

87-490-16327

SUBMITTER	
PROPERTY	
AUG 18 1987	
M.F. #	
VANCOUVER, B.C.	

**ASSESSMENT REPORT**

**DIAMOND DRILLING, SURFACE GEOLOGICAL & GEOCHEMICAL WORK  
DARDANELLES AND MOTHERLODE CLAIMS**

**RECORD NUMBERS 2481, AND 2482  
NTS 82G/12E**

**FILMED**

**LOCATED AT EAST SIDE, WILD HORSE RIVER  
CRANBROOK AREA, FORT STEELE MINING DIVISION,  
SOUTHEASTERN BRITISH COLUMBIA**

**LATITUDE: 49° 44.5 N**

**LONGITUDE: 115° 29.5 W**

**FIELD WORK, DRILL LOGS SEPTEMBER - DECEMBER 1986  
SUPERVISED D.WOODCOCK, P.Eng., R. WRIGHT, B.Sc., W.D. GROVES, P.Eng.**

**REPORT DATE: AUGUST 5, 1987**

**by**

**W.D. GROVES, P.Eng.**

**ON BEHALF OF JUSTICE MINING CORPORATION  
413 - 475 HOWE STREET  
VANCOUVER, BRITISH COLUMBIA  
V6C 2B3**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**161327**

*WDG.*

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## ABSTRACT

In the period October-December 1986, Justice Mining Corp. undertook a \$105,548.00 , 1223.5 foot 10-hole diamond drill, plus surface work program on the Dardanelle claims of their Wild Horse River area claim block, in an attempt to develop drill tonnage around the Dardanelles Fault veins, which had been previously opened by surface stripping and two old adits, showing 2 gold quartz sulphide veins in shallowly S-dipping thrust faults, cutting Upper Creston Formation phyllites and arenites.

The author was accompanied by original property owner, Tony Fredlund, and drill geologist, Wright.

A Notice to Group was filed May 26, 1986; the grouping Motherlode (1), Dardanelles (1) A-1 (18), C-1 (18), Ramses (16), (the latter 3 contiguous staked properties), into the Dardanelles Group, totalling 54 units all on NTS 82G/12E.

A total of \$14,000 of the above work was filed, applied on A-1 (2 years), C-1 (1 year), Ramses (2 years), the rest \$91,548 going into Justice P.A.C. account. The Dardanelles claim is a reverted crown grant of about one unit in area.

The author, who has previously reported on the Dardanelles and A-1 claims in the area, accompanied by Mr. Torrey Fredlund, original owner of the Dardanelles claim, and Mr. Bob Wright, FGDC, drill geologist, flew to Cranbrook from Vancouver on the morning of Saturday, October 25, 1986, and that afternoon walked over the Dardanelles vein exposures, and discussed drill sites.

On the following day, the author and Mr. Wright, jointly sighted-in 9 drill hole locations, generally ranging along trace but up hill (south) of the vein exposure and adits. Wright works for Mr. Dick Woodcock, P.Eng., with whom Wright also conferred about the drill setup. Woodcock and Fredlund had previously been on the property. On Sunday, October 16, the drill arrived on site, and was positioned on the DDH 86-1A site. The author then returned to Vancouver, Monday, October 27, 1986, leaving Wright (responding to Woodcock) in charge of carrying out the program.

During Woodcock's later visit to the property, following a meeting between

Torrey Fredlund, Mr. Woodcock and the author, in Vancouver, October 30, 1986, Woodcock visited the property, discussed the project with Wright and carried out two soil profile projects, one in the vicinity of the adits on the Dardanelles, and a reference study on the A-1 claim in the vicinity of previously obtained gold soil anomalies on the A-1.

The actual drilling was carried out in the period October 24- December 10, 1986 (see time - footage log, Figure 3) with hole logging and core sampling carried out by Mr. Wright. Core samples were assayed by 10-gram fire assay by Acme Analytical Lab in Vancouver.

The drill period extended through freeze-up including a very cold spell of weather around November 10 ( $-40^{\circ}\text{F}$ ), and several feet of snowfall, which greatly complicated the logistics of the job. The principal problem was drill water. No creek was close enough for a gravity supply. At great expense, eventually \$ 15,862, first one skidder was hired to relay a water tank up the steep switchback road from Wendy's Creek. When it broke down, a second skidder was hired which completed the job. Skidder breakdowns occurred intermittently, which periodically stopped drilling.

Drill core recovery was generally good, though holes DDH 86-1A and DH 86-5 had to be discontinued due to drilling problems. Results were generally below expectations. Both upper adit and lower adit veins appeared to pinch down or off at further drill stepout holes. Gold tenures for quartz vein intersections (in holes 1A, 1, 2, 3, 5A, 6 (5,7,8 no assays) were in the .001 - .01 oz/ton range in Au.

Of the 7 upper adit samples taken along the adit by Wright, assayed .001, .569, .056, .007, .132, .211, .092, oz/ton Au, and the four lower (cabin) adit ones .205, .446, 4.930, .035 oz/ton Au. Another surface sample by Woodcock EA-1, ran .078 oz/ton Au - or substantially better, in average, than the drill hole assays.

The trace upper vein is projected across strike across three holes (300'): the lower one is less extensive.

The situation is thus one of a stacked - thrust fault hosted quartz lens structure, with steep cross-cleavage 'sprues' connecting the stack. Obviously, both continuity and structure of the vein system is less than that of the thrust fault vein injection system originally postulated.

This report is based on the author's observations, but more so on engineers Wright and Woodcock's logging, mapping and sampling, in whose results the author has complete confidence.

The above drill program implements the first \$ 100,000 stage of a total \$320,000 program recommended by the author in his September 30, 1986 report on the property area.

Previous reports on the property are to be found in 1898-1925 B.C. Ministry of Mines reports, Rice (G.S.C. (Memoir 207, 1937, Sookachoff's 1983 Assessment Work report on the N-contiguous A-1 claims, and by the author, plus results of a 95 ton bulk sample of the Vein Material from the adit as run by the Cominco smelter for Magnum Enterprises Ltd. in 1975, averaging 0.463 oz/ton Au and 88.02 %  $\text{SiO}_2$ .

## INTRODUCTION

### A. Property, Location, Access, Physiography

The Dardanelles Group (Dardanelles and Motherlode contiguous Crown Grants Nos. L10329 and L10330, respectively, the Motherlode being the more easterly of the two) lies mostly on a rather gently N-sloping high bench whose contours run locally almost east-west, overlooking the upper south rim of Wendy's Creek Valley and extending towards the north edge of the upper Shepherd's Creek bowl.

The lower edge of the claims extend down over a much steeper ( $45^0$ ) lower slope. The vein exposure and old workings are along the contour level of the breakover near the lower edge of the claims. The southerly portion of the Crown Grants cover the projected gentle southward dip of the structure.

The claim area is accessed by 3.8 km of fairly steep but well constructed road from the main forestry road up the east side of Wild Horse River, meeting the latter just east of the main road's crossing of Wendy's Creek. Grades are somewhat steep for a 2WD but a 4WD or truck would have no problem. The road was upgraded for haul road for the 1975 bulk sampling of the property. From the Wendy's Creek junction it is approximately 15 km along the main forestry road to Fort Steele and Highway 95.

The physiography of the area encompasses the east side of the Wild Horse river valley (river elevation about 3,800' (1,235 m), plus its major side creeks (Wendy's Creek, Shepherd's Gulch) with a more gentle terrace at the 6,000 foot (1,850 m) level on the Crown Grants, then rising to the fluted upper ice sculptured spires and knife edge ridges of Vertical Mountain (top elevation 7,250' (2,3143 m).

The Wild Horse River runs over gravel and bedrock: it has downcut through an earlier 100 m of older Tertiary river terrace. The main forestry road contours the top of this terrace. Main valley sides rise at about 25° average slope, which has been 'bowled' by the major side creeks. Fairly deep till and slope wash covers the lower slopes: at about 5,500' (1,690 m) elevation, bedrock exposures are encountered on the hillsides. At the Crown Grant elevation the increasingly steep slope "breaks over" onto another gently sloping terrace at about 6,000', probably another old glacial feature: on it fine sandy till coverage exists. The uppermost slopes of Vertical Mountain become valley-glacier fluted tops and cliffs, some almost vertical.

Second growth timber and overgrown logging slash cover the slopes: on the upper terrace, small jackpine grows on the drier and sandier areas. The area abounds in game: large, well used game trails of elk and deer contour the hillside. Apart from the certain areas of overgrown slash, the country is easy to traverse.

**B. STATUS OF PROPERTY**

**a) Reverted Crown Grants**

Lot Number

Motherlode L10330 (Dardanelles vein exposure)

Dardanelles L10329

**b) Located Ground**

Record No.

A1 3N x 6E 180	SW LCP 88906	1786(5)
RAMSES 4N x 4E 16U	SW LCP 04751	2400(6)
C1 3S x 6E 180	NW LCP 88907	1788(5)

The 2 lots and 3 staked claims were grouped by a Notice to Group filed May 26, 1986 as the Dardanelles Group.

Claims are, to the author's knowledge, in good standing and either optioned to, or staked by, Justice Mining or its joint venture companies.

Work was carried out on the Dardanelle's Crown Grant: the other staked properties of the Dardanelles Group.

**C. HISTORY**

At two locations about 1 km apart in a N-S direction, shallowly dipping quartz veins 'countour' the rather steep upper slopes of Vertical Mountain on the east side of the Wild Horse River in the area of upper Shepherd's Gulch, some 9 km (north) up river from where the Wild Horse joins the Kootenay River at Fort Steele,

*WDL*



B.C. (Cranbrook area). The more northerly exposure is covered by the Dardanelles Group, Crown Grants L10329 & L10330, which the author first visited on June 30, 1985 in the course of doing regional geology around the north-adjacent "A" located claim. (The more southerly Tit-for-Tat group, south of Shepherd's Gulch headwall, was visited October 26, 1986, p.m.). Details of workings and history of both Crown Grant groups are given in several old Minister of Mines Reports for 1898, 1935 (and other years), and by Rice of the G.S.C. (1937). The original 1896 mining attempt on the Dardanelles vein system was frustrated when, after dragging 30 tons of the vein down to an arrastra near the Wild Horse River, gold values in the ore failed to amalgamate. The Minister of Mines geologist (in his 1898 report) evidently deduced from this that there was no free gold in the ore, despite the attestations of the miners. However, there certainly was tetrahedrite (grey copper): copper-silver sulphantimonide, which in any appreciable quantity fouls mercury with antimony. Thus deprived of a cash-flow, the 1896 operation ceased. On the nearby Tit-for-Tat claim, a rather more entrepreneurial approach was tried: \$ 600,000 was reportedly raised whereupon mining ceased. A long period of relative quiescence followed on the claims. In 1975, a bulk sample of the Dardanelles quartz veins totalling 95.93 tons from the Dardanelles vein, was shipped to Cominco, Trail, B.C. Smelter sheets averaged .463 oz/ton Au, 1.807 oz/ton Ag, minor lead-zinc, copper and iron, and traces of antimony, arsenic and bismuth. The quartz ore ran 88.02%  $\text{SiO}_2$ , qualifying it as a quartz flux ore. The total sample consisted of 3 lots, varying from .214 oz/ton Au to .810 oz/ton Au, demonstrating that the vein system, like most vein systems, shows considerable local variation in grade, in a range conforming with old Minister of Mines reports of samples from various points in the workings. In the Dardanelles Crown Grants, a main vein, 1 m average on surface, has been traced for 1200 m along the hillside. Two inclined tunnels have been driven down-dip on the vein, one 67 m long, another 30 m long. These workings were sampled by Sookachoff (1983) and by Wright and Woodcock (this work.). What was once a well constructed cabin is located near the major adit, with annotations on the door frame readable back to 1933.

The geometry of the thrust fault-hosted Dardanelles vein system was what made the system, in the author's opinion, conducive to a considerable geological

tonnage potential of quartz ore. The present work showed both less extent and less grade than surface and adit indications indicated.

#### **D. REFERENCES**

1. Geological Survey of Canada, Memoir 207, Cranbrook Map Area, British Columbia, by H.M.A. Rice, No. 2435, 1937. (Regional Map, Appendix 1,2)
2. "Data Relating to the Tit-for-Tat, Lenz Lode and Celt A Claims, Fort Steele M.D., B.C.", Albury Resources Ltd. 1/86 by Kregosky (Fieldwork, 1982). Figure 5.
3. Cominco Smelter Sheets (3 sheets) 1975, Dardanelles 95 ton bulk sample, for Magnum Enterprises Ltd. (Assay Sheets, Item 4).
4. a) B.C. Minister of Mines Reports: 1998, p. 1026  
Tit-for-Tat, Dardanelles Claims.  
b) IBID, 1925, P. A229, Dardanelles Group.
5. Assessment Report on Geophysical and Geochemical Surveys on the "A" Mineral Claim, Ft. Steele Mining Division, Wallinger Creek, for Justice Mining Corporation by L. Sookachoff, P.Eng. Work from July 12 to December 19, 1983. Report dated December 19, 1983.
6. Assessment Report on follow-up Geochemical Surveys, "A" claim, Fort Steele Mining Division, B.C. NTS 82G/12E, for Justice Mining Corp., by Dr. W.D. Groves, P.Eng., 1986.

#### **E. SUMMARY OF WORK DONE**

The main activity on the property in fall 1986 was the 10-hole diamond drill program under the supervision of engineers Groves, Woodcock and Wright in the period October-December 1986. A total of 1223.4 feet were drilled. Total expenditures

on the project was \$105,548. (See Appendix I). Holes spanned east-west along the trace of the veins back from where they surfaced on the hillside.

Ancillary drill hole mapping, adit sampling and some soil profile geochem sampling by Woodcock is included in the above total figure. Logging of holes and submission of core and surface soil and adit samples was made by Wright.

## **I. TECHNICAL DATA AND INTERPRETATION**

### **A. Geology**

#### **1. Regional Geology**

Regional geology is treated by Rice (Ref. 1). The following attempts to summarize features of his report relevant to the general claim area.

The claim area is underlain by folded and faulted units of the Proterozoic Lower Purcell Series. The series totals some 37,000 feet (11,300 m) in thickness. The 3 middle units, Aldridge, Creston, and Kitchener, occur in the Shepherd's Gulch-Wendy's Creek area of the Wild Horse River Valley. The Aldridge mostly rusty weathering dark argillites; the Creston, grey-green phyllites, trending upward into white, reddish, green and purple thin-bedded quartzites, and the Kitchener, orthoquartzites to well bedded dolomites. The subunits are 1.6- 3,000 meters thick each, in transitional conformal sequence. The Dardanelles Fault vein cuts the Lower Creston, just above the predominantly phyllite-predominantly quartzite transition.

Regional structural trends in the area are a northward striking west-overturned anticlinorium on the mountainous west side of the Wild Horse River. Up the river itself, a major NE to

N20E/steep W fault with 5 feathers parallels the west side of the river. The fault system is west side-up, with a very large vertical displacement (west side-up an estimated 7,000 m) which has been excavated by the Wild Horse. On the east side of the valley, traversed by the author, Aldridge rusty weathering dark dense argillites are found near river elevation (approximately 1000 m). The transition green-grey fissile banded Lower Creston phyllites then occur. At about 2000 m elevation, the well bedded white and coloured quartzites of the mid-Creston are encountered.

Bedding attitudes strike generally northerly (N10°W to N30°E) with gentle to 45° westerly bed dips, up to the elevation of the workings. Exposures along the Wild Horse, Wendy's Creek, and switchback cuts on the access road to the workings provide the data base. Evidently, the route up the road to the workings trend up-section; despite the local westward dips steeper than the slope angle, the general attitude of the section must be relatively flat in the area.

Another easterly to northeasterly-striking major fault occurs in the Mause Creek area, 7 km south of the subject area, with a 3,000 m plus N-side down movement as mapped by Rice.

Rice also mentions the section in the general subject area is cut by numerous unmapped small displacement block faults 'stepping' the section: these are of great importance in contour-tracking a thrust fault locus: its trace can step across these faults and require location by prospecting or soil geochem.

Rice also notes that both major and minor thrust faults exist in the section. He postulates an initial Proterozoic (Windermere) age of open northerly regional folding. This was followed, in Jurassic-Tertiary time, by compression, causing

northerly-trending folding, becoming west overturning, with strikes locally turned by previous structures. During the same period, thrust faulting occurred, followed by major and minor tension block and normal faulting. The latest episodes of faulting were in Laramide time (time of the formation of the Rockies overthrusting). During this period, intrusion of stocks into major faults and the entry of magmatic solutions (ankerite dykes, quartz veins, etc.) into normal and thrust fault loci occurred.

Rice identifies the Dardanelles Fault as a thrust fault.

#### **Property Geology- Gold Quartz Veins, Dardanelles Crown Grant**

First observations by the author were made on June 30, 1985 in a traverse on foot up the access road angling southward from the road crossing of upper Wendy's Creek, up the switchback cuts in the Lower Creston phyllites, observation of the excavated mouth of the main adit of another adit 60 m east-contour, the 1975 stripping area, etc. on the Dardanelles group in the area of the old cabin. Figure 4 outlines workings areas, and shows proposed drill hole locations. On the Dardanelles Group, the vein is just post-fault in a flat lying (dips 20-25° south) south-overthrust fault cleanly cross cutting the NE/60 NW dipping medium bedded micaceous to limey arsenites of the Proterzoic Lower Crestion Formation, of Lower Windermere (Belt) age.

Bed turning in the uppersheet of the thrust indicates the direction of fault movement. The thrust fault nature of the vein setting was also noted by Rice of the G.S.C. (1937 Ref. 1). Four other parallel minor structures exist: in the hanging wall, a 1 m

carbonate-feldspar "ankerite" dyke is seen in the face of the workings carrying trace lead-zinc values. This is of the low grade ankeritic lead-zinc (low silver) mineralization type generally similar to the ankerite hosted mineralization on the Kootenay King property high on the west side of the Wild Horse River roughly opposite the Dardanelles vein. Also, three minor (15 cm) quartz veins in lesser breaks parallel to the thrust have been prospected some 20-30 m below the main vein below the cabin.

Thickness of the Dardanelles main vein varies from 1 m to 1.3 m in the main incline driven down the dip by the cabin. In the face (at 72 m ), old Ministry of Mines Reports indicate this is disrupted by a small fault (north side downstepping it from the exposures further south), and the vein locally pinches to 5 cm. In a large area stripped in 1975, 100m to the west, the vein is at least 1.5 m thick in a local slight dip flattening.

A similar shallowly S-dipping fault vein cross cutting the Creston Formation on the Tit-for-Tat Crown Grant is .3 to .5 m in thickness, of similar mineralogy to the Dardanelle showing. It is found at just slightly higher elevation contouring the steep hillside south of the head wall of Shepherd's Gulch.

As revealed by the drill program, the two thrust-fault hosted quartz veins were more lense-like injections fed by the same steeply dipping 'sprue' about .1 m wide up steep cross-bed cleavage. While potential for more layers exist vertically (downhill) the cabin's adit vein and the No. 2 adit (upper) adit vein do not seem to have as large a potential as thrust-fault accessed veins.

The quartz was injected up the sprue, and locally spread out into layers of the thrust fault slices. Grades also seemed to fall off away from the adits. See Figures 4 and drill hole sections and assays.

Woodcock's traverse NE downhill from the adit area showed high soil and bedrock gold ppb values, suggesting another vein intersection on the hillside about where the lower parallel minor thrust structures were noted by the author.

His comparison profiles from the A-1 claims' low ppb gold soil anomaly locations, shows that these values on the 'V-traverse' were indeed anomalous by comparison, and indicate the need for further work for the next lower member of the vein stack structure now postulated.

## 2. Diamond Drill Program

*The note is stated in Lamborne  
— will move elsewhere.*

Wright's Figure 4-11 set out the results of the 10-hole diamond drill program. Quartz intersections were obtained in certain holes: 10 - gram standard fire assays gave sub-economic indications. Appendix 1 shows the costs of the program. Appendix 4, the detailed drill logs produced by Wright, give the logging details from which the sections were built up.

## II. SOIL ORIENTATION SURVEY AT DARDANELLES

Twelve soil profiles were taken along a line that trends northeasterly down a slope of approximately  $25^{\circ}$ . This line of orientation sites started about 50 meters southeast of the cabin and presumably crossed the vein in its upper part. The sample profiles, along with some of the results, are shown on the accompanying sketches in which the horizontal scale is 1:250,000 (1 cm = 2.5 m) and the vertical scale is 1:10 (1 cm = 10 m).

In addition to this orientation profile, which includes ten stations, there are eleven profiles that were taken several kilometers down slope down the road. These were from pits dug around the scattered gold anomalies that were previously obtained from B horizon samples.

Perusal of the samples taken in the lower region will give some information on background values as follows:

1. Gold values are low (generally less than 6 ppb) with a few somewhat higher, but not anomalous values including 12 ppb in one surface sample, 11 ppb in one B horizon sample, and 18 ppb in one sample of parent material. Background values for gold include the following means:

Surface Samples	2.7 ppb
B Horizon	2.4 ppb
C Hoizon	1 ppb
Parent material	2.2 ppb + one value of 18 ppb which gives overall mean of 3.6 ppb.

2. The lead in the surface samples is consistently higher than in samples of the B or C or A horizons. The mean value of ten samples is 23.5 ppm plus one sample at 36 ppm giving an overall mean of 26.4 ppb.

3. Zinc values are very low, generally between 20 and 40 ppm, with no consistent enrichment in the surface sample. In many of the profiles, the parent material has slightly higher values than the other samples.

A perusal of the results from the profile across the vein gives the following conclusions;



1. Site No. 8 is off the line because of rock outcrops on the line. Presumably this sample site, and possibly also Site 7, were near bedrock. If such is the case then this could account for the anomalous Au values in parent material.
2. From the profiles it appears that some of the samples at Site 3, and for a short distance below, have anomalous gold values, whereas those above (Sites 0, 1 and 2) lack anomalous gold values. Thus, one could expect the vein to have been crossed just below Site 0.
3. In general, the Au results are somewhat erratic with no good trends. However, one could note that the B horizon is anomalous for approximately 25 meters below the presumed vein sub outcrop and is also anomalous at the off-line Station 8 which is in the vicinity of an outcrop. Stations 3, 4, and 5 are also slightly anomalous in the C horizon with values of 21, 84, and 174 ppb, respectively. The erratic Site 8 is also anomalous in the C horizon.
4. Values for the parent material are very erratic with values varying from 2 to 54 ppb both above and below the vein and with the two anomalous values mentioned for sites 7 and 8.
5. The values in the surface soils in the vicinity of the vein are also anomalous although low (18, 40, 48 ppb) in comparison to background values which are generally 1 or 2 ppb but include 12 ppb and 16 ppb at Stations 9 and 2, respectively.
6. Lead values in surface soils are considerably higher than values in the other horizons. These have a mean value of 65 ppm versus 26.4 in the lower area. There is no trend in relationship to the vein or the slope and whether these are indicative of the

mineralized zone or of a higher lithological background is not known. Certainly, the mean is higher than one normally gets for lead.

7. Zinc values are again low. However, in this case the highest zinc values occur in the surface soil and are distinctively higher than values in the underlying soil horizons. This contrasts to the lower sample area where the highest zinc values are generally in the parent material.

## CONCLUSIONS

Although this is in an area of trenches and undoubtedly fairly close to places where blasting has taken place with possible contamination of the surface areas, one can probably discount contamination effect because of the high values that also occur in the C horizon and in the parent material. If one can accept that all of these are legitimate values and not partly due to contamination of blasted vein material, then generalizations are as follows: (1) values are erratic, (2) the B horizon is probably best although not completely reliable, (3) the parent material might be very good if one could get close to bedrock; however, this is not practical in a soil sampling program, (4) lead in the surface soil might indicate the overall target area of the vein system, (5) the gold in the surface soil could be useful in pinpointing the target more sharply, and (6) sample spacing along lines that cross the structure should be about ten meters.

This orientation survey has also shown that with wide sample spacing obtained, the scattered anomalous values (e.g. 50 ppb) could be significant and that carrying on a small program of sampling of B-Horizon soils from pits surrounding these scattered high values is a reasonable way of determining whether they are part of a legitimate anomaly or merely spurious values.

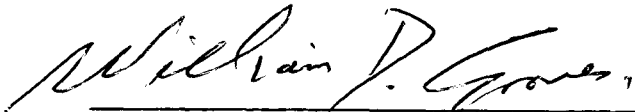
- Woodcock

The 1987 drill program indicates that both extent and grade of the two thrust-fault-hosted quartz veins (of the Cabin Adit and Upper Adit) fall off away from the adit areas.

The vein soil profile study of the V-traverse by Woodcock northeasterly down from the mid point between the two adits indicates the good possibility of another lower vein in the vein stock 20-30 m NE down slope from the road, i.e., in the station V5-V8 area. This should be pursued by bulldozer stripping.

- WDG

Respectfully submitted,

A handwritten signature in cursive script, reading "William D. Groves", is written over a horizontal line.

William D. Groves, Ph.D., P.Eng.

**APPENDIX I**  
**WORK COST STATMENT (WOODCOCK)**

# Consolidated Project Expense

ROWLINE

Prepared by PBC	Initiate Initiate
Approved by	Approved by

## Summary

### Exploration expenditures - Cranbrook Joint Venture

work + expenses were incurred on/ before Dec. 31, 1986 - per Walter Pasareglia

1	Wages - Ken Gaudy (60 x \$175)	10,500.00		
2	- Kelly Gaudy (25 x \$95)	2,375.00		
3	- Rob Hill (25 x \$50)	1,250.00		
4	- Bill Groves (3 x \$350)	10,500.00		
5	- Bob Wright (48 x \$250)	12,000.00		
6	- J.R. Woodcock (383 x \$10)	3,830.33	28,708.33	
7	Mgmt Fee (Overhead MarkUp			
8	- J.R. Woodcock	1,799.50	1,799.50	
9				
10				
11	Diamond Drilling		21,847.63	
12	Cat Work		15,255.50	11,700.00
13	Skidder - Water Support		15,862.50	
14	4 w Drive Rentals		3,091.59	
15	4 w Drive Repairs		8,154.3	
16	Equipment Rentals		28,235.0	
17	Shipping & Postage		519.55	
18	Transportation & Airfare		176,359	
19	Gas		234,748	
20	Diesel Fuel		18,373.7	
21	Meals & Groceries		4,342.78	
22	Supplies		17,225.4	
23	Motels & Accomodation		28,802.1	
24	Telephone		693.4	
25	Geochron & Assays		16,225.0	
26	Core Processing Facility		7,500.00	
27	Topographic Survey		5,500.00	105,548.84
28	Misc. expenses		5,000.00	109,109.34 F
29				
30				
31				
32	Per clients analysis of expenses			
33			1,595.14	

## APPENDIX II

### CERTIFICATE

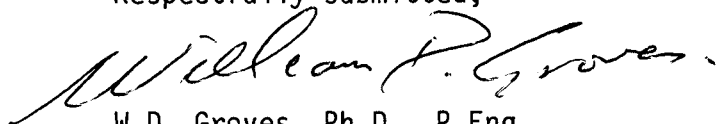
Phone 685-0167

I, William D. Groves, do hereby certify that:

1. I, William D. Groves, am a Consulting Engineer (geological) with an office at 200-675 West Hastings Street, Vancouver, British Columbia, V6B 4Z1.
2. I am a graduate of the University of British Columbia (B.A.Sc. in Geological Engineering, 1960). I am a graduate of the University of Alberta, B.Sc., in Chemical Engineering in 1962, and of the University of British Columbia with a Ph.D. in Chemical Engineering in 1971.
3. I am a registered Professional Engineer in the Province of British Columbia.
4. I have practised my profession since 1960.
5. I first visited the subject property area for a total of 6 days: 5 days on the "A" claim and one day on the "Dardanelle" Crown Grant. The visits occurred during the period June 28 to July 12, 1985 during which time I supervised geochemical grid sampling and geology on the "A" claim, and inspected the "Dardanelle" workings. Additional sources of information: Kregosky's 5-day study of the Tit-for-Tat group, Sookachoff's 1983 report on the "A" claim: Rice - GSC, 1937, Regional Geology, Minister of Mines Reports from 1898 - 1925 and general geological experience with quartz fault-vein systems. I visited the Dardanelles property again October 25-26, 1986 with Messrs. Torrey Fredlund and geologist Bob Wright with whom the 1986 drill hole sites were pegged, and discussed the project with geologist Woodcock October 30, 1986 in Vancouver. He later became Senior Geologist on the drill job. The author has complete confidence in both geologists, who did a highly competent job of carrying out the drill program and drafting the plans and sections of the results.
6. I have not received directly or indirectly, nor do I expect to receive any interest, direct or indirect, in the A1, C1, Ramses, or Dardanelle claims.

Dated the 5th day of Augsut 1987 at Vancouver, British Columbia.

Respectfully submitted,



W.D. Groves, Ph.D., P.Eng.  
20 June 1987.

### **APPENDIX III**

#### **ASSAY SHEETS**

- A. Acme File 86-4003  
Upper Adit (UA) and Lower Adit (LA) chip Samples (Woodcock)
- B. Acme File 86-3689 and 3691, 3527A, 3527, 3878, 3936  
Drill Hole Core Assays (See logs for number-position) for Cu, Pb, Zn, Ag, Au.
- C. Acme File No. 86-584. (3 pp). Surface, B-Horizon, C-Horizon and Parent (berock) sample sets, soil geochem profile V-traverse and B-traverse.

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE: 251-1011

DATE RECEIVED: DEC 17 1986

DATE REPORT MAILED: *Jan 5/87*

### ASSAY CERTIFICATE

SAMPLE TYPE: ROCK CHIPS AU# 10 GRAM REGULAR ASSAY

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

JUSTICE MINING

PROJECT-DARDANELLES FILE# 86-4003

PAGE 1

SAMPLE#	Cu %	Pb %	Zn %	Ag OZ/T	Au OZ/T
86-UA-1-1	.02	.26	.01	.16	.001
86-UA-1-2	.57	46.00	.02	5.15	.569
86-UA-1-3	.02	.45	.01	.15	.056
86-UA-2-1	.06	.28	.01	.26	.007
86-UA-2-2	.22	56.20	.01	7.04	.132
86-UA-2-3	.05	.47	.01	.39	.211
86-UA-REJ	.01	.64	.01	.11	.092
86-LA-1	.02	.08	.03	.17	.205
86-LA-2	.01	1.17	.01	.36	.446
86-LA-3	.10	11.93	.02	2.98	4.930
86-LA-4	.01	.10	.01	.11	.035
86-EA-1	.01	.11	.01	.20	.078



ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE: 251-1011

DATE RECEIVED: NOV 14 1986

DATE REPORT MAILED: 11/14/86

## ASSAY CERTIFICATE

SAMPLE TYPE: CORES AU# 10 GRAM REGULAR ASSAY

ASSAYER: *Deane Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

JUSTICE MINING

PROJECT-DARDANELLES FILE# 86-3689

PAGE 1

SAMPLE#	Cu %	Pb %	Zn %	Ag OZ/T	Au OZ/T
DDH DAR 86-2 1	-	-	-	.01	.001
DDH DAR 86-2 2	-	-	-	.01	.002
DDH DAR 86-2 3	.01	.02	.01	.03	.020
DDH DAR 86-2 4	-	-	-	.01	.008

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE: 251-1011

DATE RECEIVED: NOV 14 1986

DATE REPORT MAILED:

*Nov 20/86*

# ASSAY CERTIFICATE

SAMPLE TYPE: CORES AU# 10 GRAM REGULAR ASSAY

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

JUSTICE MINING

PROJECT-DARDANELLES FILE# 86-3691

PAGE 1

SAMPLE#	Cu %	Pb %	Zn %	Ag OZ/T	Au OZ/T
DDH DAR 86-3 1	-	-	-	.02	.001
DDH DAR 86-3 2	-	-	-	.04	.001
DDH DAR 86-3 3	.01	.02	.01	.01	.004
DDH DAR 86-3 4	-	-	-	.03	.002

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE: 251-1011

DATE RECEIVED: NOV 4 1986

DATE REPORT MAILED:

*Nov. 10/86*

### ASSAY CERTIFICATE

SAMPLE TYPE: CORES AU\*\* AND AG\*\* BY FIRE ASSAY

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

J.R. WOODCOCK CONS.

PROJECT-DARDEN FILE# 86-3527A

PAGE 1

SAMPLE#	Cu %	Pb %	Zn %	Ag** OZ/T	Au** OZ/T
DAR 86-1A-1	-	-	-	.01	.001
DAR 86-1A-2	-	-	-	.03	.003
DAR 86-1A-3	.01	.01	.01	.05	.008
DAR 86-1A-4	-	-	-	.03	.001
DAR 86-1-1	-	-	-	.04	.001
DAR 86-1-2	-	-	-	.02	.014
DAR 86-1-3	.02	.72	.01	.41	.103
DAR 86-1-4	-	-	-	.03	.008

ICME ANALYTICAL LABORATORIES LTD.  
852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: NOV 4 1986

DATE REPORT MAILED:

*Nov 10/86*

## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: ROCK CHIPS AU\*\* ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

J.R. WOODCOCK CONS.

PROJECT-DARDEN FILE# 86-3527

PAGE 1

SAMPLE#	Ag FFM	Au** FFB
W86-341R	.2	1
W86-342R	.1	1
W86-343R	.5	3
W86-344R	.2	2

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE: 251-1011

DATE RECEIVED: DEC 2 1986

DATE REPORT MAILED: *Dec 8/86*

### ASSAY CERTIFICATE

1.00 GRAM SAMPLE IS DIGESTED WITH 50ML OF 3-1-2 OF HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR.  
AND IS DILUTED TO 100ML WITH WATER. DETECTION FOR BASE METAL IS .01%.  
- SAMPLE TYPE: CORES AU: 10 GRAM REGULAR ASSAY

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

JUSTICE MINING

PROJECT-DARDANELLES FILE#86-3878

PAGE 1

SAMPLE#	Cu %	Pb %	Zn %	Ag OZ/T	Au OZ/T
DAR-86-5A-1	-	-	-	.04	.005
DAR-86-5A-2	-	-	-	.01	.001
DAR-86-5A-3	.01	.01	.01	.01	.003
DAR-86-5A-4	-	-	-	.01	.001
DAR-86-5A-5	.01	.01	.01	.01	.028

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED DEC 9 1986

852 E. HASTINGS, VANCOUVER B.C.

PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE REPORTS MAILED

*Dec 18/86*

# ASSAY CERTIFICATE

SAMPLE TYPE : CORE - CRUSHED AND PULVERIZED TO -100 MESH.

ASSAYER *D. Toye* DEAN TOYE . CERTIFIED B.C. ASSAYER

JUSTICE MINING PROJECT DARDANELLES FILE# 86-3936

PAGE# 1

SAMPLE	Cu %	Pb %	Zn %	Ag oz/t	Au oz/t
DAR-86-6-1	-	-	-	.01	.002
DAR-86-6-2	.01	.01	.01	.01	.009
DAR-86-6-3	-	-	-	.01	.001

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE: 251-1011

DATE RECEIVED: NOV 14 1986

DATE REPORT MAILED: 11/20/86

## ASSAY CERTIFICATE

SAMPLE TYPE: CORES AU: 10 GRAM REGULAR ASSAY

ASSAYER: *Deane Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

JUSTICE MINING

PROJECT-DARDANELLES FILE# 86-3689

PAGE 1

SAMPLE#	Cu %	Pb %	Zn %	Ag OZ/T	Au OZ/T
DDH DAR 86-2 1	-	-	-	.01	.001
DDH DAR 86-2 2	-	-	-	.01	.002
DDH DAR 86-2 3	.01	.02	.01	.03	.020
DDH DAR 86-2 4	-	-	-	.01	.008

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: NOV 6 1986

DATE REPORT MAILED:

*Nov. 14/86...*

# GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: SOILS -BOMESH AU\*\* ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

ASSAYER: *W. J. Woodcock* DEAN TOYE. CERTIFIED B.C. ASSAYER.

J.R. WOODCOCK FILE # 86-3584

PAGE 1

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au** PPB
B-26-2 SURFACE	18	43	45	.1	10	2	5
B-26-2 B HORIZON	17	12	41	.2	11	2	1
B-26-2 C HORIZON	14	11	41	.1	12	2	1
B-26-2 PARENT	29	9	41	.1	15	2	1
B-26-3 SURFACE	17	17	43	.1	8	2	12
B-26-3 B HORIZON	15	16	39	.2	3	2	1
B-26-3 C HORIZON	22	14	47	.1	7	3	1
B-26-3 PARENT	22	10	40	.1	5	2	1
B-14 SURFACE	20	20	37	.1	5	2	2
B-14 B HORIZON	17	12	52	.1	3	2	1
B-14 C HORIZON	17	13	52	.2	6	2	3
B-14 PARENT	37	17	48	.1	13	4	6
B-14-1 SURFACE	25	22	39	.2	9	2	1
B-14-1 B HORIZON	15	16	28	.3	3	2	1
B-14-1 C HORIZON	19	15	25	.3	6	2	1
B-14-1 PARENT	32	12	45	.2	13	2	4
B-14-2 SURFACE	23	31	43	.1	11	2	1
B-14-2 B HORIZON	22	17	50	.1	9	2	11
B-14-2 C HORIZON	32	18	48	.2	12	2	1
B-14-2 PARENT	34	18	51	.1	13	2	1
B-14-3 SURFACE	14	24	40	.1	4	2	3
B-14-3 B HORIZON	14	11	23	.3	5	2	1
B-14-3 C HORIZON	14	12	48	.1	2	2	1
B-14-3 PARENT	34	20	51	.1	14	2	1
B-14-4 SURFACE	15	21	39	.2	5	2	1
B-14-4 B HORIZON	17	15	35	.2	9	2	2
B-14-4 C HORIZON	19	16	37	.3	8	2	1
B-14-4 PARENT	19	18	41	.1	10	2	1
B-14-5 SURFACE	32	18	45	.1	10	2	1
B-14-5 B HORIZON	26	18	40	.2	10	2	1
B-14-5 C HORIZON	15	19	41	.2	7	2	2
B-14-5 PARENT	26	18	50	.2	12	5	3
B-14-6 SURFACE	22	23	36	.1	4	2	1
B-14-6 B HORIZON	26	25	43	.3	5	2	1
B-14-6 C HORIZON	27	21	53	.1	10	2	2
B-14-6 PARENT	30	16	51	.1	9	2	1
STD C/AU-S	59	39	136	7.1	39	17	52



SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au** PPB
B-14-7 SURFACE	25	16	46	.2	6	2	3
B-14-7 B HORIZON	20	18	42	.1	4	2	5
B-14-7 C HORIZON	12	13	36	.2	6	2	1
B-14-7 PARENT	24	15	45	.1	10	2	3
B-14-8 SURFACE	15	56	55	.1	5	2	2
B-14-8 B HORIZON	16	11	37	.1	6	2	1
B-14-8 C HORIZON	24	12	48	.1	7	2	1
B-14-8 PARENT	30	15	48	.1	9	2	18
V9 SURFACE	8	59	42	.1	2	2	12
V9 B HORIZON	12	18	36	.2	2	2	1
V9 C HORIZON	15	22	44	.3	2	2	40
V9 PARENT	18	14	31	.1	2	2	39
V8 SURFACE	11	95	59	.1	2	2	2
V8 B HORIZON	17	40	47	.1	2	3	109
V8 C HORIZON	19	35	37	.1	2	2	235
V8 PARENT	21	23	37	.1	2	4	210
V7 SURFACE	10	90	73	.1	2	2	1
V7 B HORIZON	15	22	49	.1	3	2	9
V7 C HORIZON	10	17	27	.1	2	2	12
V7 PARENT	18	20	41	.1	2	4	161
V6 SURFACE	29	16	44	.1	10	2	1
V6 B HORIZON	20	10	49	.1	10	2	2
V6 C HORIZON	39	13	39	.2	12	2	4
V6 PARENT	33	12	38	.1	9	2	2
V5 SURFACE	11	74	98	.1	3	3	1
V5 B HORIZON	19	19	21	.1	2	2	530
V5 C HORIZON	14	15	19	.2	3	2	174
V5 PARENT	10	18	19	.1	3	4	54
V4 SURFACE	8	98	42	.4	2	2	48
V4 B HORIZON	10	21	25	.1	2	2	31
V4 C HORIZON	11	16	24	.1	2	2	84
V4 PARENT	11	13	24	.1	2	3	49
V3 SURFACE	7	51	34	.1	2	3	40
V3 B HORIZON	8	18	27	.1	2	2	220
V3 C HORIZON	9	12	24	.1	2	2	21
V3 PARENT	11	6	20	.1	2	2	2
STD C/AU-S	59	38	137	7.2	40	15	48

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au** PPB
V2 SURFACE	14	82	75	.2	5	3	16
19 V2 B HORIZON	12	9	21	.2	3	3	5
V2 C HORIZON	9	10	21	.1	5	2	4
V2 PARENT	11	5	19	.1	4	5	3
V1 SURFACE	12	101	45	.2	7	4	1
20 V1 B HORIZON	8	8	22	.1	4	2	7
V1 C HORIZON	9	4	19	.1	2	2	12
V1 PARENT	8	7	19	.1	2	2	46
V00 SURFACE	14	65	28	.1	6	3	18
21 V00 B HORIZON	7	11	20	.2	3	2	4
V00 C HORIZON	7	7	20	.1	2	2	9
V00 PARENT	10	8	23	.1	3	3	7
STD C/AU-S	59	37	129	7.1	39	16	52

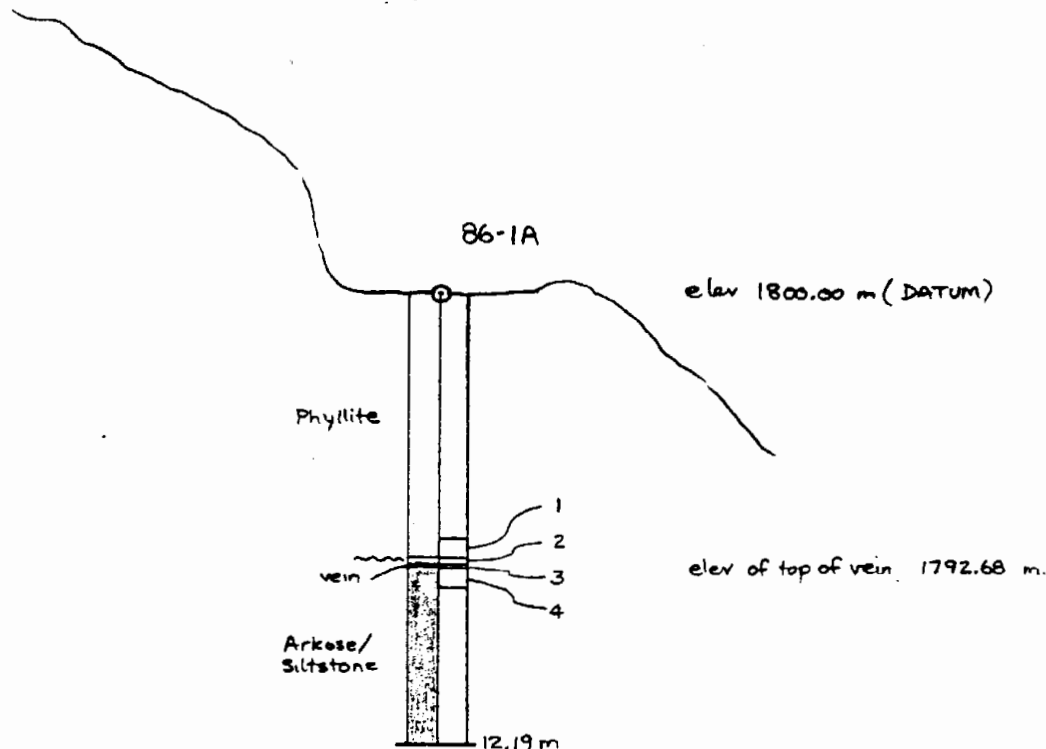
# APPENDIX 4.

86-1A

## DRILL LOGS - WRIGHT.

86-1, to 86-8 PLUS 861-A,  
865-A. (TOTAL 10 HOLES.)

Scale 1:200



### SAMPLING:

No.	Rock Type	From	To	Δ
DAR86-1A-1	Hangingwall Phyllites	6.64 m	7.14 m	0.5 m
DAR86-1A-2	Fault gouge	7.14	7.32	0.18 m
DAR86-1A-3	Quartz vein	7.32	7.40	0.08 m (3 in)
DAR86-1A-4	Footwall Arkoses	7.40	7.90	0.5 m

Oct 30, 1986  
RL Wright

J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY DardanellesHOLE No. 86-1ACLAIM No. Motherlode C.G.BEARING —COORDINATES 1000 N , 1000 EDIP -90°ELEVATION 1800 m (Datum)LENGTH 12.19 m. (40 ft)DIAMETER NA (casing 7ft).DRILLED BY Adams DrillingSTARTED: Oct 28, 1986 10AMTERMINATED: Oct 29, 1986 4pmLOGGED BY: RLWright

METERS FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY				
FROM M.	TO M.				NO.	FROM	TO	Au	Ag	Cu	Pb	Zn
0	7.14	50	<del>40</del> 35	GREEN PHYLLITIC MUDSTONE Medium to dark grey-green, rhythmically bedded phyllitic mudstone with disseminated 1mm brown limonitic spots after ankerite(?). Pronounced S <sub>1</sub> cleavage parallel to S <sub>0</sub> bedding throughout. Irregular 1-2mm thick quartz-siderite stringers throughout.	86-1A-1	6.64	7.14					
7.14	7.32	50	—	FAULT Fractured mudstones grade downward into intensely fractured shear zone with angular fragments of mudstone and quartz in a beige clay fault gouge matrix.	86-1A-2	7.14	7.32					
7.32	7.40	100	—	QUARTZ VEIN Milky white quartz vein with irregular fractures coated with limonite. No visible sulphides. Both upper and lower contacts appear to be sharp, and are subhorizontal, clearly cutting the inclined cleavage of underlying rocks.	86-1A-3	7.32	7.40					

J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY Dardanelles

HOLE No. **86-1A**

DRILLED BY \_\_\_\_\_

CLAIM No. \_\_\_\_\_

**BEARING** \_\_\_\_\_

STARTED: \_\_\_\_\_

DIP \_\_\_\_\_

TERMINATED: - \_\_\_\_\_

LOGGED BY: \_\_\_\_\_

**COORDINATES** \_\_\_\_\_

LENGTH \_\_\_\_\_

DIAMETER 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600 625 650 675 700 725 750 775 800 825 850 875 900 925 950 975 1000

ELEVATION \_\_\_\_\_

[illegible]

DDH 86-1A

LOCATION: 10 m West of stripped area, upper adit level.

GRID: N/S:

E/W:

COLLAR ELEVATION: 1800 m datum.

DIP:  $-90^{\circ}$

HOR. COMP: 0 ft (0 m.)

AZIMUTH: —

VERT COMP: 40 ft (12.19 m)

LENGTH: 40 ft (12.19 m)

RECOVERY: 73% overall.

CORE SIZE: NW casing 7 ft, NQ core

DATE COMMENCED Oct 28, 1986 10AM

DATE COMPLETED. Oct 29, 1986 4PM

Log:

0 - 23'5" GREEN PHYLLITIC MUDSTONE

(0 - 7.14 m) Medium to dark grey-green, rhythmically bedded phyllitic mudstone with disseminated 1 mm. brown limonitic spots after pyrite(?). Dip angle of cleavage:  $40^{\circ}$ . Pronounced S<sub>1</sub> cleavage parallel to S<sub>0</sub> bedding throughout. Irregular 1-2 mm. thick quartz siderite stringers throughout.

23'5" - 24'0" FAULT

(7.14 - 7.32 m) Fractured mudstones grade downward into intensely fractured shear zone with angular fragments of mudstone and quartz in a beige clay matrix with putty-like consistency

24'0" - 24'3" QUARTZ VEIN

(7.32 - 7.40 m) Typical white quartz vein with limonite-coated

fractures; no visible sulphides. Both upper and lower contacts appear to be sharp, and are subhorizontal, clearly cutting the inclined cleavage of underlying rocks.

24'3" - 40'0" RED PHYLLITIC ARKOSE  
(7.90 - 12.19 m)

Brick red layered phyllitic arkosic sediment with fine-grained beige mudstone layers 1-5 mm thick alternating with fine sandy material. Limonite stained fractures. White, unaltered, siliceous sections up to 0.5 mm thick, appear to be of the same lithology

40'0" End of hole.  
(12.19 m)

### SAMPLES

#	FROM	TO	Δ	<u>Rock type.</u>
DAR86-1A-1	21.75 ft 6.64 m.	23.42 ft. 7.14 m.	1.67 ft 0.50 m.	Hanging wall phyllites
- 2	23.42 ft 7.14 m.	24.00 ft 7.32 m.	0.58 ft 0.18 m.	Fault gouge.
- 3	24.00 ft 7.32 m.	24.25 ft 7.40 m.	0.25 ft 0.08 m.	Quartz vein
- 4	24.25 ft 7.40 m.	25.92 ft. 7.90 m.	1.67 ft. 0.50 m.	Footwall arkoses.

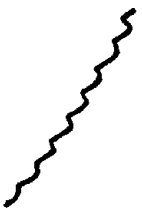
# RECOVERIES

<u>From (ft)</u>	<u>To (ft)</u>	<u><math>\Delta</math> (ft)</u>	<u>Recovered (ft)</u>	<u>%</u>
0	3.5	3.5	0.33 ft	9%
3.5	7.0	3.5	0.83'	24%
7.0	9.0	2.0	1.08	54%
9.0	11.5	2.5	0.58	23%
11.5	16.5	5.0	4.00	80%
16.5	22.0	5.5 <sub>22</sub>	4.67	85% <sub>52%</sub>
22.0	25.5	3.5	2.67	76% ←
25.5	31.5	6.0	6.67	111%
31.5	40.0	8.5	8.33 ft.	98
40.0 EOH		<u>40.0</u>	<u>29.16</u>	<u>73%</u>

BOXES :

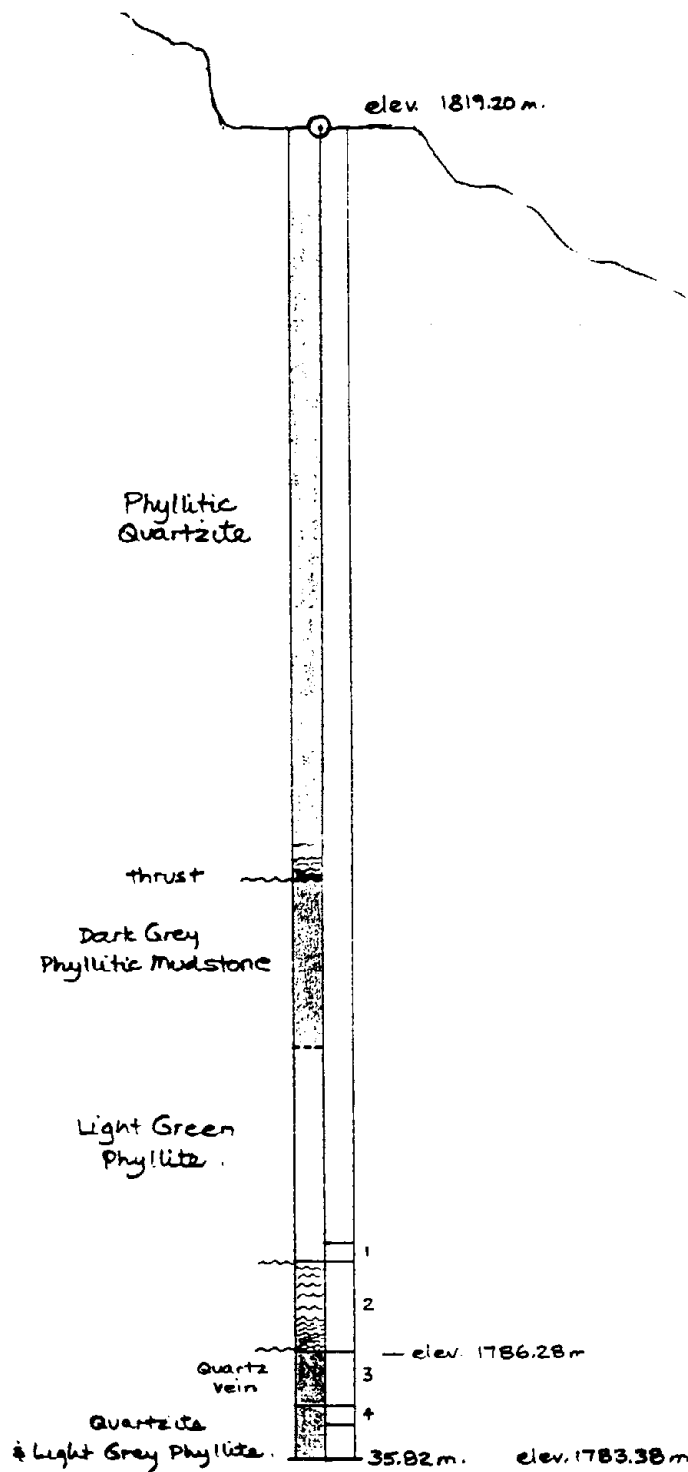
1	0 to 27'9" (8.46m) ← Intersection
2	27'9" to 40'0" (12.19 m) End of Hole.

## DIP ANGLES:

12'	35°		26' : 53°
18'	35°		29' : 68°
22'	35°		35' : 58°
			40' : 50°



86-1



Scale 1:200

SAMPLING:

No:	Rock Type	From	To	Δ
DAR86-1-1	Hanging wall	29.98 m	30.48 m	0.5 m
DAR86-1-2	Fault zone	30.48	32.92	2.44 m
DAR86-1-3	Quartz vein	32.92	34.39	1.47 m (4'10")
DAR86-1-4	Footwall	34.39	34.89	0.5 m

Nov 1, 1986  
RL Wright

J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY DARDANELLESCLAIM No. Motherlode CG.COORDINATES 9+87 N10+64.5EELEVATION 1819.20 m.HOLE No. 86-1BEARING —DIP -90°LENGTH 35.82 m (117.5 ft)DIAMETER NQDRILLED BY Adams DrillingSTARTED: Oct 31, 1986TERMINATED: Nov. 1, 1986LOGGED BY: R.L. Wright

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
0	1.2			CASING.							
0	19.27										
0	<del>20.27</del>	72	20-30	PHYLLITIC QUARTZITE							
				Chaotic unit consisting of brick red, layered akosic phyllite interbanded with dark blackish green layered greywacke with fine-grained beige tuffaceous(?) wispy layers and reddish quartzite layers with green phyllitic partings							
				- Oxidized down to 14 m. depth.							
				- Brecciated in places suggesting incipient faulting							
				Quartzite content varies from 0 to 80% over 1 m. intervals.							
19.27											
<del>20.27</del>	20.27	79	0-10	FAULT ZONE							
				Rock becomes progressively more sheared and broken downward and veined by reddish brown ankeritic carbonate. Fault surface marked by 5 cm of beige clay gouge, with sharp contact against underlying unit							
				Attitude of shearing indicates horizontal thrust.							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-1Logged By R.L. WrightDate Nov. 2, 1986Sheet No. 2 of 3

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO	Au	Ag	Cu	Pb/Zn
20.27	30.48	75		DARK GREY PHYLLITIC MUDSTONE  Massive, dark grey phyllite with poorly defined lenticular bedding with occasional brown ankeritic (?) veinlets and 1-5% disseminated dark brown earthy spots after ankerite throughout. At 25.30 m. bedding becomes better defined as light green phyllite with thin chloritic layers parallel to the phyllitic parting.	1	29.98	30.48				
30.48	32.92	10		FAULT  Heavy fracturing and core loss due to fault; 8 cm of white clay gouge preserved adjacent to underlying unit.	2	30.48	32.92				
32.92	34.39	85		QUARTZ VEIN (1.47 m)  White quartz with irregular crackled fracture pattern, fractures being lined with limonite. Irregular patches of galena and a dark grey sulphosalt occur throughout, constituting less than 1% of the vein. Concentrations of galena are at 33.86 and 34.36 m. At 33.53, patches of yellow green earthy material, possibly stibiconite or other AsSb oxidation product	3	32.92	34.39				



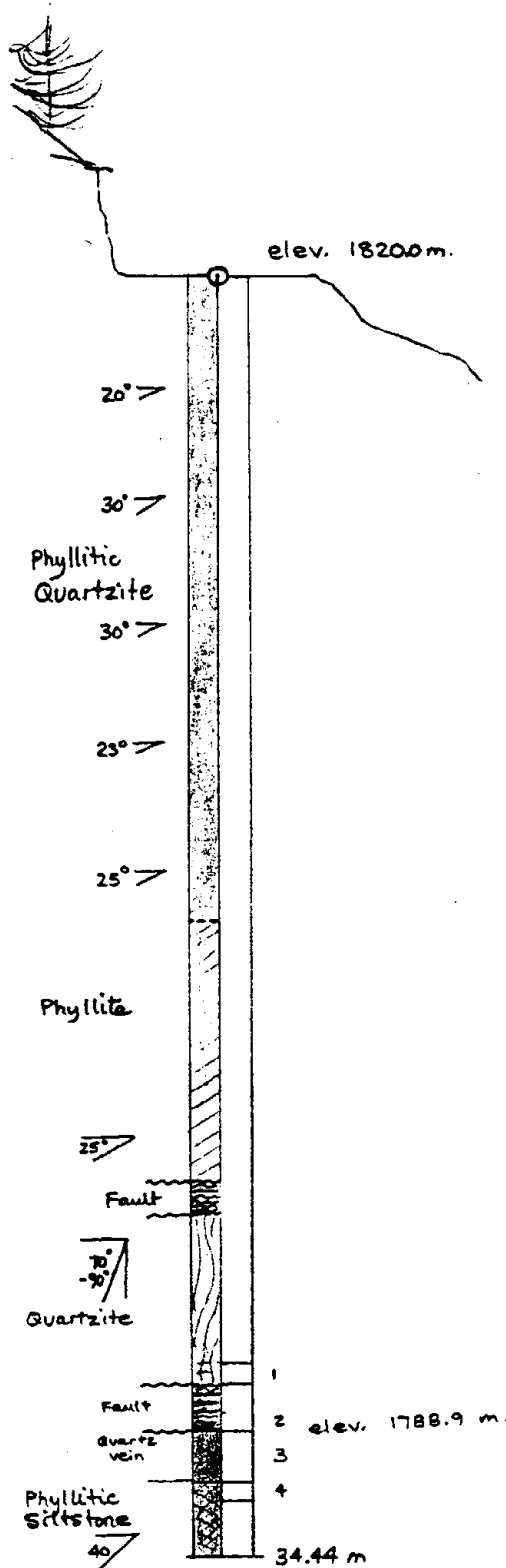
# DDH 86-1 Recoveries

<u>From</u>	<u>To</u>	<u>Δ</u>	<u>Rec</u>	<u>%</u>
0	4	4	0	0
4	11	7	3.7	53
11	18	7	2.75	39
18	24	6	5.7	95
24	28	4	4.25	106
28	33	5	3.7	74
33	38	5	4	80
38	41.5	3.5	3.25	93
41.5	47.5	6	3.7	62
47.5	51	3.5	3.9	111
51	53.5	2.5	2.25	90
53.5	57.5	4	3.4	85
57.5	67	9.5	7.5	79
67	70	3	3	100
70	76	6	4.5	75
76	83	7	3.5	50
83	87	4	3	75
87	95	8	8	100
95	103	8	4	50
103	109	6	2	33 ←
109	111	2	1.7	85 ←
111	117.5	6.5	6.2	95 ←
117.5	EoH.	<u>117.5</u>	<u>84</u>	<u>71 %</u>

DDH 86-1

<u>BOXES</u>	<u>( F+ ) FROM ( M )</u>		<u>( F+ ) TO ( M )</u>	
1	0	0	28.4	8.66
2	28.4	8.66	50.5	15.39
3	50.5	15.39	69.4	21.15
4	69.4	21.15	92.0	28.04
5	92.0	28.04	117	35.66
6	117	35.66	117.5	35.81

86-2

SAMPLING :

No.	Rock Type	From(m)	To(m)	$\Delta$
DAR 86-2-1	Hangingwall	29.37	29.87	0.50 m
DAR 86-2-2	Fault zone	29.87	31.10	1.23 m
DAR 86-2-3	Quartz vein	31.10	32.51	1.41 m
DAR 86-2-4	Footwall	32.51	33.01	0.50 m

shipped Nov 11/86 ✓

Nov. 10, 1986  
RLWright

J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY DARDANELLESCLAIM No. Motherlode C.G.COORDINATES 9+81 N10+35 EELEVATION 1820 metres.HOLE No. 86-2BEARING —DIP -90°LENGTH 34.44 m. (113 feet)DIAMETER NQDRILLED BY Adam DrillingSTARTED: Nov. 4, 1986 3 AMTERMINATED: Nov. 9, 1986 9 PMLOGGED BY: RL Wright

FROM		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
	TO				NO.	FROM	TO				
0	17.40	85	20-30	<p>PHYLLITIC QUARTZITE</p> <p>Alternating 0.5-1cm bands of light green vfg phyllite and dark green chloritic phyllite with scattered 1-50 cm quartzite layers constituting about 25% of the core. Phyllitic layering is relatively constant at 20 to 30° with rare disrupted zones suggesting incipient faulting</p> <p>Quartzite layers contain dark brown stringers and patches of earthy limonitic material after ankerite(?)</p> <p>7.62 m. - Crosscutting earthy limonite veinlets, 1 to 10 mm wide, after carbonate</p> <p>13.55 m - Crosscutting milky white quartz veins averaging 1 cm wide</p> <p>15.85 m - ditto</p> <p>The last quartzite layer occurs at 17.40 metres, but the phyllite continues</p>							
17.40	25.00	52	20-30	<p>PHYLLITE</p> <p>Pale grey green phyllite as above, but with less common quartzite intervals</p>							



## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-2Logged By R.L. WightDate Nov. 10, 1986Sheet No. 2 of 3

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO	Am	Ag	Cu	Pb/Zn
				21.95 - becomes well layered at 25° with alternating light and dark grey mudstone and stringers of dissemin. ankerite (?) along bedding							
				23.55 - 2 cm milky quartz stringer							
				24.38 - Fault with minor clay gouge. Layering in phyllite abruptly changes to 70-90°, is subparallel to core axis							
				<del>25.00 to 25.30</del>							
25.00	25.30	60	-	FAULT Clay fault gouge with rock chips of phyllite and quartzite.							
25.30	29.87	43	90	QUARTZITE Light grey quartzite with brown ankeritic spots and stringers, with intervals of phyllite. S <sub>0</sub> , S <sub>1</sub> parallel to core. Core broken and rubble.	1	29.37	29.87				
29.87	<del>30.76</del> 31.06	33	-	SAND Light grey sand seam with some phyllite fragments.	2	29.87	31.10				
<del>30.76</del> 31.06	31.10	10	-	FAULT Beige clay fault gouge with quartz and wallrock							



DDH 86-2

Recoveries

<u>From</u>	<u>To</u>	<u>Δ</u>	<u>Recovered</u>	<u>%</u>
0	12	12	5.75	48
12	17	5	5.1	102
17	22	5	5.1	102
22	27	5	5.4	108
27	32	5	5.1	102
32	37	5	4.6	92
37	41	5	4.6	92
41	42	1	0.8	80
42	43	1	0.5	50
43	48	5	4.1	82
48	49	1	0.6	60
49	53	4	3.7	92.5
53	55.5	2.5	2.25	90
55.5	58	2.5	1.75	70
58	63	5	3.5	70
63	68	5	3.2	64
68	73	5	1.4	28
73	77	4	1.4	35
77	79	2	1.25	63
79	83	4	2.3	58
83	88	5	4.5	90
88	93	5	1	20
93	98	5	1	20
98	101	3	1	33
101	102	1	0	0
102	107	5	5	100
107	109	2	1.3	65
109	113	4	3.6	90
113 EOH.			<u>79.8</u>	<u>71 %</u>

DDH 86-2

	<u>(Ft) FROM (M)</u>		<u>(Ft) TO (M)</u>	
BOXES:				
1	0	0	24	7.32
2	24	7.32	42.75	13.03
3	42.75	13.03	62	18.90
4	62	18.90	88	26.82
5	88	26.82	113	34.44

S

86-3

elev. 1819 m.

Scale 1:200

N

Phyllitic  
Quartzite

Quartzite

Phyllite

Dike

Phyllitic  
Quartzite

Gtz

Phyllite

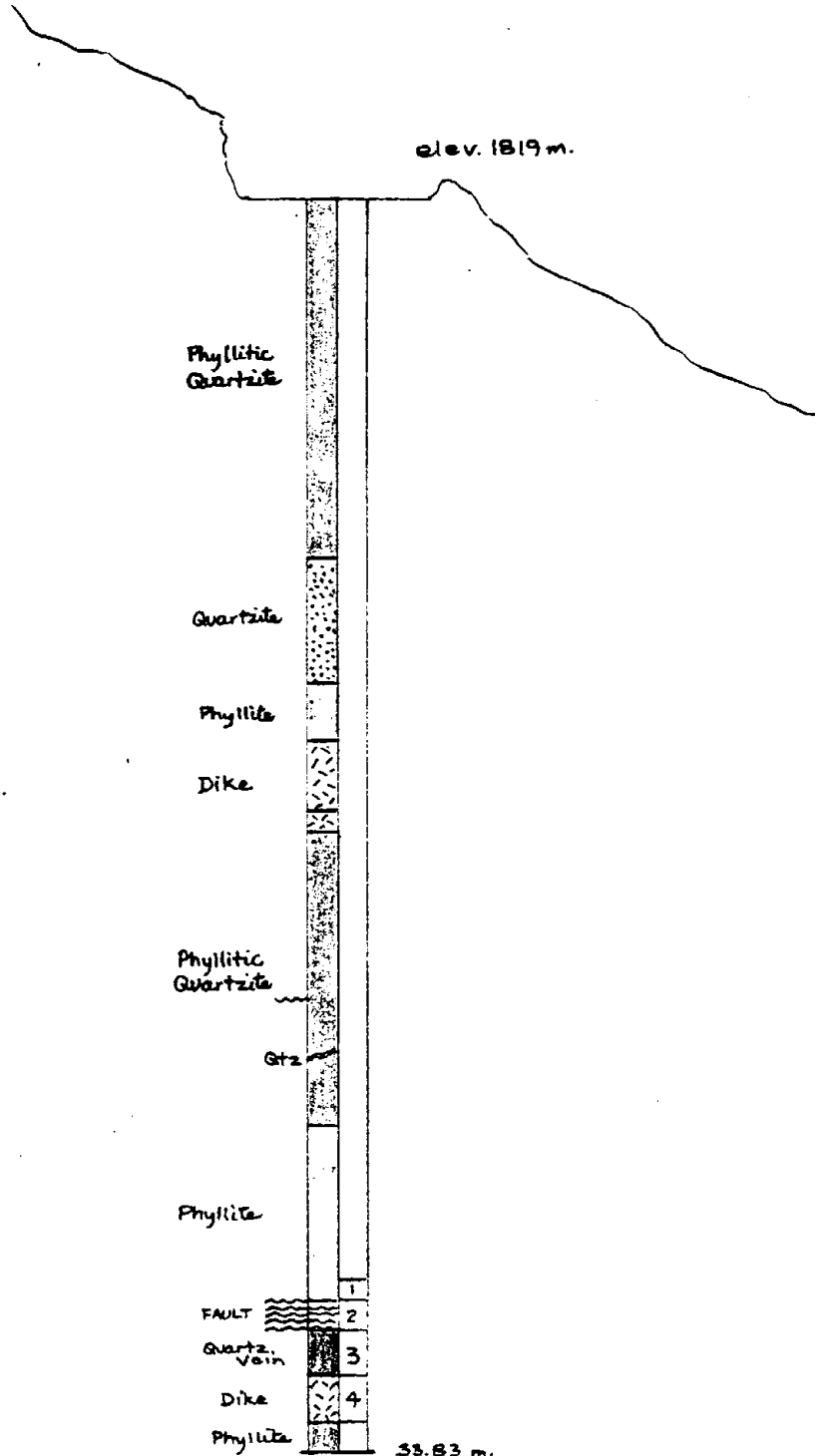
FAULT

Quartz  
Vein

Dike

Phyllite

33.83 m.



J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY DARDANELLESCLAIM No. Motherlode C.G.COORDINATES 9+66 N10+08.5 EELEVATION 1819 m.HOLE No. 86-3BEARING —DIP -90°LENGTH 33.83 m. (111 ft)DIAMETER NQ (4' casing)DRILLED BY Adam DrillingSTARTED: Nov 10, 1986 11 PMTERMINATED: Nov 12, 1986 6 PMLOGGED BY: RL Wright

FROM		%	DELTA	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
	TO				NO.	FROM	TO				
0	9.75	85	20°-30°	PHYLLITIC QUARTZITE Dark green chloritic laminated phyllites interbanded with mottled white/green quartzite. Brown ankerite (?) spots and stringers throughout. Graded bedding in phyllites indicate tops up. 4.72-5.33 brown highly foliated (sheared?) phyllite with clay gouge seams i.e. Fault.							
9.75	13.11	51		QUARTZITE Massive, beige coloured m.g. quartzite with thin interbeds of light green to beige phyllite. Broken core.							
13.11	14.63	16		PHYLLITE Pale grey green phyllite similar to that assoc. with phyllitic quartzites above - very poor recovery.							
14.63	16.46	30		ALTERED DIKE (?) Brown chalky, limonitic rock, with small 2-3 mm angular fragments of similar material and limonitic stringers. May be altered equivalent of underlying unit as contact appears gradational.							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-3Logged By RLWrightDate Nov 13, 1986Sheet No. 2 of 3

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY				
FROM	TO				NO.	FROM	TO	Au	Ag	Cu Pb	Zn	
16.46	17.07	96		ANDESITIC DIKE (?)  Massive dark grey green chloritic volcanic rock with large up to 5 cm rounded quartz inclusions. May be a massive sedimentary unit								
17.07	24.99	90		PHYLLITIC QUARTZITE  Dark green chloritic alternating quartzite and phyllite similar to unit at top of hole. 21.64 : minor shear, rock altered and bleached. 23.16 : crosscutting 2cm quartz vein with ankeritic stringers, ie remobilized quartzite.								
24.99	29.72	43		PHYLLITE  Light grey phyllite with brown ankerite(?) spots. Progressively more sheared and broken downwards. Fault gouge at 28.65 m.	1	29.22	29.72					
29.72	30.48			FAULT ZONE  Mixture of sheared, broken phyllite and white to beige clay fault gouge	2	29.72	30.48					
30.48	31.78			QUARTZ VEIN  Typical milky quartz vein with limonite-stained irregular fractures. Several small	3	30.48	31.78					

**J. R. WOODCOCK CONSULTANTS LTD.**

Hole No.

Logged By

Date \_\_\_\_\_

Sheet No. 3 of 3

[illegible]



DDH 86-3Recoveries:

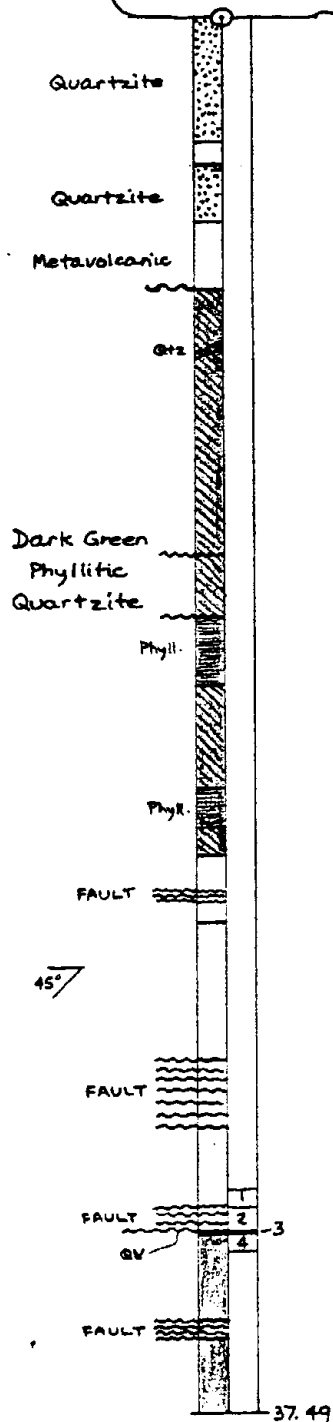
<u>From</u>	<u>To</u>	<u>Δ</u>	<u>Recovered</u>	<u>%</u>
0	4	4	1.5	38
4	6	2	1.4	70
6	9	3	1.5	50
9	13	4	4	100
13	17	4	3.8	95
17	22	5	5	100
22	23	1	1	100
23	24.5	1.5	1.25	83
24.5	28.5	4	4	100
28.5	33	4.5	4.5	100
33	35	2	1.3	65
35	39.5	4.5	1.3	29
39.5	43	3.5	2.5	71
43	48	5	0.8	16
48	53	5	1.5	30
53	58	5	4.8	96
58	63	5	4.9	98
63	68	5	5.1	102
68	73	5	4.6	92
73	78	5	5.6	112
78	83	5	1.75	35
83	87	4	2	50
87	92	5	1	20
92	98	6	3.5	58
98				

DDH 86-3

	No	(Ft) FROM	(M)	(Ft) TO	(M)
BOXES :	1	0	0	22	6.71
	2	22	6.71	45	13.72
	3	45	13.72	68.25	20.80
	4	68.25	20.80	95	28.96
	5	95	28.96	111	33.83

86-4

Scale 1:200



SAMPLING:

No.	Rock Type	From	To	Δ
DAR 86-4-1	Hangingwall	31.50	32.00	0.50 m
DAR 86-4-2	Fault zone	32.00	32.67	0.67 m
DAR 86-4-3	Quartz vein	32.67	32.70	0.03 m
DAR 86-4-4	Footwall	32.70	33.20	0.50 m

Nov 15, 1986  
RLWright

J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY DARDANELESCLAIM No. MOTHERLODE C.G.COORDINATES 9+47 N9+85.5 EELEVATION 1818 mHOLE No. 86-4BEARING —DIP -90°LENGTH 37.49 m (123 ft.)DIAMETER NQDRILLED BY Adam DrillingSTARTED: Nov. 13, 1986TERMINATED: Nov. 14, 1986LOGGED BY: R.L. Wright

		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
0	3.35	20		QUARTZITE Massive, beige coloured quartzite with thin layers of pale green phyllite							
3.35	3.96	57		ALTERED DIKE (?) VOLCANIC (?) Medium brown massive limonitic rock with 1-2mm angular fragments of fig phyllitic material.							
3.96	5.49	50		QUARTZITE Same unit as above							
5.49	7.32	86		METABASALT Dark green chloritic mg. rock with 1-2cm angular fragments, now largely altered to brown limonitic material Base of unit is a brown clay fault gouge at least 3 cm thick							
7.32	22.56	68		PHYLLITIC QUARTZITE Typical dark green chloritic unit consisting of alternating quartzite bands, averaging							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-4Logged By R.L. WrightDate Nov 15, 1986Sheet No. 2 of 3

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
				1 cm thick, and dark green quartzite / siltstone with phyllitic partings Crosscutting 1 cm quartz veinlet at 8.84 m. 14.48 m - minor fault 16.15 m - minor fault 16.15 - 17.98 Phyllitic interval, no quartzite. 20.73 - 21.79 Phyllitic interval, no quartzite <del>16.15</del>							
22.56	23.47	90 <del>88</del>		LIGHT GREY SILTSTONE Light grey bleached siltstone, highly fractured adjacent to fault.							
23.47	23.77	90		FAULT Clay fault gouge with siltstone chips							
23.77	24.38	96	50	LIGHT GREY SILTSTONE, as above.							
24.38	28.04	90	45	GREEN SILTSTONE / PHYLLITE Medium grey green laminated siltstone and mudstone with disseminated ankerite spots, with slight concentration along bedding planes. 25.60 - 26.06 bedding well pronounced in light grey brown siltstone							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-4Logged By R.L. WrightDate Nov 15, 1986Sheet No. 3 of 3

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY				
FROM	TO				NO.	FROM	TO	Au	Ag	Cu Pb	Zn	
28.04	29.87	12		FAULT Clay fault gouge with chips of green siltstone. Toward base becomes brownish, with chips of light brown phyllite from underlying unit								
29.87	32.67	45		PHYLLITIC SILTSTONE Light green/brown silvery phyllite, very muddy and broken due to faulting 32.00 - 32.67 clay fault gouge.	1	31.50	32.00 (0.5m)					
					2	32.00	32.67 (0.67m)					
32.67	32.70	?		QUARTZ Silicified brown siltstone with abundant limonite along fractures. Probably equivalent to quartz vein intersected in previous holes.	3	32.67	32.70 (3cm)					
32.70	37.49	90		PHYLLITIC SILTSTONE Pale green silvery phyllite with brown ankerite spots along bedding planes. 35.05 - 35.51 clay fault gouge 32.70 - 35.05 broken phyllite with clay seams.	4	32.70	33.20 (0.5m)					
37.49				End of Hole.								

# DDH 86-4 - Recoveries

<u>From (ft)</u>	<u>To (ft)</u>	<u>Δ (ft)</u>	<u>Recovered (ft)</u>	<u>%</u>	
0	7	7	0	0	CASING.
7	9.5	2.5	1.2	48	
9.5	13	3.5	2	57	
13	18	5	2.5	50	
18	23	5	4.3	86	
23	28	5	3.75	75	
28	31	3	3	100	
31	33	2	2	100	
33	38	5	4.75	95	
38	43	5	5.25	105	
43	47.5	4.5	3	67	FAULT
47.5	53	5.5	4.75	86	
53	58	5	1.25	25	FAULT
58	63	5	1.5	30	
63	68	5	2.5	50	
68	73	5	2.25	45	
73	78	5	4.5	90	FAULT
78	83	5	4.8	96	
83	88	5	4.7	94	
88	93	5	3.6	72	
93	98	5	0.6	12	FAULT
98	103	5	2.5	50	
103	107.2	4.2	1.5	36	FAULT
107.2	112	4.8	4.6	96	← INTERSECTION
112	116.5	4.5	2.8	62	FAULT
116.5	121.5	5	5.3	106	
121.5	123	1.5	1.5	100	
123	EOH				
TOTAL			80.4	65 %	

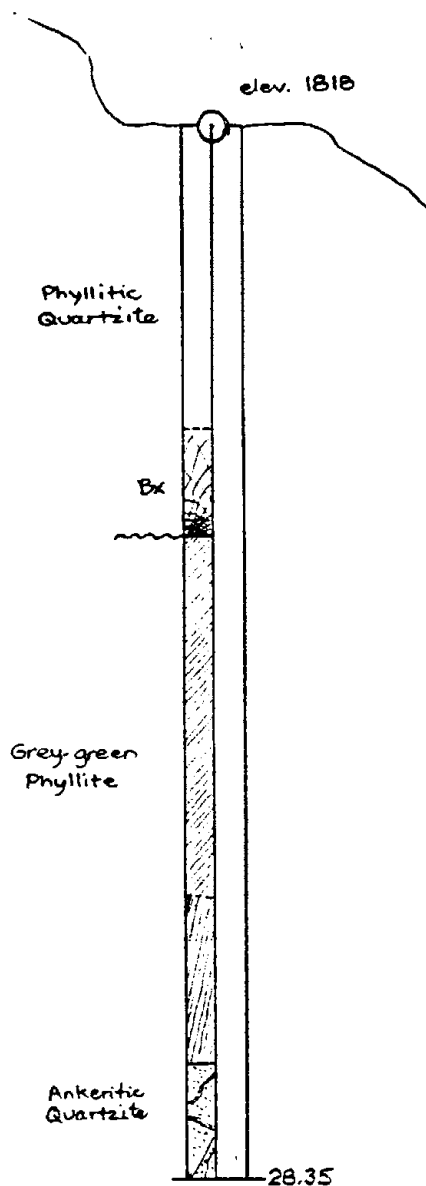
DDH 86-4

<u>BOXES :</u>	<u>No</u>	<u>(Ft) From (M)</u>		<u>(Ft) To (M)</u>	
	1	0	0	29.5	9.00
	2	29.5	9.00	46.9	14.30
	3	46.9	14.30	76.1	23.20
	4	76.1	23.20	100	30.50
	5	100	30.50	123	37.49



86-5

Scale 1:200



Nov 19/1986  
R L Wright

J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY DARDANELLESHOLE No. 86-5CLAIM No. Motherlode CG.BEARING —COORDINATES 9 + 97 NDIP -9010 + 93 ELENGTH 28.35 m (93 ft).ELEVATION 1818 m.DIAMETER NADRILLED BY Adam DrillingSTARTED: Nov. 15, 1986TERMINATED: Nov 18, 1986LOGGED BY: RL Wright

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
0	11.13	52	30-40	<p>PHYLLITIC QUARTZITE</p> <p>Typical unit with light green tuffaceous(?) layers interbedded with dark green chloritic mudstones/siltstones/quartzites and grey quartzites containing dissem. ankerite spots</p> <ul style="list-style-type: none"> <li>- At 8.23 m., unit becomes chaotic, with patches of various lithologies mixed together in a breccia with chloritic streaks parallel to core axis</li> <li>- Core very broken but no clear faults</li> <li>- 6.10 - 6.40 m : several milky white 1-2cm barren crosscutting quartz veins</li> <li>- Sharp contact (fault?) with undisturbed unit beneath.</li> </ul>							
11.13	25.30	56°	35-45	<p>GREY GREEN PHYLLITES</p> <p>Thinly laminated chloritic mudstone/siltstone with foliation parallel to bedding at 35-45°. Much regrinding and foreign material, mostly quartzite, from above.</p> <p>Rare quartzite layers similar to overlying unit.</p>							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-5Logged By R.L. WrightDate Nov. 19, 1986Sheet No. 2 of 2

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
				At 20.75 m. bedding abruptly changes from 45° to 60-65°. Lithology changes to a massive green phyllitic siltstone with brown ankerite spots.							
				23.77 to 25.30 : light grey phyllite, texturally similar to green phyllites.							
25.30	28.35	79	-	BROWN ANKERITIC QUARTZITE							
				Chaotic unit composed mostly of a massive grey silicified quartzite with abundant dissem. ankerite, giving the rock an arkosic appearance.							
				25.90 - 26.20 : green quartzite with crosscutting 3cm milky white quartz vein							
				Unit cut by many quartz ankerite/siderite veins at various angles. The contacts of veins with the silicified quartzite are diffuse							
				Hole ends in a 3 cm quartz vein at 75-80° with large ragged siderite grains comprising 30% of the vein							
28.35				End of Hole : lost due to stuck rods.							

DDH 86-5

Recoveries

<u>Box</u>	<u>From</u>	<u>To</u>	<u>Δ</u>	<u>Rec(ft)</u>	<u>%</u>	<u>Remarks</u>
1	0	7	7	0	0	CASING
	7	13	6	1.5	25	
	13	15	2	0.5	25	
	15	18	3	2.5	83	
	18	22	4	3.75	94	
	22	25	3	2.25	75	
	25	28	3	2.6	87	
1	28	31.5	3.5	3.4	97	
2	31.5	35.5	4	1.75	44	
	35.5	37	1.5	0.9	60	
	37	42	5	1.1	22	
	42	43	1	0.75	75	
	43	48	5	2.4	48	
	48	50	2	1.9	95	
	50	53	3	2.5	83	
2	53	55.5	2.5	1.4	56	
3	55.5	57	1.5	0.6	40	
	57	58	1	0.75	75	
	58	63	5	4.2	84	
	63	68	5	4.25	85	
	68	73	5	2.7	54	
	73	78	5	1.4	28	
3	78	83	5	2	40	
4	83	86	3	1.25	42	
	86	88(?)	2	3.3	165 ?	Block wrong
	88	93	5	3.3	66	
			93	53.0	57%	

J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY DARDANELLES  
 CLAIM NO. MOTHERLODE C.G.  
 COORDINATES 10 + 34 m N  
11 + 16.5 m E  
 ELEVATION 1808.4 m

HOLE No. 86-6  
 BEARING —  
 DIP -90°  
 LENGTH 40.23 m (132 ft)  
 DIAMETER NA

DRILLED BY Adams Drilling  
 STARTED: Nov 29, 1986  
 TERMINATED: Dec 4, 1986  
 LOGGED BY: RL Wright

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
0	2.70	40	60	DARK GREEN PHYLLITIC QUARTZITE Alternating pink quartzite, dark green siltstone and light green phyllitic mudstone.							
2.70	7.00	93	60	DARK GREEN PHYLLITE  4.60 - 5.70 Light Grey-green Phyllite - bleached equivalent of dark green unit - due to minor fault = 4.88 to 5.18 core fractured at - 80 to -90° 6.70 - 7.00 Light Grey-green Phyllite, as above							
7.00	8.25	42	60	DARK GREEN PHYLLITIC QUARTZITE, as above							
8.25	10.00	93	-	MASSIVE QUARTZITE Brown and green quartzite with ankerite spots and stringers, and minor amounts of dark green siltstone and pale green phyllite							
10.00	12.20	90	60	DARK GREEN PHYLLITIC QUARTZITE, as above							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-6Logged By R.L.WRIGHTDate Dec 3, 1986Sheet No. 2 of 4

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
12.20	22.80	93	60	LIGHT GREY GREEN PHYLLITE							
			-65	- Similar to phyllite units above, with streaks of earthy limonitic material throughout.							
				- 13.10 to 14.00 brecciated, with green siltstone fragments.							
				- contains numerous carbonate (ankerite?) veins from 0.5 to 3 cm. thick, with earthy brown limonite borders.							
				- entire unit strongly sheared and broken but no clear faults evident.							
				- several siliceous siltstone intervals, but predominantly soft light grey green phyllite.							
				- 19.80 to 20.0 Fault: beige clay fault gouge with angular rock fragments							
				- pronounced bedding parallel to foliation							
22.80	28.35	68	50-60	LIMONITIC PALE GREEN PHYLLITE							
				Above unit becomes more limonitic with patches and streaks of soft earthy brown limonite constituting 10 to 100% of the core, making a very muddy, incompetent unit (Hole mudded in at this point and crown of bit sheared off - succeeded in drilling through and continuing hole).							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-6Logged By R.L.WRIGHTDate Dec 5, 1986Sheet No. 3 of 4

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
				At around 23.0 m a narrow quartz vein, at least 3 cm thick, was intersected, as indicated by a single lump of quartz preserved in core.							
				Layering is disrupted, and broken by limonitic seams throughout. Core soft and crumbly.							
				26.80 - 27.55 : Carbonate vein (ankerite?) with later quartz veinlets near the contacts. Whisps of brown earthy limonite throughout							
				At 27.9 and 28.0 m. narrow white quartz veinlets cut foliation at right angle.							
28.35	28.50	35	-	ALTERED GRANITIC DIKE							
				Pale green coarse-grained granitic dike identical to that above lower adit and in 86-5A. May be much wider than indicated as core recovery was only 35% and neither contact was preserved.							
28.50	31.00	52	60	LIMONITIC PALE GREEN PHYLLITE							
				- Sheared phyllite / limonite unit continues							
				- 30.70 m = A 10 cm clay fault gouge seam.							

**J. R. WOODCOCK CONSULTANTS LTD.**

Hole No. 86-6

Logged By R.L.WRIGHT

Date Dec 5, 1986

Sheet No. 4 of 4

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
31.00	33.62	78	60	LIGHT GREEN PHYLLITIC QUARTZITE Interbedded quartzite and pale green phyllite, similar to unit at base of 86-5A. Considerable disruption of layering as $S_1$ not parallel to $S_0$ = $S_0$ continues at about $60^\circ$ while $S_1$ is shallower.	1	33.12	33.62				
33.62	33.91	100	-	QUARTZ VEIN (0.29 m) Milky white quartz vein with patches of brown limonite-stained quartz and streaks of pale green phyllite. No visible sulphides	2	33.62	33.91				
33.91	38.10	67	50	CALCAREOUS LIMONITIC PHYLLITE Unit similar to previous phyllite unit but with about 50% beige massive carbonate (ankerite?), apparently not a vein but part of the sediment (Could be a sheared, recrystallized vein) Cut by 2 narrow 1-2 cm milky white quartz veinlets with limonitic borders.	3	33.91	34.41				
38.10	40.23	89	60	QUARTZITE Medium purplish grey quartzite with thin							
40.23	END OF HOLE			pale green phyllite intervals.							



115	120	5	3.2	64
120	123	3	1.75	58
123	125	2	1.2	60
125	127	2	1.7	85
127	132	5	4.5	90
132	End of Hole.	<u>          </u>	<u>          </u>	<u>          </u>
		132	102.1	77

# DDH 86-6 : Recoveries

<u>Box</u>	<u>Metres</u>	<u>From (Ft)</u>	<u>To (Ft)</u>	<u>Δ</u>	<u>Rec</u>	<u>%</u>	<u>REMARKS</u>
1	0	0	6	6	1.8	30	) Casing
		6	7	1	0.75	75	
		7	12	5	4.5	90	
		12	17	5	4.4	88	
		17	22	5	5	100	
<u>1</u> 2	7.00	22	27	5	2.1	42	) Fault
		27	32	5	4.7	93	
		32	32.5	0.5	0.6	120	
		32.5	38	5.5	4.5	82	
		38	43	5	5.2	104	
<u>2</u> 3	13.40	43	47.5	4.5	3.9	87	
		47.5	52	4.5	4	89	
		52	53	1	1	100	
		53	58	5	5.25	105	
		58	63	5	4.5	90	
<u>3</u> 4	19.20	63	68	5	4.4	88	
		68	73	5	4.7	94	
		73	79	6	1.75	29	
		79	82	3	2.5	83	
		82	83	1	1	100	
		83	85	2	1.25	63	Bit broken
<u>4</u> 5	26.35	85	88	3	2.5	83	
		88	93	5	4.6	92	
		93	98	5	1.75	35	
		98	102	4	2.9	73	
		102	107	5	2.5	50	
<u>5</u> 6	33.50	107	110.5	3.5	4.1	117	
		110.5	115	4.5	3.6	80	

Quartz Vein

J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY DARDANELLESHOLE No. 86-5ACLAIM No. MOTHERLODE CG.BEARING —COORDINATES 10+95.5E / 9+98NDIP -90°3 metres east of 86-5LENGTH 64.31 m (211 ft)DIAMETER NQELEVATION 1817.9 m.

Redrill of DDH 86-5 which was lost at 93 ft (28.35 m)

DRILLED BY Adams DrillingSTARTED: Nov. 20 / 86TERMINATED: Nov. 26 / 86.LOGGED BY: R.L. Wright

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
0	5.49	26	30-40	PHYLLITIC QUARTZITE Similar to previous intersections; very blocky and broken.							
5.49	7.62	50	35	DARK GREEN PHYLLITES Similar to previous intersections							
7.62	10.36	35	—	FAULT ZONE Chaotic mixed unit with pale green phyllite and brown quartzite; almost breccia. Lower 0.6 m is fault gouge.							
10.36	22.25	70	40-50	DARK GREEN PHYLLITE As above. - 12.00 - 12.20 Dark green clay fault gouge - Rare rusty brown ankeritic layers - In last 3m.: several 1cm quartzite seams							
22.25	25.30	82	—	BROWN ANKERITIC QUARTZITE Same as unit in 86-5; massive, with numerous crosscutting quartz-siderite/ankerite veinlets 1-3 cm across.							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-5ALogged By R.L. WRIGHTDate Nov 26 1986Sheet No. 2 of 5

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
25.30	34.14	80	50-60	GREY PHYLLITES Alternating grey mudstone and brown ankeritic mudstone layers 26.80 - 27.10 : several quartzite layers Below 29 metres, foliation steepens gradually to 75°, then 90° at 31 m. Continues parallel to core axis to base of unit.							
34.14	34.20	100	—	FAULT : sandy clay gouge.							
34.20	37.80	80	45-50	DARK GREY PHYLLITE Similar to unit above fault but foliation at 45-50° angle Dark grey and brown banded mudstone/ siltstone 35.81 - 35.94 Quartz vein parallel to foliation Up to 2 m. below fault, has brown altered appearance grading into grey unit.							
37.80	39.72	95	45	LIGHT GREY PHYLLITE Similar to above unit but light grey-beige in colour, with streaks of brown ankeritic material.							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-5ALogged By RL WRIGHTDate Nov 27 1986Sheet No. 3 of 5

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
39.72	41.15	100	—	ALTERED DIKE Pale grey green coarse-grained granitic dike/sill, heavily saussuritized and veined by numerous 1 cm quartz veins at various angles. Top contact of dike is a 5cm quartz vein Bottom contact is gradational over 3-4cm	1	39.72	41.15				
41.15	42.25	100	45	LIGHT GREY PHYLLITE Similar to previous phyllite unit, with some pale green phyllite.	2	41.15	42.25				
42.25	44.80	93	—	QUARTZ VEIN (2.55m) Typical fractured quartz vein with limonite staining. No visible sulphides. Top contact is sharp, with no evidence of shearing or silicification of wallrock. Lower contact marked by core loss but no evidence of fault.	3	42.25	44.80				
44.80	50.10	95	45-50	PURPLE PHYLLITIC QUARTZITE Massive, mottled purple, white and cream quartzite with minor interbeds of pale green phyllite. Good bedding preserved in phyllitic intervals.	4	44.80	45.30				

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-SALogged By RLWRIGHTDate Nov 27, 1986Sheet No. 4 of 5

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
				47.7 - 48.75 becomes more phyllitic, and also brecciated, with blocks of quartzite floating in phyllite matrix							
				From 48.75 to base of unit, interbedded phyllite and quartzite with dip of foliation 80°							
				Base of unit fractured, with considerable core loss = Fault.							
50.10	54.40	100	35	ALTERED DIKE							
				Fine-grained grey and brown dike rock with upper portion containing 10% white quartz-filled amygdules, and lower portion containing angular to rounded fragments of white quartz and green carbonate							
				Identical to dike rock in DDH 86-3 at 16.46 m. and 31.78 m.							
				Foliation in matrix of dike at 35°							
54.40	55.32	100	-	QUARTZ VEIN (0.92m)	5	54.40	55.32				
				Fractured, limonite stained quartz typical of other intersections. Trace of grey sulphides. Upper contact parallel to foliation in overlying dike at 35°							
				54.70 - 54.80 numerous inclusions of brown earthy limonite and pale green phyllite.							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-5ALogged By RLWrightDate Nov 27, 1986Sheet No. 5 of 5

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
				54.90 - 55.20 Flesh-coloured quartzite, probably a sedimentary bed included in the vein. Contains irregular quartz veinlets with traces of grey sulphides Lower contact is sharp, against distorted phyllite layering.							
55.32	63.30	100		LIGHT GREY GREEN PHYLLITES Light grey-green and brown banded phyllites with white quartzite stringers parallel to foliation. Ptygmatic folding along length of core over 0.5 m. Foliation in phyllites dips in same direction as in dike above, but at 50-75°, averaging 60°. Layering chaotic, disrupted throughout, possibly the core of a recumbent fold. Overall about 15% quartzite layers in mudstone/siltstone banded turbidites							
63.30	64.31	100	SS	DARK GREEN PHYLLITIC QUARTZITE Above unit grades into typical phyllitic quartzite seen in other holes.							
64.31				END OF HOLE							

DDH-86-5A : RECOVERIES

<u>BOX</u>	<u>Metres</u>	<u>From (Ft)</u>	<u>To (Ft)</u>	<u>Δ</u>	<u>Rec.</u>	<u>%</u>	<u>REMARKS</u>
1	0	0	19	19	5	26	Casing
		19	23	4	1	25	
		23	26	3	2.9	97	
		26	31.5	5.5	2.75	50	
		31.5	37	5.5	1.2	22	
<u>1</u>	12.80	37	42	5	2.15	43	
2		42	43	1	0.5	50	
		43	47	4	2.75	69	
		47	52	5	3.2	64	
		52	56(?)	4	5.0	125	
<u>2</u>	19.20	56	62	6	4	67	
3		62	66	4	4.1	103	
		66	68	2	1.75	88	
		68	73	5	1.75	35	
		73	78	5	3.2	64	
<u>3</u>	25.90	78	83	5	5	100	
4		83	88	5	4	80	
		88	92	4	3.2	80	
		92	97	5	5.2	104	
		97	100.5	3.5	2.9	83	
<u>4</u>	31.40	100.5	105	4.5	3.75	83	
5		105	111	6	3	50	
		111	116	5	3	60	
		116	119	3	3.1	103	
		119	123	4	3.75	94	
<u>5</u>	38.30	123	124	1	1	100	
6		124					



# 86-5A RECOVERIES (cont'd)

<u>Box</u>	<u>Metres</u>	<u>From (Ft)</u>	<u>To (Ft)</u>	<u>Δ</u>	<u>Rec</u>	<u>%</u>
<u>5</u>	<u>38.30</u>					
6		124	129	5	4.67	93
		129	133	4	4	100
		133	138	5	5.1	102
		138	143	5	5	100
<u>6</u>	<u>43.80</u>	143	145	2	1.75	88
7		145	147	2	1.6	80
		147	151	4	4	100
		151	155	4	3.25	81
		155	160	5	4.9	98
<u>7</u>	<u>49.07</u>	160	161	1	1.5	150
8		161	165	4	3.5	88
		165	170	5	4.3	86
		170	174.5	4.5	5.1	113
<u>8</u>		174.5	179.5	5	5.25	105
<u>9</u>	<u>54.70</u>	179.5	184.5	5	5.25	105
		184.5	189.5	5	4.0	80
		189.5	193	3.5	3.9	103
<u>9</u>		193	198	5	5.1	102
10		198	202	4	3.7	93
	<u>60.35</u>	202	203	1	1	100
		203	205	2	2.3	115
		205	209	4	3.6	90
		209	211	2	1.5	75
<u>10</u>		211	EOH			
EOH.	<u>64.31</u>			<u>211</u>	<u>163.4</u>	<u>77%</u>

J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY DARDANELLESHOLE No. 86-7CLAIM No. MOTHERLODE CG.BEARING —DIP -90°COORDINATES 10 + 20 NLENGTH 40.54 m (133 ft)11 + 43 EDIAMETER NQELEVATION 1805.0 m.DRILLED BY Adams DrillingSTARTED: Dec 4, 1986TERMINATED: Dec 7, 1986LOGGED BY: R. L. WRIGHT

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
0	10.00	52	50	DARK GREEN PHYLLITIC QUARTZITE Similar to previous units but with layers of black argillite included 5.80 - 7.00 : Pale green (bleached) phyllite, some contorted layering. Core recovery about 10% = probably a fault.							
10.00	11.45	90	45	DARK GREY MUDSTONE / SILTSTONE PHYLLITE Alternating dark grey mudstone and dark grey-green siltstone layers with lensoid bedding							
11.45	13.70	98	45	MEDIUM GREEN MUDSTONE / SILTSTONE PHYLLITE Bleached equivalent of above unit - alternating light green and dark green layers. 11.45 - 11.85 : Quartz-ankerite vein, parallel to foliation, with inclusions of med. green phyllite.							
13.70	17.35	100	40-45	DARK GREEN PHYLLITIC QUARTZITE Similar to unit at 0-10 m., but bedding contorted, possibly a primary (slump) feature							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-7Logged By R.L. WRIGHTDate Dec 8, 1986Sheet No. 2 of 3

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
17.35	18.35	100	40	DARK GREY PHYLLITE Similar to unit at 10m above							
18.35	22.80	100	±40	DARK GREEN PHYLLITIC QUARTZITE Similar to unit at 13.70 m. but streaks of mudstone / siltstone matrix bleached to a light green colour. Layering contorted. 19.05 : several narrow 1cm crosscutting milky quartz veinlets							
22.80	25.60	100	35	QUARTZITE Massive mottled brown and white ankentic quartzite with occasional whisps of pale green phyllite. Cut by numerous narrow (1cm) milky quartz-ankerite veinlets, probably locally remobilized material.							
25.60	31.40	97	40-45	BANDED PHYLLITES Mixed unit consisting of soft, pale green mudstone phyllite in thinly graded bedding with ochre or purplish brown siltstones, the colour difference being the result of partial oxidation of the unit. Grading indicates beds overturned.							

## J. R. WOODCOCK CONSULTANTS LTD.

Hole No. 86-7Logged By R.L. WRIGHTDate Dec 8, 1986Sheet No. 3 of 3

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
31.40	34.30	93	20-30	LIGHT GREY-GREEN PHYLLITIC QUARTZITE Sections of massive quartzite and pale green phyllite, much disrupted and broken. Veinlets of earthy limonite increase in frequency towards base of unit.							
34.30	36.40	5	-	FAULT Angular fragments of brown quartzite preserved in a matrix of earthy brown limonite and brown clay gouge.							
36.40	37.20	100	20-30	LIGHT GREY-GREEN PHYLLITIC QUARTZITE Same as unit above fault.							
37.20	39.80	100	30-50	QUARTZITE with pale green phyllitic partings							
39.80	40.54	97	30	ALTERED GRANITIC DIKE/SILL Similar to sill above lower adit, with several crosscutting quartz veinlets and disseminated pyrite cubes (1-2mm). Top contact parallel to foliation at 30°							
40.54		84		End of Hole							

# DDH 86-7 Recoveries

<u>Box</u>	<u>Metres</u>	<u>From</u>	<u>To</u>	<u>Δ</u>	<u>Rec</u>	<u>%</u>	<u>Remarks</u>
1	0	0	6	6	0.75	13	CASING
		6	11	5	2.5	50	
		11	13	2	1.6	80	
		13	18	5	4	80	
		18	23	5	1.1	22	Fault.
		23	26.5	3.5	1.2	34	Fault
<u>1</u> 2	9.20 m.	26.5	31.5	5	4.6	92	
		31.5	33	1.5	1.4	93	
		33	35	2	1.75	88	
		35	40	5	5	100	
		40	43	3	2.8	93	
		43	48	5	5.2	104	
<u>2</u> 3	14.70 m.	48	53	5	5.1	102	
		53	58	5	5.1	102	
		58	63	5	4.75	95	
<u>3</u> 4	20.10 m.	63	68	5	5.1	102	
		68	72.5	4.5	3.9	87	
		72.5	73	0.5	0.75	150	
		73	76	3	3.2	107	
		76	77	1	0.7	70	
		77	77.3	0.3	0.3	100	
		77.3	82	4.7	5.1	109	
<u>4</u> 5	25.30 m.	82	87	5	4.6	92	
		87	92	5	4.7	94	
		92	94	2	2.6	130	
		94	98	4	3.35	84	
<u>5</u> 6	30.90 m	98	103	5	5.2	104	

<u>Box</u>	<u>M</u>	<u>From</u>	<u>To</u>	<u>Δ</u>	<u>Rec</u>	<u>%</u>	
6		103	108	5	4.75	95	Broken
		108	113	5	4.5	90	"
		113	116	3	0	0	Fault
		116	118	2	0	0	Fault
		118	123	5	5.5	110	Broken
<u>6</u>	37.30	— 123	125	2	2.2	110	
7		125	130	5	5.1	102	
		130	133	3	2.9	97	
<u>7</u>	40.54	— 133	End of Hole				
				133	111.3	84	

## J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY DARDANELLESCLAIM NO. MOTHERLODE C.G.COORDINATES 10+10N11+71.5 EELEVATION 1808.4 m.HOLE NO. 86-8BEARING —DIP -90°LENGTH 45.72 m (150 feet)DIAMETER NODRILLED BY Adams DrillingSTARTED: Dec 8, 1986TERMINATED: Dec 10, 1986LOGGED BY: RL WRIGHT

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
0	10.80	76	45	DARK GREEN PHYLLITE Alternating med. grey green mudstone with dark green siltstone. 0 to 6 m.: numerous narrow (<1cm) irregular horizontal quartz veinlets cut core.							
10.80	11.70	100	—	ANDESITE DIKE Medium grained, mottled light and dark green with white feldspar phenocrysts. Margins of dike are earthy brown limonite, similar to material seen in hole 86-3 and elsewhere.							
11.70	16.75	100	45	DARK GREEN PHYLLITE, as above							
16.75	39.30	100	45-60	BROWN PHYLLITE Similar rock type but colour changes to alternating beige mudstone and medium brown siltstone. Some short green phyllite intervals 19.35 m.: crosscutting 3cm milky quartz veinlet Bedding disrupted by minor folds but averages 45-60°							

**J. R. WOODCOCK CONSULTANTS LTD.**

Hole No. 86-8

Logged By R.L.Wright

Date Dec 11, 1986

Sheet No. 2 of 2

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY			
FROM	TO				NO.	FROM	TO				
				25.20 - 25.35 fractured rock and fragments of phyllite in brown earthy limonite matrix: fault.							
				Some massive brown siltstone layers up to 15 cm thick.							
				33.7 - 33.9 irregular 1cm milky quartz veinlet parallel to core							
				36.00 - 36.60 swarm of milky quartz veinlets in light green phyllite. Thickest is 6 cm across with earthy limonite masses constituting 10% of the vein.							
39.30	44.65	100	45	DARK GREEN SILTSTONE Alternating light and dark green siltstone layers with minor amounts of mudstone							
44.65	45.72	100	45	LIGHT GREY GREEN PHYLLITE with earthy brown limonite stringers, 1-2 mm thick.							
45.72		92.		End of Hole.							



# DDH 86-8 Recoveries

<u>Box</u>	<u>M</u>	<u>From</u>	<u>To</u>	<u>Δ</u>	<u>Rec</u>	<u>%</u>	<u>Remarks</u>
1	0	0	7	7	0	0	Casing
		7	9	2	1.75	88	
		9	13	4	4.25	103	
		13	18	5	5.2	104	
		18	23	5	5.0	100	
<u>1</u> 2	7.30m	23	28	5	5.1	102	
		28	33	5	5.1	102	
		33	38	5	5.5	110	Broken
<u>2</u> 3	12.20m	38	43	5	5.0	100	
		43	48	5	5.0	100	
		48	53	5	5.3	106	
<u>3</u> 4	17.35m	53	58	5	4.75	95	
		58	63	5	4.9	98	
		63	68	5	4.75	95	
		68	71	3	3.25	108	
		71	73	2	1.8	90	
<u>4</u> 5	22.85m	73	78	5	5.25	105	
		78	83	5	4.5	90	
		83	88	5	4.6	92	
		88	93	5	4.75	95	
<u>5</u> 6	28.50m	93	98	5	5	100	
		98	103	5	5	100	
		103	108	5	5	100	
<u>6</u> 7	34.00m	108	113	5	4.85	97	
		113	118	5	5	100	
		118	123	5	5.1	102	
		123	128	5	5.1	102	
<u>7</u> 8	39.55m	128	133	5	5.0	100	
		133	138	5	5.1	102	

		138	143	5	4.9	98
<u>8</u>		143	148	5	5.1	102
9	45.10 m	148	150	2	2	100
<u>9</u>	45.72	150	End of Hole			

# GEOCHEM ORIENTATION PROFILE

## B-SERIES EG. DIAGRAM

2  
1  
6 5 0.3 4  
7  
8  
STNS 10m INTERVALS

TAKEN ON A-1 (1985) A/C (B-SERIES) ANOMALY(S)

STN	COLOUR	TEXTURE	DEPTH
B-4			
SURFACE	DARK GREY	MED-FINE	1"
B-HOR	ORANGE	FINE	1"
C-HOR	LIGHT BROWN	MED-COARSE	2"
PARENT	GREYISH	COARSE(SANDY)	2'6"
B-4-1			
SURFACE	DARK BROWN	FINE	1"
B-HOR	ORANGE	"	1"
C-HOR	BROWNISH	FINE	2"
PARENT	GREY	SANDY	3'6"
B-4-2			
SURFACE	DARK BROWN	MED-FINE	1"
B-HOR	ORANGE	FINE	10"
C-HOR	LIGHT BROWN	SANDY	2"
PARENT	RED GREY	MEDIUM	3'6"
B-4-3			
SURFACE	DARK BROWN	MED-FINE	2"
B-HOR	ORANGE BROWN	FINE	6"
C-HOR	LIGHT BROWN	SANDY	1'6"
PARENT	GREY	COARSE SANDY	2'
B-4-4			
SURFACE	DARK BROWN	FINE	1"
B-HOR	ORANGE	MED-FINE	10"
C-HOR	BROWN	SANDY	16"
PARENT	GREY	COARSE SANDY	2'
B-4-5			
SURFACE	RED BROWN	MED-FINE	1"
B-HOR	ORANGE	FINE	5"
C-HOR	RED BROWN	"	1'6"
PARENT	LIGHT BROWN	SANDY	2'
B-4-6			
SURFACE	BROWN	MED-COARSE	1"
B-HOR	RED	MED-FINE	1"
C-HOR	LIGHT BROWN	MED-COARSE	1'8"
PARENT	GREY	COARSE SANDY	2'
B-4-7			
SURFACE	RED BROWN	MED-COARSE	1"
B-HOR	RED ORANGE	MED-FINE	6"
C-HOR	LIGHT ORANGE	FINE	2"
PARENT	GREY	COARSE SANDY	3'
B-4-8			
SURFACE	DARK BROWN	MED-FINE	1"
B-HOR	ORANGE	FINE	8"
C-HOR	LIGHT BROWN	MED-COARSE	1'
PARENT	GREY	SANDY COARSE	1'6"
B-26-2			
SURFACE	BROWN	FINE	1.5"
B-HOR	LIGHT ORANGE	COARSE	8"
C-HOR	RED	MED-FINE	1'4"
PARENT	GREY	SANDY	2'
B-26-3			
SURFACE	BROWN	MED-FINE	2"
B-HOR	RED ORANGE	"	8"
C-HOR	LIGHT BROWN	COARSE	1'
PARENT	GREY	" SANDY	2'

# TABLE 1

## V SERIES EG. DIAGRAM

1cm=1m

← down slope V9 V8 V7 V6 V5 V4 V3 V2 V1 V0 → up slope  
V9 V8 V7 V6 V5 V4 V3 V2 V1 V0  
3 3 3 3 3 3 3 3 3 3

TAKEN ACROSS CARDNELLES VEIN STRUCTURE

STN	COLOUR	TEXTURE	DEPTH	cm
V0				
SURFACE	BLACK/BROWN	FINE	1"	2.5
B-HOR	ORANGE	FINE	3"	7.6
C-HOR	GREY BROWN	COARSE	6"	15.2
PARENT	GREY	COARSE	2'	60
V-1				
SURFACE	BLACK BROWN	FINE	1"	2.5
B-HOR	ORANGE	"	6"	15
C-HOR	BROWN	COARSE	3"	20.3
PARENT	GREY	" SANDY	3'	91
V-2				
SURFACE	BROWN	FINE	1"	2.5
B-HOR	ORANGE	"	4"	10.1
C-HOR	BROWN	COARSE	8"	20.3
PARENT	GREY	COARSE	2'	60
V-3				
SURFACE	BLACK/BROWN	FINE	2"	5
B-HOR	ORANGE	"	4"	10.1
C-HOR	LIGHT BROWN	COARSE	6"	15
PARENT	GREY	" SANDY	2.5'	75cm
V-4				
SURFACE	BLACK	MED-FINE	2"	5
B-HOR	ORANGE	FINE	4"	10
C-HOR	BROWN	COARSE	6"	15
PARENT	GREY	" SANDY	2'	60cm
V-5				
SURFACE	BLACK	FINE	1"	2.5
B-HOR	ORANGE	"	3"	7.6
C-HOR	BROWN	COARSE	5"	12.7
PARENT	GREY	"	2'	60
V-6				
SURFACE	BLACK	FINE	1"	2.5
B-HOR	ORANGE	"	5"	12.7
C-HOR	BROWN	COARSE-MED	6"	15
PARENT	GREY	" SANDY	2'	60
V-7				
SURFACE	BROWN/BLACK	FINE	1"	2.5
B-HOR	ORANGE	"	3"	7.6
C-HOR	LIGHT BROWN	COARSE	5"	12.7
PARENT	GREY	" SANDY	2.5"	75cm
V-8				
SURFACE	BLACK	FINE	1"	2.5
B-HOR	ORANGE	"	4"	10
C-HOR	LIGHT BROWN	COARSE	6"	15
PARENT	GREY	" SANDY	2'	60cm
V-9 *				
SURFACE	BLACK/BROWN	FINE	1"	2.5
B-HOR	ORANGE	"	3"	7.6
C-HOR	LIGHT BROWN	COARSE	7"	17.8
PARENT	GREY	" SANDY	2'	60cm

\* TAKEN 10m W STN (OUTCROP)

B-26 SERIES INCOMPLETE DUE TO  
ERROR CREATED BY SOIL MAG LABELER  
B-26-2 & B-26-3 ONLY PROFILES ABLE TO  
BE ANALYSED.

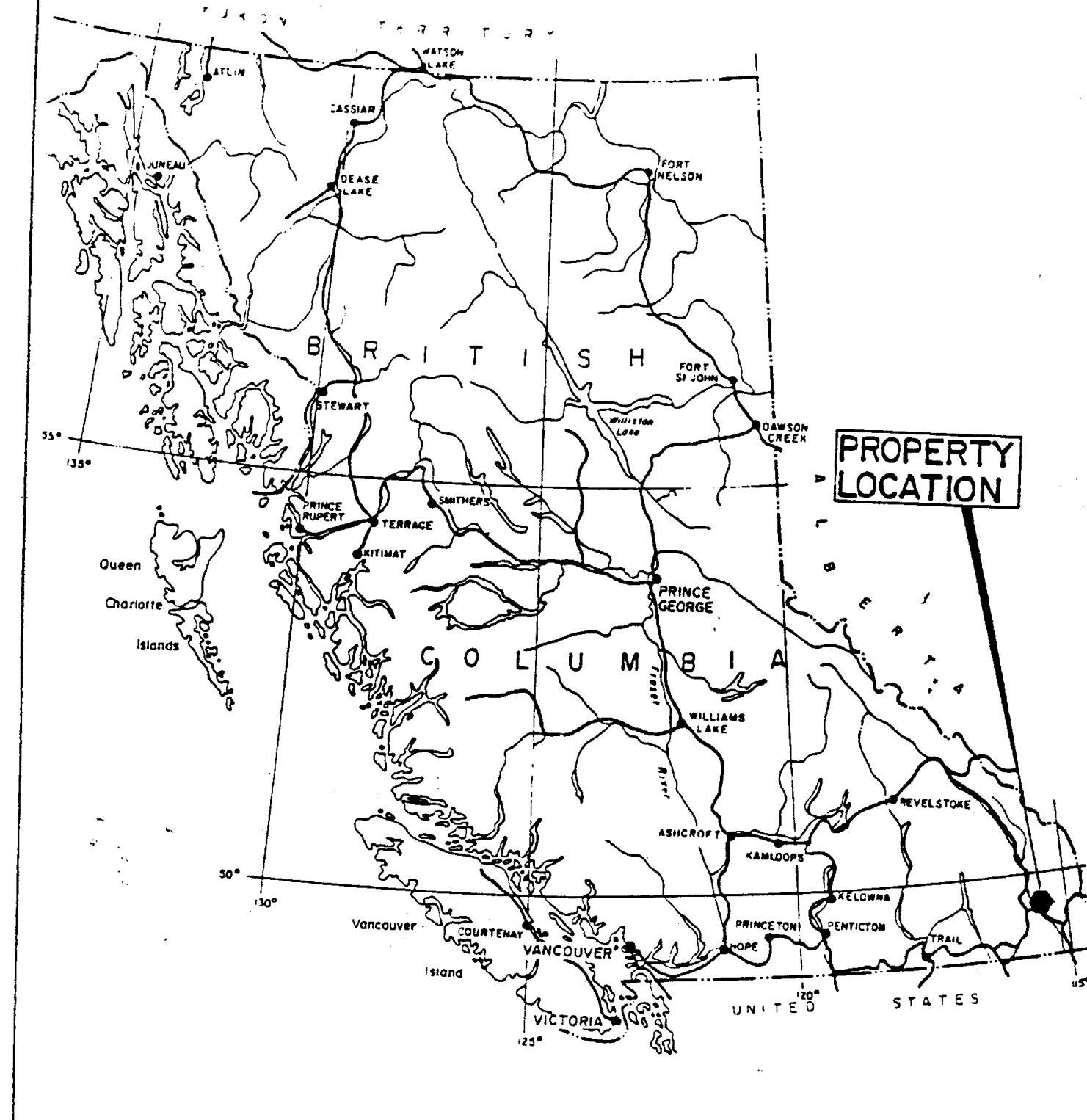
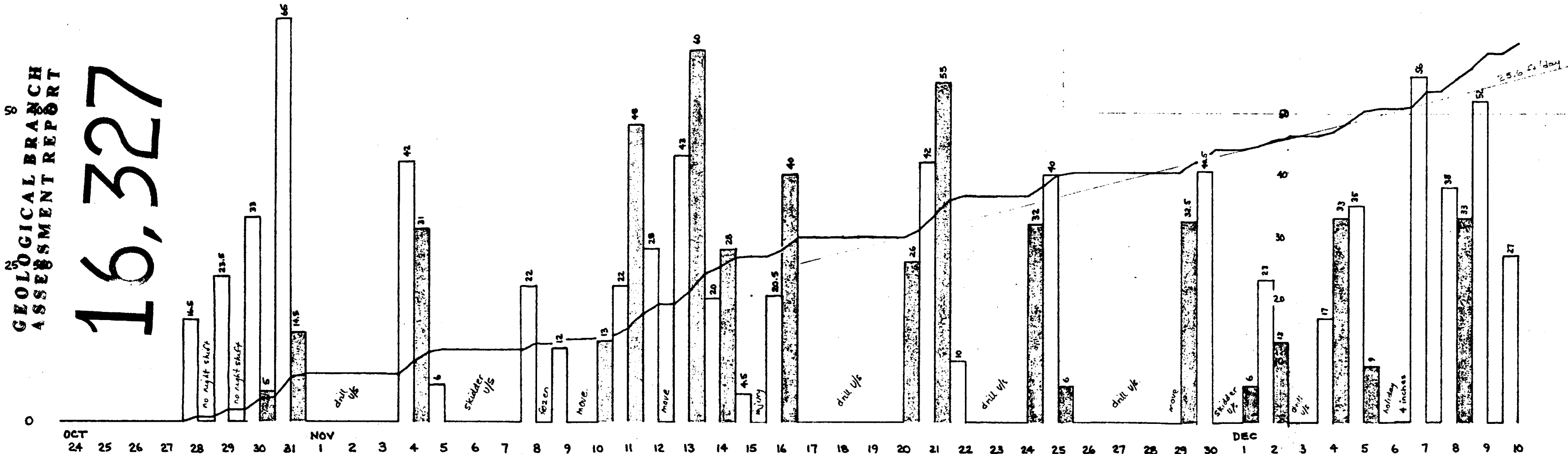


FIGURE 1. LOCATION  
 MAP. DARDANELLES W.D.G.  
 CLAIM.  
 NTS 82G/12E.  
 FORT STEELE M.P.



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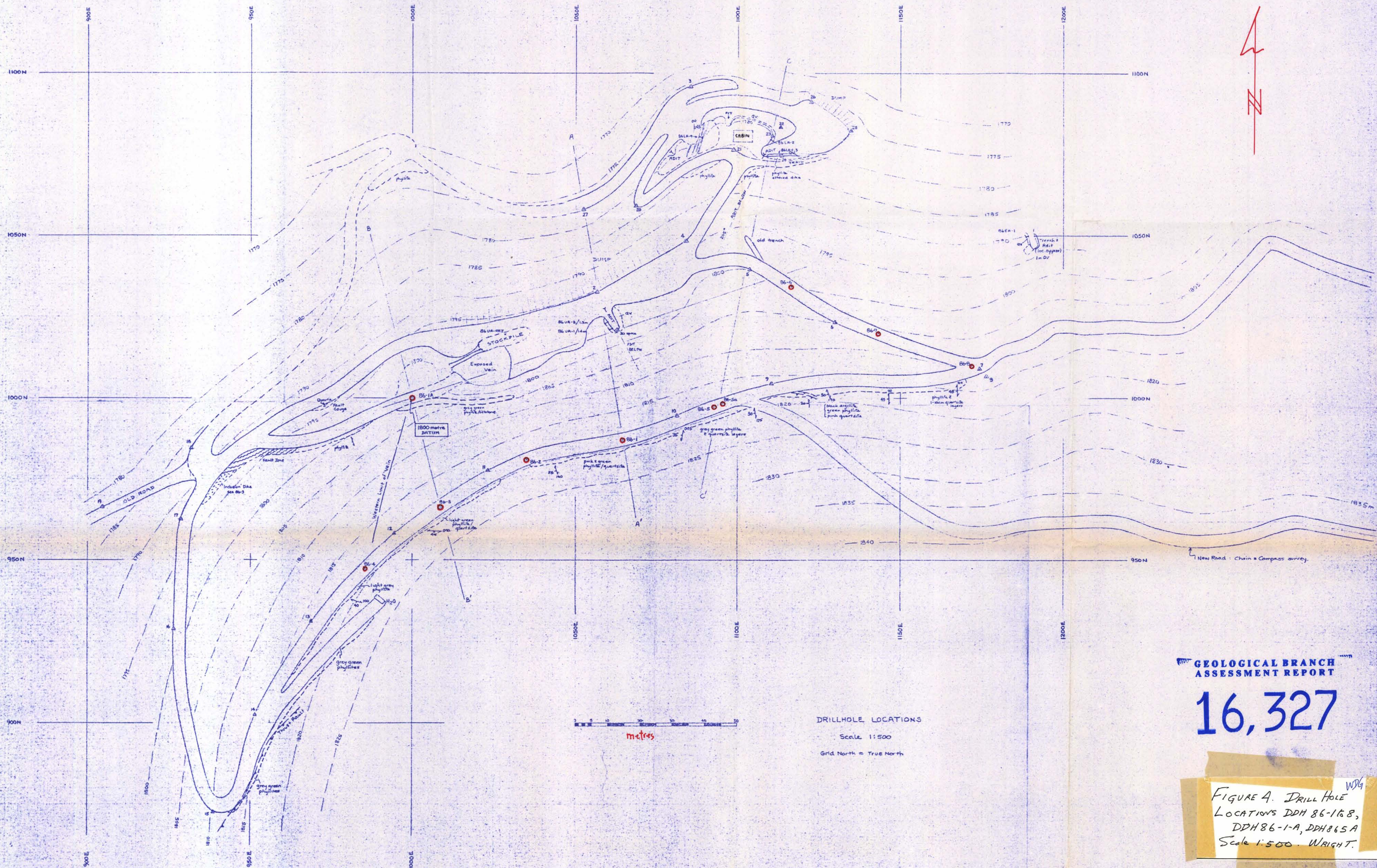


SUMMARY:					
#	Feet	Cum. Total.			
1A	40	40	8	150	1223.5
1	117.5	157.5	9	-	
2	113	270.5			
3	111	381.5			
4	123	504.5			
5	93	597.5			
5A	211	808.5			
6	132	940.5			
7	133	1073.5			

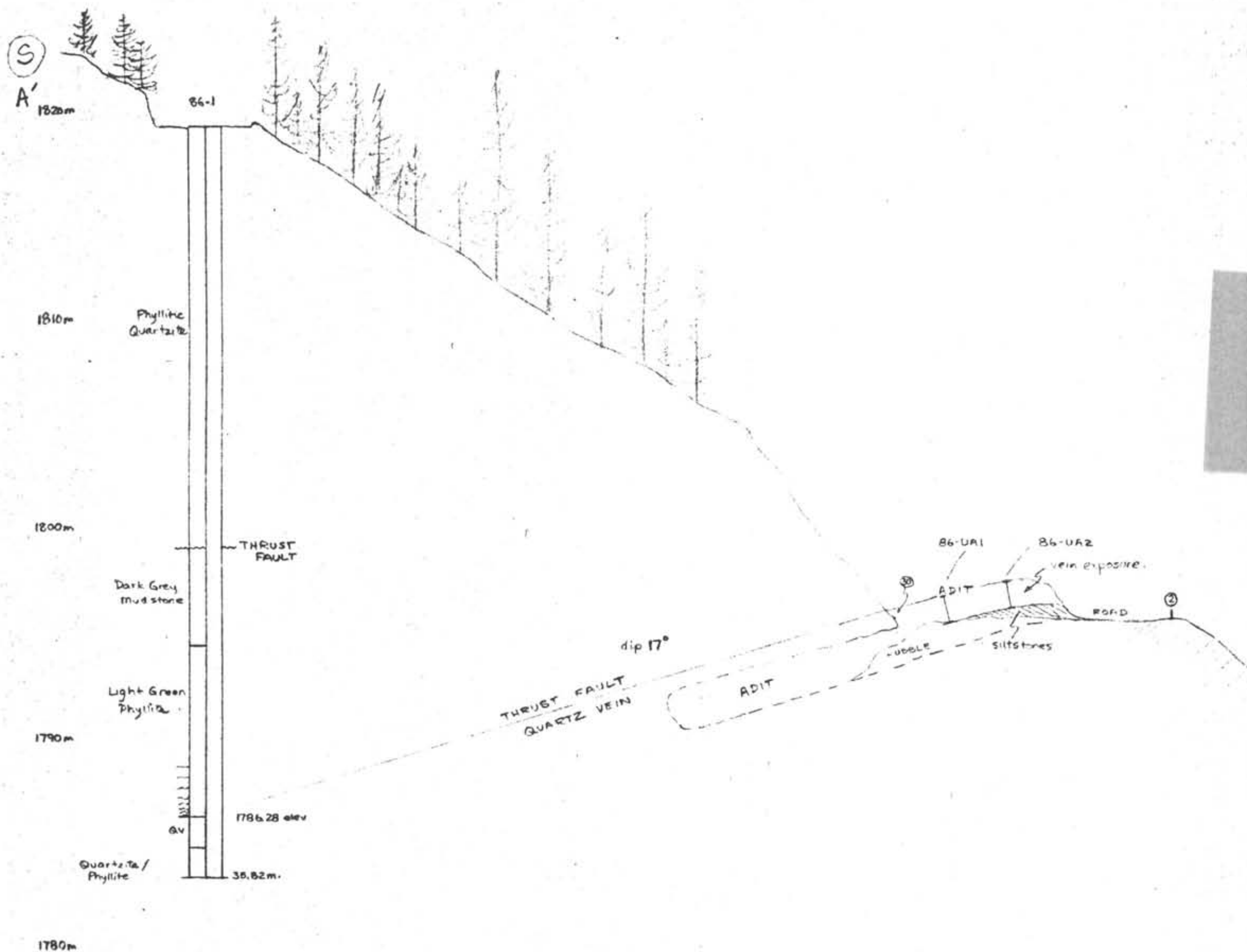
mobilize  
mobilize  
Setup 86-1A  
Setup 86-1A  
Startup 10AM  
Completed 4pm  
Setup 86-1  
Completed 6AM  
Rods lost in hole.  
Replacements ordered  
Move to 86-2 Startup 8AM  
Skidder U/S  
" "  
" "  
New skidder 10pm  
Start 8PM frozen by 9pm  
Frozen, -30 at drill  
Completed 9pm.  
Move drill  
Startup 11pm  
Completed 6pm.  
Startup 10AM  
Completed 4pm.  
Startup 4AM.  
Skidder U/S  
Keith injured  
Bad ground  
No money, no fuel, no drilling.  
Rods stuck.  
Rods broke 4pm  
No night shift  
Parts on order  
" "  
Parts arrive PM  
Hard ground, pull rods  
Lumpy for rods  
No rods.  
Late return from Lumbly  
Heavy snow, access difficult  
Drilling - cat on site  
Hole lost  
Move to 86-6  
Skidder U/S  
Skidder replaced in PM.  
Bit lost  
Drill thru bit ... skidder alternator U/S.  
Clutch gone on drill 11:00 11:00 4.  
Work on clutch  
No night shift  
Complete 86-6 9pm  
86-7 Startup 11pm  
Hard ground.  
No day shift 'holiday'  
No comment  
Finish 86-7 at 9pm  
Move  
Move, startup 4pm  
No night shift  
Completed 3:30 pm.

FIGURE 3. DRILL TIME -  
UTILITY PROGRAM - WRIGHT  
DARDANELLES PROJECT.









N  
A

Cross Section A-A'

Scale 1:200

FIGURE 5. SECTION A-A'  
(FIGURE 4.) SHOWS 86-1, ADIT 2.  
-WRIGHT.  
WDG.

0 2 10 m

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A-A' AWR Fig 5



SECTION B-B'

Scale 1:200

1820m

86-3

Phyllitic  
Quartzite

1810m

Quartzite

Phyllite

Dike

1800m

Phyllitic  
Quartzite

Phyllite

1790m

Quartz  
Vein

Dike

33.83m

70 dip

86-1A

Green  
Phyllite

Fault

Red  
Phyllitic  
Arkose

12.19m

0 2 10 m

WDG  
FIGURE 6. SECTION B-B'  
(FIGURE 4). SHOWS 86-1-A.  
86-3. -WRIGHT.

Road to Upper Adit

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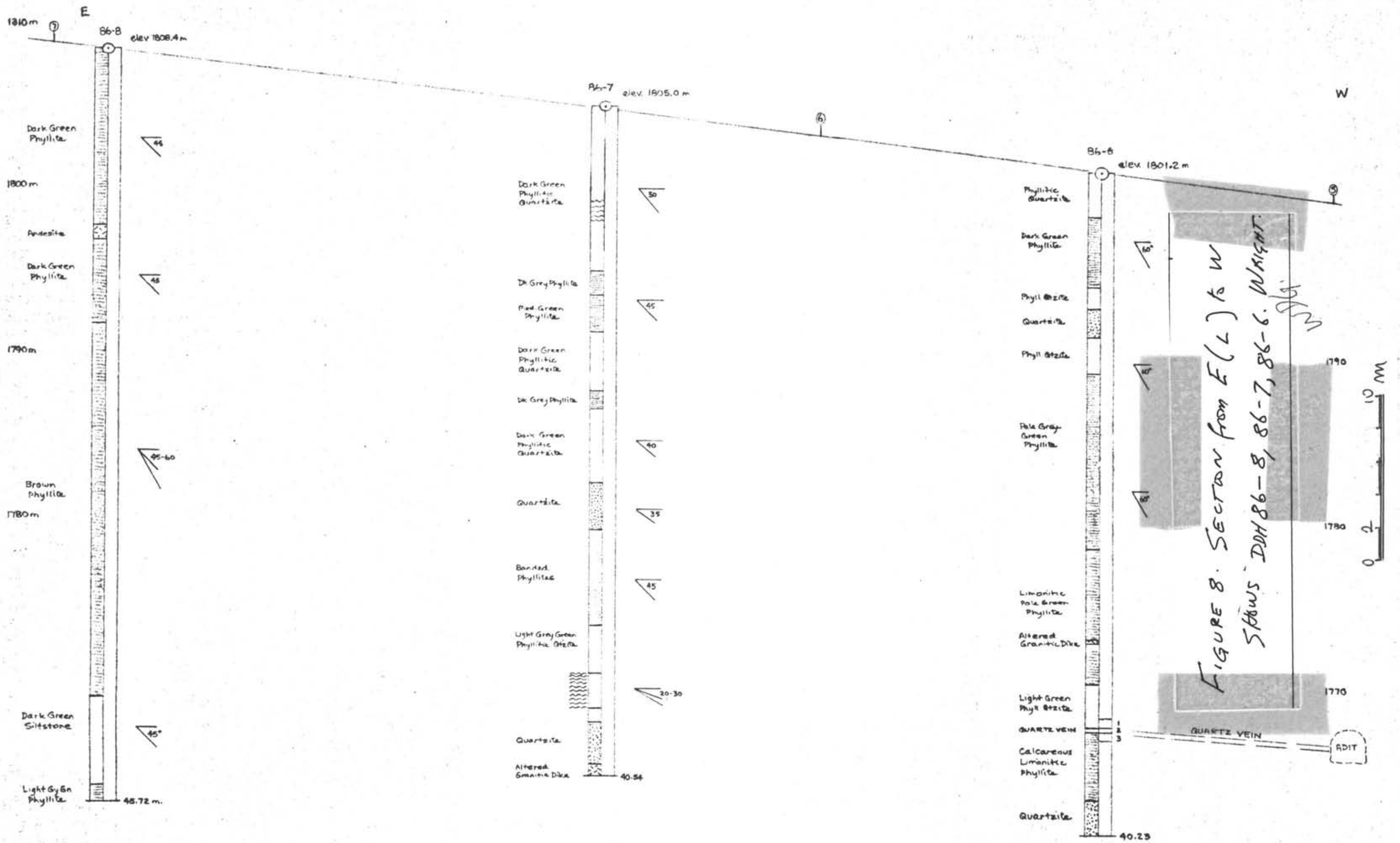
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B-B' AWR FIG 6





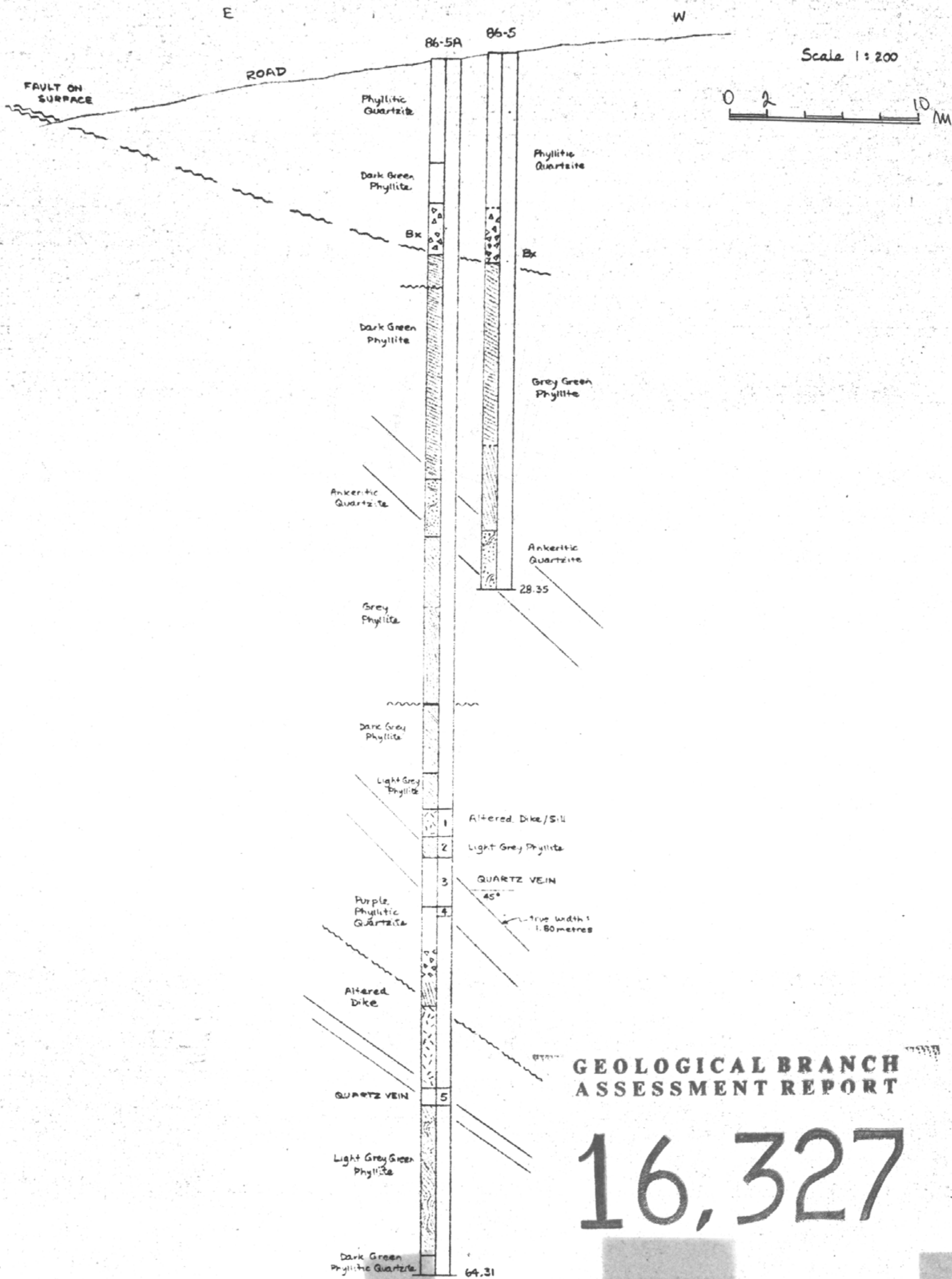




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86-5

86-5A



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FIGURE 9. SECTION FROM E (L) TO W.  
SHOWS 86-5A AND 86-5. WRIGHT.

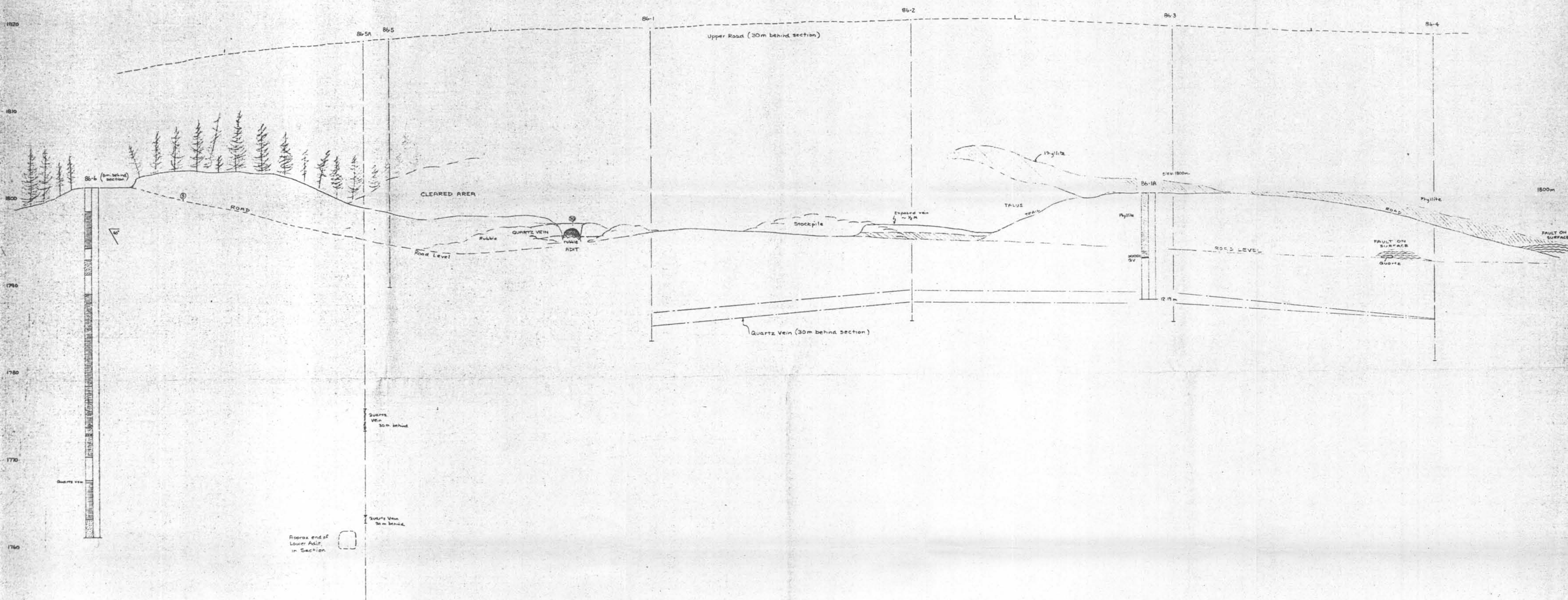
W94

Nov 26, 1986

R. L. Wright

NWR. Fig. 8.9





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FIGURE 10. LONGITUDINAL SECTION  
THROUGH UPPER ADIT (#2). SCALE 1:200  
SHOWS 86-1-A, 86-6, PROF. LOWER CABIN  
ADIT. INTO SECTION. LOOKING SOUTHERLY  
- WRIGHT.

WDG

LONGITUDINAL SECTION  
THROUGH UPPER ADIT  
SCALE 1:200









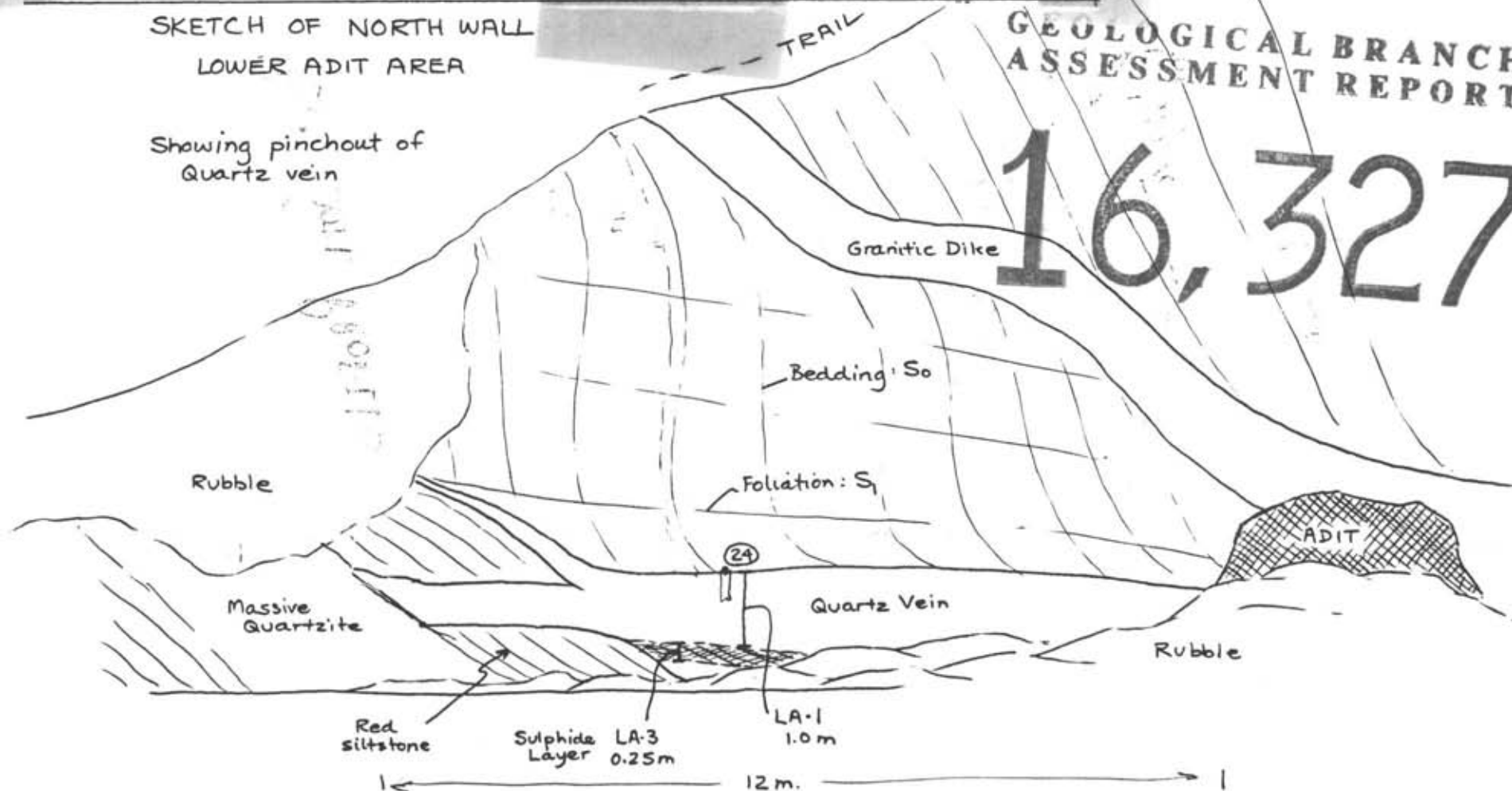
FIG. 13. Elevation SKETCH OF NORTH WALL,  
LOWER ADIT AREA, SHOWING PINCH. OUT <sup>W.D.</sup>  
OF QUARTZ VEIN. APPROX. 1:25. - WRIGHT

SKETCH OF NORTH WALL  
LOWER ADIT AREA

Showing pinchout of  
Quartz vein

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Bedding 030/60-90W  
Foliation 080/20S

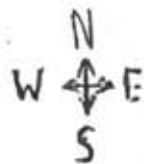
FIGURE 13

WRIGHT



# VEIN SOIL PROFILE & ADIT TRAIL MAP.

1cm = 10m



6  
138  
23  
32  
31  
33  
50

N: 24.86  
TIED ON SURVEY STAKE #21 (SE CORNER OF CABIN).  
TRAVELED 21°S of E for 21m THEN 33°S of E for 23.5m  
AND SET STN V0. STN V0 → V2 TRAVELS UPSLOPE 10m AT 46°W of S  
STN V0 - V9 TRAVELS DOWNSLOPE 60m AT 52°E of N.

TIED ON STN V0. TRAVELLED 17m AT 23°S of E.  
THEN 20m AT 10°S of E AND 66m AT 23°N of E. THEN 6°S of E  
for 17m TO THE ADIT

STN V1 5m UPSLOPE STN V0  
STN V3 5m DOWNSLOPE STN V0

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0 10 50 m

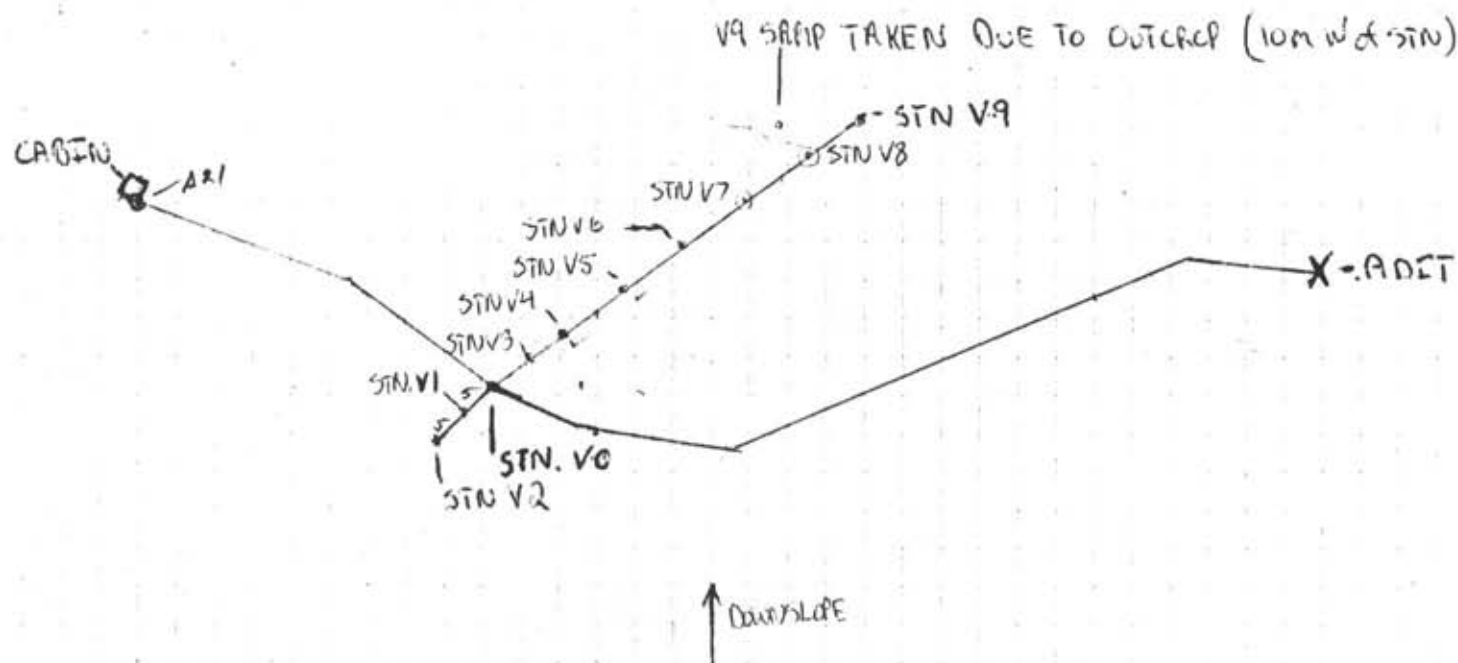


FIG 14. PLAN VEIN SOIL PROFILE. TRAVERSE  
(V-TRAVERSE). SCALE 1cm = 10 m. - WOODCOCK  
WPG.

FIG. 15. PROFILE OF 'V'-TRAVERSE. WOODCOCK.  
 SCALE 1CM = 10M. WDG.

Gold in PPB @ surface  
 B horizon  
 C horizon  
 P parent

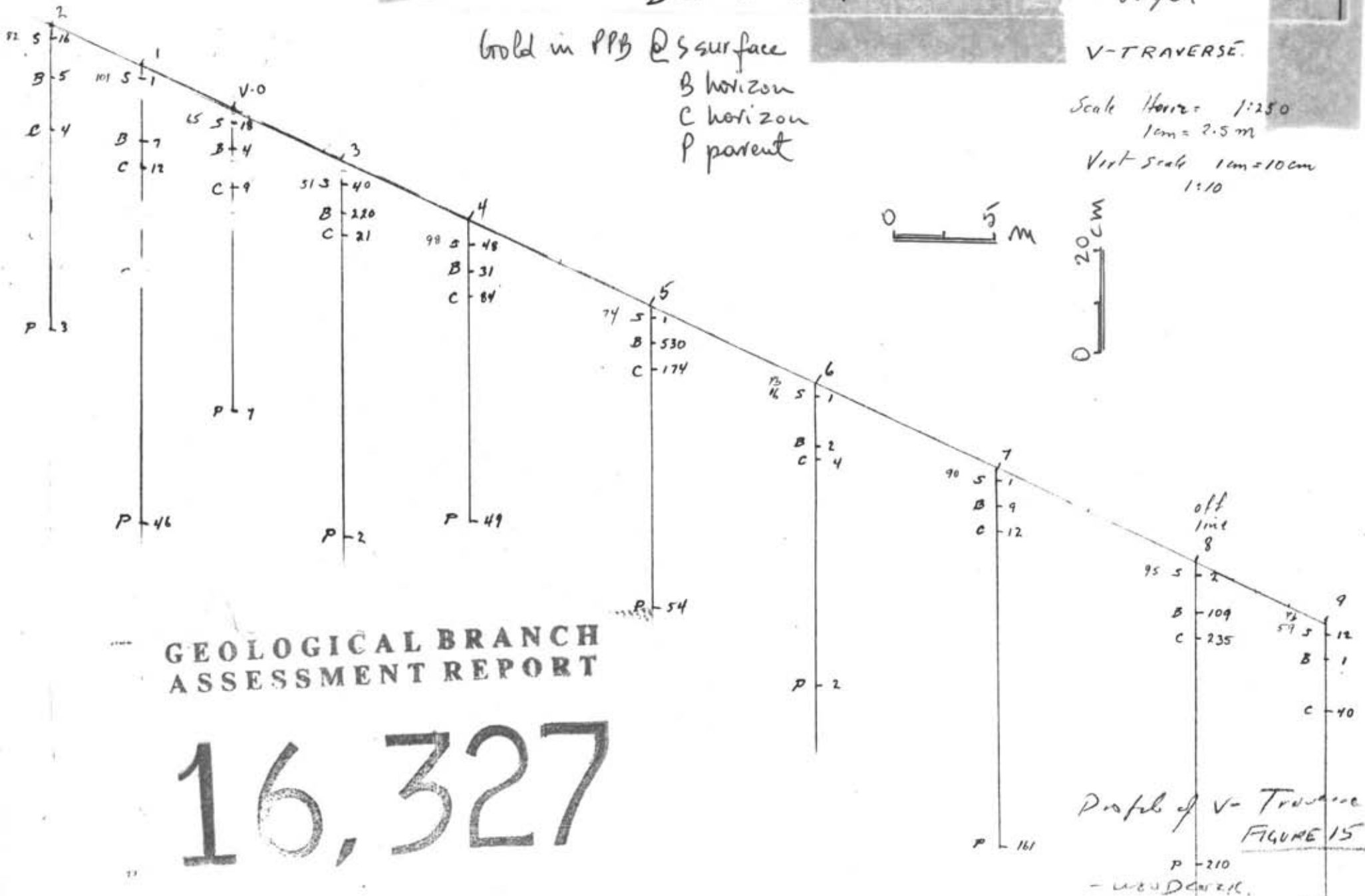
V-TRAVERSE.

Scale Horiz = 1:250  
 1cm = 2.5m

Vert Scale 1cm = 10cm  
 1:10

0 5 M

0 20 CM



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Profile of V-Traverse  
 FIGURE 15

P-210  
 - WOODCOCK