mountainous and ranges in elevation from 400' in some valleys, to over 6000' in the higher mountains. The mountainous regions consist of steep barren rock with only sparse forest growth on the flatter areas. In the valleys and where there is some soil development, a good forest growth of fir, spruce, cedar, and pine is common. The valleys are covered by glacial material and are therefore the main exploration targets.

History:

This region has many old mining areas well noted for their past production. The Index and Silver Creek areas (Cu-Ag-Au) have produced intermittently since the turn of the century and up into the 1940's. Other past mineral producing areas are the Sultan basin (Cu) and the Miller River region (Cu-Ag-Au-Pb-Zn).

Over the past two years there has been a considerable increase in mineral exploration in Washington State. A growing mineral demand along with a reevaluation of Washington's favorable porphyry copper province has resulted in the increased exploration activity.

Small copper occurrences are common over the entire western Washington region and now several mining companies have made significant discoveries of the large porphyry copper type.

For example, Brenmac is drilling on several pipe breccias and one crackle breccia type deposit; all are located on the upper reaches of the Sultan River near Vesper Creek (Drawing No. B-9). Tonnage proved to date is thought to be in excess of 70,000,000 tons. City Service Explorations is currently drilling on a deep porphyry copper type deposit on the upper reaches of the Middle Fork Snoqualmie near Burnboat Creek (Drawing No. C-13). Tonnage is thought to be in excess of 100,000,000 tons.

Geology:

The exploration area is centered in and around the Snoqualmie batholith which ranges in age from 38 million years in the north to 17 million years for the southern portion. The batholith has intruded Jurassic-Cretaceous sediments and Eocene volcanics on the west and north and Paleocene-Cretaceous sediments and Eocene-Oligocene volcanics on the east and south.

The batholith is elongated along the north-northwest regional structural trend. Transverse structural belt trending east-west to north-east appear to cross the batholith in several areas. These belts are characterized by an echelon shear and/or fracture systems. It appears that these east-west structures exhibit some controls over sulphide deposition in the region.

The Snoqualmie batholith, which consists mainly of acid rock, is extremely rugged and the only extensively covered areas are the well developed river valleys which generally exhibit a thin glacial cover.

Field Work:

As previously mentioned exploration was mainly restricted to the valleys as they offer the most favorable covered areas. Generally the valleys have good road access and rock geochem sampling can be carried out on one side or the other as road and bridge access affords. The region receives heavy rainfall and forest growth is extremely dense making bush travel slow and difficult.

Results:

Rock samples were taken every 1500 to 2000' and all samples were assayed for copper. The first 80 samples were also assayed for molybdenum but the values were so low as to be considered undetectable and it was decided to discontinue the moly assaying. Due to the low background copper, values above 200 ppm were considered anomalous. Assay results were plotted on 1" - 2000' overlays which correspond to the geology maps.

Property Acquisitions

The only ground staked to date has been an eleven claim group located on the North Fork Skykomish River immediately southwest of Silver Creek (Drawing No. C-9). Visible copper mineralization in quartz monzonite on one side of the valley and strong propylitic alteration on the other side warranted the staking of the valley floor. Private ground adjoining the claim group on the west requires a title search in the near future to ascertain who holds the mineral rights.

Proposed Exploration

A program of soil geochem followed by percussion drilling is planned for the claim block near Silver Creek. Also a further sampling check will be made on a rock geochem high (280 ppm) taken near the junction of Quartz Creek and Taylor River (Mount Si; Drawing No. B-12).

The reconnaissance program on this designated area will continue in 1975 as access has proved to be adequate and the geology significantly interesting.

SUMMARY

Work in this area has been confined to the "SUS" Group of mineral claims. As set out in Progress Report No. 9, a large soil anomaly containing values greater than 200 ppm was indicated on the original six mineral claims. Three percussion holes were drilled in October 1973 but they failed to intersect bedrock. An additional thirty-eight claims were staked in December 1973 adjoining the original block on the north and west side.

Percussion Drilling

During September 1974 4 percussion holes were drilled on the "SUS" group, 2 immediately north of the anomalous area and two in the northwest corner of the claim block. The location of these holes are shown on Drawing No. 93E/11 (A). Approximately 1.5 miles of drill road were constructed in order to provide access to the four sites. The following is a summary of the drill results:-

Hole No.	Overburden (ft.)	Assay Interval (ft.)	Total Depth (ft.)	% Cu
PC-SUS-74-4	20	240	260	.007
PC-SUS-74-5	60	270	330	.004
PC-SUS-74-6	100	250	350	.038
PC-SUS-74-7	50	280	330	.034

The logging of the drill holes is not complete at this time but copies of the individual assay sheets are appended in Section D.

Conclusions and Recommendations

The results obtained from hole Nos. SUS-74-6 and SUS-74-7 would have to be considered anomalous and therefore further exploration in the form of geological mapping, bedrock and soil sampling and possible percussion drilling is recommended for the northwest sector of the claim block and the adjacent ground. Following this field work, additional claims will be acquired should results warrant.

Due to the lateness of the season, this work will probably not be carried out until late spring 1975.

Assessment work credits sufficient to hold the claims until December 1975 will be filed with the Department of Mines.

PART III - COPPER BELT SOUTH
MISSEZULA LAKE PROPERTY

Summary

The Log 1-72 claims were staked in the late fall of 1973 and are located just west of Missezula (Ref Map 92H/15E). The area had been previously covered by the Copper Belt Syndicate in 1970 and rock geochem highs were found to exist to the west and north of a low lying covered area. The ground was held at that time and did not come open until 1973 when it was subsequently staked by Bethlehem Copper.

Proposed Exploration

The claim group is mainly underlain by Nicola volcanics but some acid intrusives do outcrop on the southwest border of the ground. There is road access to the property and a program of geological mapping, rock geochemical sampling and percussion drilling is scheduled to start in mid-October.

SECTION 'B'

Summary of Mineral Claims and Coal Licences as of Oct. 1, 1974

A) COPPER BELT-SOUTH:

"DUD" "HIP" "SNO" "SKI" "LOG"	Group Group Group Group Group	16 7 16	claim claims claims claims claims	ASPEN " " " MISSEZ	11 11 11	'11 11 11	
							
тот	AL	112	claims				

B) COPPER BELT-PRINCETON COAL

Licence Nos.	2019-2042 2222-2231		licences licences
TOTAL.		34	licences

C) COPPER BELT - JOY*

TOTAL

*Note:	These claims were not transferred to Joy at
	the termination of the Exploration Agreement.
	All are due to expire on Nov. 3, 1974.

18 claims

PRINCETON AREA

D) COPPER BELT-NORTH

No mineral claims remain.

E) COPPER BELT-SMITHERS

"DAY" Group 10 claims HOUSTON AREA
"ANNA" Group 16 claims TAHTSA LAKE AREA
"SUS" Group 44 claims " " "
"TX" Group 10 claims " " "

TOTAL 80 claims

F) COPPER BELT-WASHINGTON

"BRYAN" Group 11 claims GALENA AREA

G) TOTAL MINERAL CLAIMS 221

COAL LICENCES 34

SECTION C

PART 1 -

COPPER BELT SYNDICATE

STATEMENT OF DISBURSEMENTS

1st January 1974 to 30th September 1974

	Actual Cost to Aug. 31/74	Est. Cost to Sept. 30/74
Salaries and employee benefits	\$2,976.89	\$ 4,104.23
Consultants	-	-
Contracted services	-	3,322.13
Supplies	3.54	3.54
General expense	548.63	976.59
Claims - expense	1,555.00	1,555.00
Claims - registration: disposals	(785.00)	(785.00)
Percussion drilling	-	4,067.50
Administration	4,000.00	4,500.00
	the subsequent of the subseque	**************************************
TOTAL DISBURSEMENTS	\$8,299.06 ———	\$17,743.99
Disbursements Allocated		
Numac Oil & Gas Ltd. 20/90	1,844.23	3,943.11
United Siscoe Mines Limited 20/90	1,844.23	3,943.11
Kerr Addison Mines Ltd. 20/90	1,844.23	3,943.11
Bethlehem Copper Corporation 30/90	2,766.37	5,914.66
	\$8,299.06	\$17,743.99
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SECTION C

PART 2 -

COPPER BELT-WASHINGTON

STATEMENT OF DISBURSEMENTS

1st January 1974 to 30th September 1974

		Actual Cost to Aug. 31/74	Est. Cost to Sept. 30/74
Salaries and employee benefits	3	\$5,819.06	\$ 7,562.77
Supplies		233.37	413.83
Contracted services		583.33	614.33
General expenses		1,122.29	1,502.90
Claim - expenses		.	÷
		· •	
Diamond Drilling		-	•
Administration		776.11	1,009.39
TOTAL DISBURSEME	ENTS	\$8,537.15	\$11,103.22
	•		<u> </u>
Disbursements allocated:			
United Siscoe Mines Limited	25.7/90	2,437.83	3,170.59
Kerr Addison Mines Ltd.	25.7/90	2,437.83	3,170.59
Bethlehem Copper Corporation	38.6/90	3,661.49	4,762.04
		\$8,537.15	\$11,103.22

BETHLEMEM COPPER CORPORATION LTD.

ASHCROFT, B.C.

SAMPLE		OZS. P	ER TON			PER C	ENT			
No.	DESCRIPTION	GOLD	SILVER	COPPER	мо.	SULPHUR				
US-74-4	20 - 30			,008						
	30 - 40			.006						
	40 - 50			.007					1	
	50 - 60			008						
	60 - 70			,009			<u> </u>			
	70 - 80			.009						
	80 - 90			.008						
	90 - 100			.009						
	100 - 110			.007						
	110 - 120			.008						
	120 - 130			.007						
	130 - 140			.008						
•	140 - 150			.006						
	150 - 160			.008						
	160 - 170			.007						
	170 - 180			.006					-	
	180 - 190			.006						
	190 - 200			.006						
	200 - 210			.007						
	210 - 220			005				-		
	220 - 230			006						
	230 - 240			008				_		
	240 - 250			.008					-	
	250 - 260			008						

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DETHLEHEM COPPER CORPORATION LTD.

ASHCROFT, B.C.

SAMPLE		OZS. P	OZS. PER TON			PER CENT				
No.	DESCRIPTION	GOLD	SILVER	COPPER	жo.	SULPHUR				
US-74-5	60 - 70			.004						
	70 - 80			.004						
	80 - 90			.003						
	90 - 100			.003						
	100 - 110			.002						
	110 - 120			.003						
	120 - 130			.003						
	130 - 140			.003						
	140 - 150			.003						_
	150 - 160			.002						
	160 - 170			.002						
	170 - 180			.013						
	180 - 190			.002						
	190 - 200			.002						
	200 - 210			.003						
	210 - 220			.004						
	220 - 230			.005						
	230 - 240			.005						
	240 - 250			.004						
	250 - 260			,004						
	260 - 270			.004						
	270 - 280			.007						
	280 - 290			,003						
	290 - 300			.003						
	300 - 310			.003						
	310 - 320			.003						
	320 - 330			.004						

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BETHLEHEM COPPER CORPORATION LTD.

ASHCROFT, B.C.

SAMPLE		OZS. P	ER TON	PER C			CENT			
No.	DESCRIPTION	GOLD	SILVER	COPPER	MO.	SULPHUR				
US-74-6	100 - 110			031						
	110 - 120			.036						
	120 - 130			.038						
	130 - 140			. 025						
	140 - 150			039						
	150 - 160			059						
	160 - 170			.065						
	170 - 180			.056						
	180 - 190			099						
	190 - 200			028						
	200 - 210			032						
	210 - 220			048						
·	220 - 230		-	039						
	230 - 240			041						
·	240 - 250			.023				.		
	250 - 260			028			-			
	260 - 270			022			-			
	270 - 280			.018			-			
	280 - 290			.023						
	290 - 300			021			-			
	300 - 310			.015						
	310 - 320	-		029			-			
	320 - 330			.088						
	330 - 340			025						
	340 - 350			.016						
							-			
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ASHCROFT, B.C.

Geology - Percussion Drill Sept. 30, 19	eology - Percussion Drill			Sept.	30,	1974
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SAMPLE No.	DESCRIPTION	OZS. PER TON		PER CENT					
		GOLD	SILVER	COPPER	но.	SULPHUR			
SUS-74-7	50 - 60			.114					
	60 - 70			, 026					
	70 - 80			.021					
	80 - 90			013					
	90 - 1.00			.009					
	100 - 110			.011					
	110 - 120			.078					
	120 - 130			.025					
	130 - 140			.014					
	140 - 150			.074					
	150 - 160			.055					
	160 - 170			.057					
	170 - 180			.035					
	180 - 190			021					
	190 - 200			044					
	200 - 210			.039					
	210 - 220			020					
	220 - 230			.035					
	230 - 240			.018					
	240 - 250			.023					
	250 - 260			031					
	260 - 270			020					
	270 - 280			023					
	280 - 290			.038					
	290 - 300			027					
	300 - 310			029					
	310 - 320			.026					
	320 - 330			.024					

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SECTION E - DRAWINGS

All drawings are to be found in the accompanying binder.