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MINERALS		co	AL		OIL & GAS
303 WILDWOOD DRIVE S.W., CALGARY,	ALBERTA TIC	3E2			ELEPHONE (403) 242-1426
<u>FRAN</u> DRILLING	CES CREZH REPORT	<u>( M</u> ] *	NES LTD. NORTH GROUP	#] #J	MAPS Drill Section Survey of Working Mineral Shows

## General

A two-phase drilling program to be conducted on the Frances Creek property of Frances Creek Mines Ltd. was contracted by Shepherd Industries Ltd. of Rossland, B.C. It was initially proposed that approximately 1000 feet in two or three holes be drilled on the North Group in the vicinity of the old workings on the Lead Queen (L12763) claim. This was to be followed by an additional 500 feet in three short holes on the South Group to test the vein structure exposed in the No. 4 adit on the First Effort (L11426) claim.

The drilling rig, a BBS1, and crew moved on the property on August 24, 1973. Due to delays in helicopter support, drilling was not commenced on Hole No. 1 until August 30. The hole was finally completed at a total depth of 195 feet on September 13th. As weather conditions were making the continuance of the program on the Lead Queen difficult, the contractor's representative suggested that this portion of the program be suspended. Hence the rig was moved and the second phase of the program was initiated at the lower altitudes on the First Effort claim.

## Dismond Drill Hole No.1

DDH No.1 was spotted at a horizontal distance of 182 feet from Sample Point No.2 at a bearing of North  $65^{\circ}$  West and 81 feet lower in elevation. Sample Point No.2 is just adjacent to the Upper Workings adit. The hole was drilled at a bearing of North 55° East and at an angle of -45°.

The purpose of this hole was to test for a northern extension of the vein that is exposed in the Upper Workings tunnel and at Sample Point No.2. The sparsely mineralized vein structure was encountered between the depths of 99 feet and 124 feet. Over this interval the core was split for assay and returned the following:

Interval	Gold (oz/T)	Silver (oz/T)	Lead (%)	Zinc (%)
99'-103'	<0.003	0.96	0.76	0.02
103'-107'	<0.003	2.77	0.70	0.01
107'-111'	<0.003	1.31	0.35	0.02
······································	<0.003	0.58	0.58	0.02
117'-124'	<0.003	0.13	0.06	<0.01

In comparison, an assay of chip samples taken across six feet at Sample Point No.2 returned Gold - 0.023 oz/T, Silver - 6.33 oz/T, Lead - 9.20%, and Zinc - 3.00%

## Conclusions and Recommendations

Hole No. 1, by encountering the sparsely mineralized vein structure on strike with the occurrence in the Upper Workings adit, has added approximately 145 feet to the inferred length of the structure.

During the course of the drilling some additional surface prospecting was done in the area south of the upper surface pits. As a result, mineralized vein material was discovered outcropping on strike 90 feet southeast of the previous limits of the vein.

Using these occurrences we can now infer a strike length of over 600 feet to the structure.

It remains to test the structure for depth extension by drilling. For this purpose a second hole location has been spotted downslope from the most southerly of the upper trenches. This, if successful, should intersect the vein some 350 feet to 400 feet below its surface exposure, and would give reasonable substantiation for the possibility of reserves of at least 50,000 tons of mineralized rock.

The grade of the minerelized material is the major concern. The assays from Hole No. 1 indicate sub-economic material. The tenor of the sampled material at the mouth of the Upper Workings tunnel (Sample Point No.2) may or may not represent ore depending on the economic feasibility of extracting it.

The vein structure mineralization on this property has historically been erratic with the structure pinching and swelling, and grading in sulphide content from rich to barren. Hence a drill core or a surface outcropping of the vein can only be considered indicative of the nature of the structure for a few feet on either side. What controls localization of the metallics in the vein is not clear, but there appears to be a relationship to the nature and competency of the rock through which the structure passes. Predicting the overall grade of the mineralized rock would be only a guess without a closely spaced drilling program or underground bulk sampling.

As mentioned, one additional drillsite has been spotted. This hole would probably intersect the vein within 350 feet. A further hole to the north of hole No. 1 is also suggested as an attempt to extend the structure further in that direction.

There is a possibility that a portion of the vein intersection was ground up during drilling of Hole No. 1 as there was not complete core recovery. Unfortunately there was no return of the drilling fluid across this interval, and no sludge samples could be taken.



October 2, 1973

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FRANCES CREEK MINES LTD.

## DRILL LOG

Diamond Drill Hole No. 1: Bearing - North 55°E Dip - 45° Completed - Sept. 14, 1973

FROM ft.	TO <u>ft.</u>	REC. ft.	DESCRIPTION	Au. oz/T	Ag. oz/T	Pb. %	Zn.
0	59		<u>Overburden</u> - slide roch	ĸ			
59	62.5	3.5	<u>Limestone</u> - med. to day grey with brown tinge, hard, dense, argillaced calcite veins up to $\frac{1}{4}$ "	rk ous			
62.5	66	3.5	Limestone - very fine grained, dense, uniform texture, slightly arg. occasional calcite vein up to 4" wide	n			
66	67	1	<u>Quartzite</u> - light to magrey, mottled, hard, and ular, calcite veining	ed. ng-			
67	70.5	3.5	Limestone - med. to day grey, very fine grained dense, uniform texture slightly argillaceous, occasional thin calcit vein. Quartzite band, 1" wid as above at 68' Quartzite band, 1" wid as above at 69' Limestone grades to day grey and black at 69'	rk d, e e e . rk			
70.5	72	1.5	Limestone - as describ above and Quartzite - described above in alt nating bands $\frac{1}{2}$ " - 2" w	ed as er- ide			

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FROM ft.	TO <u>ft.</u>	REC. ft.	DESCRIPTION	Au. oz/T	Ag. oz/T	Pb. %	Zn.
72	76.5	4.5	Limestone - med. grey to black, very fine grained mottled, veins and blebs of white calcite, occas- ional thin quartzite ban as described above.	ð			
76.5	77	0.5	Limestone - as described above, and <u>Quartzite</u> - a described above in bands and blebs with irregular boundaries. considerable calcite veining, breccia appearance	s ted			
77	80	3	Limestone - as described above, some calcite vein	S			
80	81	1	Quartzite - dark grey to black, angular, hard, mo tled, calcite veins.	t-			
81	81.5	0.5	Limestone - as described above				
81.5	85	3.5	Limestone - med. to dark grey and brown, part den partly very argillaceous very broken, calcite cry tals and veins, some bro quartzite	se, , s- ken			
85	90	5	Limestone - med. to dark grey with some brown, fr tured, disturbed with oc ional small quartzite ba minor calcite veining, s manganeese stain. A few of pyrite and galena at	ac- cas- nd, ome apecks 88'	3		
90	99	4	Limestone - med to dark and brown, very fracture broken and ground up, li recemented breccia in pa manganeese stain.	grey d, ke rt,			
99	104	3	Quartzite - very limy, h fractured, light buff to guartz veins, disseminat pyrite, visible galena i lets; <u>Assay Semple 99' -</u>	ighly grey, ed n veir 103' (0.003	- 0.96	0.76	0.02

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FROM ft.	TO ft.	REC. ft.	DESCRIPTION	Au. oz/T	Ag. oz/T	Pb. %	2n. %
104	106.5	2.5	Limestone - siliceous, med. grey, fractured, mottled, veinlets of galens and pyrite, lim- onite stain. Assay 103'-1	<u>107'</u>	0 77	0.70	0.01
106.5	109	2,5	Quartz - vein material, white, milky with galena in disseminations and veinlets	0.009	2•11	0.10	0.01
109	111	2	Quartzite - grading to siliceous schist, partly limy, light grey, fract- ured, partly platy, hard mottled with veinlets of galene Assay 107'-111'(0.	, .003 ]	. 31	0.35	0.02
111	129•5	17	Limestone - light to med grey, brown in part, very fine grained, partly frac- tured, partly siliceous, partly argillaceous, vein lets of galena, some cal- veining Assay 111'-117'(	• y c- cite 0.003	0.58	0.58	0.02
129.5	133	3.5	Assay 117'-124' ( <u>Limestone</u> - very limy, argillaceous, med brown and grey, much manganees stain, calcite veins and crystals, earthy	003 0	0.13	0.06	<0.01
133	137	4	<u>Quartzite</u> - light grey, partly limy, very fine grained, angular, dissem inated pyrite crystals	-			
137	138	l	Limestone - siliceous, 1 to med. grey, dense	ight			
138	141	3	<u>Quartzite</u> - as described above			·	
14 <b>1</b>	142.5	1.5	Limestone - as described above, partly banded				

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FROM ft.	TO <u>ft.</u>	REC. ft.	DESCRIPTION	Au. oz/T	Ag. oz/T	Pb.	Zn. %
14 <b>2.</b> 5	144	1.5	<u>Quertzite</u> - light gre and buff, angular, pla slightly limy along fr tures	y ty, ac-			
144	158	14	Limestone - very limy, light to med. grey and brown, very fine grain ed, argillaceous, part siliceous. Fractured below 146', with calcite in fractu disturbed to 158'	- ly res,			
158	195	33	Limestone - med grey, dense, very fine grain very limy, calcite vei up to l" wide	ed, ns			
195	200 Total d	lepth	Core lost				

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Sample\*1 - 8068'

GUY B/ALLEN BRITISH VGINE Expiry Date: April 22, 1974

10 ACLOMPANY DISLICING REPORT BILLS BILLS NORTH GROUP ON FRANCES GI. GOLDEN MINING DIVISION DATED OCT. 2, 1973 GROUP