COSTS AND

DIAMOND DRILL LOGS

FOR

HOLES 80 B-2
80 B-3

BAR CLAIM GROUPS

YA 27	BAR 2	YA 26	BAR 1
YA 29	BAR 4	YA 28	BAR 3
YA 30-33	BAR 5-8	YA 917-922	BAR 13-18
YA 913-916	BAR 9-12		
YA 923,924	BAR 19,20		

WATSON LAKE MINING DISTRICT
MAP SHEETS 105C/8,9

OPERATOR: D.C. SYNDICATE JULY 6, 1980

090651

This report has been examined by the Geological Evaluation Staff and is recommended to the Commissioner to be considered as representation work to the amount of

$ 9200.00

Resident Geologist or
Resident Mining Engineer

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

for Commissioner of Yukon Territory

TABLE OF CONTENTS

BAR CLAIM GROUP

MAPS 105C/8,9

COST OF DIAMOND DRILL PROGRAM JUNE 1980.

INVOICE	$22,346.18
INVOICE	$14,244.37
TOTAL	$36,590.55

TOTAL FOOTAGE DRILLED:

80 B-1	348'
B-2	292'#
B-3	287'#
B-4	188'
	1115'

FILED FOR ASSESSMENT WORK

TOTAL DRILLING COST PER FOOT $\frac{\$36,590.55}{1115}$ = $32.816

COST OF DRILL HOLE 80 B-2 292' @ $32.816 = $9,582.45

COST OF DRILL HOLE 80 B-3 287' @ $32.816 = $9,418.37

ASSAYS ARE NOT INCLUDED IN THE DRILL LOGS SINCE THEY ARE NOT YET AVAILABLE (JULY 6).

J. Stephens

Drilcor Industries Ltd.
18 - 12871 Bathgate Way
Richmond, British Columbia
Canada V6V 1Y5

Telephone (604) 273-1878
Telex 04-357519

July 2/80

8005/1

INVOICE

J.C. Stephen Exploration Ltd.
1124 W. 15th Street,
North Vancouver, B.C.
V7P 1M9

re: diamond drilling - Bar Group

HW-1: Drilling Footage - Wolf River

		BW Casing	BQ Coring	
DDH-1	0-28.5	28.5		
	0-348		348'	
DDH-2	0-38.5	38.5		
	0-292		292'	
DDH-3	0-33.5	33.5		
	0-67		67'	
		100.5	707'	
		@ 12.50	@ 22.50	
		1,256.25	+ 15,907.50	17,163.75

Labor	Man Hours		
June 4	28		
5	09		
7	27½		
8	75		
9	22		
10	02		
11	06		
12	16		
15	17		
	202.5	@ 17.50/hr.	3,543.75
			20,707.50

Additives

8 bags mud @ 11.50	92.00	
1 Alcomber	232.53	324.53
		21,032.03

J.C. Stephen Exploration Ltd.
July 2, 1980.

b/f 21,032.03

Mob:

Load Camp Gear to Teslin:	1,169.10 + 10%	1,286.01
Your ½ of Truck Rental:	25.59 + 10%	28.14
		$22,346.18

Drilcor Industries Ltd.
18 - 12871 Bathgate Way
Richmond, British Columbia
Canada V6V 1Y5

Telephone (604) 273-1878
Telex 04-357519

INVOICE 8005/2 July 3, 1980.

J.C. Stephen Exploration Ltd.
1124 W. 15th Street,
North Vancouver, B.C.
V7P 1M9

Diam.Drilling Bar Group: June16-19/80

HW-1 Drilling Footage - Wolf River.

	BW Casing	BQ Coring		
DDH-3		67-287 : 220		
DDH-4	0-23.5	0-188 : 188		
	23.5 @ 12.50 = 293.75	408 @ 22.50		9,180.00
				293.75

Man Hours

June 16	-		
17	41		
18	06		
19	48		
	95 hrs. @ 17.50		1,662.50

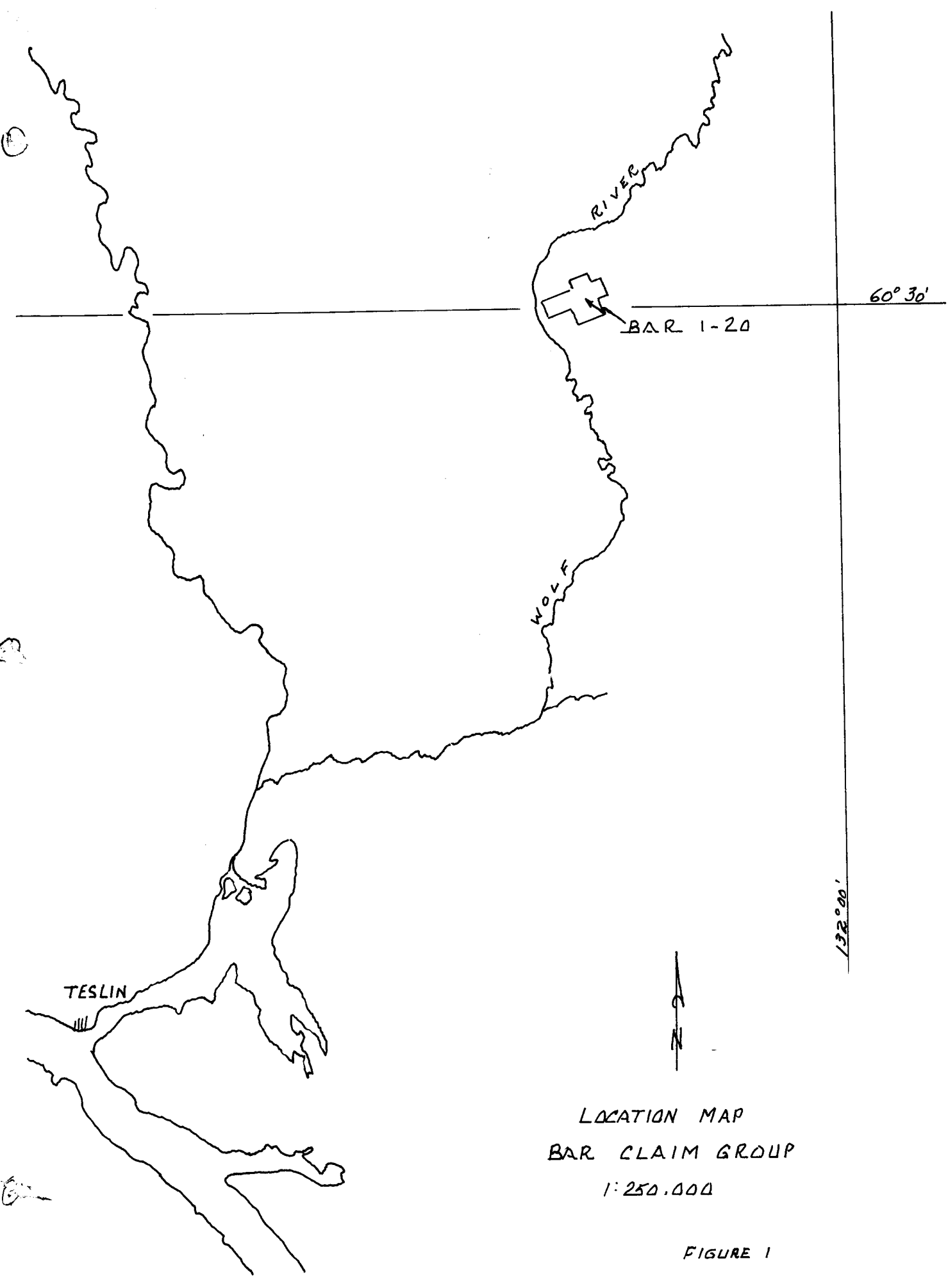
Local pickup & del. to Swift River			
Lumber, plywood & fuel	60.00		
Groc. - del	60.00		
Gas & Groc.	75.00		
	195.00 + 10%		214.50

Materials Consumed

40 Core boxes @ 7.00	280.00	
25 Core box lids @ 2.00	50.00	
30 Groved c/boxes-Watson @4.85+15%	167.33	
4 propane @ 21.80	87.20	
3 bentonite @ 11.50	34.50	
1 casing advancer	117.70	
1 casing shoe 12305	171.50	
(above 2 items left in hole)		
Accomm. & meals-Teslin: 666.50+10%	733.15	
Drilcor truck mileage: 800km @ 25	200.00	1,841.38

Cook's Wages:1900.00x125x13/30 36/89	416.28 + 10%	457.60
Groceries: 4th 1187.95		
13th 148.53		
1336.48x36/89	540.59 + 10%	594.64
		$14,244.37

OK J.C. Stephen

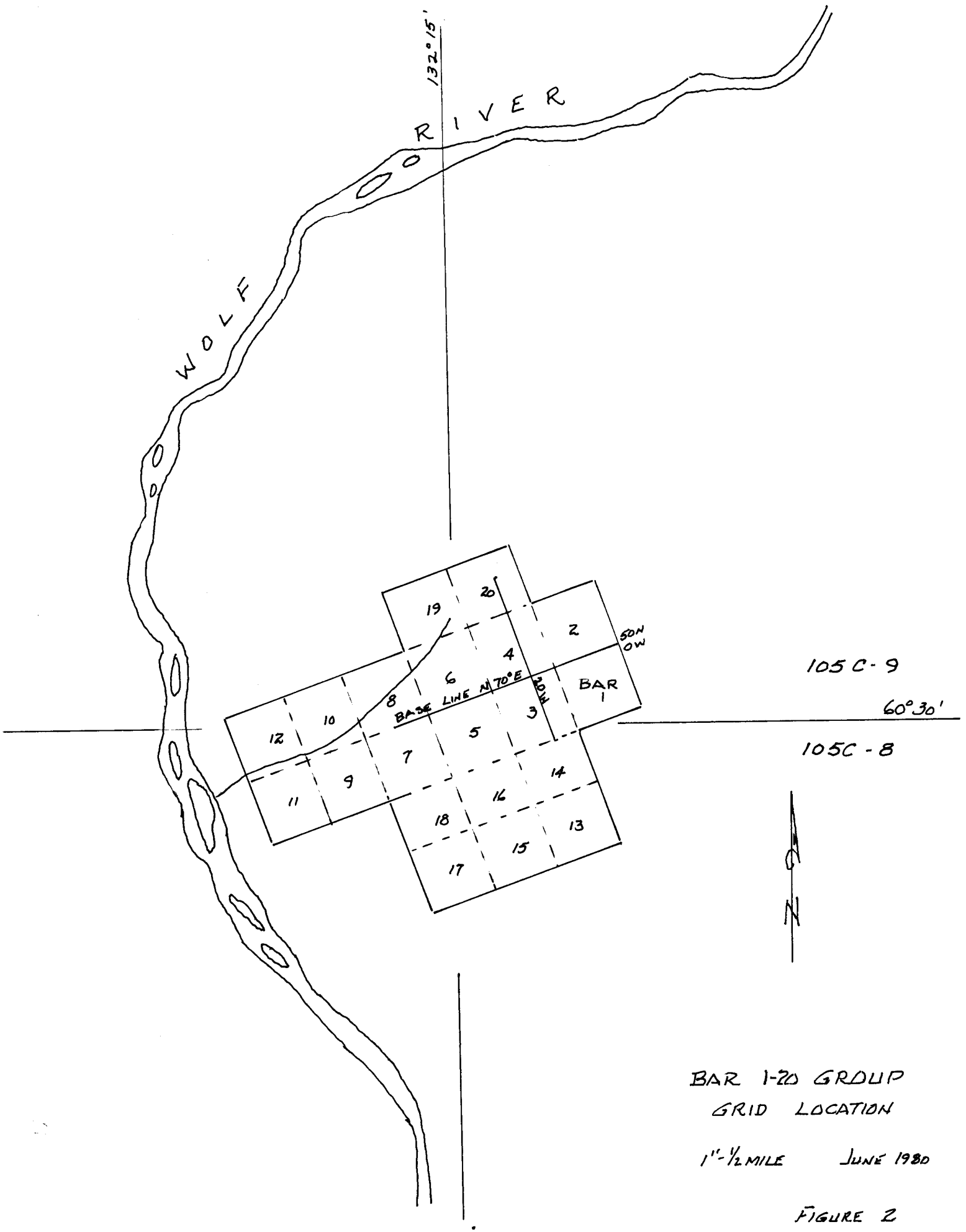


LOCATION MAP

BAR CLAIM GROUP

1:250,000

FIGURE 1



BAR 1-20 GROUP
GRID LOCATION

1"-½ MILE JUNE 1980

FIGURE 2

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80-B-2
Project DC SYNDICATE
Claim BAR 3
Page 1 of ___

Length ___ Contractor Drillcor
Bearing Grid North (340°) Core BQ Stored ___
Dip -60° Casing ___
Lat. 48N 4149N Logged by JCS Date June 13 - 1980
Dep. 20W 2041W Location ___
Elev. 3760 ___
O.B. Thickness ___ Started ___ Finished ___
B.R. Thickness ___ Started ___ Finished ___

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 20'	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose Comment
			0				ob	0 - 6.5 OVERBURDEN
								6.5 - 33.5 OVERBURDEN, ROCK SLABS - CASING
								BROKEN FRAGMENTS GREY-GREEN CHERT
			20					
			40					38 - 61. GREY GREEN CHERT, WELL FRACTURED: LIMONITE ON FRACTURE SURFACES - LEACHED
			60					
			80					[illegible] GREY GREEN CHERT - WEAKLY [illegible] AT 35°-40°
								MINOR PYRITE ON WEAK FRACTURES
			100					101 - 113 BRECCIATED CHERT SEAMED BY PYRITE & MINOR BARITE. SOME HEMATITE IN CHERT. MINERALIZATION [illegible]
								113 - 131.3 CREAM COLORED FELDSPATHIC LOOKING COARSE CHERT - BRECCIA.
			120					

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

5.

Length
Bearing
Dip
Lat.
Dep.
Elev.
O.B. Thickness
B.R. Thickness

Contractor
Core
Casing
Logged by
Location
Started
Started

Stored
Date
Finished
Finished

J.C. STEPHEN EXPLORATIONS LTD.

Hole No.
Project
Claim
Page 2 of

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" :	ALTERATION				FRACTURING	MINERAL	GEOLOGY	Purpose Comment
			120						Py		PYRITE MINERALIZATION ON FRACTURES – SPOTTY
									Py		131.3–159 GREY FINE CHERT BRECCIA – APPEARS [illegible] CONSIDERABLE PY MINERALIZATION UP TO 30%:
			140						Py		
									Py		
			160								159 – 23[illegible] QUARTZITE – MASSIVE – RELATIVELY FINE GRAINED VERY MINOR FRACTURING AND QTZ VEINING, [illegible] AT ABOUT 50° INDISTINCT 166.3 - 172 PALE GREY GREEN IN COLOR [illegible] – 201.5 " " " " " 205.5 – 23[illegible] PYRITE MINERALIZATION ON FRACTURES AND WEAK [illegible] ZONES AT 174, 178, 183 WITH LITTLE BARITE ; 187½ - 188½ 204 - 205, 2[illegible] ; [illegible] WITH LITTLE [illegible] VEINING GREY GREEN QTZITE GENERALLY BARREN
			180								
			200								
			220								
			240								238–291 FINER GRAINED BETTER BEDDED GREENISH TO GREY CHERTY BEDS THIN BEDS AT 40° TO CORE

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

9

DRILLING INTERVAL	% CORE RECIVERED	BOX No.	SCALE 1" = 20	ALTERATION				FRACTURING	MINERAL	GEOLOGY	Purpose Comment
			260								
			280								281 3" MASSIVE WHITE ~~[illegible]~~ BARITE with pyrite 28[illegible] - [illegible] 2[illegible] - THIN Py VEINING 291 END HOLE

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

Length — Contractor —
Bearing — Core — Stored —
Dip — Casing —
Lat. — Logged by — Date —
Dep. — Location —
Elev. —
O.B. Thickness — Started — Finished —
B.R Thickness — Started — Finished —

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. —
Project —
Claim —
Page 3 of —

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays							
101'	107'	6'			4838A								
107	112	5'			39A								
137	144	7'			4840A								
144	151	7'			41A								
151	159	8			42A								
280.5	283.0	2.5			4543A								

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. _____

Project _____

Claim _____

Page ____ of ____

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

Purpose
Comment

0 - 33.5 CASING

33.5 - 45 PALE GREEN TO WHITE SILICIFIED "CHERT" WITH VERY LITTLE DISSEMINATED CUBIC PYRITE. FAIRLY WELL FRACTURED WITH LIMONITE AND FERRUGINOUS

45 - 142 WHITE SILICEOUS CHERT. SOME BARITE PYRITE

GEOLOGY

MINERAL

FRACTURING

ALTERATION

SCALE 1" = 20'

BOX No.

% CORE RECOVERED

DRILLING INTERVAL

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip Vert

Lat. GRID 6245N Casing _____

Dep. GRID 2000W Logged by _____ Date _____

Elev. 3713 Location _____

O.B. Thickness _____ Started _____ Finished _____

B.R Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80-B-3

Project DC 5 Mile

Claim BAR 4

Page 1 of _____

J.C. STEPHEN EXPLORATIONS LTD.

- Length ______ Contractor ______
- Bearing ______ Core ______ Stored ______
- Dip ______ Casing ______
- Lat. ______ Logged by ______ Date ______
- Dep. ______ Location ______
- Elev. ______
- O.B. Thickness ______ Started ______ Finished ______
- B.R. Thickness ______ Started ______ Finished ______
- Hole No. 80 B-3
- Project ______
- Claim ______
- Page ____ of ____

DRILLING INTERVAL | % CORE RECOVERED | BOX No. | SCALE 1" = 20 | ALTERATION | FRACTURING | MINERAL | GEOLOGY

Purpose
Comment

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

Scale: 120, 140, 160, 180, 200, 220, 240

142′
GREY TO GREENISH GREY FINE GRAINED CHERT OR ARGILLACEOUS CHERT, BEDDING AT 35°, FAIRLY MASSIVE - WEAK FRACTURING WITH PYRITE

174.5 - 175.6 DARK GREY CHERTY ARGILLITE

177 - 237 DARK GREY ARGILLITE. BEDDING SOMEWHAT VARIABLE 60° AT 180′; 45° @ 215′ LOCALLY UP TO 75° NEAR 270′
OCCASIONAL FRACTURES WITH PYRITE

SECTIONS VARY FROM FINE GRAINED GRITTY ARGILLITE TO IRREGULARLY THIN BEDDED TO MASSIVE.

241 - 245 NARROW Gts - Qtz CARB. VEINING AT 15° TO CORE

237′ END HOLE

10.

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays Zn	Ag	BaSO4					
45.0	50.0	5.0			4844A								
50	57	7.0			45								
57	62	5.0			46								
62	72	10.0			47								
72	82	10.0			48								
82	92	10.0			49								
92	102	10.0			50 A								
102	107	5.0			5258 B								
107	112	5.0			59								
112	122	10.0			60								
122	132	10.0			61								
132	142	10.0			62								

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

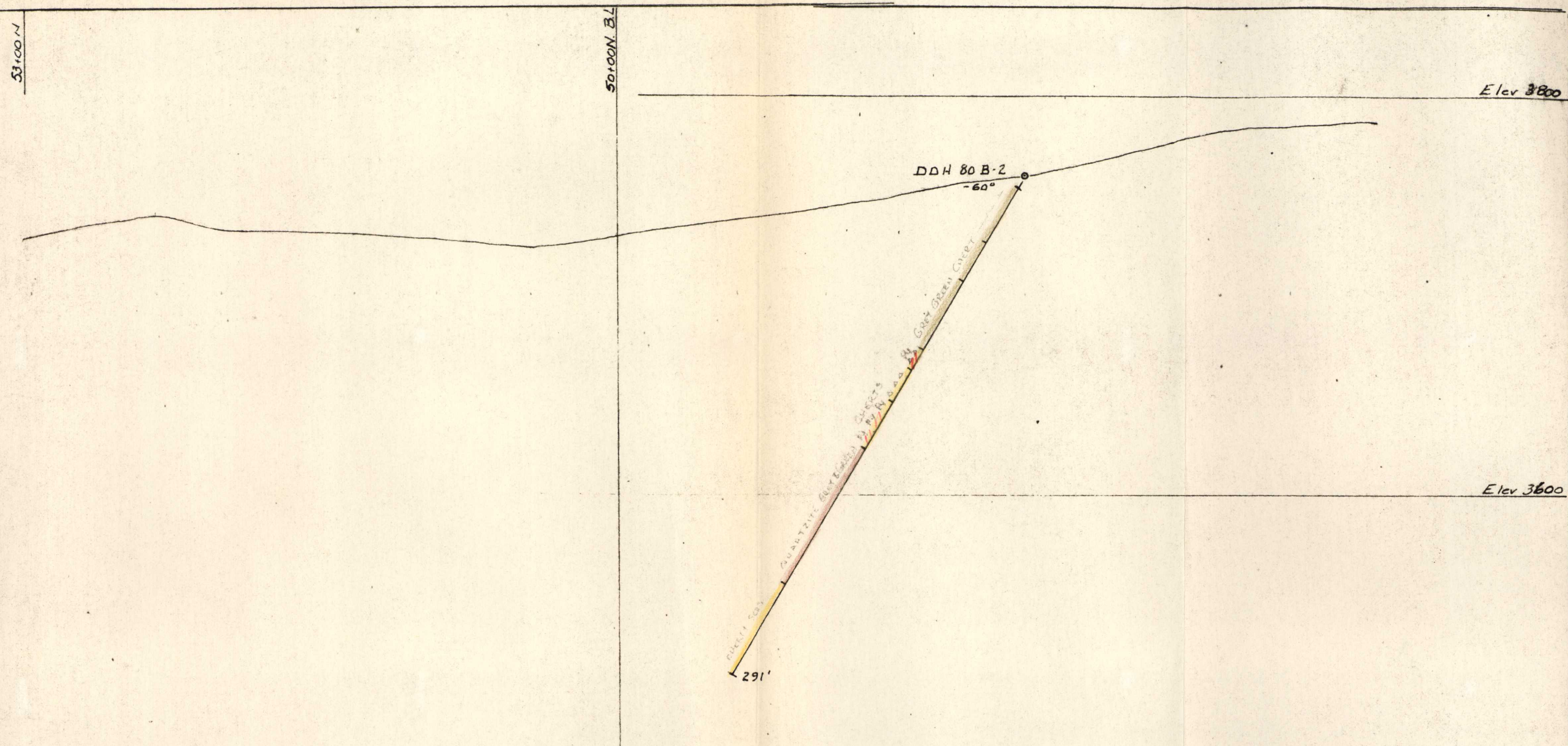
J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-3

Project DC. SYNDICATE

Claim BAR 4

Page ____ of ____



DD.H. 80 B-2

J.C. STEPHEN EXPLORATIONS LTD.

D.C. SYNDICATE

BAR CLAIM GROUP

VERTICAL SECTION 20+00 W.

FACING EASTERLY

SCALE 1" - 50'   JUNE 1980

FIGURE 2

64+00N

62+00N

57+00N

Elev 3800'

DDH 80 B-3
-90°

SILIC CHERT

CHERT BARITE PYRITE

GREY CHERT

ARGILLITE

287'

Elev 3600'

D.D.H. 80 B-3

J.C. STEPHEN EXPLORATIONS LTD.

D.C. SYNDICATE

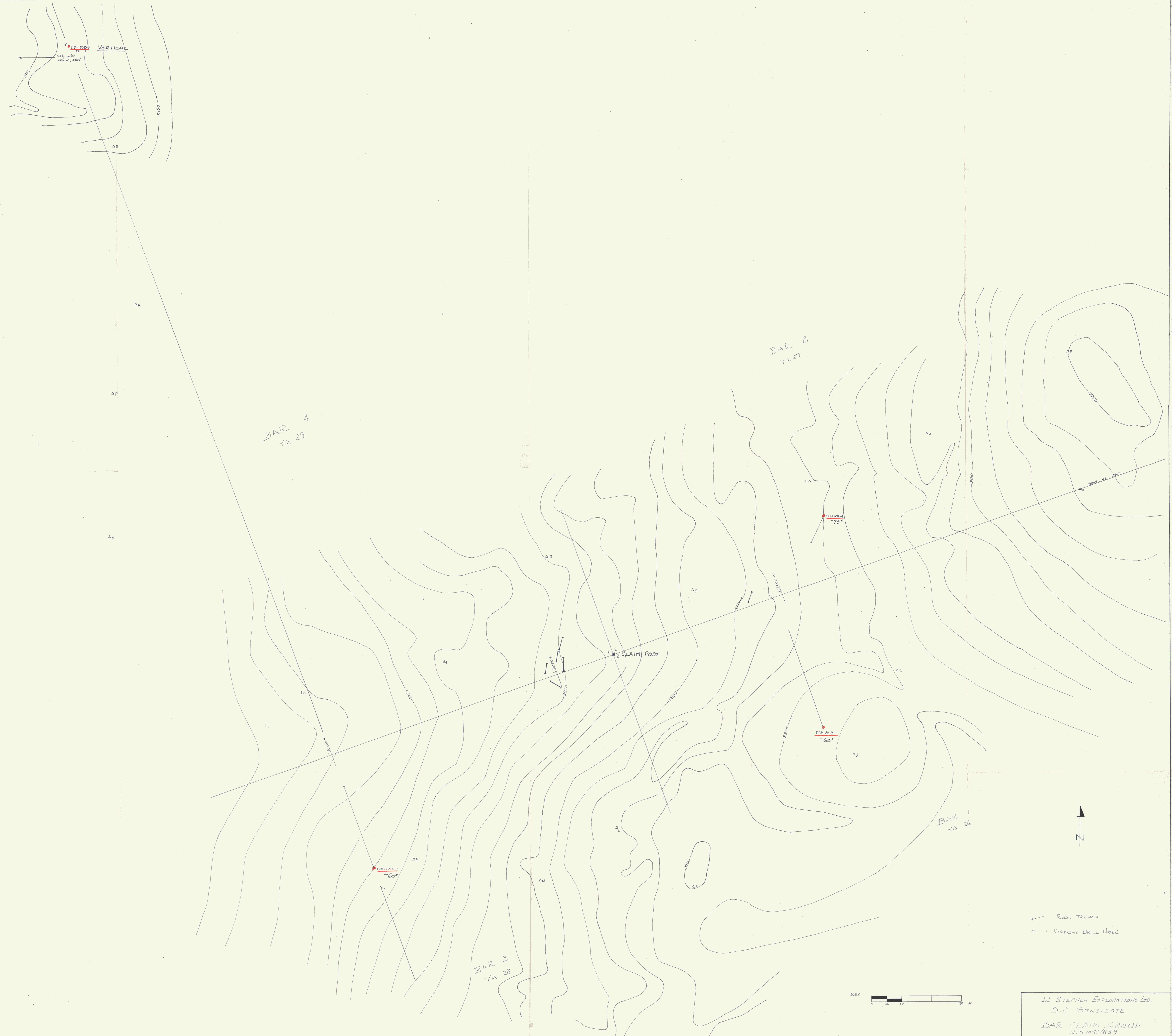
BAR CLAIM GROUP

VERTICAL SECTION 20+00 W

FACING EASTERLY

SCALE 1" = 50' JUNE 1980

FIGURE 4



J.C. STEPHEN EXPLORATIONS LTD.

D.C. SYNDICATE

BAR CLAIM GROUP
NTS 105C/8 & 9

TOPOGRAPHIC MAP

SCALE 1" - 50'   JUNE 1980

J.C. STEPHEN EXPLORATIONS LTD.
1124 West 15th Street, North Vancouver, B.C. V7P 1M9 (604) 988-1545

July 15. 1980
% Geraghtys Lodge
Swift River. Yukon

Mining Recorder
Watson Lake. Y.T.

Re: BAR 1-20 MAP 105C/8+9

Dear Sir:

Enclosed are two copies of drill logs and location maps to accompany the statements of expenditure, etc. filed for assessment work on these claims about June 22. I trust all is in order and that you have received the $10.00 cheque requested to complete the fees.

Yours very truly
J.C. Stephen

Drilcor Industries Ltd.
18 - 12871 Bathgate Way
Richmond, British Columbia
Canada V6V 1Y5

Telephone (604) 273-1878
Telex 04-357519

September 22, 1980.

J.C. Stephen Exploration,
1124 W. 15th Street,
North Vancouver, B.C.
V7P 1M9

BAR group - Final Invoice 8005/3

Additives from our Invoice 8005/1 charged at straight cost -		
15% of 324.53		48.68
Materials consumed from our Invoice 8005/2 charged at straight cost -		
3 bentonite	34.50	
1 casing adv.	117.50	
1 casing shoe	171.50	
15% of	323.50	48.53
Cook's wages charged on Inv. 8005/2 for 13/30 (13 days). Total project duration was June 4-19 inclusive - 16 days Outstanding portion: 1900.x1.25x3/30x36/89= 96.07		
Less 10% added to cooks wage cost in error on Invoice 8005/2 (41.63)		54.44
Stove oil taken in to Bar group - 3 drums		238.28
	Total	$389.93

OK [illegible]
Signed - BJR

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-2
Project DC SYNDICATE
Claim BAR 3
Page 1 of

Length
Bearing GRID NORTH (340°)
Dip -60°
Lat. 48N 4149N
Dep. 20W 20400W
Elev. 3760
O.B. Thickness — Started — Finished
B.R. Thickness — Started — Finished

Contractor DRILCOR
Core BQ — Stored
Casing
Logged by JCS — Date JUNE 13 - 1980
Location

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 20'	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose Comment

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

GEOLOGY	Comment
ob	0 - 6.5 OVERBURDEN
	6.5 - 38.5 OVERBURDEN, ROCK SLABS - CASING BROKEN FRAGMENTS GREY-GREEN CHERT
	38 - 61. GREY GREEN CHERT, WELL FRACTURED - LIMONITE ON FRACTURE SURFACES - LEACHED
	61 - 101 GREY GREEN CHERT - WEAK LINEATION (BEDDING?) AT 35°-40° MINOR PYRITE ON WEAK FRACTURES
	101 - 113. BRECCIATED CHERT SEAMED BY PYRITE + MINOR BARITE SOME HEMATITE IN CHERT. MINERALIZATION WEAKER 106 - 113
	113 - 131.3 CREAM COLORED FELDSPATHIC LOOKING COARSE CHERT BRECCIA.

Scale marks: 0, 20, 40, 60, 80, 100, 120

J.C. STEPHEN EXPLORATIONS LTD.

Length ____ Contractor ____
Bearing ____ Core ____ Stored ____
Dip ____ Casing ____
Lat. ____ Logged by ____ Date ____
Dep. ____ Location ____
Elev. ____
O.B. Thickness ____ Started ____ Finished ____
B.R. Thickness ____ Started ____ Finished ____

Hole No. ____
Project ____
Claim ____

Page 2 of ____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 120	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose Comment
						Py		PYRITE MINERALIZATION ON FRACTURES – SPOTTY
			140			Py		131.3 – 159 GREY FINE CHERT BRECCIA – APPEARS PEBBLY. – CONSIDERABLE PY MINERALIZATION UP TO 20%?:
						Py		
			160			Py		159 – 238 QUARTZITE – MASSIVE – RELATIVELY FINE GRAINED VERY MINOR FRACTURING AND QTZ VEINING, BEDDING AT ABOUT 50° INDISTINCT
								166.3 – 172 PALE GREY GREEN IN COLOR
								171 – 201.5 ″ ″ ″ ″ ″
								205.5 – 238 ″ ″ ″ ″ ″
			180					PYRITE MINERALIZATION ON FRACTURES AND WEAK IRREGULAR ZONES AT 174, 178, 183 WITH LITTLE BARITE; 187½ – 188½ 204 – 205, 210.5; 235.5 – 236 WITH LITTLE QTZ VEINING GREY GREEN QTZITE GENERALLY BARREN
			200					
			220					
			240					238 – 291 FINER GRAINED BETTER BEDDED GREENISH TO GREY CHERTY SEDS THIN BEDS AT 40° TO CORE

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

SURVEY: Footage	Bearing	ANGLE Reading	Corrected	Purpose Comment

281 3" MASSIVE WHITE BARITE WITH PYRITE
282 - 6" 15% PY MIN
291 - TRACE PY VEINING
291 END HOLE

GEOLOGY	
MINERAL	
FRACTURING	
ALTERATION	
SCALE 1" = 20'	260 280
BOX No.	
% CORE RECOVERED	
DRILLING INTERVAL	

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. _____

Project _____

Claim _____

J.C. STEPHEN EXPLORATIONS LTD.

Length ____ Contractor Drilcor
Bearing Grid North (340°) Core BQ Stored ____
Dip -60° Casing ____
Lat. 47+67 N. Logged by JCS Date ____
Dep. 12+00W. Location ____
Elev. 3907' Hole No. 80 B-1
O.B. Thickness ____ Started ____ Finished ____ Project ____
B.R. Thickness ____ Started ____ Finished ____ Claim BAR 1
Page ____ of ____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 10'	ALTERATION	FRACTURING	MINERAL	GEOLOGY
			10'				0' - 12.5' Casing, overburden, rock fragments
	30%						12.5-16' Grey green chert, collection of small fragments
	2%		20'			Py	16-21' Grey green chert, little pyrite small fragments
	15%					Ba Py	21-26' Grey geen chert? Barite, pyrite, limonite on fractures
	12%		30'			Py	26-31' Grey green chert, little barite, pyrite, limonite on fractures
	40%					Ba Py	31-33.5' Mainly Pyrite, barite, limonite on fractures. Banding irregular at 30° to 70° to core
	35%					Py	33.5-35' Grey green chert, little ba, py, lim. small fragments
	30%					Py	35-36' White barite, fine pyrite, small fragments
	30%		40'			Ba Py	36-40' Mainly white barite, pyrite, remnants grey gr chert. Broken core.
	10%						40-41' Fragments grey green chert
	70%					Ba, Py	41-42.8' Grey green chert, barite, pyrite. Broken
	70%						42.8-44.4' Dark grey to black f.g. shale. Irregular breaking.
	100%		50'			Py Ba Sph Tetrahedrite?	44.4-114' Dark grey cherty sediment. Irregular indistinct bedding or banding in places. Irregular zones or fragments of light grey (pepper & salt) grit with small angular chert and black shale fragments. Mainly between 60 and 66'
			60'				Formation well fractured and mineralized with pyrite and barite.

Purpose
Comment

SURVEY: Footage	SURVEY: Bearing	ANGLE Reading	ANGLE Corrected

J.C. STEPHEN EXPLORATIONS LTD.

Length _____ Contractor _____
Bearing _____ Core _____ Stored _____
Dip _____ Casing _____
Lat. _____ Logged by _____ Date _____
Dep. _____ Location _____
Elev. _____
O.B. Thickness _____ Started _____ Finished _____
B.R. Thickness _____ Started _____ Finished _____

Hole No. 80 B-1
Project _____
Claim _____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 60	ALTERATION	FRACTURING	MINERAL	GEOLOGY
			70			Py	
			80			Py	
			90		/////		
			100			Py, Gal Sph	
			110'				
			120'			Py	

SURVEY: Footage	SURVEY: Bearing	ANGLE Reading	ANGLE Corrected

Purpose
Comment

Zones of relatively massive pyrite;
71-72;74.5-77.8;85-86;115-119.4'

Slickensides on slip at 45° to core; Sheared pyrite on surfaces

Minor galena on fracture at 102.5'
Occassional pale sphalerite on fractures

111' and 113.5-115' Core vuggy, sheared, Fault at 60° to core

114-154' Pale creamy grey siliceous sediment - variable hardness, fine grained, numerous fine fractures and irregular zones pyrite. Resembles grey green chert.

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-1

Project _____

Claim _____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 120'	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose Comment
			130'			Py		30% pyrite in irregular zones and fractures 119.3'-124' Then less pyrite on irregular fractures to 153.8'
			140'					133.5-135.5'; 141-142' Grit zones include angular fragments of fine grained pyrite
			150'					
			160'			Py		153.8-166' Massive pyrite, little barite 30% pyrite in irregular zones 1.5 and 2.5' on either side.
			170'					166-178' Similar to 114-154'
			180'			Py		Similar to grey green chert Bedding at about 45° to core, generally indistinct. 178-221' Grey to grey green chert

SURVEY: Footage	SURVEY: Bearing	ANGLE Reading	ANGLE Corrected

J.C. STEPHEN EXPLORATIONS LTD.

Length _____ Contractor _____
Bearing _____ Core _____ Stored _____
Dip _____ Casing _____
Lat. _____ Logged by _____ Date _____
Dep. _____ Location _____
Elev. _____
O.B. Thickness _____ Started _____ Finished _____
B.R. Thickness _____ Started _____ Finished _____

Hole No. 80 B-1
Project _____
Claim _____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 180'	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose / Comment	SURVEY: Footage	SURVEY: Bearing	ANGLE: Reading	ANGLE: Corrected
			190			Py		Pyrite in fractures and irregular seams Pyrite is fractured or brecciated and healed with quartz. 184' Little red dusting of hematite? on fracture				
			200									
			210					Fine grey to creamy grey green irregularly bedded cherty sediment Bedding at about 70° to core Weak pyrite mineralization on small fractures				
			220			Py		221-223' Nearly massive pyrite				
			230					230.8-235.5' 40% pyrite.				
			240			Py		235.5-247.5' Massive pyrite, brecciated, spots and seams of quartz				

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-1

Project _____

Claim _____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" =	ALTERATION	FRACTURING	MINERAL	GEOLOGY
			240			Py	
			250				
			260			Py	
			270				
			280				
			290			Py	
			300				

SURVEY: Footage	SURVEY: Bearing	ANGLE Reading	ANGLE Corrected

Purpose
Comment

247.5-287.5' Grey argillite, short sections thin bedded, alternating light and dark grey - appears varved. Bedding irregular often disrupted by coarser irregular zones or fragments Contacts sharp but very irregular.

255.5-256.6' Grey grit with pyrite

Bedding at 70° to core.

Irregular fracture filling and weak zones pyrite - cross fractured zebra style.

Grit

Chert more common toward end of section.

Bedding quite irregular, some graphitic

Chert

287.5-305' Grey chert as 178-221'

Up to 15% pyrite on irregular fractures
Mineralization along core 291-294'

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

80 B-1

Hole No. _____

Project _____

Claim _____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 300	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose Comment
								305.7-318' Dark green intrusive dyke. Porphyritic with dark green to black augite?? crystals. First contact chilled and fine grained, second contact sheared. Dyke appears sheared and serpentinized, some quartz-carbonate veining.
			310					318-348' Dark grey to black irregularly bedded conglomeratic siltstone. Bedding at about 60-65°.
			320					
			330			Py		Thin seams pyrite parallel to bedding
			340				Grit	338.5-341' Chert grit, 5" quartz on first contact, second contact sheared. Irregular pyrite filled fractures
	70%							Core broken at end of section
	50%							END OF HOLE 348'

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays Zn%	Ag oz	Au oz	Ba%	Pb%			
44.4	50.0	5.6			4811A	0.02	0.20		13.3				
50.0	56.0	6.0			12A	0.01	0.18		20.8				
56.0	66.0	10.0			13A	0.04	0.18		7.0				
66.0	71.0	5.0			14A	0.01	0.24		19.9				
71.0	74.5	3.5			15A	0.02	0.20		16.6				
74.5	78.0	3.5			16A	0.15	0.32		18.3	0.05			
78.0	83.2	5.2			17A	0.14	0.24		15.9	0.04			
83.2	86.0	2.8			4818A	1.88	0.52		31.4	0.12			
86.0	91.0	5.0			19A	0.02	0.24		12.2				
91.0	101.0	10.0			20A	0.01	0.16			0.03			
101.0	110.5	9.5			21A	0.08	0.16			0.04			
110.5	115.0	4.5			22A	0.06	0.24						
115.0	119.3	4.3			23A	0.07	0.28	<0.003					
119.3	124	4.7			24A	<0.01	0.10	<0.003					
124.0	134.0	10.0			25A	0.01	0.08						
134.0	144.0	10.0			26A	<0.01	0.01						
144.0	152.4	8.4			27A	0.02	0.06						
152.4	160.0	7.6			28A	0.12	0.20	<0.003		0.06			
160.0	168.0	8.0			29A	0.06	0.36	<0.003		0.06			
168.0	178.0	10.0			30A	<0.01	0.10	<0.003					
221.0	223.0	2.0			4831A	0.01	0.32						
223.0	230.8	7.8			32A	<0.01	0.14	<0.003					
230.8	235.5	4.7			33A	0.05	0.10	<0.003					
235.5	241.0	5.5			34A	0.05	0.28	<0.003					
241.0	247.5	6.5			35A	0.01	0.32	<0.003					
247.5	257.5	10.0			36A	0.01	0.06						
287.5	297.5	10.0			37A	0.27	0.08	.003					

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-1

Project _____

Claim BAR 1

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected

Purpose
Comment

0 - 6.5' Overburden

6.5-38.5' Overburden, rock slabs - CASING

Broken fragments grey green chert

38-61' Grey green chert;

Well fractured - limonite on fracture surfaces - leached

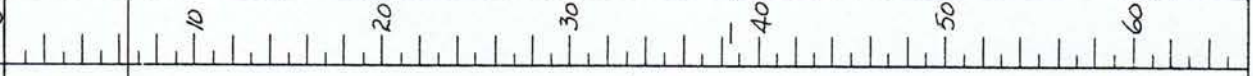
GEOLOGY

MINERAL

FRACTURING

ALTERATION

SCALE 1" = _____



BOX No.

% CORE RECOVERED

DRILLING INTERVAL

Length 291'
Bearing Grid north (340°)
Dip -60°
Lat. 47+97 N.
Dep. 20+00 W.
Elev 3760'
O.B. Thickness _____ Started _____ Finished _____
B.R. Thickness _____ Started _____ Finished _____

Contractor DRILCOR
Core BQ Stored On property
Casing _____
Logged by JCS Date June 13 - 1980
Location _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-2
Project _____
Claim BAR 3
Page 1 of _____

J.C. STEPHEN EXPLORATIONS LTD.

Length _____ Contractor _____
Bearing _____ Core _____ Stored _____
Dip _____ Casing _____
Lat. _____ Logged by _____ Date _____
Dep. _____ Location _____
Elev. _____

O.B. Thickness _____ Started _____ Finished _____
B.R. Thickness _____ Started _____ Finished _____

Hole No. 80 B-2
Project _____
Claim _____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = ____	ALTERATION	FRACTURING	MINERAL	GEOLOGY
			60				
			70				
			80				
			90				
			100				
			110			Py	
			120				

Purpose
Comment

SURVEY: Footage	SURVEY: Bearing	ANGLE Reading	ANGLE Corrected

61-101' Grey green chert, weak lineation (bedding?) at 35°-40°.

Minor pyrite on weak fractures

101-113' Brecciated chert, seamed by pyrite and minor barite. Some hematite in chert. Mineralization weaker 106-113'.

113-131.3' Cream colored feldspathic looking coarse chert breccia

J.C. STEPHEN EXPLORATIONS LTD.

Length _____ Contractor _____
Bearing _____ Core _____ Stored _____
Dip _____ Casing _____
Lat. _____ Logged by _____ Date _____
Dep. _____ Location _____
Elev. _____
O.B. Thickness _____ Started _____ Finished _____
B.R. Thickness _____ Started _____ Finished _____

Hole No. 80 B-2
Project _____
Claim _____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 120	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose Comment
			130			Py		Pyrite mineralization on fractures - spotty
			140			Py		131.3-159' Grey fine chert breccia - appears pebbly- considerable pyrite mineralization up to 30%
			150			Py		
			160					159-238 Quartzite- massive- relatively fine grained. Very minor fracturing and quartz veining. Indistinct bedding at about 50°.
			170					166.3-172 pale grey green in color 191-201.5 " " " " " 205.5-238 " " " " "
			180					Pyrite mineralization on fracture and in weak irregular zones at 174, 178; 183 with little barite; 187.5-188.5; 204-205; 210.5; 235.5-236 with little quartz veining. Grey green quartzite generally barren

SURVEY: Footage	SURVEY: Bearing	ANGLE Reading	ANGLE Corrected

J.C. STEPHEN EXPLORATIONS LTD.

Length _____ Contractor _____
Bearing _____ Core _____ Stored _____
Dip _____ Casing _____
Lat. _____ Logged by _____ Date _____
Dep. _____ Location _____
Elev. _____
O.B. Thickness _____ Started _____ Finished _____
B.R. Thickness _____ Started _____ Finished _____

Hole No. 80 B-2
Project _____
Claim _____
Page 3 of ____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" =	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose Comment	SURVEY: Footage	SURVEY: Bearing	ANGLE Reading	ANGLE Corrected
			120									
			130			Py		Pyrite mineralization on fractures - spotty				
			140			Py		131.3-159' Grey fine chert breccia - appears pebbly- considerable pyrite mineralization up to 30%				
			150			Py						
			160					159-238 Quartzite- massive- relatively fine grained. Very minor fracturing and quartz veining. Indistinct bedding at about 50°. 166.3-172 pale grey green in color 191-201.5 " " " " " 205.5-238 " " " " "				
			170					Pyrite mineralization on fracture and in weak irregular zones at 174, 178; 183 with little barite; 187.5-188.5; 204-205; 210.5; 235.5-236 with little quartz veining.				
			180					Grey green quartzite generally barren				

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected

Purpose
Comment

238-291' . . Finer grained better bedded greenish to grey cherty sediments. Thin beds at 40° to core.

GEOLOGY

MINERAL

FRACTURING

ALTERATION

SCALE 1" = _____ ft

180 190 200 210 220 230 240

BOX No.

% CORE RECOVERED

DRILLING INTERVAL

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-2

Project _____

Claim _____

Page 4 of _____

SURVEY: Footage | Bearing | ANGLE Reading | Corrected

Purpose Comment

281' 3" massive white barite with pyrite
282' 6" 15% pyrite mineralization
291'. Thin pyrite veining.
291' END OF HOLE

GEOLOGY

MINERAL — Py

FRACTURING

ALTERATION

SCALE 1" = _____ — 240 250 260 270 280 290

BOX No.

% CORE RECOVERED

DRILLING INTERVAL

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-2

Project _____

Claim _____

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays Zn%	Ag oz	Au oz	Ba%	Pb%			
101	107	6			4838A	0.03	0.10		0.87				
107	112	5			39A	0.02	0.01	<.003					
137	144	7			4840A	0.01	0.25	<.003		0.01			
144	151	7			41A	0.01	0.18	<.003		0.02			
151	159	8			42A	0.01	0.30	<.003		0.01			
280.5	283.0	2.5			4843A	0.01	0.01	<.003	28.1				

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-2

Project _____

Claim BAR GRP

Page ____ of ____

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected

Purpose Comment

0 -33.5' CASING

33.5-45' Pale grey to white siliceous "chert" with very little disseminated cubic pyrite. Fairly well fractured with limonite on fractures.

45-142' White siliceous chert, barite, pyrite

core broken.

GEOLOGY	
MINERAL	Py
FRACTURING	
ALTERATION	
SCALE 1" = 10'	0, 10, 20, 30, 40, 50, 60
BOX No.	
% CORE RECOVERED	60% / 57' 20% / 62' 50%
DRILLING INTERVAL	

Length 287'
Bearing
Dip VERTICAL
Lat. 62+65 N
Dep. 20+00 W.
Elev. 3713
O.B. Thickness Started Finished
B.R. Thickness Started Finished

Contractor DRILCOR
Core BQ Stored
Casing
Logged by JCS Date
Location

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-3
Project
Claim BAR 4

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

Purpose
Comment

GEOLOGY

MINERAL — Py — Py

FRACTURING

ALTERATION

SCALE 1" = 10' 60

70 80 90 100 110 120

BOX No.

% CORE RECOVERED — 50% — 90%

DRILLING INTERVAL — 62' — 67' — 72'

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-3

Project _____

Claim BAR 4

Page 2 of _____

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No 80 B-3

Project _____

Claim _____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 10'	ALTERATION	FRACTURING	MINERAL	GEOLOGY
			120				
			130				
			140				
			150				
			160				
			170				
			180				

Purpose
Comment

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

142-177' Grey to greenish grey fine grained chert or argillaceous chert. Bedding at 35°. Fairly massive, weak fracturing with pyrite.

174.5-175.6' Dark grey cherty argillite.

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-3

Project _____

Claim _____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 10'	ALTERATION	FRACTURING	MINERAL	GEOLOGY
			180				
			190				
			200				

Purpose Comment	SURVEY: Footage	SURVEY: Bearing	ANGLE Reading	ANGLE Corrected

177-287' Dark grey argillite. Bedding somewhat variable. at 60^0 at 180'; 45^o at 215'; locally up to 75^o near 270'; Occasional fractures with pyrite. Sections vary from fine grained gritty argillite to irregularly thin bedded to massive.

241-248' Narrow quartz and quartz-carbonate veining at 15^o to core.

287' END OF HOLE

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays Zn%	Ag oz	Ba	Pb				
45.0	50.0	5.0			4844A	0.01	0.02	3.42					
50	57	7.0			45	0.02	0.01	6.11					
57	62	5.0			46	0.01	0.01	3.54					
62	72	10.0			47	0.01	0.01	14.0					
72	82	10.0			48	0.04	0.05	30.1					
82	92	10.0			49	0.01	0.01	22.8					
92	102	10.0			50A	0.02	0.01	17.2					
102	107	5.0			5258B	0.07	0.16	20.9	0.03				
107	112	5.0			59	0.19	0.01	27.1	0.01				
112	122	10.0			60	0.02	0.01	26.3					
122	132	10.0			61	0.06	0.01	23.0					
132	142	10.0			62	0.04	0.01	0.83					

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-3

Project DC SYNDICATE

Claim BAR 4

Page ____ of ____

J.C. STEPHEN EXPLORATIONS LTD.

Length 188' | Contractor DRILCOR
Bearing S 27° W | Core BQ | Stored JC CLAIM GROUP
Dip -75° | Casing
Lat. 10+75 W | Logged by NS & PJP Date June 19, 1980
Dep. 51+02 N. | Location
Elev 3890' | Hole No. 80 B-4
O.B. Thickness | Started | Finished | Project
B.R. Thickness | Started | Finished | Claim BAR 2

Page 1 of 4

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 10'	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose / Comment	SURVEY: Footage	SURVEY: Bearing	ANGLE: Reading	ANGLE: Corrected
			0					Casing				
			10				3	0'-188' Grey chert pebble conglomerate. Badly fractured to 34'. Pebbles of white and grey chert, black cherty argillite. Vary in size from 1" to 3", Angular. fractured with pyrite in stringers. Talc along fractures Bedding at 45°.				
			20									
			30									
			40				3					
						py		Bands of pyrite - fractured, chert filled				
			50			py sph		Minor disseminated sphalerite found along fractures.				
						sph		Small vugs or pits in core filled with yellow-orange weathering stain. Talc rich band.				
			60			sph						

Length 188' Contractor DRILCOR

Bearing S 27° W Core BQ Stored JC CLAIM GROUP

Dip -75° Casing

Lat. 10+75 W Logged by NS & PJP Date June 19, 1980

Dep. 51+02 N Location

Elev. 3890'

O.B. Thickness Started Finished

B.R. Thickness Started Finished

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-4

Project

Claim BAR 2

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 10'	ALTERATION	FRACTURING	MINERAL	GEOLOGY
			60			sph py	
	20%	64					
			70				
		72					
			80			sph	3
						Py	
			90				
						Py sph	
			100				
							4
			110			Py	3
							4
						Py sph	3
			120				

SURVEY: Footage	SURVEY: Bearing	ANGLE Reading	ANGLE Corrected

Purpose
Comment

Core badly broken.

Bedding 45°

Bedding 42°

Sphal blebs red-brown, intergrown with chert along fractures.

Pyrite stringers - fine grained. Rust colored stain along fracts.

2" band pyrite mixed with chert.
Small bleb sphal.

4" band cherty argillite.
2" band buff colored clay alteration fracture filling
106.5-107.5' Grey cherty argillite

111.5-112.5' Grey cherty argillite Disseminated pyrite blebs sub-rounded to angular fragments of pyrite.
112.5-116' Minor rounded clusters of dissem sphal. intermixed with pyrite.

J.C. STEPHEN EXPLORATIONS LTD.

Length _____ Contractor _____
Bearing _____ Core _____ Stored _____
Dip _____ Casing _____
Lat. _____ Logged by _____ Date _____
Dep. _____ Location _____
Elev. _____
O.B. Thickness _____ Started _____ Finished _____
B.R. Thickness _____ Started _____ Finished _____

Hole No. 80B-4
Project _____
Claim _____

Page 3 of 4

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = ____	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose Comment
			120					
						Py		125.5' Pyrite stringers
								128-129' Core badly broken only fragments remaining.
			130			Py		130' Massive pyrite
						Py	3	136-146' Pyrite in stringers.
			140					
								150' Bedding 34°
			150					
			160					
161'								Core badly broken
	50%							
166'								166-173' Black cherty argillite.
			170				4	
						Py	3	179' Pyrite filling hairline fractures.
			180					1" quartz vein
	20%							184-188' Badly broken 188' END OF HOLE

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays	Zn	Ag	Cu	WO_3	Sn	Pb%	
27	33	6.0			85754B		<0.01	0.08	<0.01	0.02	<0.01		
33	39	6.0			5263B		0.06	0.09					
39	43	4.0			85755B		<0.01	0.12	<0.01	0.02	<0.01		
43	54	11.0			5264B		0.04	0.07				0.02	
54	57	3.0			85756B		0.34	0.14	<0.01	0.03	<0.01		
57	62	5.0			5265B		0.59	0.09				0.02	
62	66	4.0			85757B		0.08	0.06	<0.01	0.02	<0.01		
72	83	11.0			5266B		1.17	1.30				0.20	
83	91	8.0			85758B		0.02	0.14	<0.01	<0.01	<0.01		
91	96	5.0			759		0.01	0.08	<0.01	<0.01	<0.01		
96	100	4.0			5267B		0.02	0.25					
100	102	2.0			85760B		0.02	0.08	<0.01	<0.01	<0.01		
102	108	6.0			761		0.03	0.12	<0.01	0.02	<0.01		
108	113	5.0			762		0.01	0.08	<0.01	0.02	<0.01		
113	119	6.0			5268B		0.44	0.17					
119	121	2.0			85763B		0.01	0.18	<0.01	0.01	<0.01		
121	133	12.0			5269B		0.17	0.42					
133	136	3.0			85764B		0.02	0.06	<0.01	<0.01	<0.01		
136	146	10.0			5270B		0.79	0.93					
146	151	5.0			85765B		0.11	0.32	<0.01	<0.01	<0.01		
151	160	9.0			5271B		0.02	0.36					
168.5	177.5	9.0			85766B		0.07	0.48	<0.01	<0.01	<0.01		
177.5	183.5	6.0			767		0.20	0.34	<0.01	<0.01	<0.01		
183.5	188.0	4.5			768		0.30	0.20	<0.01	<0.01	<0.01		

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-4

Project _____

Claim BAR GROUP

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph. D. Geologist

P.O. BOX 39
8887 NASH STREET
FORT LANGLEY, B.C.
VOX 1JO

PHONE (604) 533-1155

7 Sept. 1980
Invoice
2187

Mr. J.C. Stephen
J.C. Stephen Explorations Ltd.
1124 W. 15th Street
Vancouver, B.C.
V7P 1M9

Dear Mr. Stephen:

Enclosed please find petrographic descriptions for the five samples from the DC Syndicate project. The materials and the bill will follow.

Two main periods of sulfide mineralization can be identified.Sample 80-B1-127.5' contains chert clasts with fine pyrite trains parallel to bedding. Minor sphalerite is also present in the clasts. This appears to be syngenetic. The clasts are surrounded by a pyrite-rich vein matrix, which also contains sphalerite. This mineralization of course took place after brecciation. It should be noted that the clasts in sample 80-B1-127.5', as well as the samples from drill hole B2 show a sericite foliation parallel to bedding succeeded by a later sericite cleavage, probably a dewatering effect. These cleavages are cut off and rotated in the breccia. Thus the brecciation, along with veining and mineralization, occurred considerably after deposition of the sediments.

Rebrecciation of pyrite and multiple veining events are also indicated; however they all belong within the second (epigenetic) period of mineralization.

Samples 80-B2-191' and 244' are immature clastic sediments derived from rhyolite/chert terrane. Although no immediate volcanism is apparent in the five samples examined, at least these indicate the proximity of a volcanic center.

Should you have questions or wish further discussion, I can be reached either via Jim Vinnell or at 224-6883.

Sincerely yours,

J. Nelson

JoAnne Nelson, M.Sc.

80-B1-127.5' Brecciated silty and argillaceous chert with pyrite-quartz-barite-sphalerite veins

The light-colored clasts in this sample are cherty. Two lithologies are present: chert with about 20% .1 mm quartz grains; and chert with abundant fine white mica. The latter contain fine pyrite bands which run parallel to sedimentary layering. They are cut off at the edges of the fragments by veins containing coarse pyrite, plus quartz and barite.

Pyrite in the veins occurs as single grains and in aggregates; Fine quartz and barite veinlets cut across the pyrite aggregates, filling fractures.

This sample shows two episodes of sulfide mineralization. The first was syngenetic. It is represented by bedding-parallel pyrite lamellae. The second was epigenetic. It involved remobilization of pyrite during brecciation and veining.

Clasts

Sharp bedding contacts separate the two lithologies. Two sericite foliations can be seen, one nearly parallel to bedding, the other at a low angle to it.

Pyrite grains in the fragments are very small. Many are cubic. A few possible examples of framboidal pyrite were noted. Pyrite occurs disseminated, in clusters (this was especially apparent in the silty layers), and in fine trains. The trains occur only in the argillaceous layers. They bifurcate; their trends are nearly parallel to bedding.

One sphalerite clump was seen in a silty layer. It touches and surrounds pyrite. It is .05 mm in diameter.

Veins

Pyrite occurs as equant grains and blobby aggregates. "Stacked" rectangular morphologies are scattered in the veins. In the denser aggregates, wispy concave-bordered inclusions of barite and quartz show the impingement of pyrite on its matrix. However, quartz and barite have grown later at the expense of pyrite. This is shown by straight quartz and barite veinlets which cut across pyrite aggregates.

Quartz grows interstial to pyrite; it also forms columnar veinlets.

Sericite, somewhat coarser than in the fragments, accompanies quartz in veinlets and in interstitial aggregates.

Some of the barite in the veins is coarse and euhedral; it also occurs as small equant grains in interstitial aggregates

80-B1-127.5' cont.

and as elongate grains within groups of columnar quartz.
Sphalerite is rare. One very large clear grain .1 by 1 mm occurs in a late vein that cuts across the thin section, both fragments and vein matrix.

Mode (overall)

45	quartz
40	pyrite
10	sericite
5	barite
(.2)	sphalerite

Clast, showing py bands

3 mm

"stacked" pyrite

.05 mm

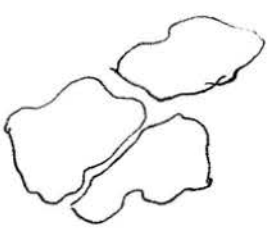
80-B1-156' Pyrite-barite-quartz-sphalerite vein complex

This sample shows none of the relict sedimentary host, unlike 80-B1-127.5'. It consists entirely of epigenetic material. Episodes of both pyrite and barite growth can be seen in it. Pyrite aggregates developed by impingement on the surrounding matrix. Later, barite filled fractures in the pyrite aggregates. This sample contains the most sphalerite in the suite.

Mode

75	pyrite
20	barite
3	quartz
2	sphalerite

Pyrite occurs as equant grains and cubes which average .1 mm in diameter, but may reach .5 mm. These occur either singly or in open to dense aggregates. The latter are laced with barite in wispy inclusions along approaching pyrite grain boundaries. Pyrite aggregates are divided into angular fragments by barite veinlets. These have straight courses and were probably emplaced along fractures. This succession of textures is identical to that seen at 127.5' in this hole.
Barite grains range from fine to coarse. The larger ones are prismatic and show uneven extinction.
Quartz grows with barite as small, anhedral grains.
Sphalerite is yellow and Fe-poor. Small convex and irregular grains grow in pyrite aggregates. Larger aggregates cluster in one area of the thin section, where they reach 1.5 mm in diameter. They are very irregular in shape and include pyrite. Their edges extend along grain boundaries into the pyrite which surrounds them.



80-B2-191' Arkose

This sandstone has the texture of a greywacke. Sand-sized (.4 - 1 mm) clasts are separated by very fine grained felsic matrix, which contains abundant sericite. It is an immature sediment of rhyolitic derivation. Clasts are angular to subrounded. Many feldspars occur as nearly-euhedral laths. The lithic clasts are all rhyolite porphyries, consisting of Kspar and albite phenocrysts in fine grained felsic matrices. The phenocrysts are identical to the feldspar clasts.

Sericite orientations define 3 foliations. The strongest is parallel to bedding. The second cuts across it at 85°. A third weak foliation at 40° to bedding is also present. Its age relation to the other two is not apparent.

Mode

40	Kspar
24	sericite
15	albite
10	quartz
1	barite
tr	carbonate, apatite
10	opaques (pyrite?)

Kspar is the dominant clast type as well as the most abundant felsic mineral in the matrix. Kspar crystals show uneven extinction. None are microcline. This is evidence against a plutonic source. Typically, the matrix of a lithic clast is composed of very fine grained equant Kspar grains and sericite. In one, suhedral Kspar laths .05 mm long form an interlocking aggregate.

Sericite in the matrix shows an early bedding-parallel orientation succeeded by a cleavage that may have developed during de-watering of the sediment. Unoriented dispersed sericite is also present.

Albite forms clasts like Kspar and is also present in the matrix.

Quartz clasts are scarce. They tend to be more rounded than the feldspars. Quartz veinlets, showing columnar growth, cut the section. They developed later than the sericite cleavage.

Barite grows as small patches in feldspar and lithic clasts.

Scattered grains of carbonate grow in the matrix.

A few apatite prisms occur in the lithic clasts. They are probably primary.

Disseminated cubes and equant grains are probably pyrite. They occur both in fragments and in the matrix. One lithic fragment contains a wavy train of pyrite.

80-B2-244' Arkose with siltstone interbeds

This sample resembles 80-B2-191'. It consists of feldspar, quartz and lithic clasts in a fine grained sericite-rich matrix. It differs in having more quartz clasts; also it contains abundant chert clasts and only one volcanic clast. Sericite trains are at 0^{o} and 20^{o} to bedding.

Mode

47	Kspar
20	sericite
20	plagioclase
15	quartz
5	pyrite
3	barite
tr	carbonate, zircon

Kspar clasts in the sandy portions are angular to subrounded. Many show tabular original shapes. Those in the silty layers tend to be angular fragments.
Sericite has a strong bedding-parallel orientation and a weaker one at 20^{o} to bedding. It is most abundant in the silty layers.
Plagioclase clasts rarely show albite twinning. Like Kspar, they are angular to subrounded, or tabular.
Quartz clasts are round to irregular in shape. These may be the primary morphologies of volcanic phenocrysts. The degree of "roundness" contrasts strongly with that of the feldspars. This is difficult to explain as due to rounding during transport, as feldspars are softer than quartz.
Pyrite occurs as disseminated equant grains and cubes with rounded corners in both clasts and matrix.
Barite forms irregular patchy inclusions in feldspar clasts.
Scattered carbonate grains are anhedral as well as rhombic.
A few zircon prisms were seen.

80-B3-86' Pyrite-barite-quartz-sphalerite vein complex

This sample resembles the veins encountered in Bl. Pyrite is dominant, followed by quartz and barite which form clear segregations. Sphalerite is present in very small quantities.

The distinctive feature of this rock is the streaky foliation, defined by segregations of pyrite-rich and pyrite-poor material. These formed after an episode of columnar quartz veining.

Mode

50	pyrite
40	barite
10	quartz
tr	sphalerite

Pyrite is fairly even grained, but grain sizes range from .02 to .2 mm in diameter. Most grains are equant and anhedral. They occur either singly or in clumps up to 1 mm across. A few instances of "stacked" growth were noted.
Barite aggregates are bimodal, either very coarse or very fine grained. Coarse barite is tabular and simply twinned with uneven extinction. Grains average .5 mm long. Fine barite (.05 mm in diameter) occurs as equant anhedral grains in aggregates with quartz. Fine barite veinlets cut coarse quartz where it forms segregations.
Quartz aggregates are cherty or coarse. Relict columnar vein segments are seen in places. One cuts across a coarse quartz segregation at 90^{o}, but terminates against massive pyrite at the edge of the segregation. The other cuts through a dense pyrite aggregate but terminates against pyrite-rich material on both sides of it.
Sphalerite forms anhedral aggregates .05 to .1 mm across in a barite-quartz segregation. They enclose pyrite grains.

To: **Cominco Ltd.**

PAGE No. **1**

700 - 409 Granville Street
Vancouver, B.C. V6C 1T8

REPORT NO. **A20 - 655**

DATE: **June 30, 1980**

Samples submitted: June 17, 1980
Results completed: June 30, 1980

BONDAR-CLEGG & COMPANY LTD.

CERTIFICATE OF ASSAY

I hereby certify that the following are the results of assays made by us upon the herein described samples.

MARKED	GOLD		SILVER		Pb	Zn	Cd					
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
[redacted]												
19192			0.16		0.30	0.29	- BAR tetrahedrite					
19193			0.60		0.64	3.60	- BAR Laminated Barite lowermost Trench.					

NOTE:
Rejects retained three weeks
Pulps retained three months
unless otherwise arranged.

Registered Assayer, Province of British Columbia

J.C. STEPHEN EXPLORATIONS LTD.

Length 348' Contractor Drillcore
Bearing ____ Core ____ Stored ____
Dip 60° Casing ____
Lat. ____ Logged by NS, PDP Date June 17, 1980
Dep. ____ Location ____
Elev. ____
O.B. Thickness ____ Started ____ Finished ____
B.R. Thickness ____ Started ____ Finished ____

Hole No. DDH 80 B-1
Project DC SYNDICATE
Claim BAR GROUP
Page 1 of 3

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

Scale 1" = 30'

Drilling Interval	% Core Recovered	Box No.	Alteration	Fracturing	Mineral	Geology	Purpose / Comment	
0		1					- Grey chert - core badly broken - rusty stain visible - some barite veins @ 25'	chert
	16%							
31		1			PY		- Grey to grey-white barite - py → irregular blebs and fine stringers in assoc. w barite - some rust staining - 33.5 → 36' poor recovery, core broken	barite
40.0	16	1		infilled w barite - pyrite	PY		- vuggy (small) - Dark grey to black cherty argillite - v. fine grained, massive - py as fracture filling, massive, + finely disseminated, brecciated barite and argillite	cherty argillite
60.8		2						
66		2			PY		- Grey cong. w cherty (grey) matrix and both grey chert and cherty argillite fragments - lineation defined by fragments ∠50°, some barite fractures - lenses?	
75		2						
77					PY		- massive py and barite	
83.5		3						
86		3			PY		- barite white, crystalline, massive - py - massive, [illegible] of barite - minor	
110.6		4						
115'		4			PY		barite, massive pyrite core badly broken, polished surfaces. cherty arg? host re.	
					PY		Grey, green chert → massive, fine grained. - py - hairline fractures, brecciated frags, stringers, and massive	

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected

Purpose
Comment

GEOLOGY

MINERAL

FRACTURING

ALTERATION

SCALE
1" = _____

BOX No.

% CORE RECOVERED

DRILLING INTERVAL

Length 348'
Bearing _____
Dip 060°
Lat. _____
Dep. _____
Elev. _____
O.B. Thickness _____ Started _____ Finished _____
B.R. Thickness _____ Started _____ Finished _____

Contractor DRILCORE
Core _____ Stored _____
Casing _____
Logged by NS, PHP Date JUNE 17/80
Location _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. DDH 80-BJ-1
Project _____
Claim _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. DDH 80 B-1
Project BAR GROUP
Claim
Page 3 of 3

Length 348'
Bearing
Dip 60°
Lat.
Dep.
Elev.
O.B. Thickness
B.R. Thickness

Contractor DRILCORE
Core
Casing
Logged by
Location
Stored
Date
Started
Finished
Started
Finished

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 10'	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose / Comment
			260–280			PY		- fractures ~ 70° - py- brecciated and interbanded with barite "zebra ore", also fracture filling. - py runs ∥ to fractures - lenses of cong ~ 1" – minor - v. fine grained dark grey cherty argillite.
287		11	290			PY, Sp		Grey-green chert. - massive py, ang frags. of py - sp. (293')
297.5		12	300			PY		Grey cherty argillite - abd polished surfaces - diss py blebs, py in fractures. - intermixed w chert.
306		12	310					- Serpentinized? chloritized? fault gauge or dyke - contact sharp ~ 50° - lighter green w dark green specks - stringers of weathered pinkish carbonate? (or dolomite? fizzes upon scratching + hard)
325		13	330, 340					Dark grey cherty argillite - fractures 40° filled w grey-green chert - irregular blebs of buff-colored dolomite, and as fracture infilling - few lenses of cong.
338.5 / 339			350			PY		← massive qtz. white – irregular contact. Cong. w py. fracture veins E.O.H. 348'
			360					

chert | cherty arg | dyke | argillite | cg.

J.C. STEPHEN EXPLORATIONS LTD.

Length ____ Contractor DRILCOR
Bearing GRID NORTH (340°) Core BQ Stored ____
Dip -60° Casing ____
Lat. 4870N 4746N Logged by JCS Date ____
Dep. 12+00W 12+00W Location ____
Elev. 3907' Hole No. 80 B-1
O.B. Thickness ____ Started ____ Finished ____ Project DC SYNDICATE
B.R. Thickness ____ Started ____ Finished ____ Claim BAR 1
Page 1 of ____

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" = 10'	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose Comment
0								CASING - OVERBURDEN - ROCK FRAGMENTS
12.5			10					
16	30%	1						GREY GREEN CHERT, COLLECTION OF SMALL FRAGMENTS
						1 Py		GREY GREEN CHERT. LITTLE Py
21	2	1	20					SMALL FRAGMENTS
						Ba Py		GREY GREEN CHERT? BARITE, Py, LIMONITE ON FRACTURES
26	15%	1						
						Py		GREY GREEN CHERT, LITTLE BARITE, Py, LIMONITE ON FRACTURES
31	12%	1	30					
33½	40%	1				Ba Py		MAINLY Py, BARITE, LIMONITE ON FRACTURES BANDING IRREGULAR AT 30° TO 70° TO CORE
35	35%	1				Py		GREY GREEN CHERT, LITTLE BARITE, Py, LIMONITE, SMALL FRAGMENTS
36	30%	1				Ba Py		WHITE BARITE, FINE Py SMALL FRAGMENTS
						Ba Py		MAINLY WHITE BARITE, Py, REMNANTS GREY GREEN CHERT. BROKEN CORE
40	30%	1	40					
41	10%	1						FRAGMENT GREY GREEN CHERT
42.8	70%	1				Py		GREY GREEN CHERT, BARITE, Py, BROKEN
44.4	70%	1						DARK GREY TO BLACK FINE GR. SHALE, IRREGULAR BREARING 44.4-114
						Py Ba Spk Tetra. Hedrite?		DARK GREY CHERTY SEDIMENT. IRREGULAR INDISTINCT BEDDING OR BANDING IN PLACES. IRREGULAR ZONES OR FRAGMENTS OF LIGHT GREY (PEPPER & SALT) GRIT WITH SMALL ANGULAR CHERT AND BLACK SHALE FRAGMENTS MAINLY BETWEEN 60 AND 66'.
	100%		50					FORMATION WELL FRACTURED AND MINERALIZED WITH PYRITE - BARITE
			60					

SURVEY:

Footage	Bearing	ANGLE Reading	ANGLE Corrected

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

Purpose
Comment

Zones of relatively massive Py
71-72; 74.5-77.8, 85-86, 115-119.4

Slickensided slip at 45° to core, smeared Py on surfaces

Minor galena on fracs 102.5'

Occasional pale sphalerite on fractures

111' and 113.5-115 Core vuggy & sheared - fault at 60°? to core

114-154
Pale creamy grey siliceous sediment - variable hardness
Fine grained, numerous fine fractures and irregular zones Py
(grey green chert)

GEOLOGY

MINERAL — Py, Ga, Sph

FRACTURING

ALTERATION

SCALE 1" = 10'

60' 70' 80' 90' 100' 110' 120'

BOX No.

% CORE RECOVERED

DRILLING INTERVAL — 114'

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-1

Project DC. SYNDICATE

Claim BAR 1

Page 2 of _____

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected	Purpose Comment
				30% PY IN IRREGULAR ZONES & FRACTURES 119.3 - 124' THEN LESS PY IN IRREGULAR FRACTURES TO 153.8'
				133.5' - 135.5'; 141-142 GRIT ZONES - INCLUDE ANGULAR FRAGMENTS Fg PYRITE.
				153.8 - 166 MASSIVE PY LITTLE BARITE 30% PY IN IRREGULAR ZONES 1.5 AND 2.5 FEET ON EITHER SIDE
				BEDDING AT ABOUT 45° TO CORE. INDISTINCT GENERALLY

GEOLOGY

MINERAL Py Py Py

FRACTURING

ALTERATION

SCALE 1" = _____ 120' 130' 140' 150' 160' 170' 180'

BOX No.

% CORE RECOVERED

DRILLING INTERVAL

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-1

Project _____

Claim _____

Page 3 of _____

SURVEY: Footage	Bearing	ANGLE: Reading	Corrected

Purpose Comment

PYRITE IN FRACTURES AND IRREGULAR SEAMS
PYRITE IN FRACTURED OR BRECCIATED + HEMATITE WITH QTZ
18' LITTLE RED DUSTING OF HEMATITE ? ON FRACTURE

FINE GRAIN - CREAMY GREY GREEN / IRREGULARLY BEDDED CHERTY SED
BEDDING AT ABOUT 70° TO CORE.
WEAK PY MIN ON SMALL FRACTURES

221-223 NEARLY MASSIVE Py

230.8 - 235.5' 40% Pyrite

235.5 - 247.5' MASSIVE PYRITE, BRECCIATED, 3QTZ + SEAMS OF QTZ

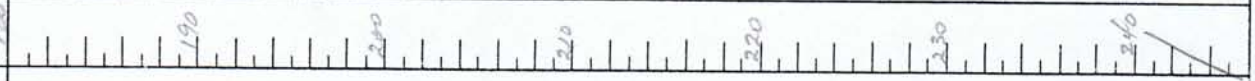
GEOLOGY

MINERAL Py

FRACTURING

ALTERATION

SCALE 1" = 100



BOX No.

% CORE RECOVERED

DRILLING INTERVAL

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-1

Project _____

Claim _____

Page 4 of _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-1
Project ____
Claim ____
Page 5 of ____

Length ____ Contractor ____
Bearing ____ Core ____ Stored ____
Dip ____ Casing ____
Lat. ____ Logged by ____ Date ____
Dep. ____ Location ____
Elev. ____
O.B. Thickness ____ Started ____ Finished ____
B.R. Thickness ____ Started ____ Finished ____

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected

Purpose
Comment

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" =	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Comment
			240			Py		
							247.5	GREY ARGILLITE. SHORT SECTIONS THIN BEDDED ALTERNATING LIGHT + DARK GREY - APPEARS VARVED. BEDDING IRREGULAR - OFTEN DISRUPTED BY COARSER IRREGULAR ZONES OR FRAGMENTS - CONTACTS SHARP BUT VERY IRREGULAR
			250					
							GRIT	255.5 - 256.0 GREY GRIT WITH PYRITE
								BEDDING AT 70° TO CORE
			260					IRREGULAR FRACTURE FILLING AND WEAK ZONES PYRITE - CROSS FRACTURED ZEBRA STYLE
								GRIT
			270					
			280					CHERT MORE COMMON TOWARD END OF SECTION
								BEDDING QUITE IRREGULAR - SOME GRAPHITIC
							287.5	CHERT
			290					GREY CHERT AS 178-221 UP TO 15% Py ON IRREGULAR FRACTURES. MINERALIZATION ALONG CORE 291'-294'
			300					

J.C. STEPHEN EXPLORATIONS LTD.

Length ______ Contractor ______
Bearing ______ Core ______ Stored ______
Dip ______ Casing ______
Lat. ______ Logged by ______ Date ______
Dep. ______ Location ______
Elev. ______
O.B. Thickness ______ Started ______ Finished ______
B.R. Thickness ______ Started ______ Finished ______

Hole No. 80 B-1
Project ______
Claim ______
Page 6 of ______

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	SCALE 1" =	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Purpose Comment
			300					
							305.7	305.7 - 318 DARK GREEN INTRUSIVE DYKE - PORPHYRITIC WITH DARK GREEN TO BLACK AUGITE ?? CRYSTALS. FIRST CONTACT CHILLED + FINE GRAINED. SECOND CONTACT SHEARED. DYKE APPEARS SHEARED AND SERPENTINIZED. SOME QTZ-CARBONATE VEINING.
			310					
							318	DARK GREY TO BLACK IRREGULARLY BEDDED CONGLOMERATIC SILTSTONE. BEDDING AT ABOUT 60°-65°
			320					
			330					THIN SEAMS // TO BEDDING WITH PYRITE
								333.5-341 CHERT GRIT, 5" QTZ ON FIRST CONTACT, SECOND SHARP. IRREGULAR PYRITE FILLED FRACTURES
			340				GRIT	
	70%							CORE BROKEN AT END OF SECTION
	50%						348	END OF HOLE 348'

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

Purpose Comment

0-61' Chert; severely weathered, badly fractured; limonite (orange-brown) staining visible, fracturing at 70°, minor amt. of disseminated pyrite visible.

61'-112' Grey-green Chert; pyrite visible in veins; also disseminated, chert v. fine grained, massive in appearance, salmon pink-coloured mineral visible in fractures in chert - fractures have been infilled with barite which is slightly vuggy.

112'-140' Brecciated Chert, v. fine grained grey chert matrix with salmon-pink coloured angular fragments of siliceous material (chert?), pyrite visible in fractures.

GEOLOGY

MINERAL Py Py Py

FRACTURING

ALTERATION

SCALE 1" = 10'

0 10 20 30 40 50 60 70 80 90 100 110 120 130

BOX No. 1 2 4

% CORE RECOVERED

DRILLING INTERVAL 0 61' 112'

Length 291' Contractor DRILCORE

Bearing _____ Core _____ Stored _____

Dip 60° Casing _____

Lat. _____ Logged by WS, RDP Date JUNE 17/80

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. DDH 80 B-2

Project DC SYNDICATE

Claim BAR GROUP

Page 1 of 3

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected

Purpose Comment

140' – 159'. Barite
Massive, finely crystalline; grey in colour
red-brown weathering stain visible
Pyrite associated with barite, found as thin veins

159' – 231' Quartzite.
massive; very fine grained; green to green-grey quartzite
green alteration visible, oriented 50° to core
possibly epidote? appears as bands and streaks within the quartzite.
minor disseminated pyrite; also in stringers;
white quartz as blebs and veins; blebs of quartz showing irregular contacts.
at depth of 232'; breccia.
of altered quartzite (possibly serpentinized?) angular fragment
fragment off-white in colour in a pale green matrix;
pyrite within brecciated quartzite surrounds angular fragments as stringers.
Some of matrix of breccia is barite.
barite also at 281' as a band within the quartzite

GEOLOGY

MINERAL Py Py

FRACTURING

ALTERATION

SCALE 1" = 10' — 130 140 150 160 170 180 190 200 210 220 230 240 250 260

BOX No.

% CORE RECOVERED

DRILLING INTERVAL 140' 159'

Length _____ Contractor DRILCORE

Bearing _____ Core _____ Stored _____

Dip 60° Casing _____

Lat. _____ Logged by DP & NS Date June 17, 1980

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80-B-2

Project D.C. SYNDICATE

Claim BAR GROUP

SURVEY: Footage | Bearing | ANGLE Reading | Corrected

Purpose Comment

END OF HOLE 291'

GEOLOGY

MINERAL

FRACTURING

ALTERATION

SCALE 1" = 10' 260 270 280 290 300 310 320 330 340 350 360

BOX No.

% CORE RECOVERED

DRILLING INTERVAL 291'

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip 60° Casing _____

Lat. _____ Logged by NS & PP Date June 18, 1980

Dep. 291' Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No 80-B-2

Project DC SYNDICATE

Claim BAR GROUP

Page 3 of 3

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80-B-3
Project DC SYNDICATE
Claim BAR GROUP
Page 1 of 3

Length 287'
Bearing
Dip VERTICAL; 90°
Lat.
Dep.
Elev.
O.B. Thickness — Started — Finished
B.R. Thickness — Started — Finished

Contractor DRILCORE
Core — Stored
Casing
Logged by PP + NS — Date JUNE 18, 1980
Location

Purpose
Comment

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected

Column headings: DRILLING INTERVAL | % CORE RECOVERED | BOX No. | SCALE 1" = 10' | ALTERATION | FRACTURING | MINERAL | GEOLOGY

Drilling Interval	Box No.	Mineral	Footage	Description
0	1	Py, Sphal, Gal	0'–	Chert with Barite; light grey in colour; chert massive, very finely crystalline; barite crystalline; up to first 67' of core rust-coloured weathering stain visible. Pyrite in stringers; has been fractured; also massive; Sphalerite (minor) at 57' in a small fracture - yellowbrown in colour. Galena @ 82' within barite; Py - v. fine grained - greenish-gold color. Barite - as fracture-filling; looks slightly more voggy
				Chert ̄c barite
67		Py	67 68	-Massive py, fine grained, greenish-grey gold. -associated ̄c barite
		Ga		Chert is more pinkish, v-fine grained, massive

Scale: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130

J.C. STEPHEN EXPLORATIONS LTD.

Length 257' Contractor DRILCORE
Bearing ____ Core ____ Stored ____
Dip -90° ± Casing ____
Lat. ____ Logged by RP + NS Date JUNE 19, 1980
Dep. ____ Location ____
Elev ____
O.B. Thickness ____ Started ____ Finished ____
B.R. Thickness ____ Started ____ Finished ____

Hole No. 80-B-3
Project DC SYNDICATE
Claim BRR GROUP

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

Purpose
Comment

GEOLOGY | MINERAL | FRACTURING | ALTERATION | BOX No. | % CORE RECOVERED | DRILLING INTERVAL | SCALE 1" = 10'

132'

132' - 257' Cherty Argillite mineralization found as:
- Sphalerite: finely crystalline, honey coloured blebs
- Pyrite: v. fine grained, minute fragments disseminated;

Cherty argillite light grey to grey in colour; bedding @ 35°
Black band of cherty argillite from 174.5' to 176'
minor fractures infilled with barite;
@ 178' argillite with wavy banding; alternating layers of pyrite and argillite.

193' core badly broken, lcherty argillite in a buff coloured soft matrix
194' lens of fine grained conglomerate

194.5' → 213' Conglomerate; small rounded fragments within a chert matrix;

219' small breccia band - angular fragments of cherty argillite within lighter grey matrix;

Pyrite found along fine fractures in cherty argillite

246' Quartz? white mineral as lense in argillite with small vugs which are stained orange-brown rust coloured.

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected	Purpose Comment
				277' green (boundary?) staining on broken surface of dusty argillite.
				END OF HOLE 287'

GEOLOGY

MINERAL

FRACTURING

ALTERATION

SCALE 1" = 10 — 260, 270, 280, 290

BOX No.

% CORE RECOVERED

DRILLING INTERVAL

Length 287'
Bearing
Dip 90° (Vertical)
Lat.
Dep.
Elev.
O.B. Thickness — Started — Finished
B.R. Thickness — Started — Finished

Contractor DRILCORE
Core — Stored
Casing
Logged by PP + NS — Date June 18, 1980
Location

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80-B-3
Project DC SYNDICATE
Claim BAR GROUP
Page 3 of 3

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected

Purpose / Comment

0-33.5 CASING

33.5-45 PALE GREY TO WHITE SILICEOUS "CHERT" WITH VERY LITTLE DISSEMINATED CUBIC PYRITE. FAIRLY WELL FRACTURED WITH LIMONITE ON FRACTURES.

45-142 WHITE SILICEOUS CHERT, BARITE, PYRITE CORE BROKEN

GEOLOGY

MINERAL

FRACTURING

ALTERATION

SCALE 1" = 20'

BOX No.

% CORE RECOVERED

DRILLING INTERVAL

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip Vert

Lat. GRID 62+65N Casing _____

Dep. GRID 20+00W Logged by _____ Date _____

Elev. 3713 Location _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80-B-3

Project DC SYND

Claim BAR 4

Page 1 of _____

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected	Purpose Comment

142'-177' GREY TO GREENISH GREY FINE GRAINED CHERT OR ARGILLACEOUS CHERT, BEDDING AT 35°, FOIRLY MASSIVE - WEAK FRACTURING, WITH PYRITE

174.5 - 175.6 DARK GREY CHERTY ARGILLITE

177 - 237 DARK GREY ARGILLITE, BEDDING SOMEWHAT VARIABLE 60° AT 180°; 45° @ 215°, LOCALLY UP TO 75° NEAR 270°. OCCASIONAL FRACTURES WITH PYRITE

SECTIONS VARY FROM FINE GRAINED GRITTY ARGILLITE TO IRREGULARLY THIN BEDDED TO MASSIVE.

241-248 NARROW QTZ + CT VEINS, CORE VARIES AT 15° TO CORE

287' END HOLE

GEOLOGY	
MINERAL	
FRACTURING	
ALTERATION	
SCALE 1" = 20 / 120	100 140 180 200 220 240
BOX No.	
% CORE RECOVERED	
DRILLING INTERVAL	

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-3

Project _____

Claim _____

Page ____ of ____

J.C. STEPHEN EXPLORATIONS LTD.

Length 188'
Bearing S27°W
Dip 0750
Lat. GRID 10+75W
Dep. GRID 51+02N
Elev. 3890
O.B. Thickness
B.R. Thickness
Started
Started
Finished
Finished
Contractor DRILCORE
Core
Casing
Logged by N.S. PJP
Location
Stored
Date JUNE 19, 1980

Hole No. DDH BDB-4
Project DC SYNDICATE
Claim BAR GROUP
Page 1 of 2

SCALE 1" = 10'

Purpose
Comment

SURVEY: Footage	Bearing	ANGLE Reading	Corrected

DRILLING INTERVAL	% CORE RECOVERED	BOX No.	ALTERATION	FRACTURING	MINERAL	GEOLOGY	Comment
0		1			Py		Grey chert pebble conglomerate Badly fractured to 34' Pebbles of white, grey chert, black cherty argillite ↳ angular, vary in size from 1" to c. 3" ↳ fractured by pyrite in stringers Talc ? along fractures.
							Bedding – 045°
34							
					Py		
47		1			Py		Bands of pyrite – fractured (chert filled)
					Py Sp		Minor dissem. sp. found along fractures
52.5		2			Sp		Small vugs or pits in core filled w yellow-orange weathering stain — Talc-rich band – grey
55.5 57 (56)					Sp		Same as above
62 64					Sp.		Sp intermixed with py Core badly broken
	20%						
72							
78.5		2					Bedding 045°
81 (81)		3			Sp		Bedding 042° Sp blebs – red brown, intergrown w chert along fractures Py – stringers, fine-grained
87					Py		87' Rust colored stain along fractures.
96					Py Sp		96' 2" band py mixed w chert Small lens of sp
100.5		3					
105		4					4" band cherty argillite — .2' band buff coloured fracture filling 105.5' – clay alteration product – pale pink
							Bedding 035° 106.5 – 107.5 Band of grey cherty argillite 111.5 – 112.5 " " " "
					Py Sp		– Core is easily broken Talc along fractures
125					Py		112.5 – 116' Dissem. py blebs, s-rd. forming frags py. Rounded clusters of diss. sp. intermixed w py.
128 129							125.5' – Py stringers

chert peb. cong.

SURVEY: Footage	Bearing	ANGLE Reading	ANGLE Corrected

Purpose Comment

128-129 - Core badly broken. Sludge remaining
130.5 Massive Py
138-146 - Py in stringers
150' - Bedding 034
Core badly broken.
Block cherty argillite
Py filling hairline fractures
1" wide qtz vein
EOHole 188'

GEOLOGY

MINERAL Py Py

FRACTURING

ALTERATION

SCALE 1" = 10

BOX No.	% CORE RECOVERED	DRILLING INTERVAL
5		136
		146
		150
	59%	155.5
		161
		166
		173
		179
		182
	20%	188

Length 188'
Bearing ~~N 27E~~
Dip 75
Lat.
Dep.
Elev.
O.B. Thickness Started Finished
B.R. Thickness Started Finished

Contractor DRILCORE
Core Stored
Casing
Logged by NS PJP Date JUNE 19, 1980
Location

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. DDH 80 B-4
Project DC SYNDICATE
Claim BAR GROUP

80 B-2

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays Zn	Ag	Au	Ba %	Pb %			
101'	107'	6'			4838A	0.03	0.10		0.87				
107	112	5'			39A	0.02	0.01	<.003					
137	144	7'			4840A	0.01	0.25	<.003		0.01			
144	151	7'			41A	0.01	0.18	<.003		0.02			
151	159	8			42A	0.01	0.30	<.003		0.01			
280.5	283.0	2.5			4843A	0.01	0.01	<.003	28.1				

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-2

Project _____

Claim BARGRP

Page ____ of ____

80 B-3

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays Zn	Ag	Ba	Pb %				
45.0	50.0	5.0			4844A	0.01	0.02	3.42					
50	57	7.0			45	0.02	0.01	6.11					
57	62	5.0			46	0.01	0.01	3.54					
62	72	10.0			47	0.01	0.01	14.0					
72	82	10.0			48	0.04	0.05	30.1					
82	92	10.0			49	0.01	0.01	22.8					
92	102	10.0			50 A	0.02	0.01	17.2					
102	107	5.0			5258 B	0.07	0.16	20.9	0.03				
107	112	5.0			59	0.19	0.01	27.1	0.01				
112	122	10.0			60	0.02	0.01	26.3					
122	132	10.0			61	0.06	0.01	23.0					
132	142	10.0			62	0.04	0.01	0.83					

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-3

Project DC SYNDICATE

Claim BAR 4

Page ____ of ____

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays Zn %	Assays Ag	Assays Ba
33.0	39.0	6.0			5263 B	0.06	0.09	
43	54	11.0			5264 B	0.04	0.07	
57	62	5.0			5265 B	0.59	0.09	
72	83	11			5266 B	1.17	1.30	
96	100	4			5267 B	0.02	0.25	
113	119	6			5268 B	0.44	0.17	
121	133	12'			5269 B	0.17	0.42	
136	146	10'			5270 B	0.79	0.93	
151	160	9'			5271 B	0.02	0.36	

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev _____

O B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-4

Project DC SYNDICATE

Claim BAR 2

Page ____ of ____

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays Zn	Ag	Cu	WO_3	Sn	Pb %		
27	33	6.0			85754 B	<0.01	0.08	<0.01	0.02	<0.01			
33	39	6.0			5263 B	0.06	0.09						
39	43	4.0			85755 B	<0.01	0.12	<0.01	0.02	<0.01			
43	54	11.0			5264 B	0.04	0.07				0.02		
54	57	3.0			85756	0.34	0.14	<0.01	0.03	<0.01			
57	62	5.0			5265B	0.59	0.09				0.02		
62	66	4.0			85757B	0.08	0.06	<0.01	0.02	<0.01			
72	83	11.0			5266 B	1.17	1.30				0.20		
83	91	8.0			85758 B	0.02	0.14	<0.01	<0.01	<0.01			
91	96	5.0			759	0.01	0.08	<0.01	<0.01	<0.01			
96	100	4.0			5267 B	0.02	0.25						
100	102	2.0			85760B	0.02	0.08	<0.01	<0.01	<0.01			
102	108	6.0			761	0.03	0.12	<0.01	0.02	<0.01			
108	113	5.0			762	0.01	0.08	<0.01	0.02	<0.01			
113	119	6.0			5268 B	0.44	0.17						
119	121	2.0			85763B	0.01	0.18	<0.01	0.01	<0.01			
121	133	12.0			5269B	0.17	0.42						
133	136	3.0			85764	0.02	0.06	<0.01	<0.01	<0.01			
136	146	10.0			5270B	0.79	0.93						
146	151	5.0			85765	0.11	0.32	<0.01	<0.01	<0.01			
151	160	9.0			5271 B	0.02	0.36						
168.5	177.5	9.0			85766B	0.07	0.48	<0.01	<0.01	<0.01			
177.5	183.5	6.0			767	0.20	0.34	<0.01	<0.01	<0.01			
183.5	188.0	4.5			768	0.30	0.20	<0.01	<0.01	<0.01			

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep _____ Location _____

Elev. _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. 80 B-4

Project DC SYND

Claim BAR GROUP

Page ____ of ____

BAR CLAIM

80 B-4

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays Cu	Zn			WO_3	Sn		
27	33	6'			85754B	<0.01	<0.01			0.02	<0.01		
39.5	44	4.5'			85755B	<0.01	<0.01			0.02	<0.01		
55	58	3			85756B	<0.01	0.34			0.03	<0.01		
63	66	3			85757B	<0.01	0.08			0.02	<0.01		
83	91	8'			85758B	<0.01	0.02			<0.01	<0.01		
91	96	5'			85759B	<0.01	0.01			<0.01	<0.01		
98.5	102	3.5'			85760B	<0.01	0.02			<0.01	<0.01		
102	108	6			85761B	<0.01	0.03			<0.02	<0.01		
108	114	6			85762B	<0.01	0.01			0.02	<0.01		
119	121	2			85763B	<0.01	0.01			0.01	<0.01		
133	136	3			85764B	<0.01	0.02			<0.01	<0.01		
146	151	5			85765B	<0.01	0.11			<0.01	<0.01		
168.5	177.5	9			85766B	<0.01	0.07			<0.01	<0.01		
177.5	183.5	6			85767B	<0.01	0.20			<0.01	<0.01		
183.5	188	4.5			85768B	<0.01	0.30			<0.01	<0.01		

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev _____

O B Thickness _____ Started _____ Finished _____

B.R Thickness _____ Started _____ Finished _____

J.C. STEPHEN EXPLORATIONS LTD.

Hole No. B-4

Project BAR

Claim BAR CLAIMS

Page ____ of ____

D.C. SYNDICATE BAR GROUP IDLE 80 B-1

From	To	Width	Recovery ft./lbs.	Recovery %	Sample	Assays Zn%	Ag oz	Au oz	Ba %	Pb %
44.4	50.0	5.6'			4811 A	0.02	0.20		13.3	
50.0	56.0	6.0			12A	0.01	0.18		20.8	
56.0	66.0	10.0			13A	0.04	0.18		7.0	
66.0	71.0	5.0			14A	0.01	0.24		19.9	
71.0	74.5	3.5			15A	0.02	0.20		16.6	
74.5	78.0	3.5			16A	0.15	0.32		18.3	0.05%
78.0	83.2	5.2			17A	0.14	0.24		15.9	0.04
83.2	86.0	2.8			4818A	1.88	0.52		31.4	0.12
86.0	91.0	5.0			19A	0.02	0.24		12.2	
91.0	101.0	10.0			20A	0.01	0.16			0.03
101.0	110.5	9.5'			21.A	0.08	0.16			0.04
110.5	115.0	4.5			22A	0.06	0.24			
115.0	119.3	4.3			23A	0.07	0.28	<0.003		
119.3	124	4.7			24A	<0.01	0.10	<0.003		
124.0	134.0	10.0			25A	0.01	0.08			
134.0	144.0	10.0			26A	<0.01	0.01			
144.0	152.4	8.4			27A	0.02	0.06			
152.4	160.0	7.6			28A	0.12	0.20	<0.003		0.06
160.0	168.0	8.0			29.A	0.06	0.36	<0.003		0.06
168.0	178.0	10.0			30A	<0.01	0.10	<0.003		
221.0	223.0	2.0			4831A	0.01	0.32			
223.0	230.8	7.8			32A	<0.01	0.14	<0.003		
230.8	235.5	4.7			33A	0.05	0.10	<0.003		
235.5	241.0	5.5			34A	0.05	0.28	<0.003		
241.0	247.5	6.5			35A	0.01	0.32	<0.003		
247.5	257.5	10.0			36A	0.01	0.06			
287.5	297.5	10.0			37A	0.27	0.08	.003		

Length _____ Contractor _____

Bearing _____ Core _____ Stored _____

Dip _____ Casing _____

Lat. _____ Logged by _____ Date _____

Dep. _____ Location _____

Elev _____

O.B. Thickness _____ Started _____ Finished _____

B.R. Thickness _____ Started _____ Finished _____

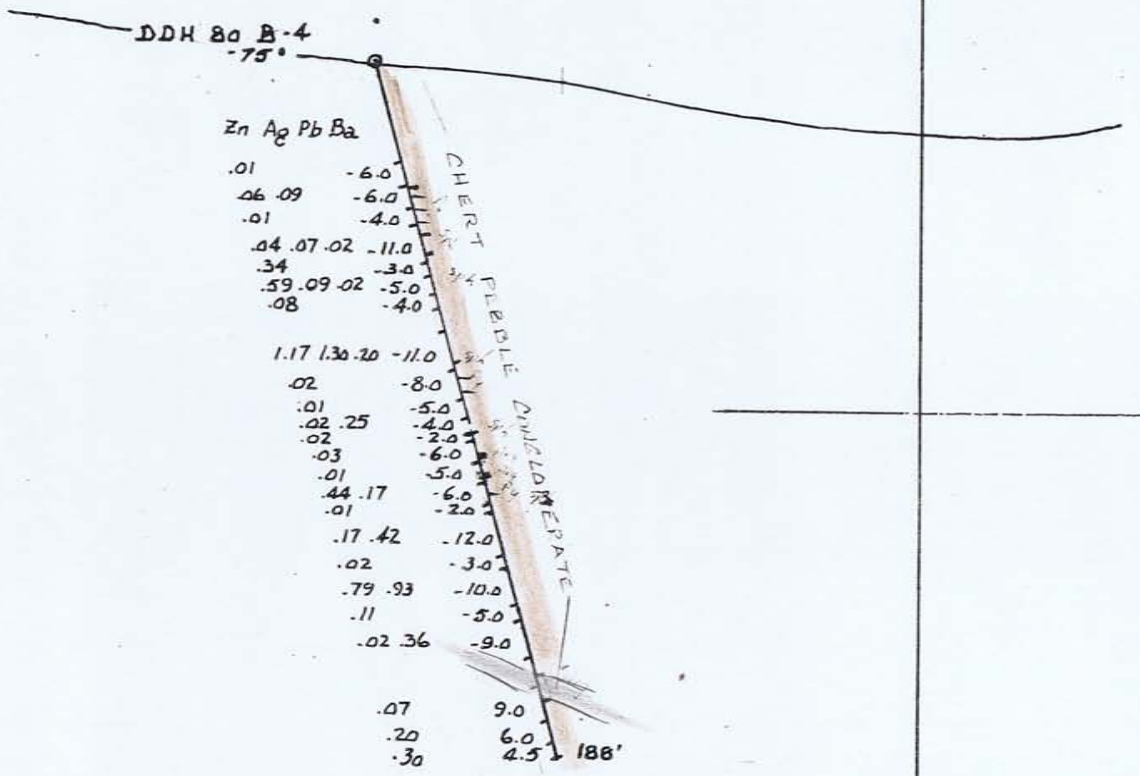
J.C. STEPHEN EXPLORATIONS LTD.

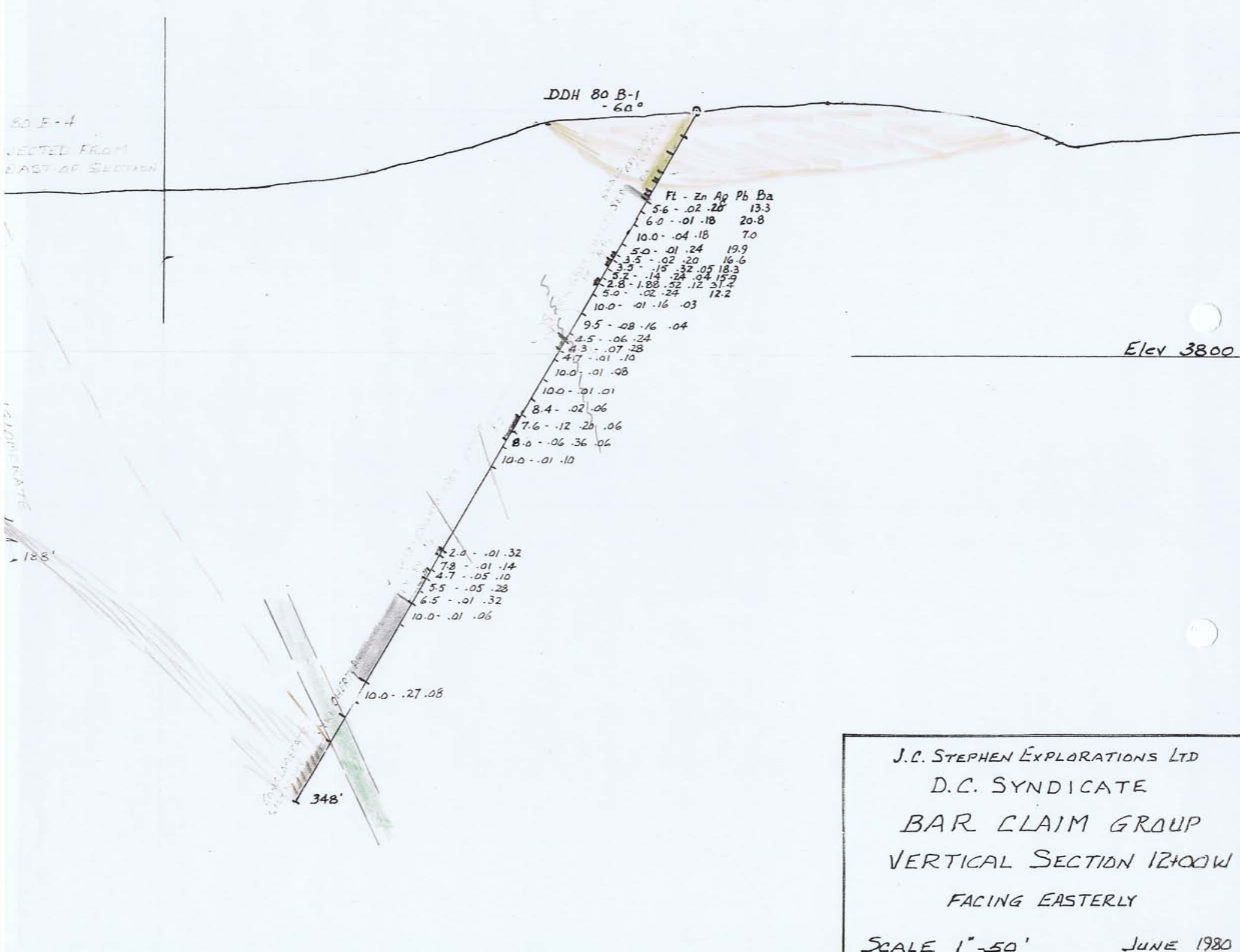
Hole No. 80B-1

Project DC SYNDICATE

Claim BAR 1

Page ____ of ____


DDH 80 B-4
-75°
Zn Ag Pb Ba
.01 -6.0
.06 .09 -6.0
.01 -4.0
.04 .07 .02 -11.0
.34 -3.0
.59 .09 .02 -5.0
.08 -4.0
1.17 1.30 .20 -11.0
.02 -8.0
.01 -5.0
.02 .25 -4.0
.02 -2.0
.03 -6.0
.01 -5.0
.44 .17 -6.0
.01 -2.0
.17 .42 -12.0
.02 -3.0
.79 .93 -10.0
.11 -5.0
.02 .36 -9.0
.07 9.0
.20 6.0
.30 4.5
188'
CHERT PEBBLE CONGLOMERATE



J.C. STEPHEN EXPLORATIONS LTD

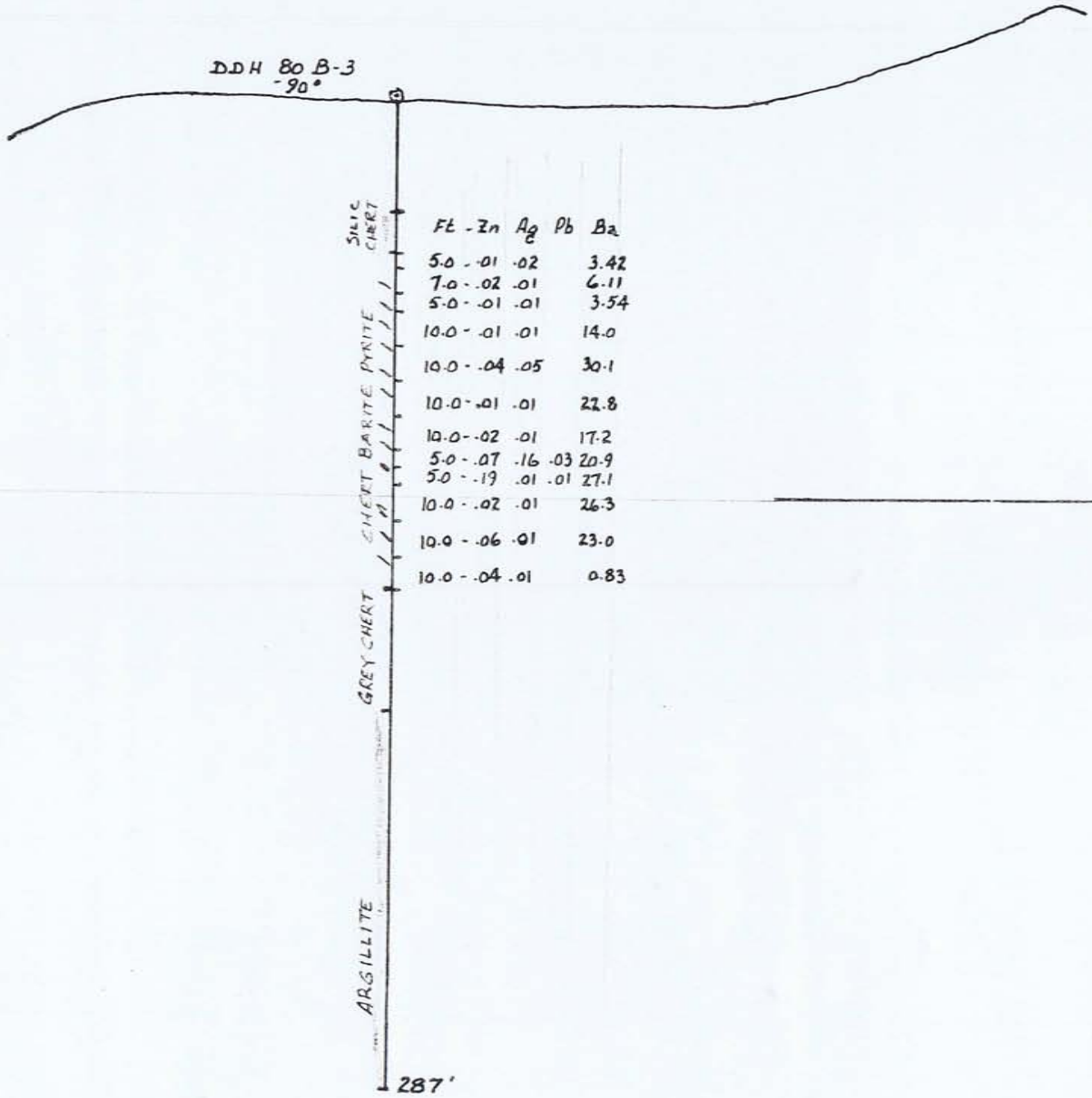
D.C. SYNDICATE

BAR CLAIM GROUP

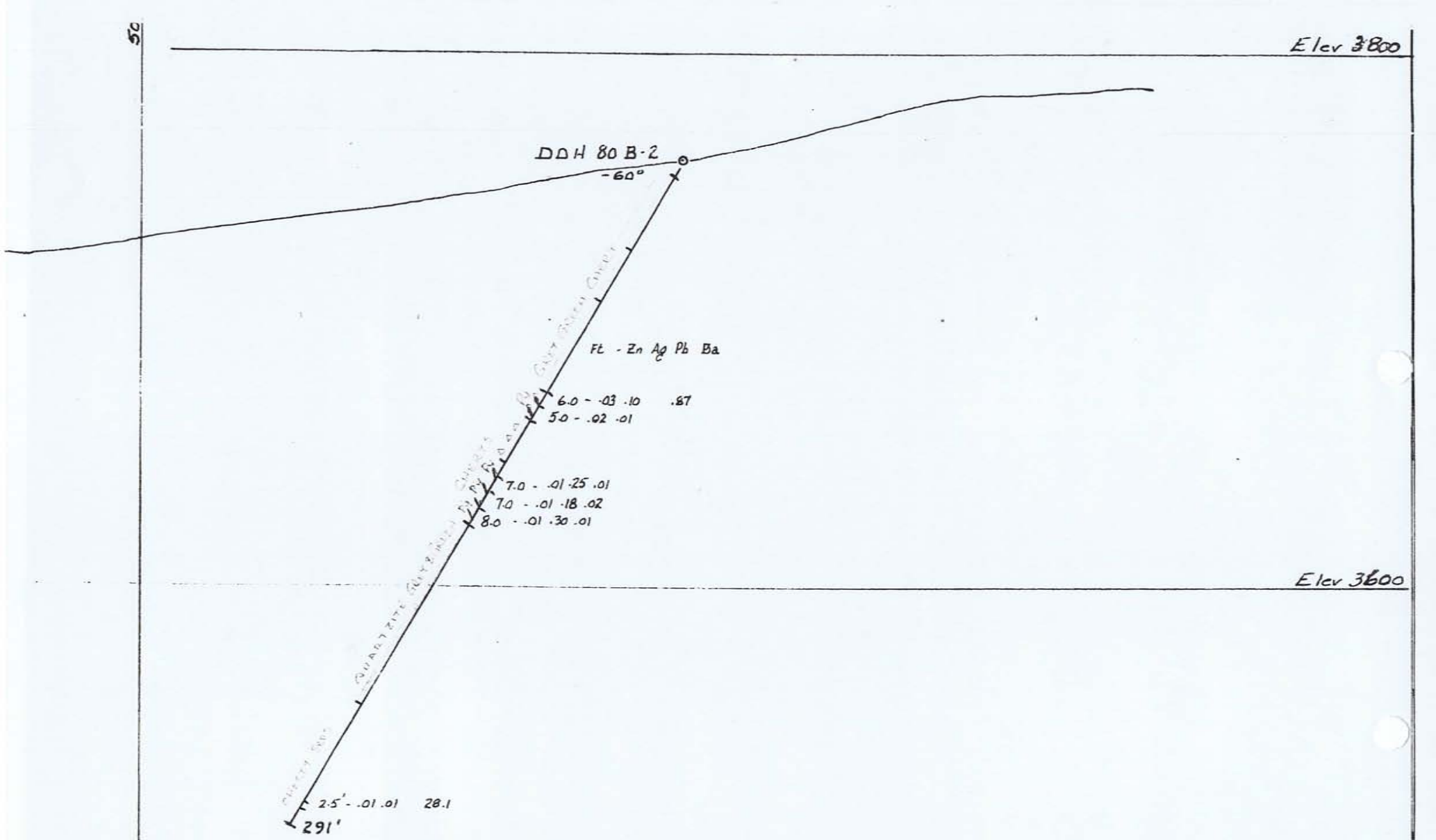
VERTICAL SECTION 12+00W

FACING EASTERLY

SCALE 1"=50' JUNE 1980

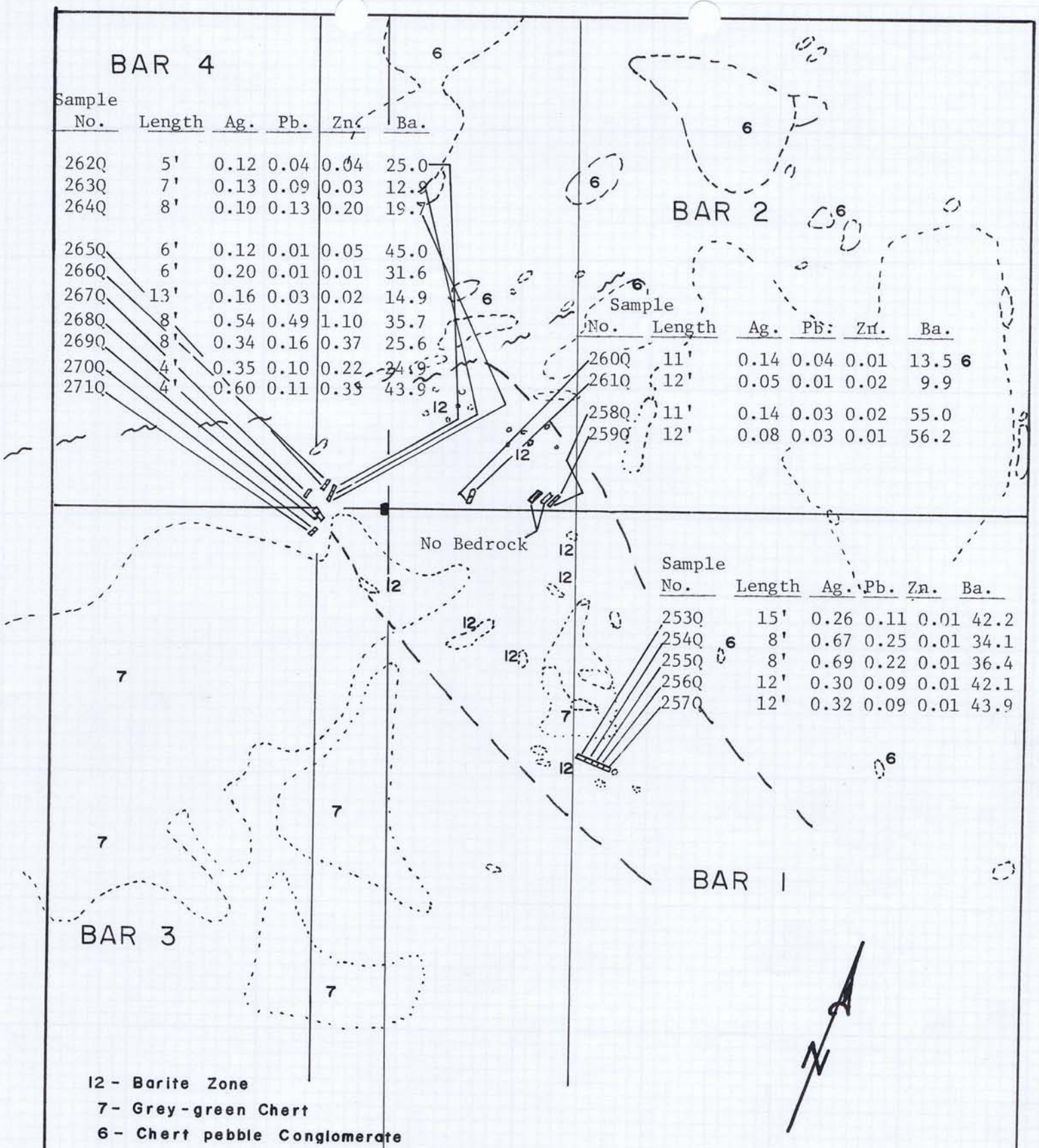


Ft	Zn	Ag	Pb	Ba
5.0	.01	.02		3.42
7.0	.02	.01		6.11
5.0	.01	.01		3.54
10.0	.01	.01		14.0
10.0	.04	.05		30.1
10.0	.01	.01		22.8
10.0	.02	.01		17.2
5.0	.07	.16	.03	20.9
5.0	.19	.01	.01	27.1
10.0	.02	.01		26.3
10.0	.06	.01		23.0
10.0	.04	.01		0.83



J.C. STEPHEN EXPLORATIONS LTD.

D.C. SYNDICATE



Sample No.	Length	Ag.	Pb.	Zn.	Ba.
262Q	5'	0.12	0.04	0.04	25.0
263Q	7'	0.13	0.09	0.03	12.8
264Q	8'	0.10	0.13	0.20	19.7
265Q	6'	0.12	0.01	0.05	45.0
266Q	6'	0.20	0.01	0.01	31.6
267Q	13'	0.16	0.03	0.02	14.9
268Q	8'	0.54	0.49	1.10	35.7
269Q	8'	0.34	0.16	0.37	25.6
270Q	4'	0.35	0.10	0.22	34.9
271Q	4'	0.60	0.11	0.35	43.9

Sample No.	Length	Ag.	Pb.	Zn.	Ba.
260Q	11'	0.14	0.04	0.01	13.5
261Q	12'	0.05	0.01	0.02	9.9
258Q	11'	0.14	0.03	0.02	55.0
259Q	12'	0.08	0.03	0.01	56.2

Sample No.	Length	Ag.	Pb.	Zn.	Ba.
253Q	15'	0.26	0.11	0.01	42.2
254Q	8'	0.67	0.25	0.01	34.1
255Q	8'	0.69	0.22	0.01	36.4
256Q	12'	0.30	0.09	0.01	42.1
257Q	12'	0.32	0.09	0.01	43.9

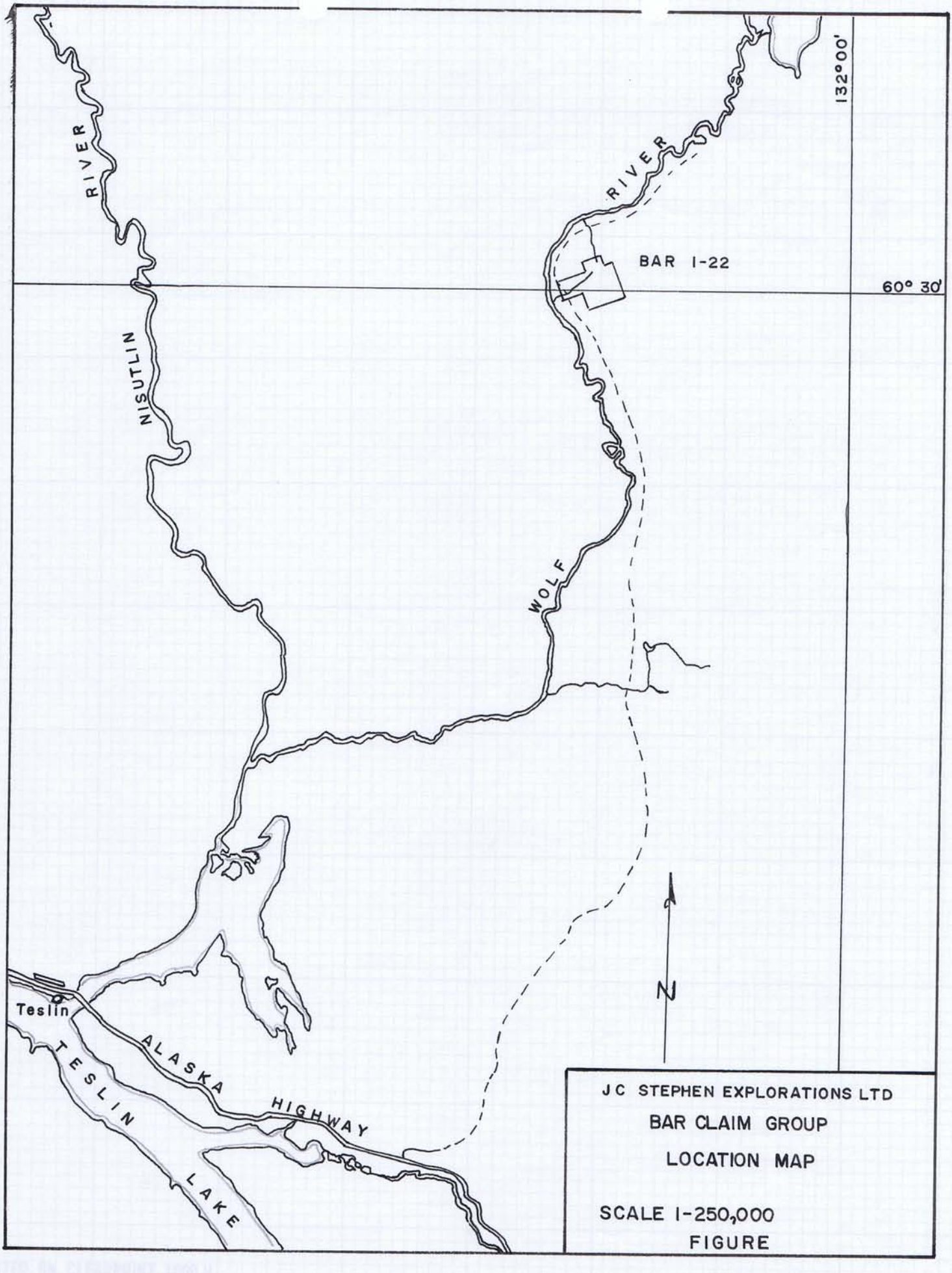
J C STEPHEN EXPLORATIONS LTD

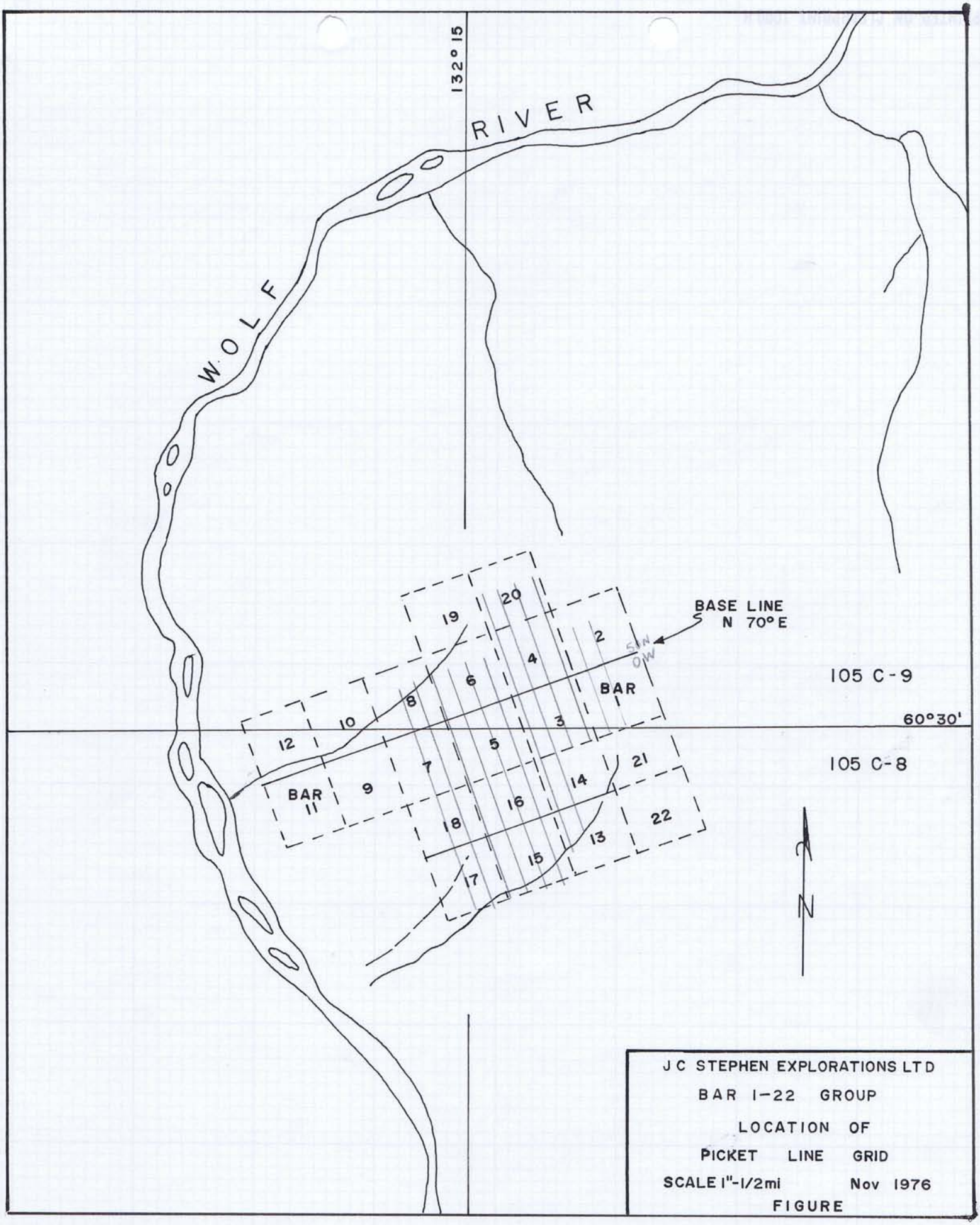
BAR CLAIM GROUP

ROCK TRENCHES

Scale 1"-200' Nov 1978

FIGURE


RIVER
NISUTLIN
RIVER
132°00'
BAR 1-22
60° 30'
WOLF
N
Teslin
ALASKA
HIGHWAY
TESLIN
LAKE
JC STEPHEN EXPLORATIONS LTD
BAR CLAIM GROUP
LOCATION MAP
SCALE 1-250,000
FIGURE



J C STEPHEN EXPLORATIONS LTD

BAR 1-22 GROUP

LOCATION OF

PICKET LINE GRID

SCALE 1"-1/2mi Nov 1976

FIGURE

Indian and Northern Affairs
Affaires indiennes et du Nord

P. O. Box 269
Watson Lake, Yukon
YOA 1CO

23 July, 1980

Your file *Votre référence*

Our file *Notre référence*

J. C. Stephen Explorations Ltd.
c/o Geraghty's Lodge
Swift River, Yukon

Dear Sir:

We have received Diamond Drill Logs for drilling done on the BAR claims. Would you kindly advise where the drill core is being stored.

We have also received the $10.00 required for filing fees.

Yours truly,

G. Peter Jones
A/Mining Recorder
Watson Lake Mining District

PLM

STEPHEN EXPLORATIONS LTD.

1124 West 15th Street, North Vancouver, B.C. V7P 1M9 (604) 988-1545

July 31, 1980

Mr. James Vinnell
Vancouver Petrographics Ltd.
8887 Nash Street
P.O. Box 39
Fort Langley, B.C.
V0X 1J0

Project: DC Syndicate

Dear Mr. Vinnell:

We submit five core specimens for thin section, and/or polished section preparation and examination.

These are from a barite, pyrite, minor Pb Zn Ag occurrence north east of Teslin, Yukon. Structure, character and genesis of the deposit are obscure with sulphides (99% pyrite) apparently filling fracture and replacement zones well beyond and below the barite horizon. More than one period of brecciation of sulphides is indicated. There is disagreement as to whether there is any volcanic component to some of the host rock. Any suggestions would be appreciated.

One interpretation of the stratigraphy is as follows:

0 - 200'	Grey green chert	pyrite
0 - 80'	Barite	pyrite
	Chert, quartz etc.	pyrite
100 - 400'	Grey chert pebble conglomerate - grit, shale and argillite beds locally.	
10 - 30'	Grey chert	
100 - 300'	White to grey limestone - chert nodules in upper portions	
100'+	Thin bedded shale	

Yours very truly

J.C. Stephen Exploration Ltd.

J.C. Stephen

JCS/ed

DOME EXPLORATION (CANADA) LIMITED

SUITE 600 - 365 BAY STREET

TORONTO, CANADA

M5H 2V9

TELEPHONE

(416) 364-3453

March 28, 1980

Mr. J. C. Stephen
J. C. Stephen Exploration Limited
1124 West 15th Street
North Vancouver, B. C.
V7P 1M9

Dear Cam:

Re: D.C. Syndicate -- BAR Claims

Today I received a letter dated March 26, 1980, on the above subject, from Bill Wolfe at Cominco.

Before replying, I would like to have your comments. Would you mind phoning me after you have read this photocopy? Perhaps this letter was copied to you, but there is no indication of such.

Sincerely,

DOME EXPLORATION (CANADA) LIMITED

Wally.

G. S. W. Bruce

GSWB:rn
Enclosure

Tel. (604) 682-0611 / Telex 04-507730

Cominco

Exploration

Mr. G.S.W. Bruce
Vice-President
Dome Exploration (Canada)
Suite 600
365 Bay Street
Toronto, Ontario
M5H 2V9

26 March 1980

Dear Wally:

Re: BAR Claims (D.C. Syndicate)

In preparing a request for funds to support the proposed drilling of the D.C. Syndicate BAR Property, I have had occasion to review the technical data with Dave Cooke and Bruce Mawer - two of our Senior Geologists who have actually visited the property. I am not impressed by our current knowledge of the property.

We know that moderate to erratically high Pb-Zn-Ag soil anomalies overlap anomalous I.P. responses which coincide in general with barite beds containing low (0.5% Pb, 0.5% Zn, 1.5 oz Ag) metal values. No ore grade material has been identified at surface in outcrop or float. The past geological mapping has been poor quality. Bedding attitudes shown on the map are consistently west dipping although both Mawer and Cooke observed east dipping attitudes during brief property visits. There is some suggestion that bedding and schistosity have been confused. The end result is that there is no consistent opinion on (1) the nature of the mineralization (sedimentary, volcanic, vein or stratabound), or (2) the attitude or geometry of the potential target.

In short, the property is in poor shape considering that it is being brought forward for drill testing after four years. Nevertheless, I am prepared to recommend Cominco participation in the BAR drill test on the basis of the following conditions:-

(1) A Cominco staff geologist will be on-site when drilling commences and will have the power to alter collar locations of the proposed holes.

no problem.

.../2

(2) In the event that positive results are obtained from the program (leading to new company formation) a meeting of participants on or before 31 October 1980 will be held to discuss transfer of exploration management commencing January 1981.

Your early response to these two items would assist us in the formulation of our budget proposal.

Best Regards,

Bill Wolfe

W.J. Wolfe
Assistant Manager
Western District

WJW:hmr

J.C. STEPHEN EXPLORATIONS LTD.
1124 West 15th Street, North Vancouver, B.C. V7P 1M9 (604) 988-1545

March 4, 1980

Drilcor Industries Ltd.
18 - 12871 Bathgate Way,
Richmond, B.C. V6V 1Y5

Attention: Mr. Tom Hasek

RE: BAR 1 - 20 105 C/8

Dear Sirs,

Further to our telephone conversation today we would like to outline circumstances regarding our proposed drilling on our BAR 1 - 20 claims in the Yukon.

This project is for the D.C. Syndicate which is funded by Dome Exploration and Cominco. Final approval of the drilling has not been received as yet from Cominco but since they suggested the drilling we expect funding will be forthcoming and should be confirmed shortly.

Four (plus) vertical, or near vertical, BQ holes are proposed on a barite lead zinc showing. These should total 1000 feet with the deepest hole to about 300 feet initially for geological information. Depending on those results additional holes will be 150 to 250 feet in depth. If results are at all encouraging we would like to get as many holes as we can with the budget.

May 15 – [illegible]

these claims. Late August may be poor because of water problems.

We will be sharing a 500D helicopter with Dupont this summer. This machine will be based at Swift River. I don't know at the moment when Dupont will be starting but we expect a machine to be available whenever the drill is available.

A map is provided showing location of the property approximately 30 miles north east of Teslin. We would expect to fly the camp and equipment from Teslin. Supply trips would come from Swift River.

Two drill holes are at or near the top of a low rounded hill on a "kill" zone essentially free of timber. A third hole is probably in buck brush and the fourth, so far planned, is in or close to green timber.

Camp will be established close to the drill area probably on open "kill" or gossan areas. Our representative will have his own small tent.

Water supply can be a problem during dry spells and at the best of times may be up to 2000 feet from proposed drill sites.

Mobilization and demob would be prohibitive for this footage if calculated from Vancouver. We understand you expect to be drilling for Noranda in the area and would like to arrange our schedule to co-operate with them as to timing and charges.

Due to the relatively open, fairly low, south facing nature of our ground we could start in late May. We would like to have the drilling done by September 3. If convenient for you the period May 15 - June 15 is probably best for us because of assessment dates on these claims. Late August may be poor because of water problems.

Rock types are expected to be, rhyolite, siliceous barite, grey chert pebble conglomerate, chert, limestone.

Core boxes can be supplied by this company and arrangements could be made to have fuel and groceries supplied as well.

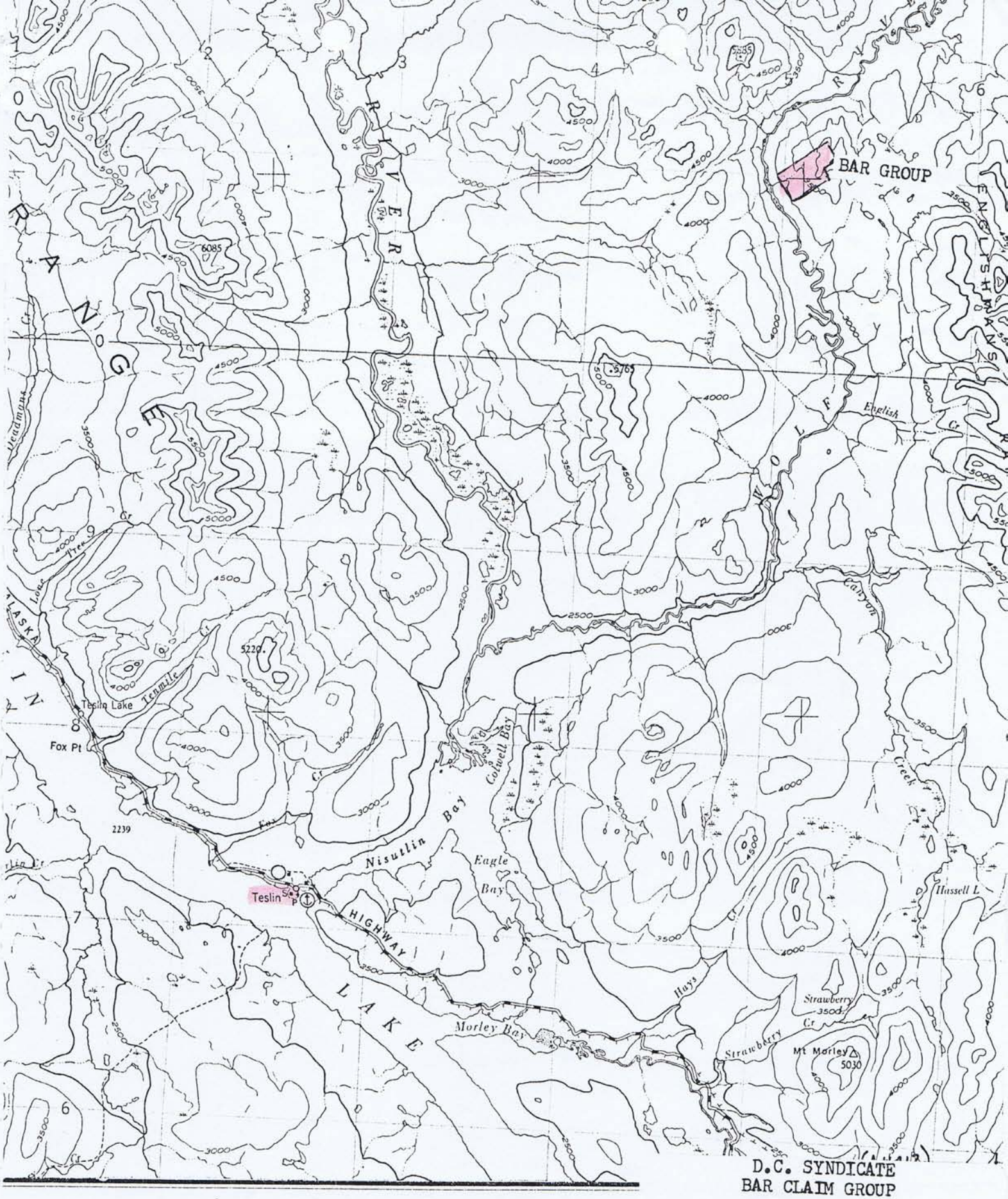
The company will arrange radio equipment for communication with the property.

Please feel free to call me with regard to this work.

Yours very truly,
J.C. Stephen Explorations Ltd.

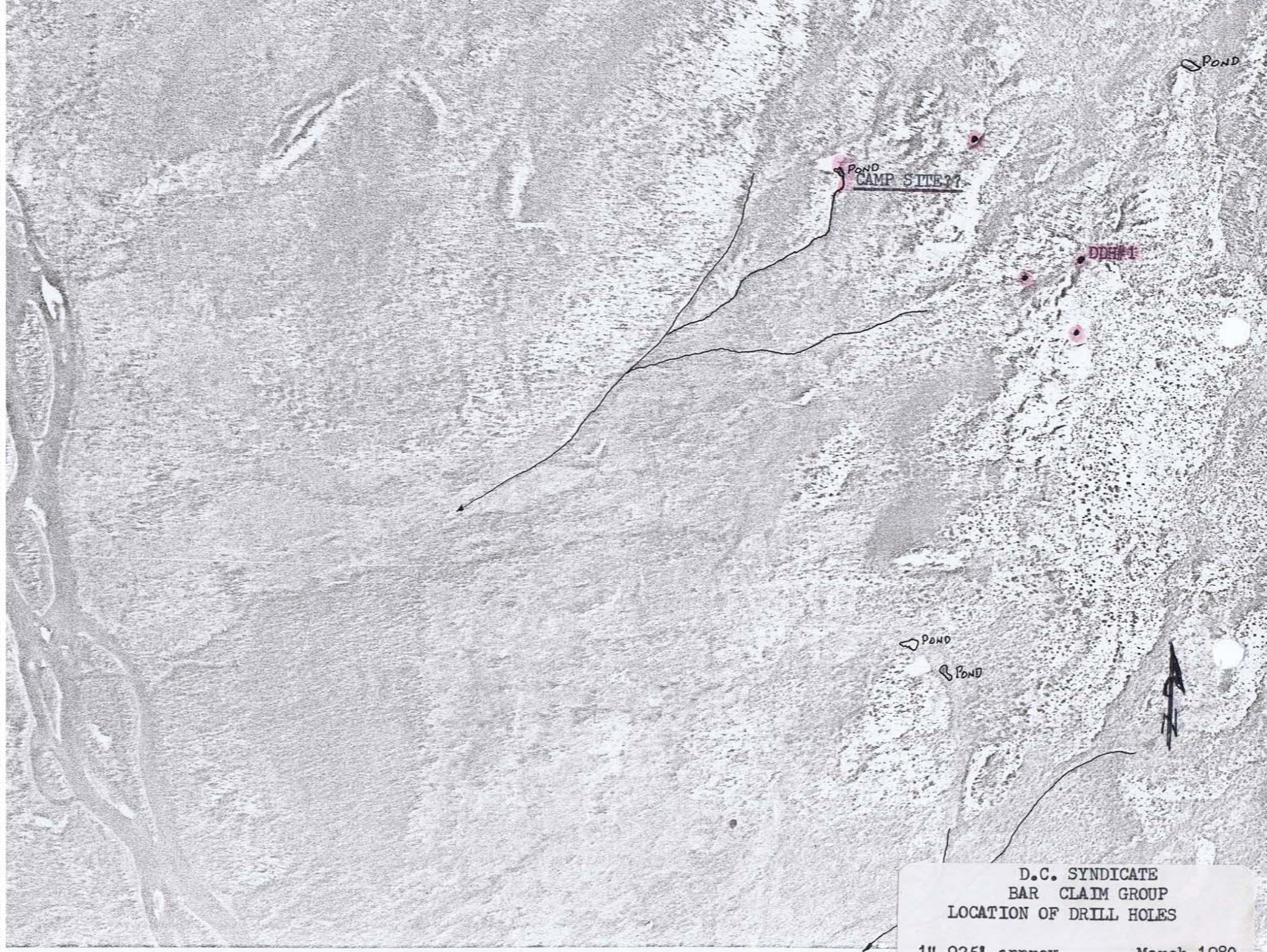
J.C. Stephen

JCS/ms



D.C. SYNDICATE
BAR CLAIM GROUP

LOCATION MAP 105C/8,9
1:250,000
March 1980



D.C. SYNDICATE
BAR CLAIM GROUP
LOCATION OF DRILL HOLES

1"-925' approx March 1980

LITHOLOGY

Sh/Arg	Dark grey to black shale or argillite, carbonaceous to graphitic.
St/Ss	Light to dark grey to grey-green, cherty to fine-grained, massive to flaggy, siltstone, sandstone to arkose.
Cg	White, grey and black chert - lithic pebble to granule conglomerate.
Ct	White, grey to black chert, ± hematite.
Ct bx	Brecciated chert.
Dolo	Brown weathering sandy dolostone with chert fragments.
Wt dolo	Sucrose white dolostone.
Lst	Grey limestone with chert lenses and chert sand. ± crinoid fragments.

ALTERATION

///	Pyrite stringers.
x1 - x5	Pervasive, strong, moderate, weak, very weak alteration.
c	Clay and/or sericite alteration, yellow-green bleached appearance.
s	Silicification, cherty grey-green appearance.
h	Hematite alteration ± manganese oxides on fractures.

LEGEND

O O⟶	Diamond drill hole, vertical, angled.
	Trench.
	Outcrop or subcrop.
×	Float, frost heaved boulders.
	Rock geochem sample.

8341E

50+00 N. B.L.

Elev 4000

Elev 3800

DDH 80 B-1
-60°

DDH 80 B-4
-75°
PROJECTED FROM
105' EAST OF SECTION

CHERT PEBBLE CONGLOMERATE

188'

SHALE GREENISH-GREY CHERTY-SED PY

DARK GREY PY

CHERT PY

GREY-GREENISH GREY PY PY PY

CHERT ARGILLITE

DYKE

CONGLOMERATIC SILTSTONE

348'

Ft	Zn	Ag	Pb	Ba
5.6	.02	.28		13.3
6.0	.01	.18		20.8
10.0	.04	.18		7.0
5.0	.01	.24		19.9
3.5	.02	.20		16.6
3.5	.15	.32	.05	18.3
5.2	.14	.24	.04	15.9
2.8	1.88	.32	.12	31.4
5.0	.02	.24		12.2
10.0	.01	.16	.03	
9.5	.08	.16	.04	
4.5	.06	.24		
4.3	.07	.28		
4.7	.01	.10		
10.0	.01	.08		
10.0	.01	.01		
8.4	.02	.06		
7.6	.12	.20	.06	
8.0	.06	.36	.06	
10.0	.01	.10		
2.0	.01	.32		
7.8	.01	.14		
4.7	.05	.10		
5.5	.05	.28		
6.5	.01	.32		
10.0	.01	.06		
10.0	.27	.08		

J.C. STEPHEN EXPLORATIONS LTD

D.C. SYNDICATE

BAR CLAIM GROUP

VERTICAL SECTION 12+00W

FACING EASTERLY

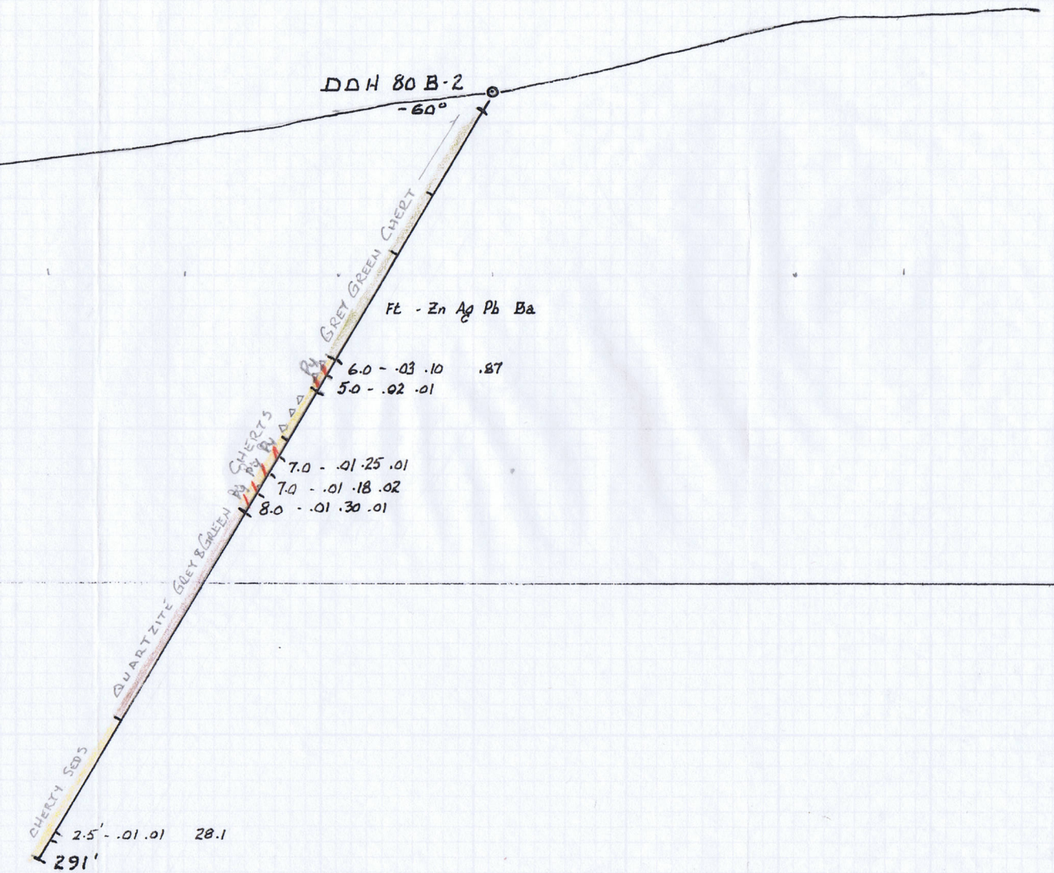
SCALE 1"=50' JUNE 1980

FIGURE 1

53+00N

50+00N. B.L

Elev 3800



Elev 3600

J.C. STEPHEN EXPLORATIONS LTD.

D.C. SYNDICATE

BAR CLAIM GROUP

VERTICAL SECTION 20+00W.

FACING EASTERLY

SCALE 1"-50' JUNE 1980

FIGURE 2

64+00N

62+00N

57+00N

Elev 3800'

Elev 3600'

DDH 80 B-3
-90°

SILIC. CHERT

CHERT BARITE PYRITE

GREY CHERT

ARGILLITE

287'

Ft	Zn	Ag	Pb	Ba
5.0	.01	.02		3.42
7.0	.02	.01		6.11
5.0	.01	.01		3.54
10.0	.01	.01		14.0
10.0	.04	.05		30.1
10.0	.01	.01		22.8
10.0	.02	.01		17.2
5.0	.07	.16	.03	20.9
5.0	.19	.01	.01	27.1
10.0	.02	.01		26.3
10.0	.06	.01		23.0
10.0	.04	.01		0.83

3500

J.C. STEPHEN EXPLORATIONS LTD.

D.C. SYNDICATE

BAR CLAIM GROUP

VERTICAL SECTION 20+00 W

FACING EASTERLY

SCALE 1" = 50' JUNE 1980

FIGURE 3

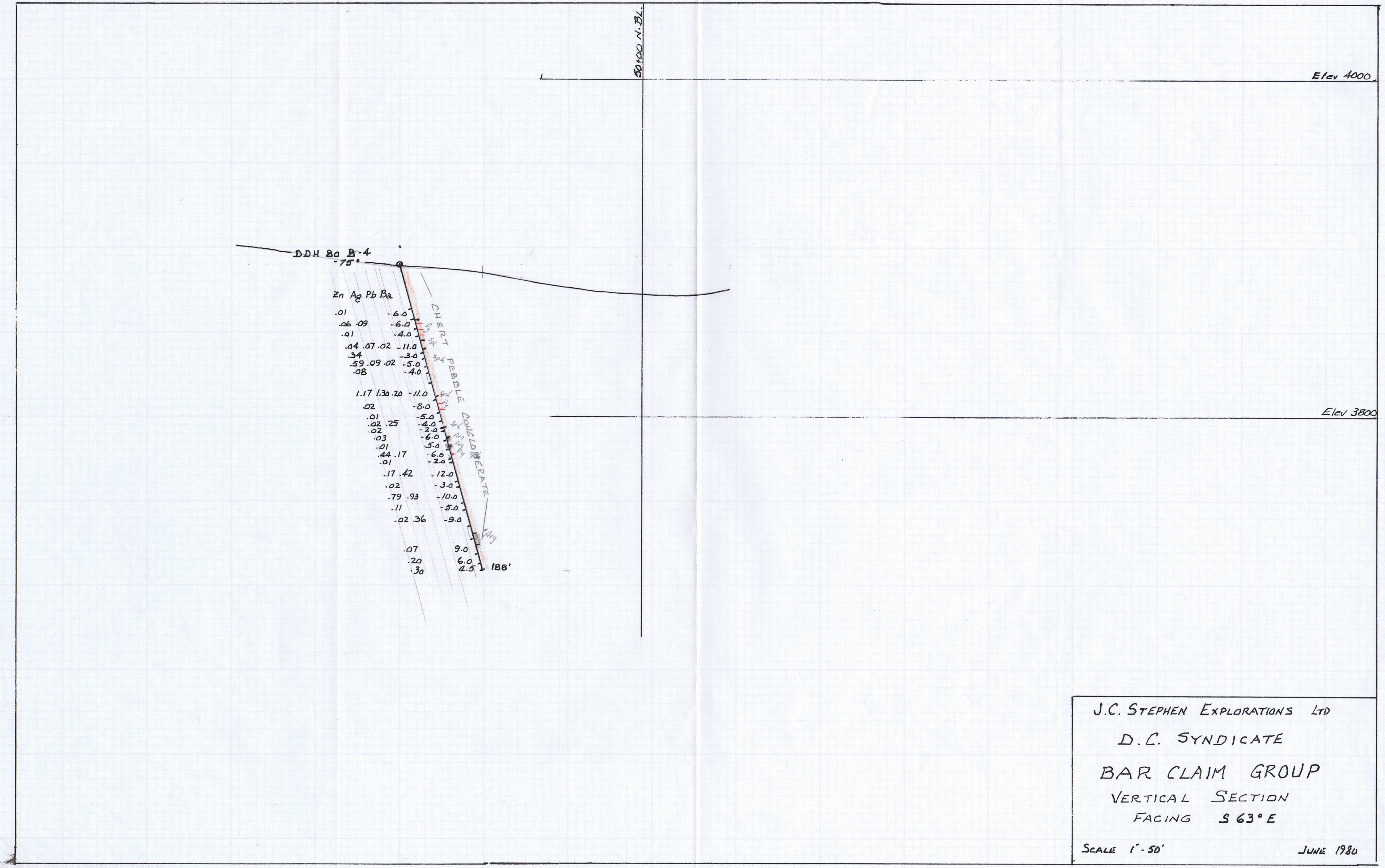

50+00 N.BL.
Elev 4000
Elev 3800
DDH 80 B-4
-75°
Zn Ag Pb Ba
.01 -6.0
.06 .09 -6.0
.01 -4.0
.04 .07 .02 -11.0
.34 -3.0
.59 .09 .02 -5.0
.08 -4.0
1.17 1.30 .20 -11.0
.02 -8.0
.01 -5.0
.02 .25 -4.0
.02 -2.0
.03 -6.0
.01 -5.0
.44 .17 -6.0
.01 -2.0
.17 .42 -12.0
.02 -3.0
.79 .93 -10.0
.11 -5.0
.02 .36 -9.0
.07 9.0
.20 6.0
.30 4.5
188'
Py
Sph
Arg
CHERT PEBBLE CONGLOMERATE
J.C. STEPHEN EXPLORATIONS LTD
D.C. SYNDICATE
BAR CLAIM GROUP
VERTICAL SECTION
FACING S 63° E
SCALE 1"-50'
JUNE 1980

FIGURE 4

AIL THIS FORM TO: M.I.R. - Geology Section - Indian Affairs and Northern Development
200 Range Road, Whitehorse, Yukon. Y1A 3V1

SUMMARY OF EXPLORATION & DEVELOPMENT WORK 1980

COMPANY NAME: J.C. STEPHEN EXPLORATIONS LTD. COMPANY ADDRESS: 1458 RUPERT STREET, NORTH VANCOUVER, B.C. V7J 1G1

DATE: Oct.23/80 POSITION: PRESIDENT SIGNATURE: J.C. Stephen

WAS EXPLORATION WORK DONE IN THE YUKON IN 1980: yes x No ___ (if No; no further information required)

The reports appearing in the Mineral Industry Report are produced from data abstracted from this form, from assessment reports and from personal observations obtained during property visits. All reports are returned to company for corrections and approval prior to publication. All information on this form should be considered public on receipt by us.

If you plan to file Assessment work PRIOR to Mar 1/81 please fill out only Section A, and for drilling please complete Drilling Summary. For claims on which assessment work will be filed at a later date or for which only physical work will be applied, or for which no assessment work will be filed, please complete entire form, one copy for each property; CONFIDENTIAL INFORMATION IS NOT REQUESTED.

A) PROPERTY NAME

NAME	NTS MAP SHEET	LONG	LAT	MINING DISTRICT	TYPE OF WORK (geol, geoch, geoph, etc)
BAR	105C/8 & 9	132°14'W	60°30'N	WATSON LAKE	DIAMOND DRILLING

B) MINING DISTRICT: WATSON LAKE NTS MAP SHEET: 105C/8&9 LAT 60°30'N LONG 132°14'W

CLAIM NAME(S): BAR 1 - 22 TOTAL NUMBER OF CLAIMS: 22

OWNERS OF CLAIMS: ___ WORK FINANCED BY: D.C. SYNDICATE

MINERALS OF ECONOMIC INTEREST: BARITE ZINC SILVER

GEOLOGICAL DESCRIPTION OF OCCURRENCE: BARITE ZONES WITH MINOR ZINC SILVER LEAD MINERALIZATION. SULPHIDE MINERALIZATION OCCURS AS FRACTURE FILLING AND POSSIBLE REPLACEMENT.

(if more space required please use back of page or separate page)

WORK DONE in 1980:

Geological Mapping: Claims Mapped and Scale: ___

Geochemistry: Claims Covered & Method: ___

Geophysics: Claims Covered & Method: ___

Trenching & Stripping: Claims, Method and Area or Volume: ___

Drilling: Type, Size, No. of Holes, Total Metreage or footage, On which Claims: ___

DIAMOND DRILLING BQ 4 holes 1115 FEET BAR 1, 2, 3, 4

RESULTS of WORK DONE: ___