

REPORT ON  
WORK PROGRAM, CHU PROSPECT  
June 15 - September 5, 1982

AA GROUP OF MINERAL CLAIMS

(Chu 25-36, 41-52, Ako, Nech, Nech#1, Nech#2, AA#1, AA#2, AA#3)

Located 6.5km West of West End of Chutanli Lake

OMINECA MINING DIVISION, B.C.

(53° 21' N, 124° 37' W)

(93F/7E)

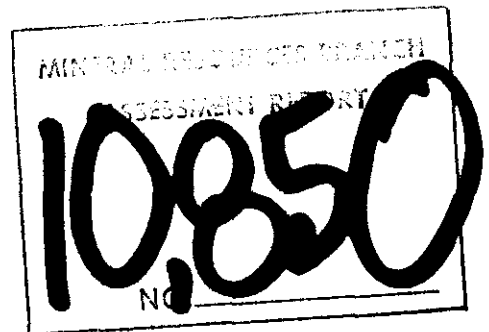
E. A. Ostensoe, Geologist

October, 1982

Revised April 21, 1983

Claims owned by:

Asarco Incorporated and  
Armco Mineral Exploration Ltd.



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## Introduction

The Chu property is a molybdenite prospect that is located at the south end of the Nechako Range in Omineca Mining Division, British Columbia. Discovered in 1969, it is owned jointly by Armco Mineral Exploration Ltd. and Asarco Inc. An exploration program of diamond drilling and geological mapping, followed by reclamation work, was funded and directed by Armco Mineral Exploration Ltd. in the period June 1 to September 5, 1982.

Diamond drilling totalled 798 m (2617') in two holes. Camp facilities and boxes of drill core were removed from the property. Expenditures exceeded \$100,000. This report describes the program of work and provides documentation on expenditures in excess of \$33,200. A statement of exploration expenditures filed on September 7, 1982, applied the latter sum as assessment work to all Chu property mineral claims.

Geological core log summaries for holes #82-1 and #82-2 are included as part of this report. Appendix I is a statement of expenditures and Appendix II is a statement of the writer's qualifications.

## Location

The Chu mineral property is located at the south end of the Nechako Range in the Intermontane physiographic province of British Columbia. Approximate geographical co-ordinates are 53°21'N, 124°37'W. It is about 6.5 km west of Chutanli Lake and 100 km southwest of the village of Vanderhoof. With the exception of the Kluscius-Ootsa Forestry Road that passes 3 km south of the Chu area, there are neither nearby facilities nor improvements.

## Previous Work

Immediately following its discovery in 1969, the Chu property was explored by Asarco and Rio Tinto Canadian Exploration Ltd. Asarco completed additional geochemical surveys in 1977. Armco commenced work by building an access road in 1979 and carried out diamond drilling campaigns in 1980 and 1981. Late in 1981 Armco conducted technical surveys over much of the property. The 1982 program of diamond drilling was directed to the main molybdenite zone revealed by previous work.

A comprehensive description of geological features, as well as logistics, was included in an assessment report submitted to the British Columbia Ministry of Energy, Mines and Petroleum Resources in October 1981. The interested reader will find information in that report that is not repeated in this account of the somewhat smaller 1982 field program.

### Accommodations and Personnel

A centrally located five building tent camp that was constructed in 1981 to service drilling and other work at Chu property was re-occupied during summer 1982. Personnel included four diamond drillers, a cook, a core sampler and a geologist/manager. Following completion of work, four buildings were removed and the site reclaimed.

### Work Program

Two diamond drill holes of NQ-size diameter and aggregate length 798 m (2617') were cored in the period June 15 through July 7, 1982. The contractor, G and D Diamond Drilling Co. Ltd. of Surrey and Williams Lake, B.C., provided a Model Super 38 diamond drill, a small crawler tractor and all necessary tools and ancillary equipment, plus personnel.

The work program was planned and supervised by Philip I. Conley, P.Eng., manager, and Erik Ostensoe, senior geologist, of Armco's staff. Camp maintenance and core sampling duties were ably handled by Pieter Kos who had similar duties during the 1981 field program.

Erik Ostensoe prepared geological "logs" of drill cores and determined sampling procedures. Upon completion of field work he prepared vertical sections to illustrate results obtained and compiled technical reports. In addition he removed all drill core and most of the buildings from the property. Cores were transported to the Vancouver area and placed in safe dry storage. Forage crop seeds were spread on drill sites, campsites and road sides to stabilize soils and encourage regeneration of natural vegetation. All work was completed by early September.

1982 drilling was confined to the eastern portion of the zone of molybdenite mineralization that was explored during 1980 and 1981. Drill hole #82-1 was intended to fill a "data gap" between Sections 0+00 and 2+80W. Drill hole #82-2, on Section 4+20W, which under cut drill hole #81-2 by about 80 m, was planned to test the continuation at depth of an attractive molybdenite zone that was intersected in hole #81-2 (Figure 1).

Reclamation work was necessitated by reclamation guidelines and cores were removed as a precaution against destruction by natural hazards and vandalism and in order to facilitate access in the future. With the exception of one tent frame structure and the stoutly constructed core storage rack, the camp was completely removed or destroyed.

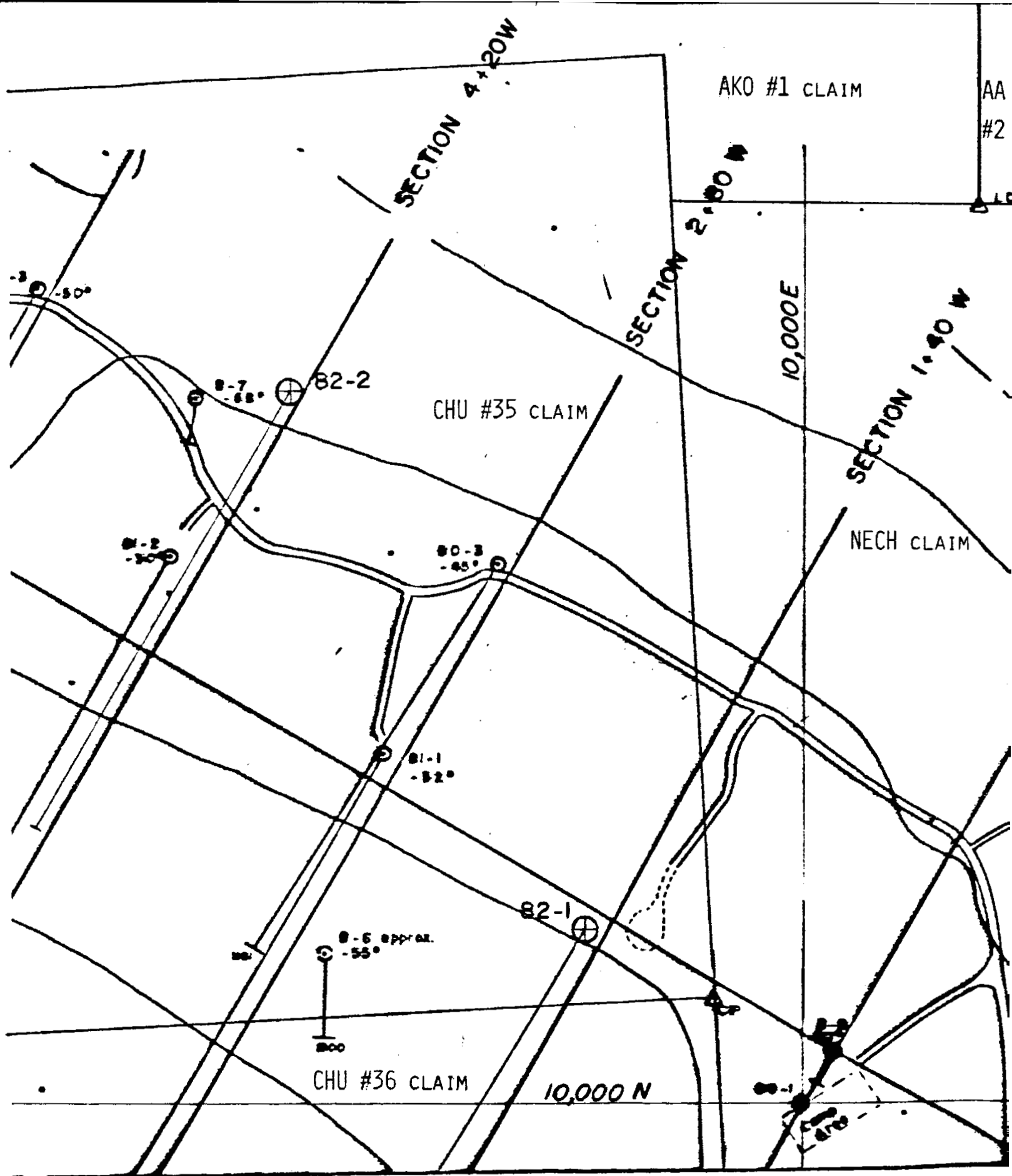


FIGURE 1. Location of Drill Holes #82-1 and #82-2.  
Scale: 1:2500.

Revised April 21, 1983

Diamond Drill Hole 82-1 - Core Log Summary

Location 10,092N  
9,883E not surveyed - relative to collar DDH 80-1  
Elevation 1,380m at 10,000N  
10,000E  
elev. 1384.2m

NQ size core

Collar bearing 214° azimuth Collar inclination - 47°30'

Reference: Geological Section 1+40W, folded in pocket of this report.

- 0 - 4.3m Overburden and broken bedrock not recovered.  
(0 - 14')
- 4.3m - 82.5m Andesite with porphyritic texture and variable appearances  
(14' - 270.5') due to mottled effects of alteration which include biotitization, epidotization, chloritization and varying amounts of iron sulphides. Occasional narrow quartz veins. Foliation is weakly developed at 45° to core axis.
- 82.5m - 100.2m Dense, dark, biotitized andesite with alteration  
(270.5' - 328.7') (siliceous and chloritic, minor carbonate veinlets); may be a foliated lapilli tuff horizon. From 94.2m (309') rock in increasingly fine grained and more strongly foliated though not sheared. Distinctive disseminated bright green epidote.
- 100.2m - 117.3m At 100.2 m (328.7') contact with a very siliceous,  
(385' - 397.3') whitish-green coloured, very fine grained quartzite or rhyolite formation. May be a rhyolite crystal tuff unit. Crushed interval at 106.7 m - 106.37m (348' - 349') with gougy calcite and disseminated grains.
- 117.3m - 121.1m Transitional zone between siliceous formation and reddish  
biotitized argillite unit. Contains a series of black basalt dykes with widths of 0.14m to 2m (0.45' to 6.55') and contacts at 35° to 45° to core axis.
- 121.1m - 369.4m Reddish coloured biotitized argillite with stockwork of  
quartz veinlets. Small amounts of MoS<sub>2</sub>. Dominant stockwork veinlets parallel foliation. Rock is monotonous except for occasional narrow crushed/pulverized sections. Molybdenite is fine grained and is obscured by folia. Sections 151.18m - 151.73m (496' - 497.8') is strongly sheared, even schistose, and accompanying biotite is coarse grained, dark brown. From 152.40m - 155.45m (500' - 510') fracturing is at 65° to 70° to core axis and quartz veinlets pinch and widen and are ptygmatically crenulated. Quartz veinlet stockwork intensifies from 161.54m to 167.64m (530' to 550').
- 175m - 175.73m (574' - 576.55') altered porphyritic quartz monzonite dyke. Contacts 45° to 50° to core axis. White feldspar phenocrysts up to 1.5 cm in diameter are sparsely scattered.

121.1m - 369.4m (cont'd.)

181.66m - 182.09m (596' - 597.4') mud seam of crushed argillite and vein quartz with MoS<sub>2</sub> flakes. Followed 182m - 182.9m (597' - 600') by very pale green chloritic alteration of argillite formation - likely retrograde alteration from biotite. This type of chloritic alteration occurs sporadically over narrow widths, commonly with flame textures where chlorite and biotite types meet. QM dykes at 198m - 198.3m (649.5' - 650.5'), 202.45m - 206.47m (664.2' - 677.4'), 212.75m - 213.21m (698' - 699.5').

At about 222.5m (730') rock becomes much darker brown in contrast to reddish brown, and texture becomes more dense and featureless than the foliated texture encountered above. Molybdenite is more obvious in the denser formation, forms seams, occurs with pyrite and epidote in quartz veins. Continues to 234.7m (770') then reverts to foliated formation. At 241.46m to 241.52m (792.2' to 792.4') quartz occurs with much pyrite and strongly magnetic pyrrhotite plus molybdenite. Quartz veinlet stockwork is variable in intensity (ie. number) and "strength" (ie. widths of individual veinlets). From 305.2m to 305.5m (1001.3' to 1002.35') a mixed zone of pegmatite-like vein quartz and porphyritic fine grained grey dyke material followed at 305.52m (1002.35') by feldspar porphyritic quartz monzonite dyke that continues to 307.1m (1007.6'). From 307.1m (1007.6') biotite altered argillite continues monotonously with occasional narrow QM dykes, "crackle" altered sections and mixed chlorite/biotite alteration. Crushed but not strongly sheared section occurs from 326.9m to 327.6m (1072.5' to 1074.8') - MoS<sub>2</sub> is sheared along with the silicate rock. From 336.8m to 338.7m (1105' to 1111.3') quartz monzonite dyke with large, partially resorbed, feldspar phenocrysts. From 360m to 360.4m (1181' to 1182.5') quartz breccia with fine grained pyrite, possibly a case of complete silicification that approaches quartz monzonization. 369.4m (1212')- end of hole.

Diamond Drill Hole #82-2 - Core Log Summary

Location 10,373.35N  
9,726.74E not surveyed - relative to collar DDH 80-1  
Elevation 1,399.45m at 10,000N  
10,000E  
elev. 1384.2m

NQ size core

Collar bearing 210° azimuth Collar inclination - 52°30'

Reference: Geological Section 4+20W, folded in pocket of this report

0 - 3.66m Overburden and broken bedrock not recovered.  
(0 - 12')

3.66m - 133.2m Dark green/dark purple coloured feldspar porphyry with  
(12' - 437.2') tiny fractures filled by chlorite and very fine grained  
pyrite. Cut by occasional quartz veins and pale green  
bleaching-type alteration. Feldspar phenocrysts are  
2 mm in diameter and very pale green to ivory white  
coloured. Narrow portions are strongly altered to  
granitic texture. Quartz-pyrite sections also contain  
few sphalerite grains, pyrrhotite and chalcopyrite.  
At 30.48m - 33.53m (100' - 110') similar to above but  
has coarse fragmental texture and may be a lapilli tuff  
unit.

47m - 49m (154.3' - 160.8') basalt dyke with narrow  
chilled contacts at 45° to core axis.

Carbonate alteration is present though weakly developed  
from 49m (160.8'). At 55.3m (181.5') rock becomes  
strongly biotitized and very dark, almost black, in  
colour. Irregular sections with fragmental textures  
may reflect a volcanic breccia origin.

From 68.3m (224') rock colour changes from mainly  
greenish-grey to mainly purplish-grey. 91.65m to  
94.95m (300.7' to 311.5') strongly porphyritic texture  
with crowded feldspar phenocrysts up to 3 mm in diameter.  
Carbonate alteration is moderately strong from 96.9m  
to 103.6m (318' to 340'). 104.4m (342.6') marks the  
start of a section of oxidized broken core with much  
gouge, clay alteration, bleaching, iron staining and  
faulting that persists to 133.2m (437.2').

133.2m - 428.2m At 133.2m (437.2') contact between broken andesite  
(437.2' - 1405') formation and black strongly sheared/foliated shale  
formation, including broken sections with rust coatings  
on fractures.

At 143.2m (470') prominent foliation (possible bedding)  
at 42° to core axis. Core becomes more solid below  
145.5m (477.5') and is crosscut by narrow carbonate  
veinlets. Weak traces of biotitization appear at  
161.5m (530'). Trace of MoS<sub>2</sub> at 165.9m (544.2').  
Mixed black and brown colour patterned argillite occurs  
from 173.7m to 183m (570' to 60-'). Quartz veinlets



133.2m - 428.2m(con't.)

increase in number and width also.  $\text{MoS}_2$  becomes noticeable at about 189m (620') and strengthens along with increase in biotitization and silicification to 219.5m (720') where quartz veins are up to 4cm wide. Basalt dyke 223.3m - 223.9m (732.6' - 734.6'). Exact transition from shale to hornfels is difficult to determine; similarly re quartz veinlet stockwork. "Crackle"-type alteration occurs over narrow widths from 250.15m (820.7') and narrow ( 0.5m) quartz monzonite dykes are irregularly present. The section 274.5m to 278m (900.5' to 911.9') exhibits much crushing and gouge though rock is reasonably competent.

290.5m - 294m (953' - 964.5') - quartz monzonite dyke.

308.6m - 309.5m (1012.5' - 1015.4') - quartz monzonite dyke.

311.9m - 312.2m (1023.2' - 1024.2') - quartz monzonite dyke.

Stronger  $\text{MoS}_2$  mineralization from 317m (1040') occurs in brown stockworked hornfelsed argillite. Wide quartz veins are present though irregular in occurrence and over printed on a persistent fine quartz veinlet stockwork. Dominant alteration is biotitization but chloritization is also prominent. Occasional narrow sections contain  $>0.2\%$   $\text{MoS}_2$ .

The above formation with  $\text{MoS}_2$  mineralization continues to 428.2m (1405') which is end of hole.

Appendix I - Statement of Expenditures - Chu Prospect,  
Omineca Mining Division, B.C. in period  
June 15 through September 5, 1982.

1. Drilling Costs	- as invoiced, including mobilization and demobilization, tractor, footage charges, extra charges for labour, additives and drilling fluids, water supply, equipment used up in drilling operations, stand-by time for cementing, et al. Also includes cook's wages and benefits, rental of kitchen equipment and light plant, core boxes and freight charges.	\$68,151.92
2. Groceries		\$3,905.47
3. Reclamation	- August - September 5 - includes wages, living costs, transportation charges re drill core removal, storage charges, truck and forklift rental, freight, in excess of	\$7,500.00
Total Expenditures incurred in excess of		\$79,557.39

Appendix II - Statement of Qualifications

Erik A. Ostensoe, B.Sc., Geologist

- Education: Completed B.Sc. (Honours) course at University of British Columbia, Vancouver, B.C. in May, 1960.  
Completed course requirements for M.Sc. degree at Queen's University, Kingston, Ontario in 1966.  
Thesis incomplete.
- Professional Associations: Member: Canadian Institute of Mining and Metallurgy;  
Association of Exploration Geochemists;  
Geological Association of Canada.
- Work History: May 1960 through August 1964 - employed by Newmont Mining Corporation of Canada Ltd. as geologist in Granduc Mine area, Stewart, B.C. under direction of D.M. Cannon, P.Eng., and G.W.H. Norman, Ph.D., P.Eng.  
Summer 1965 - employed as geologist by Mount Billings Venture, a southern Yukon prospecting syndicate.  
Summer 1966 - employed as geologist by Scud Venture, a northwestern British Columbia prospecting syndicate.  
October 1966 to June 1978 - employed by Hecla Mining Company of Canada Ltd. and Granduc Mines, Limited (N.P.L.) as exploration supervisor and chief geologist, respectively, under the direction of P.I. Conley, P. Eng.  
August to November, 1978 - employed on contract basis by Union Oil Company of Canada, Ltd. as geologist in charge of field program at Beaverdell, B.C.  
April 1979 to September 1982 - employed by Armco Mineral Exploration Limited as geologist, assigned to projects in north-central British Columbia and Yukon under the direction of P.I. Conley, P.Eng.

APPENDIX II(a)

Drill Core Assays  
Copper and Molybdenite ( $\text{MoS}_2$ )

Note: Added to the report  
April 21, 1983 per request  
of Chief Gold Commissioner

CEU PROJECT - WECHARO RANGE, B.C.

DIAMOND DRILL HOLE 82-1

Start: June 20, 1982  
 Finish: June 27, 1982  
 Core Size: NQ  
 Core Recovery: +98%  
 Sample: Split Core

Co-ordinates: 10,092 N (Not surveyed)  
 9,883 E " " "  
 Elevation: 1,380 m " " "  
 Inclination:  
 Bearing: 214° (compass)  
 Length: 369.4 m 1212 feet

Directional Survey:	Bearing	Inclination
Collar	214°	-47° 30'
61 m (200 ft.)	-	-50° (by acid bottle etch)
146 m (480 ft.)	-	-48° " " " "
239 m (785 ft.)	-	-45° " " " "
309 m (1015 ft.)	-	-44° 30' " " " "

Sample Number	Hole Interval		Copper		Molybdenite
	(feet)	(meters)	(per cent)	(per cent)	(per cent)
45001	14 - 20	4.3 - 6.1	0.03		0.003
45002	20 - 30	6.1 - 9.1	0.02		<0.001
45003	30 - 40	9.1 - 12.2	0.01		0.004
45004	40 - 50	12.2 - 15.2	0.02		<0.001
45005	50 - 60	15.2 - 18.3	0.02		<0.001
45006	60 - 70	18.3 - 21.3	0.04		<0.001
45007	70 - 80	21.3 - 24.4	0.04		0.007
45008	80 - 90	24.4 - 27.4	0.03		0.007
45009	90 - 100	27.4 - 30.5	0.04		0.003
45010	100 - 110	30.5 - 33.5	0.02		<0.001
45011	110 - 120	33.5 - 36.6	0.02		0.018
45012	120 - 130	36.6 - 39.6	0.04		0.049
45013	130 - 140	39.6 - 42.7	0.02		0.005
45014	140 - 150	42.7 - 45.7	0.02		0.006
45015	150 - 160	45.7 - 48.8	0.02		0.009
45016	160 - 170	48.8 - 51.8	0.03		0.003
45017	170 - 180	51.8 - 54.9	0.04		0.005
45018	180 - 190	54.9 - 57.9	0.03		0.003
45019	190 - 200	57.9 - 61.0	0.03		0.025
45020	200 - 210	61.0 - 64.0	0.02		0.008
45021	210 - 220	64.0 - 67.0	0.03		0.029
45022	220 - 230	67.0 - 70.1	0.02		0.008
45023	230 - 240	70.1 - 73.1	0.03		0.031
45024	240 - 250	73.1 - 76.2	0.03		0.034
45025	250 - 260	76.2 - 79.2	0.03		0.048
45026	260 - 270	79.2 - 82.3	0.03		0.016
45027	270 - 280	82.3 - 85.3	0.05		0.011
45028	280 - 290	85.3 - 88.4	0.06		0.013
45029	290 - 300	88.4 - 91.4	0.03		0.003
45030	300 - 310	91.4 - 94.5	0.03		0.005
45031	310 - 320	94.5 - 97.5	0.06		0.003
45032	320 - 330	97.5 - 100.6	0.05		0.012
45033	330 - 340	100.6 - 103.6	0.05		0.013

Sample Number	Hole Interval (feet)	Hole Interval (meters)	Copper (per cent)	Molybdenite (per cent)
45034	340 - 350	103.6 - 106.7	0.06	0.006
45035	350 - 360	106.7 - 109.7	0.07	0.013
45036	360 - 370	109.7 - 112.8	0.06	0.022
45037	370 - 380	112.8 - 115.8	0.04	0.007
45038	380 - 390	115.8 - 118.9	0.03	0.023
45039	390 - 400	118.9 - 121.9	0.01	0.008
45040	400 - 410	121.9 - 125.0	0.02	0.030
45041	410 - 420	125.0 - 128.0	0.03	0.042
45042	420 - 430	128.0 - 131.0	0.03	0.048
45043	430 - 440	131.0 - 134.1	0.02	0.056
45044	440 - 450	134.1 - 137.1	0.02	0.022
45045	450 - 460	137.1 - 140.2	0.01	0.016
45046	460 - 470	140.2 - 143.2	0.01	0.024
45047	470 - 480	143.2 - 146.2	0.02	0.056
45048	480 - 490	146.2 - 149.3	0.02	0.032
45049	490 - 500	149.3 - 152.4	0.02	0.033
45050	500 - 510	152.4 - 155.4	0.02	0.035
45051	510 - 520	155.4 - 158.5	0.01	0.024
45052	520 - 530	158.5 - 161.5	0.01	0.038
45053	530 - 540	161.5 - 164.6	0.01	0.040
45054	540 - 550	164.6 - 167.6	0.01	0.051
45055	550 - 560	167.6 - 170.7	0.01	0.033
45056	560 - 570	170.7 - 173.7	0.02	0.066
45057	570 - 580	173.7 - 176.8	<0.01	0.063
45058	580 - 590	176.8 - 179.8	0.03	0.075
45059	590 - 600	179.8 - 182.9	0.03	0.100
45060	600 - 610	182.9 - 185.9	0.01	0.082
45061	610 - 620	185.9 - 189.0	0.01	0.020
45062	620 - 630	189.0 - 192.0	0.02	0.167
45063	630 - 640	192.0 - 195.0	0.02	0.100
45064	640 - 650	195.0 - 198.1	0.04	0.076
45065	650 - 660	198.1 - 201.2	0.01	0.031
45066	660 - 670	201.2 - 204.2	<0.01	0.013
45067	670 - 680	204.2 - 207.3	<0.01	0.007
45068	680 - 690	207.3 - 210.3	0.02	0.047
45069	690 - 700	210.3 - 213.3	0.02	0.048
45070	700 - 710	213.3 - 216.4	0.02	0.042
45071	710 - 720	216.4 - 219.4	0.03	0.038
45072	720 - 730	219.4 - 222.5	0.02	0.064
45073	730 - 740	222.5 - 225.5	0.03	0.063
45074	740 - 750	225.5 - 228.6	0.04	0.117
45075	750 - 760	228.6 - 231.6	0.03	0.058
45076	760 - 770	231.6 - 234.7	0.03	0.040
45077	770 - 780	234.7 - 237.7	0.03	0.046
45078	780 - 790	237.7 - 240.8	0.03	0.030
45079	790 - 800	240.8 - 243.8	0.03	0.038
45080	800 - 810	243.8 - 246.9	0.02	0.083
45081	810 - 820	246.9 - 249.9	0.03	0.050

Sample Number	Hole Interval		Copper (per cent)	Molybdenite (per cent)	CHEMEX General Testir
	(feet)	(meters)			
45082	820 - 830	249.9 - 253.0	0.05	0.030	
45083	830 - 840	253.0 - 256.0	0.03	0.043	
45084	840 - 850	256.0 - 259.0	0.03	0.112	
45085	850 - 860	259.0 - 262.1	0.03	0.018	
45086	860 - 870	262.1 - 265.2	0.02	0.037	
45087	870 - 880	265.2 - 268.2	0.03	0.029	
45088	880 - 890	268.2 - 271.3	0.02	0.042	
45089	890 - 900	271.3 - 274.3	0.03	0.048	
45090	900 - 910	274.3 - 277.4	0.02	0.037	
45091	910 - 920	277.4 - 280.4	0.03	0.060	
45092	920 - 930	280.4 - 283.4	0.04	0.120	
45093	930 - 940	283.4 - 286.5	0.06	0.038	
45094	940 - 950	286.5 - 289.5	0.02	0.038	
45095	950 - 960	289.5 - 292.6	0.02	0.038	
45096	960 - 970	292.6 - 295.6	0.02	0.054	0.050
45097	970 - 980	295.6 - 298.7	0.02	0.087	0.098
45098	980 - 990	298.7 - 301.8	0.02	0.050	0.038
45099	990 - 1000	301.8 - 304.8	0.02	0.060	0.053
45100	1000 - 1010	304.8 - 307.8	0.03	0.038	0.048
45101	1010 - 1020	307.8 - 310.9	0.03	0.054	0.048
45102	1020 - 1030	310.9 - 313.9	0.05	0.072	0.085
45103	1030 - 1040	313.9 - 317.0	0.02	0.051	0.060
45104	1040 - 1050	317.0 - 320.0	0.01	0.078	0.082
45105	1050 - 1060	320.0 - 323.1	0.03	0.038	0.043
45106	1060 - 1070	323.1 - 326.1	0.03	0.050	
45107	1070 - 1080	326.1 - 329.2	0.02	0.071	
45108	1080 - 1090	329.2 - 332.2	0.02	0.048	
45109	1090 - 1100	332.2 - 335.3	0.01	0.013	
45110	1100 - 1110	335.3 - 338.3	0.02	0.051	
45111	1110 - 1120	338.3 - 341.4	0.02	0.069	
45112	1120 - 1130	341.4 - 344.4	0.02	0.064	
45113	1130 - 1140	344.4 - 347.5	0.03	0.180	
45114	1140 - 1150	347.5 - 350.5	0.02	0.117	
45115	1150 - 1160	350.5 - 353.6	0.02	0.125	
45116	1160 - 1170	353.6 - 356.6	0.01	0.062	
45117	1170 - 1180	356.6 - 359.7	0.03	0.054	
45118	1180 - 1190	359.7 - 362.7	0.03	0.112	
45119	1190 - 1200	362.7 - 365.8	0.02	0.062	
45120	1200 - 1210	365.8 - 368.8	0.02	0.064	
45121	1210 - 1212	368.8 - 371.9	0.02	0.057	

CEU PROJECT - WECHAKO RANGE, B.C.

DIAMOND DRILL HOLE 82-2

Start: June 28, 1982  
 Finish: July 8, 1982  
 Core Size: NQ  
 Core Recovery: +98%  
 Sample: Split Core

Co-ordinates: 10,373.35 N (Not surveyed)  
 9,726.74 E " " "  
 Elevation: 1,399.45 m " " "  
 Inclination:  
 Bearing: 210° (compass)  
 Length: 428.2 m (1405 feet)

Directional Survey:	Bearing	Inclination
Collar	210° compass	-52°30'
91.44 m (300 ft.)	-	-54°30' (by acid bottle etch)
227.08 m (745 ft.)	-	-52°40' " " " "
347.47 m (1140 ft.)	-	-49°30' " " " "
416.05 m (1365 ft.)	-	-50° " " " "

Sample Number	Hole Interval (feet)	(meters)	Copper (per cent)	Molybdenite (per cent)
	12 - 550	3.66 - 167.64	Not Sampled	
45122	550 - 560	167.64 - 170.7	0.01	0.005
45123	560 - 570	170.7 - 173.7	0.01	0.002
45124	570 - 580	173.7 - 176.8	<0.01	0.006
45125	580 - 590	176.8 - 179.8	<0.01	0.005
45126	590 - 600	179.8 - 182.9	0.01	0.008
45127	600 - 610	182.9 - 185.9	0.01	0.008
45128	610 - 620	185.9 - 189.0	0.01	0.005
45129	620 - 630	189.0 - 192.0	0.02	0.011
45130	630 - 640	192.0 - 195.0	0.02	0.013
45131	640 - 650	195.0 - 198.1	0.03	0.024
45132	650 - 660	198.1 - 201.2	0.04	0.019
45133	660 - 670	201.2 - 204.2	0.01	0.018
45134	670 - 680	204.2 - 207.3	0.02	0.037
45135	680 - 690	207.3 - 210.3	0.02	0.044
45136	690 - 700	210.3 - 213.3	0.03	0.040
45137	700 - 710	213.3 - 216.4	0.02	0.017
45138	710 - 720	216.4 - 219.4	0.03	0.048
45139	720 - 730	219.4 - 222.5	0.05	0.069
45140	730 - 740	222.5 - 225.5	0.16	0.030
45141	740 - 750	225.5 - 228.6	0.05	0.025
45142	750 - 760	228.6 - 231.6	0.02	0.033
45143	760 - 770	231.6 - 234.7	0.03	0.050
45144	770 - 780	234.7 - 237.7	0.02	0.020
45145	780 - 790	237.7 - 240.8	0.03	0.027
45146	790 - 800	240.8 - 243.8	0.02	0.034
45147	800 - 810	243.8 - 246.9	0.03	0.042
45148	810 - 820	246.9 - 249.9	0.03	0.045



Sample Number	Hole Interval		Copper (per cent)	Molybdenite	
	(feet)	(meters)		(per cent)	(per cent)
45149	820 - 830	249.9 - 253.0	0.03	CHEMEX 0.035	General Testing
45150	830 - 840	253.0 - 256.0	0.03	0.075	
45151	840 - 850	256.0 - 259.0	0.04	0.037	
45152	850 - 860	259.0 - 262.1	0.03	0.029	
45153	860 - 870	262.1 - 265.2	0.03	0.047	
45154	870 - 880	265.2 - 268.2	0.04	0.081	
45155	880 - 890	268.2 - 271.3	0.03	0.060	
45156	890 - 900	271.3 - 274.3	0.03	0.053	
45157	900 - 910	274.3 - 277.4	0.02	0.041	
45158	910 - 920	277.4 - 280.4	0.02	0.046	
45159	920 - 930	280.4 - 283.4	0.03	0.068	
45160	930 - 940	283.4 - 286.5	0.03	0.103	
45161	940 - 950	286.5 - 289.5	0.04	0.085	
45162	950 - 960	289.5 - 292.6	0.04	0.070	
45163	960 - 970	292.6 - 295.6	0.01	0.060	
45164	970 - 980	295.6 - 298.7	0.02	0.062	
45165	980 - 990	298.7 - 301.8	0.05	0.086	
45166	990 - 1000	301.8 - 304.8	0.06	0.127	
45167	1000 - 1010	304.8 - 307.8	0.02	0.117	
45168	1010 - 1020	307.8 - 310.9	0.04	0.050	
45169	1020 - 1030	310.9 - 313.9	0.04	0.090	
45170	1030 - 1040	313.9 - 317.0	0.03	0.080	
45171	1040 - 1050	317.0 - 320.0	0.07	0.149	
45172	1050 - 1060	320.0 - 323.1	0.06	0.177	
45173	1060 - 1070	323.1 - 326.1	0.05	0.179	
45174	1070 - 1080	326.1 - 329.2	0.06	0.133	
45175	1080 - 1090	329.2 - 332.2	0.03	0.160	
45176	1090 - 1100	332.2 - 335.3	0.05	0.227	0.23
45177	1100 - 1110	335.3 - 338.3	0.05	0.192	0.16
45178	1110 - 1120	338.3 - 341.4	0.05	0.257	0.24
45179	1120 - 1130	341.4 - 344.4	0.04	0.250	0.23
45180	1130 - 1140	344.4 - 347.5	0.03	0.334	0.28
45181	1140 - 1150	347.5 - 350.5	0.04	0.310	0.31
45182	1150 - 1160	350.5 - 353.6	0.04	0.169	0.17
45183	1160 - 1170	353.6 - 356.6	0.03	0.113	0.12
45184	1170 - 1180	356.6 - 359.7	0.04	0.177	0.19
45185	1180 - 1190	359.7 - 362.7	0.04	0.076	0.070
45186	1190 - 1200	362.7 - 365.8	0.04	0.130	0.15
45187	1200 - 1210	365.8 - 368.8	0.03	0.093	0.095
45188	1210 - 1220	368.8 - 371.9	0.04	0.150	0.12
45189	1220 - 1230	371.9 - 374.9	0.03	0.133	0.14
34190	1230 - 1240	374.9 - 378.0	0.03	0.147	0.11
45191	1240 - 1250	378.0 - 381.0	0.02	0.055	0.055
45192	1250 - 1260	381.0 - 384.0	0.02	0.061	0.058
45193	1260 - 1270	384.0 - 387.1	0.03	0.058	0.055
45194	1270 - 1280	387.1 - 390.1	0.04	0.120	0.097
45195	1280 - 1290	390.1 - 393.2	0.03	0.340	0.300
45196	1290 - 1300	393.2 - 396.2	0.03	0.183	
45197	1300 - 1310	396.2 - 399.3	0.04	0.212	

Sample Number	Hole Interval		Copper (per cent)	Molybdenite (per cent)
	(feet)	(meters)		
45198	1310 - 1320	396.2 - 402.3	0.04	0.170
45199	1320 - 1330	402.3 - 405.4	0.03	0.055
45200	1330 - 1340	405.4 - 408.4	0.01	0.057
45201	1340 - 1350	408.4 - 411.5	0.01	0.065
45202	1350 - 1360	411.5 - 414.5	0.02	0.064
45203	1360 - 1370	414.5 - 417.6	0.01	0.070
45204	1370 - 1380	417.6 - 420.6	0.02	0.157
45205	1380 - 1390	420.6 - 423.7	0.01	0.066
45206	1390 - 1400	423.7 - 426.7	0.02	0.075
45207	1400 - 1405	426.7 - 429.8	0.02	0.167

APPENDIX II(b)

Drill Core Assays

Tungstate ( $WO_3$ ), Silver and Gold

Note: Added to the report  
April 21, 1983 per request  
of Chief Gold Commissioner



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 864-0221  
TELEX: 043 52597

## CERTIFICATE OF ASSAY

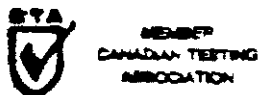
TO : ARPCO MINERAL EXPLORATION LTD.,

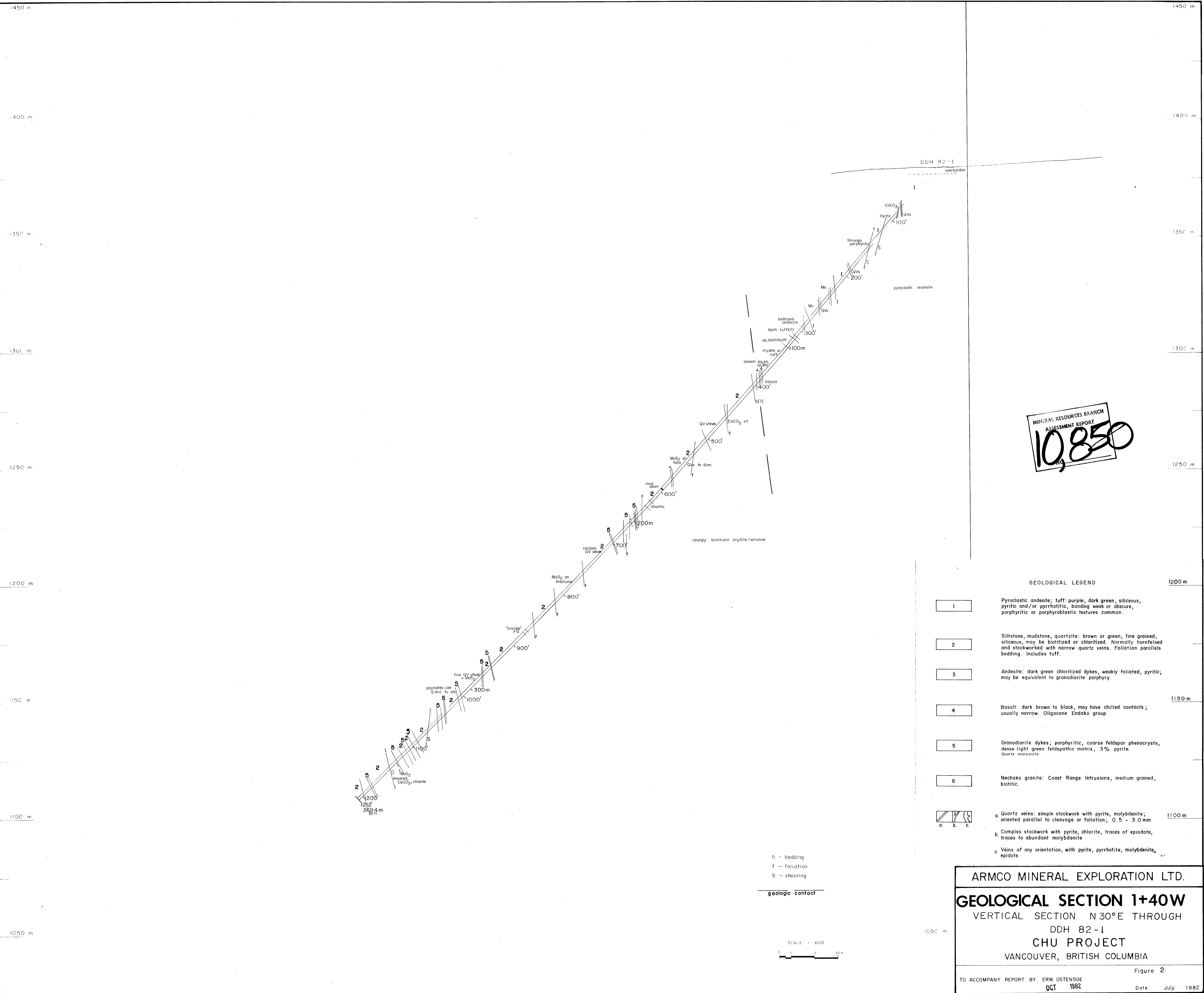
1780 - 1055 W. HASTINGS STREET  
VANCOUVER, B.C.  
V6E 2E9

CERT. # : AB212972-001-1  
INVOICE # : 18212972  
DATE : 2-SEP-82  
P.C. # : NONE

Sample Description	Prep code	WC3 NAA %	Ag FA oz/T	AU FA oz/T			
45096 <u>DHP2-1 960-970</u>	214	0.004	0.01	<0.003	--	--	--
45097	214	0.001	0.02	<0.003	--	--	--
45098	214	0.001	<0.01	<0.003	--	--	--
45099	214	<0.001	<0.01	<0.003	--	--	--
45100	214	0.001	<0.01	<0.003	--	--	--
45101	214	0.003	0.02	<0.003	--	--	--
45102	214	0.003	0.04	<0.003	--	--	--
45103	214	<0.001	0.04	<0.003	--	--	--
45104	214	0.001	<0.01	<0.003	--	--	--
45105 <u>1050-1060</u>	214	0.002	0.02	<0.003	--	--	--
45176 <u>DHP2-2 1090-1100</u>	214	0.001	0.03	<0.003	--	--	--
45177	214	<0.001	0.03	<0.003	--	--	--
45178	214	0.001	<0.01	<0.003	--	--	--
45179	214	0.001	0.06	<0.003	--	--	--
45180	214	0.001	<0.01	<0.003	--	--	--
45181	214	0.004	<0.01	<0.003	--	--	--
45182	214	0.006	0.02	<0.003	--	--	--
45183	214	0.001	<0.01	<0.003	--	--	--
45184	214	0.003	0.02	<0.003	--	--	--
45185	214	0.001	<0.01	<0.003	--	--	--
45186	214	0.020	<0.01	<0.003	--	--	--
45187	214	0.002	0.03	<0.003	--	--	--
45188	214	0.002	0.01	<0.003	--	--	--
45189	214	0.002	0.02	<0.003	--	--	--
45190	214	0.001	0.05	<0.003	--	--	--
45191	214	0.001	0.01	<0.003	--	--	--
45192	214	0.002	0.01	<0.003	--	--	--
45193	214	0.002	<0.01	<0.003	--	--	--
45194	214	0.003	0.03	<0.003	--	--	--
45195 <u>1280-1290</u>	214	0.001	0.03	<0.003	--	--	--

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Registered Assayer, Province of British Columbia





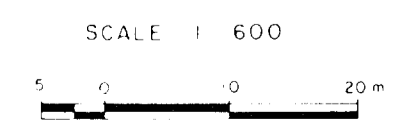
MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**10,850**

GEOLOGICAL LEGEND

- 1 Pyroclastic andesite; tuff: purple, dark green, siliceous, pyritic and/or pyrrhotitic, banding weak or obscure, porphyritic or porphyroblastic textures common.
  - 2 Siltstone, mudstone, quartzite: brown or green, fine grained, siliceous, may be biotitized or chloritized. Normally hornfelsed and stockworked with narrow quartz veins. Foliation parallels bedding. Includes tuff.
  - 3 Andesite: dark green chloritized dykes, weakly foliated, pyritic; may be equivalent to granodiorite porphyry.
  - 4 Basalt: dark brown to black, may have chilled contacts; usually narrow. Oligocene Endako group.
  - 5 Granodiorite dykes; porphyritic, coarse feldspar phenocrysts, dense light green feldspathic matrix, 3% pyrite. Quartz monzonite.
  - 6 Nechako granite: Coast Range intrusions, medium grained, biotitic.
- a. Quartz veins: simple stockwork with pyrite, molybdenite; oriented parallel to cleavage or foliation; 0.5 - 3.0 mm  
b. Complex stockwork with pyrite, chlorite, traces of epidote, traces to abundant molybdenite  
c. Veins of any orientation, with pyrite, pyrrhotite, molybdenite, epidote.

b - bedding  
f - foliation  
S - shearing

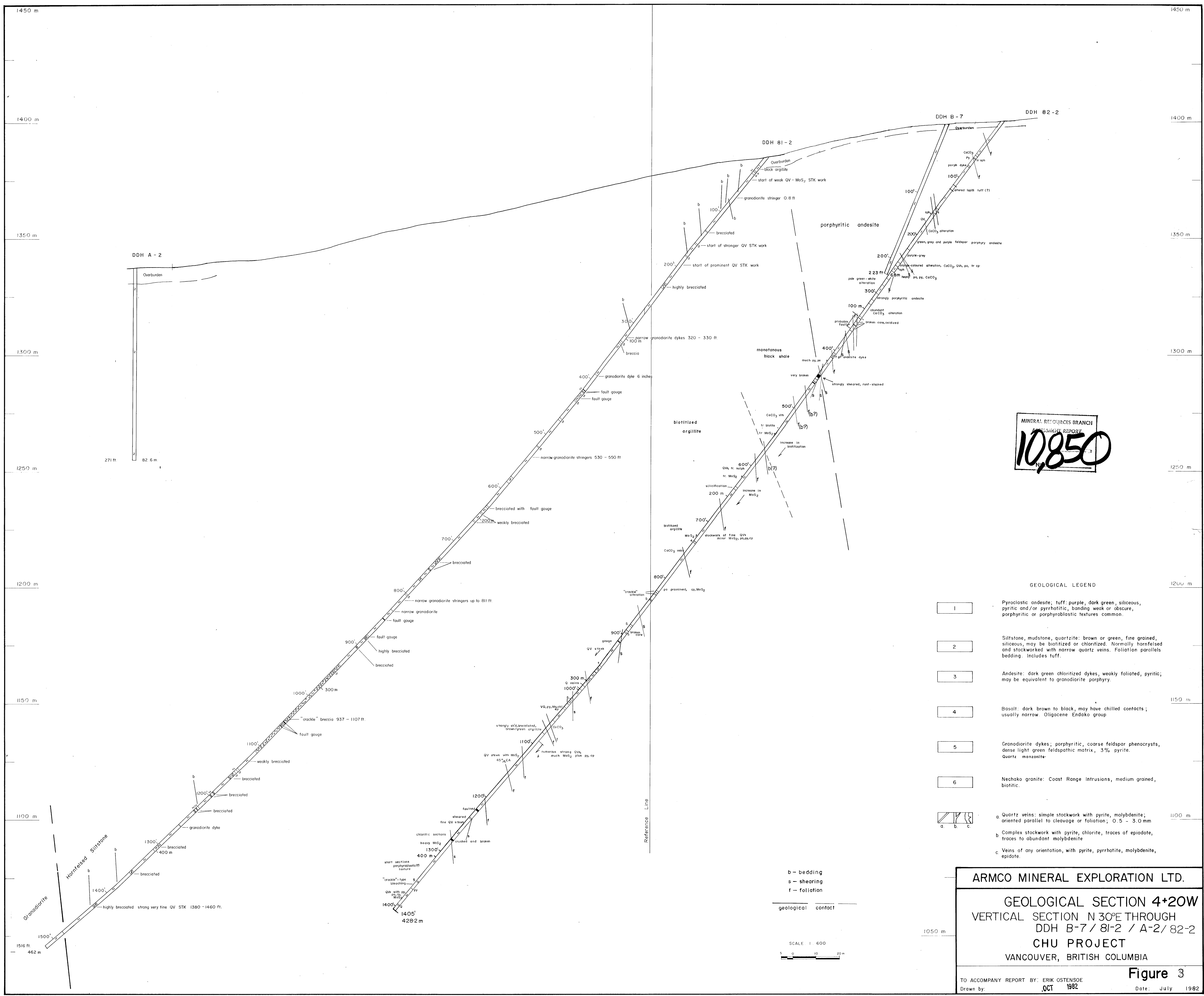
geologic contact



ARMCO MINERAL EXPLORATION LTD.

**GEOLOGICAL SECTION 1+40W**  
VERTICAL SECTION N30°E THROUGH  
DDH 82-1  
**CHU PROJECT**  
VANCOUVER, BRITISH COLUMBIA

Figure 2-  
TO ACCOMPANY REPORT BY: ERIK OSTENSOE  
OCT 1982 Date: July 1982



MINERAL RESOURCES BRANCH  
 ASSESSMENT REPORT  
**10850**

**ARMCO MINERAL EXPLORATION LTD.**  
**GEOLOGICAL SECTION 4+20W**  
 VERTICAL SECTION N 30°E THROUGH  
 DDH B-7 / 81-2 / A-2 / 82-2  
**CHU PROJECT**  
 VANCOUVER, BRITISH COLUMBIA

**Figure 3**  
 TO ACCOMPANY REPORT BY: ERIK OSTENSOE  
 Drawn by: OCT 1982 Date: July 1982