WELCOME NORTH MINES LTD. (N.P.L.)
1027-470 Granville St., Vancouver, B.C. V6C 1V5 Telephone (604) 687-1658

ARCTIC RED PROJECT

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

CAB MINERAL CLAIMS

Latitude 64°59'N Longitude 132°27'W

MACKENZIE MINING DISTRICT

N.T.S. 106C-15/16 & 106F-1/2

NORTHWEST TERRITORIES

CANADA

Work Performed July 20 to August 31, 1976

b y

G.F. McArthur

M.L. McArthur

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of $17,700.00

Resident Geologist or
~~Resident Mining Engineer~~

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

R. R. BAXTER
Supervising Mining Recorder

for Commissioner of Yukon Territory

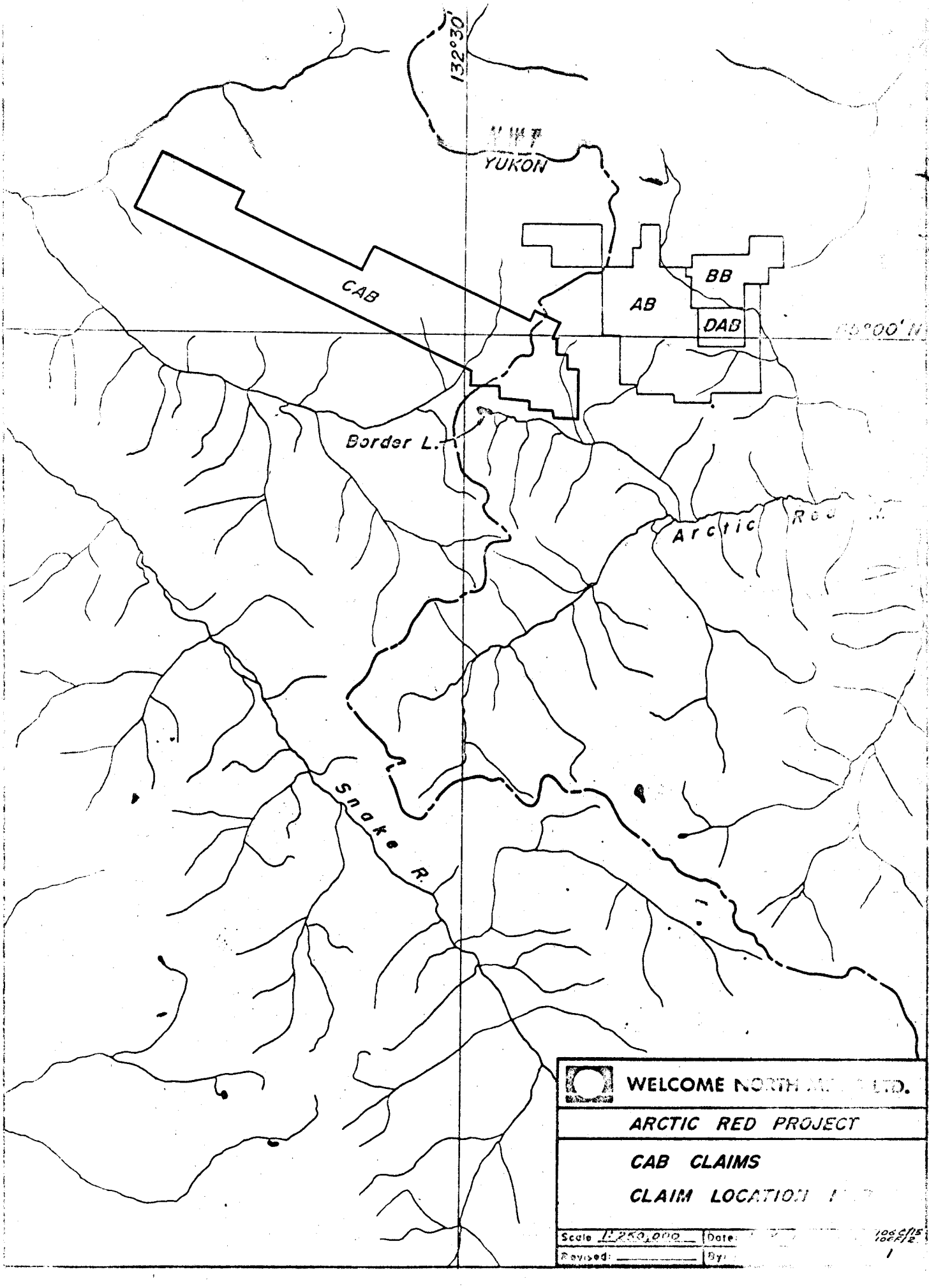
132°30'
YUKON
CAB
AB
BB
DAB
Border L.
Arctic Red R.
Snake R.
WELCOME NORTH
ARCTIC RED PROJECT
CAB CLAIMS
CLAIM LOCATION
Scale 1:250,000
Date:
Revised:
By:

TABLE OF CONTENTS

	Page
INTRODUCTION AND SUMMARY	1
LOCATION AND ACCESS	1
CLAIMS	1
GEOLOGY - STRATIGRAPHY	3
LOCAL GEOLOGY	3
MINERALIZATION	4
GEOCHEMICAL SURVEY	4
1) Method of Survey	4
2) Method of Analysis	4
3) Treatment of Data	5
4) Interpretation of Results	5
CONCLUSIONS	5
RECOMMENDATIONS	6

TABLES

TABLE 1	CAB CLAIMS SUMMARY	2

FIGURES

FIGURE 1	CLAIM LOCATION MAP	Frontispiece

PLATES

PLATE 1	CAB CLAIM MAP	In Pocket
PLATE 2	REGIONAL GEOLOGY	In Pocket
PLATE 3	REGIONAL GEOLOGY	In Pocket
PLATE 4	GEOCHEMISTRY	In Pocket

APPENDICES

A	STRATIGRAPHIC SECTIONS
~~B~~	~~APPLICATION FOR CERTIFICATES OF WORK~~

INTRODUCTION AND SUMMARY

The CAB mineral claims were staked in May, 1974 to cover several occurrences of zinc mineralization in the Lower Cambrian Sekwi Formation. Mapping, prospecting, sampling, and minor soil geochemistry were carried out at this time on the CAB 1 and 2 showings. In September, 1974 1,134 feet of diamond drilling were carried out on the CAB 1 and 2 showings.

In 1976 soil geochemistry sampling, regional mapping and measuring of stratigraphic sections was carried out.

LOCATION AND ACCESS

The CAB Project Area straddles the border between the Yukon and the Northwest Territories, 140 miles to the northeast of Mayo, Yukon Territory, and 170 miles to the west of Norman Wells, Northwest Territories. The approximate coordinates are: latitude 64°59'N and longitude 132°27'W.

Access to the area can be gained by helicopter from Mayo or Norman Wells, or by fixed-wing aircraft to Guildersleeve (Border) Lake (elevation 4,000 feet) which lies within a few thousands of feet of the property and can facilitate aircraft up to Twin-Otter capacity.

The known CAB showings range in elevation from 4,500 to 5,500 feet. They occur in the rugged Backbone Range of the Mackenzie Mountains which trends east-west. Bedrock exposure is largely restricted to streams or to the upper reaches of mountain slopes; the intermediate slopes being largely talus and scree covered.

CLAIMS (Plate 1)

Of the original 379 CAB claims, 54 were allowed to lapse in June, 1976. Following in Table 1 is a list of the remaining 325 claims and their status as of December, 1976.

TABLE I

CAB CLAIMS SUMMARY AS AT DECEMBER 31, 1976

N.T.S.	CLAIMS		GRANT NUMBERS	RECORDING DATE	DUE DATE	
106C-16	CAB	5- 8	Y89133-Y89136	July 12/74	July 12/77	Y
C-15,	CAB	11- 14	Y88992-Y88995	July 8/74	July 8/77	Y
F- 1,	CAB	15- 18	Y89137-Y89140	July 12/74	July 12/77	Y
F- 2	CAB	50-223	Y95029-Y95202	Aug. 5/74	Aug. 5/77	Y
	CAB	224-279	Y96315-Y96370	Aug. 22/74	Aug. 22/77	Y
	CAB	324-351	Y96415-Y96442	Aug. 22/74	Aug. 22/77	Y
	CAB	1- 3	A56755-A56757	July 8/74	July 8/80	NWT
	CAB	4	A56758	July 8/74	July 8/79	NWT
	CAB	9- 10	A56771-A56772	July 8/74	July 8/80	NWT
	CAB	19- 22	A86221-A86224	Aug. 19/74	Aug. 19/80	NWT
	CAB	23- 24	A86225-A86226	Aug. 19/74	Aug. 19/79	NWT
	CAB	25- 30	A86227-A86232	Aug. 19/74	Aug. 19/80	NWT
	CAB	31	A86233	Aug. 19/74	Aug. 19/77	NWT
	CAB	32- 33	A86234-A86235	Aug. 19/74	Aug. 19/80	NWT
	CAB	34- 45	A86236-A86247	Aug. 19/74	Aug. 19/79	NWT
	CAB	46- 48	A86248-A86250	Aug. 19/74	Aug. 19/78	NWT
	CAB	49- 60	A86251-A86262	Aug. 19/74	Aug. 19/77	NWT
	CAB	363	A90763	Sept. 6/74	Sept. 6/77	NWT
	CAB	364	A90764	Sept. 6/74	Sept. 6/80	NWT
	CAB	365-369	A90765-A90769	Sept. 6/74	Sept. 6/77	NWT

GEOLOGY - STRATIGRAPHY

The CAB claims are located in an area of Paleozoic carbonate and clastic rocks thought to represent miogeoclinal deltaic and platformal deposition from off the Mackenzie Arch to the northeast. These rocks are now exposed in an east-west set of fault blocks stepping down section to the north toward the Arch (Plates 2, 3).

The stratigraphic section exposed on the property consists of:

SDc	Silurian to Devonian	Platy, bioclastic limestone
OSrr	Ordovician to Silurian Road River Formation	Calcareous shales, chert
€Of	Cambrian to Ordovician Franklin Mountain Formation	Vuggy dolomite
€sk	Lower Cambrian Sekwi Formation	Sandstone, siltstone, quartzite, dolomite
€b	Lower Cambrian Backbone Formation	Sandstone, quartzite, conglomerate
Hs	Hadrynian Sheepbed Formation	Shales
Hk	Hadrynian Keele Formation	Sandy dolomite - conglomerate, dolomite
HRl	Hadrynian Rapitan Formation	Shales, siltstones

LOCAL GEOLOGY

The section exposed at the CAB 2 showing has a gross similarity to that at the AB claims, located five miles to the west. The mineralized section underlies and is part of a dark-grey bioturbated limestone-dolomite which contains oncolites and oolites. This is underlain by a lithoclast breccia which may represent sub-areal exposure or shallow water deposition of this unit. This whole sequence is in part dolomitized by primary solutions and then by a later mineralizing fluid stage. The development of channel ways is little understood. However there would appear to be a relationship to the development of bladed

barite rock with secondary dolomitization and the higher grade sphalerite areas in these rocks. Abundant late stage fracture and vug filling is controlled by fracturing and jointing related to regional tectonism. The mineralized horizons are overlain and underlain by sequences of barren, sandy dolomite, sandstone, quartzite and siltstone.

MINERALIZATION

Lower Cambrian Sekwi Formation limestones have been selectively dolomitized by at least two phases of fluids. An early diagenetic dolomitization followed by a later cross-cutting dolomitization which weathers orange to red with associated bladed barite.

Mineralization at the CAB 2 is controlled by this later cross-cutting phase of secondary solutions which deposited secondary sparry dolomite, calcite, barite, quartz, pyrite, sphalerite amd minor galena.

Mineralization commonly occurs as open space filling of vugs, fractures and veins and as replacement of sedimentary structures and disseminations along bedding planes.

Channel ways in the dolomite are controlled in part by jointing, fracturing and faulting within favourable horizons.

GEOCHEMICAL SURVEY

1) Method of Survey

Reconnaissance geochemistry was conducted on the property in late August. Grid-controlled soil geochemistry utilized 400-foot line spacing and 200-foot sample sites. Sample lines were compass and topofil surveyed. All samples were obtained with a prospector's grub hoe.

2) Method of Analysis

Samples were analyzed by Bondar-Clegg & Company Ltd. of Whitehorse,

Yukon Territory, and Acme Analytical Labs of Ross River, Yukon Territory. Samples received were dried, screened to -80 mesh, weighed out to 0.5 grams and digested in hot aqua regia. They were then diluted, clarified for 20 hours and tested for lead and zinc by an atomic absorption spectrophotometer.

Accuracy of the instrument ideally is 1% of the amount of metal present. Individual cathode lamps are used for each element determined and a direct readout in parts per million is given.

3) Treatment of Data

All results of the geochemical soil samples were treated statistically to determine background-threshold-anomalous values (Sinclair, 1975). Values are presented on Plate 1. Values are colour coded on the map to aid in distinguishing anomalous areas.

4) Interpretation of Results

Two low-intensity zinc-lead anomalies on the southwestern portion of the grid are possibly associated with fracture mineralization in the Road River Formation (Plate 4).

An elongate trend of spotty high zinc-lead anomalies is spacially associated with low-grade fracture mineralization in vuggy medium-crystalline dolomites of the Franklin Mountain Formation.

A large coincident zinc-lead anomaly located in the eastern portion of the grid is associated with a zone of fracture dolomite, pyrite, smithsonite, sphalerite and galena veinlets and coating along the contact between the overlying Road River Formation shales and cherts underlying Franklin Mountain Formation vuggy dolomites.

CONCLUSIONS

Mineralization on the CAB claims within the Sekwi Formation is controlled and associated with secondary cross-cutting zones of

dolomitization. These are poorly understood and to date these zones of mineralization are of a limited extent and grade. It is thought at this time that the stratigraphic section present at the CAB 2 zone has a number of similarities to those exposed on the AB Main and C zones.

Anomalous geochemistry covering the stratigraphic section west of the CAB 1 zone is associated with low-grade fracture mineralization in the Franklin Mountain Formation and the Road River Formation.

RECOMMENDATIONS

Further work on the CAB 1 and 2 zones is not warranted or cannot be performed economically at this time. A limited program of follow-up mapping and sampling on those showings which have not received previous work should be conducted in conjunction with work proposed on the AB claims.

A budget covering the estimated $15,675.00 cost of these recommendations can be found at the beginning of this volume.

CAB CLAIMS	TAG No's
1-4	A 56755 - A 56758
5-8	Y 89133 - Y 89136
9-10	A 56771 - A 56772
11-14	Y 89992 - Y 89995
15-18	Y 89137 - Y 89140
19-60	A 86221 - A 86262
50-223	Y 95029 - Y 95202
224-279	Y 96315 - Y 96370
280-323	lapsed
324-351	Y 96415 - Y 96442
353-362	lapsed
363-369	A 90763 - A 90769

WELCOME NORTH MINES LTD.

ARCTIC RED PROJECT

CAB CLAIM MAP

Scale: 1 inch: ½ mile	Date: Nov. 1976	NTS	106 P/13 / 106 P/12
Revised:	By: G.E.M. M.C.A.	Plate	1

132°25'W

K

OSRR

€b

€sk

HS

€Of

4800

6372±

LOF MACKENZIE

Outline of AB Claims

4152±

OSRR

6361±

YUKON TERRITORY

NORTHWEST TERRITORIES

DISTRICT O

65° 00'N

SDc

DDH CAB-1&2

CAB 2-ZONE

UNSURVEYED

Outline of Geodhem Grid

4200

DDH CAB-3

CAB 1-ZONE

HRI

BORDER LAKE

Outline of CAB Claims

C

LEGEND

Silurian-Devonian

SDc — Bioclastic, cherty, black limestones; Halysites and crinoids present.

Ordovician-Silurian, Road River Fm.

OSRR — Calcareous shales and shaly limestones; black chert nodules common in upper beds, sponge spicules in bedded chert.

Cambrian-Ordovician, Franklin Mtn. Fm.

€Of — Resistant, light-grey, medium crystalline dolomite, commonly cherty.

Lower Cambrian, Sekwi Fm.

€sk — Undivided, orange-weathering dolomite; sandy dolomite and quartzite.

Lower Cambrian, Backbone Fm.

€b — Red- to orange-weathering sandstone, siltstone, conglomerate, and quartzite.

Precambrian

Hs — Sheepbed Fm. - shales and siltstones.

Hk — Keele Fm. - dolomite.

HRI — Rapitan Fm. - siltstone and shale.

Geologic contact ..... defined — approx.

Fault .....

Mineralization ..... *

Cross-section .....

Syncline .....

Anticline .....

Bedding - inclined, horizontal .....

Joint - inclined, vertical .....

Vein - inclined, vertical .....

Note: Geology after D.K. Norris, 1975, G.S.C. O.F. 279 and from Arctic Red Report 1974.

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ARCTIC RED PROJECT

CAB CLAIMS

REGIONAL GEOLOGY

Scale: 1 inch: 1000 feet | Date: Nov. 1976 | NTS 106C-16 106F-2

Revised: | By: G.A.M. McA. | Plate 2

132°25'W

132° 40' W

HK
Hs
€Of
€sk
6000
4800
4000
OSRR
HRI
Outline of Claims
€b
66
65° 00' N
65° 00' N
132° 40' W

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ARCTIC RED PROJECT

CAB CLAIMS

REGIONAL GEOLOGY

Scale: 1" : 1000'	Date: Nov. 1976	NTS	106C-16 106F-1
Revised:	By: G.S.M. McA.	Plate	3

LEGEND

See Plate 1

LEGEND

- OSDR — ORDOVICIAN TO DEVONIAN, ROAD RIVER FM. Shales, chert, bioclastic limestone
- €Of — CAMBRIAN TO ORDOVICIAN, FRANKLIN MTN. FM. Light-grey weathering dolomite
- €sk — LOWER CAMBRIAN, SEKWI FM. Sandstone, dolomite, limestone

Outline of anomalous lead
Outline of anomalous zinc
Geologic contact, approx.
Mineralization
Creek
Soil sample site with ppm lead : ppm zinc — e.g. 27 : 430

	ppm Pb	ppm Zn
green	< 75	< 1000
yellow	75-150	1000-2500
red	150-200	2500-5000
purple	> 200	> 5000

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ARCTIC RED PROJECT

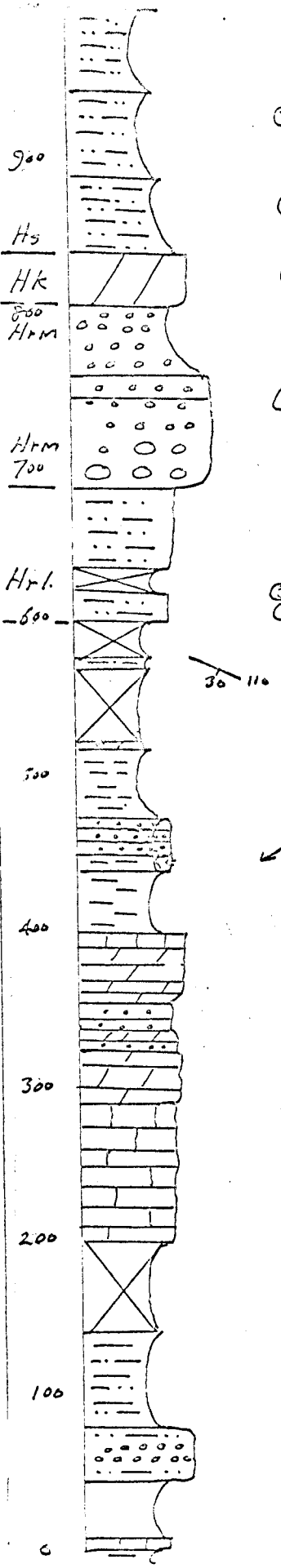
CAB CLAIMS

GEOLOGY & GEOCHEMISTRY

Scale: 1 inch : 250 Ft.	Date: Sept. 1976	NTS 106C/16
Revised:	By: E.A.M. M.T.A.	Plate 4

APPENDIX A

STRATIGRAPHIC SECTIONS



Shale brown, weathers brown platy with platy dol. interbeds to 1" thick grey weathers brown platy

(8) Siltstone

(7) siltstone, red-brown laminations

(6) Dol. light grey mtlx. weathers pink

Conglomerate, with pink dolomitic clasts and brown silty dolomitic matrix.

Conglomerate, brown silty.

(5) Conglomerate, pale pink dolomitic, with bright

(4) pink weathering dol boulders to 2', white laminated dol. to 6", black chert to 3" grey ls. to 3" siltstone, maroon and green platies.

Cover, weathers orange

(3) siltstone, maroon and green platy friable.

(2) Cover, orange dolomite.

30 110

Shale, brown platy, siltstone
Cover plus
brown shale
orange weathering platy dolomite base
Shale brown papery

Quartzite, white, fg. blocky.

Shale, rusty brown platy fissile

Shale, brown calcareous

Ls. grey block.
Dol. weathers buff, platy

Quartzite, white fg. with black and green lichen on blocks
Dol. buff, platy at base
Dol. grey. mtlx.
weathers dull buff, vuggy

ls. grey platy

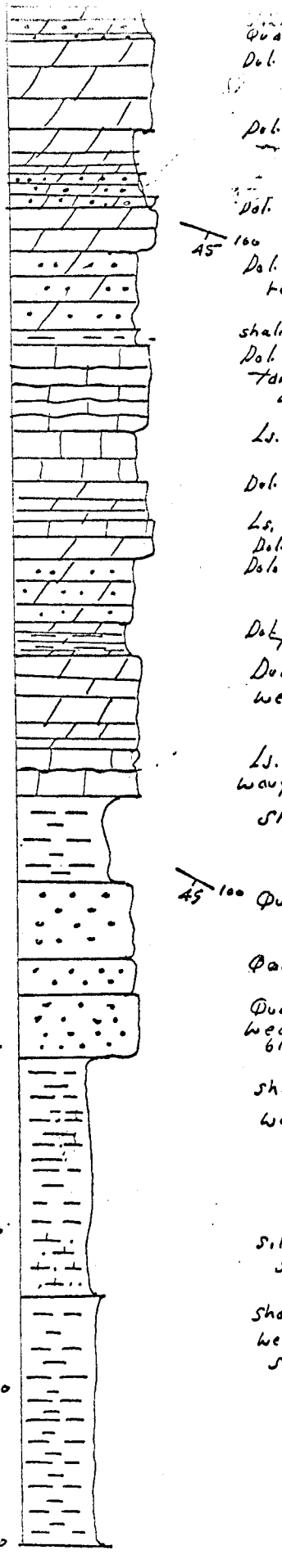
Cover.
grey Ls. scree

Shale, brown
plus siltstone

shale and siltstone

(1) Conglomerate, 5' beds
platy brown siltstone
Quartz pebble cgl. with white quartz, and grey quartzite pebbles in grey fg quartz

- Ls. grey
Shale - black.



platy
Quartzite, brown dolomitic
Quartzite, red
Dol. light grey, weathers tan.

Dol. dark grey, weathers brown.

Dol. light grey mtlx, weathers tan.

45 100

Dol. brown sandy with red sandy laminations

shale, red and green platy dolomite
Dol. light grey, mtlx. weathers tan in 1' plates with silty wavy beds.

Ls. grey massive

Dol. light grey platy, weathers buff
Ls. grey massive
Dol. weathers brown
Dolomite, grey, sandy, weathers brown in 1' beds

Dol. light grey, mtlx weathers tan. thin green and maroon shale
Dol. light buff, mtlx,
weathers in tan plates

Ls. grey weathers with wavy brown silty laminations

Shale, brown, weathers to fine scree.

45 100 Quartzite, white, massive in 5' beds

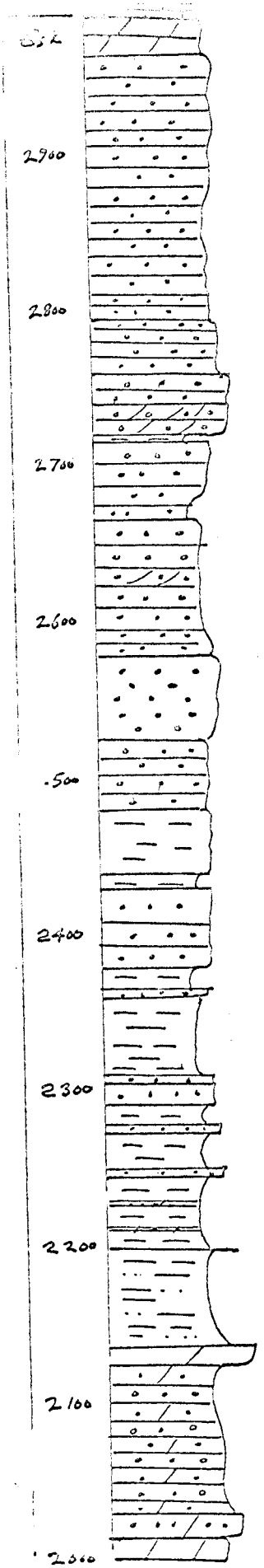
Quartzite, brown. vfg.

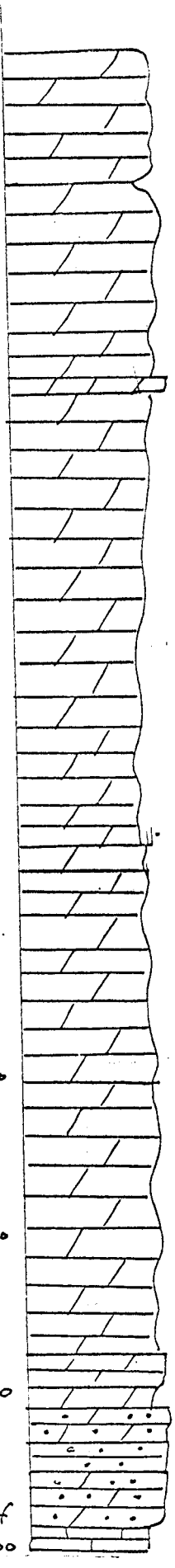
Quartzite, white, fg. massive, weathers to blocks with black and green lichen

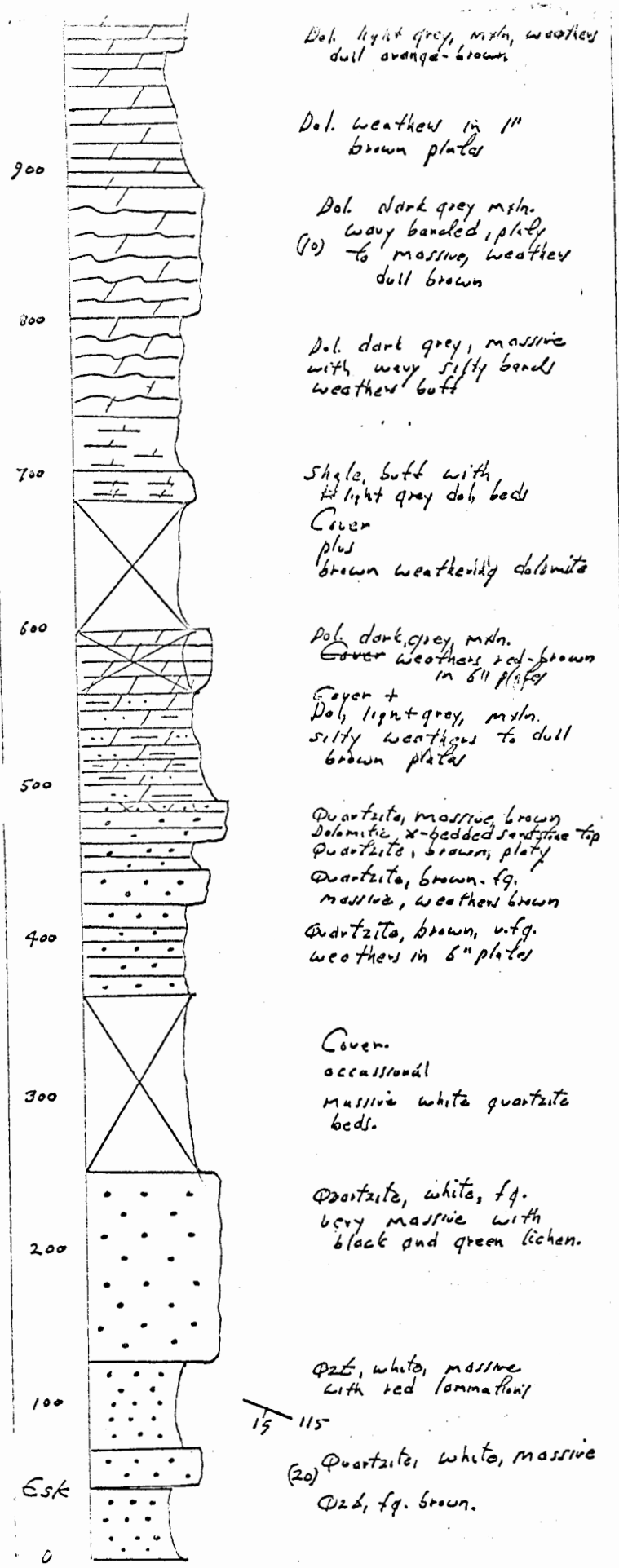
shale, black papery
weather to very fine scree

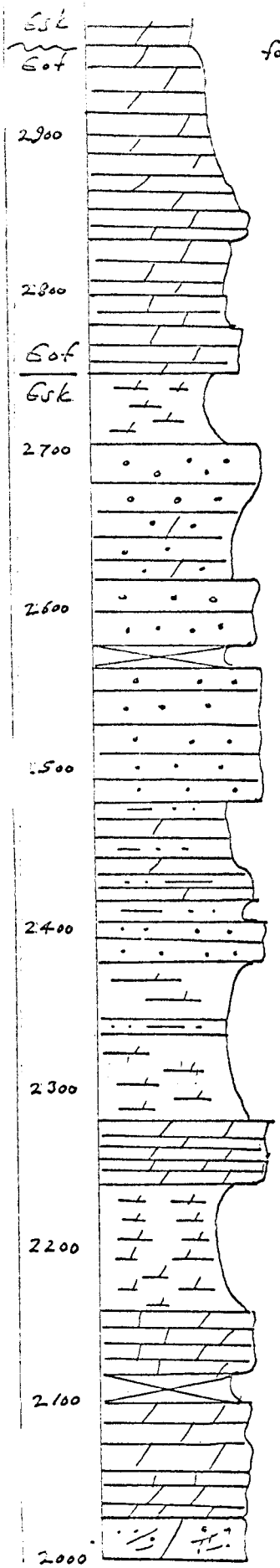
siltstone, grey-brown, dolomitic shaly.

shale, grey-brown
weathers to very fine scree


Dol. light grey, m-xln weather dull orange in 6" plates
2900
Quartzite, white, pkw tan dol.
Quartzite, red sandy in 6" plates
Quartzite, white, fg
2800
① Quartzite, red, cross-beds
Shale, green
Quartzite, red sandy in 6" plates, some tan dolomite
2700
Quartzite, light brown, fg. weathers in 1' plates some sandy cross beds white quartzite to top.
2600
Quartzite, white, weathers blocky with green and black lichen
Quartzite, light brown, fg.
500
Shale.
Shale brown
Quartzite, brown fg.
2400
Shale, brown
Sandstone, red.
Shale, fine brown
Sandstone, red, ripple marks.
2300
Quartzite, brown fg.
Shale, brown
Quartzite, brown, fg
Shale brown.
Quartzite, red sandy
Shale brown, with brown sandy dolomite interbeds
2200
Siltstone, brown platy and shale, brown
Dol. massive weathers tan.
Quartzite, brown fg. and dolomite, brown sandy
2100
Dol. brown, very sandy weathers brown
2000


Dol. light grey banded
Dol. light grey weathers blocky
3900
3800
Some dark grey bands to top
3700
Dol. grey m-xln. weathers to very light grey blocks
3600
3500
② Dol. grey-black, blocky vuggy - oolitic.
3400
Dol. light grey m-xln.
3300
Dol. light grey m-xln.
3200
Dol. light grey m-xln. weathers buff
Dol. grey, m-xln, weathers tan
Dol. sandy, weathers brown
Quartzite, fg. brown.
3100
Dol. brown sandy weathers brown in 1' plates ripple marks
Ls, black shaly
Eof
3000


900
800
700
600
500
400
300
200
100
Esk
0
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
Dol. light grey, m+fn, weathers dull orange-brown.
Dol. weathers in 1" brown plates
Dol. dark grey m+fn. wavy banded, platy (10) to massive, weathers dull brown
Dol. dark grey, massive with wavy silty bands weathers buff
Shale, buff with light grey dol. beds
Cover
plus
brown weatheridg dolomite
Dol. dark grey, m+fn. Cover weathers red-brown in 6" plates
Cover +
Dol, light grey, m+fn. silty weathers to dull brown plates
Quartzite, massive, brown
Dolomitic x-bedded sandstone top
Quartzite, brown, platy
Quartzite, brown. fg. massive, weathers brown
Quartzite, brown, v.fg. weathers in 6" plates
Cover.
occasional
massive white quartzite beds.
Quartzite, white, fg. very massive with black and green lichen.
QZt, white, massive with red laminations
15
115
(20) Quartzite, white, massive
QZt, fg. brown.
m+fn, sandy
Dol. dark grey, weathers dark brown with sandy
15
140 laminations
Cover
brown shaly dolomite?
Dol grey, m+fn, weathers in 1' brown plates weathers
(12) dark brown.
weathers orange at top.
Quartzite, light grey,
(28) v.fg. massive
weathers pale grey
Dol very light grey
sandy x-bedded
mud cracks
very massive
weathers dark brown
Dol. very light grey, m+fn
massive weathers light grey
Dol light buff, m+fn, sandy, very massive
weathers brown.
Quartzite, brown, fg. weathers in brown 6" plates.
Dol. dark grey weathers to bright orange platy
Ls, light grey massive
shale green and nodular Ls
Ls. massive light grey.
Dol. weathers buff
(2)
Ls. banded, light grey, dark grey, m+fn
- shale green.
Dol. weathers Buff
Ls. dark grey platy
and shale, brown calcareous
(1) Dol. light grey weathers orange and dull grey ls. plates
Dol. light grey, laminated
weathers in orange plates



Dol. weathers buff in 6" plates.

fault 40 105

Dol. light grey mtln weathers to white blocks

Dol, mtln. weathers buff. Shale, brown dolomite weathers to drab scree. orange-brown

Quartzite, dark grey massive

Quartzite, brown, dolomitic and brown quartzite

Quartzite, white, fg, weathers blocky white black and green lichen

Cover

Quartzite, brown

grey, mtln weathers

(A) Dol, brown, laminated plus brown siltstone

Shale, brown

Quartzite, fg. brown weathers to 6" brown plates

Shale, brown dolomitic with brown siltstone beds

Dol. grey mtln, weathers to bright pink blocks.

Shale, brown, dolomitic

Ls. dark grey, weathers to dull Hz. grey plates, in part dol. dark grey weathers bright pink with Hz

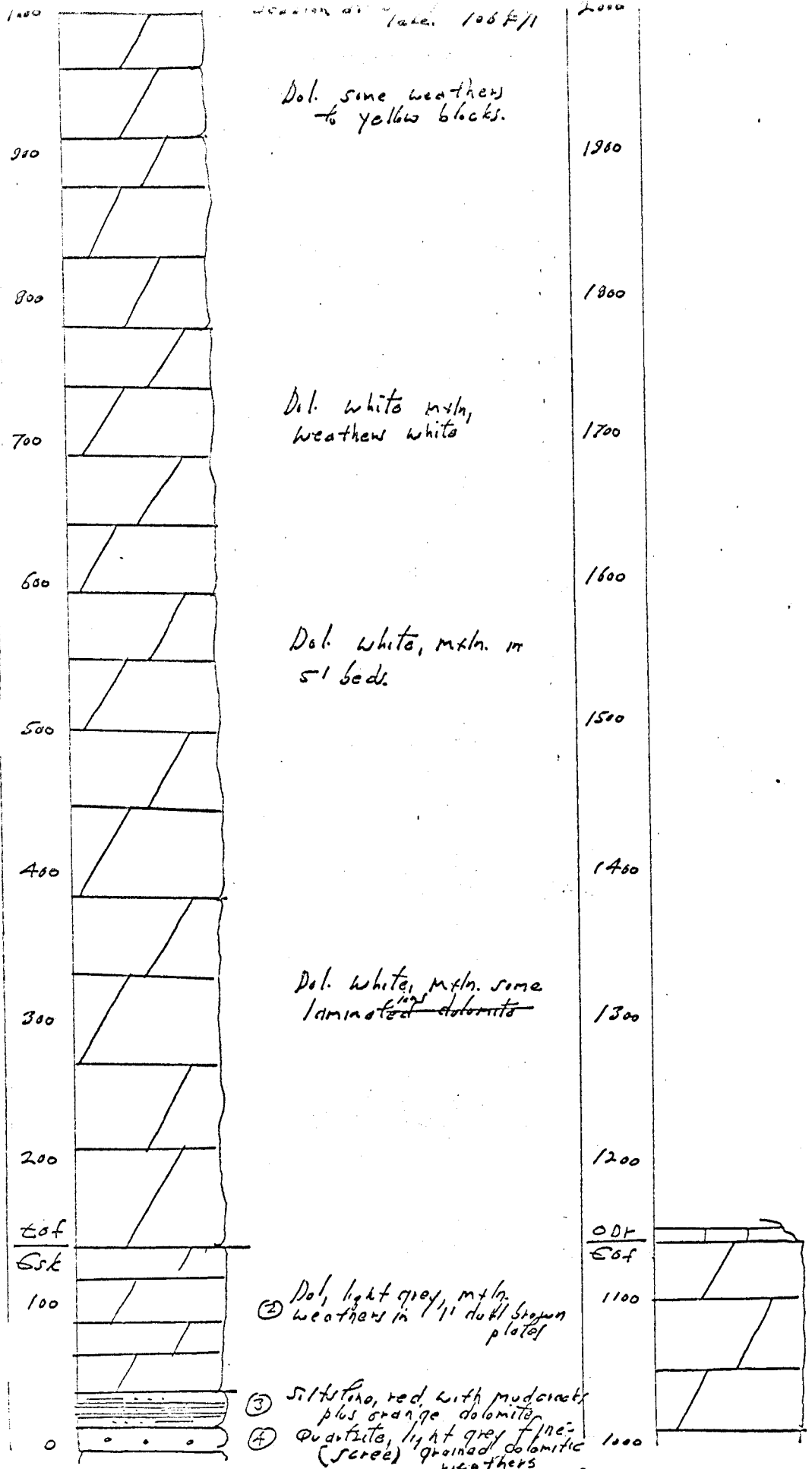
Cover, brown shale

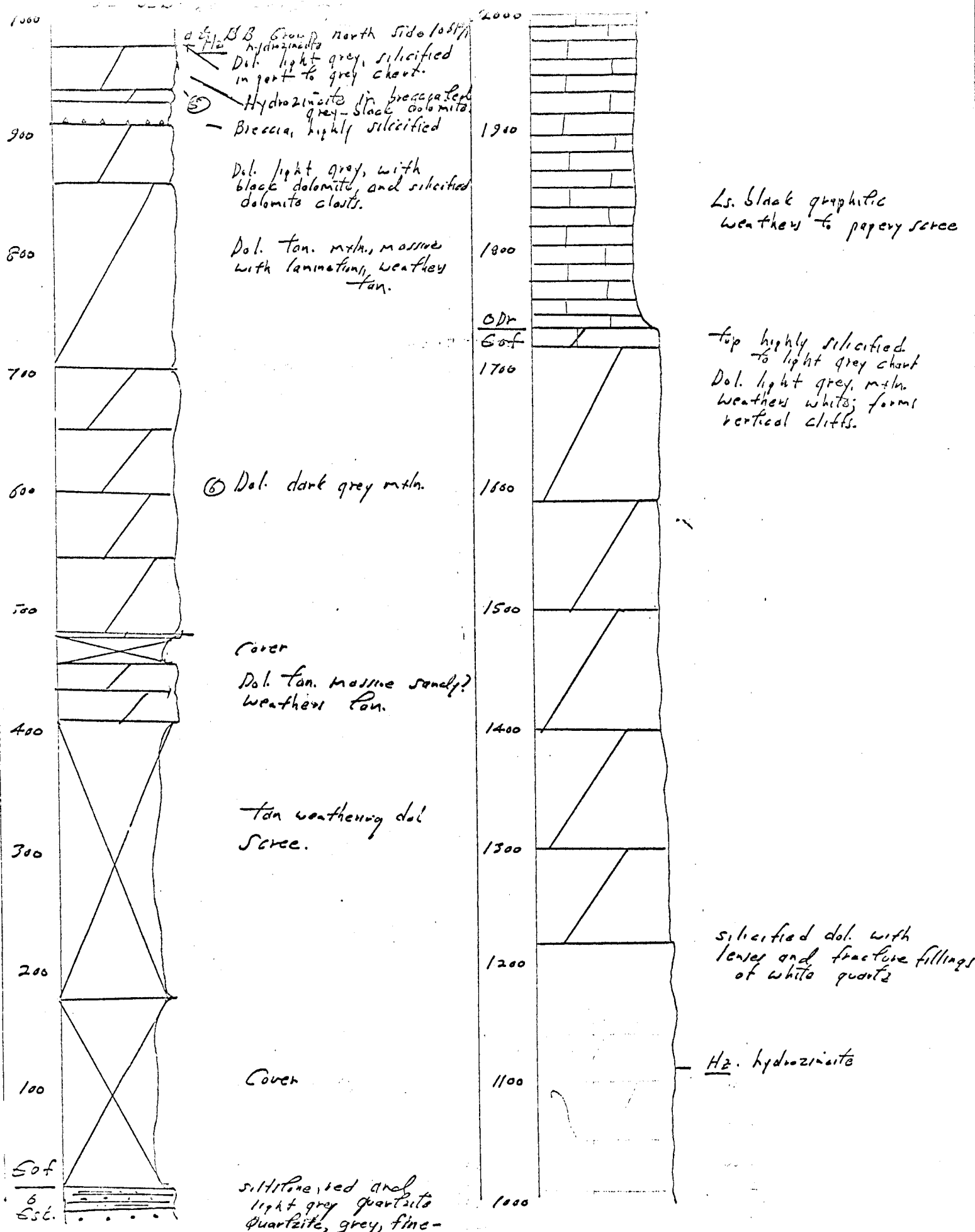
Dol. very light grey, mtln, Hz. weathers pink in 6" plates + Hz on pink dolomite

- top Ls, white

Dol grey, platy, weathers buff.

Dol. grey, massive sandy, x-bedded weathers brown


1000
900
800
700
600
500
400
300
200
Eof
Esk
100
0
2000
1900
1800
1700
1600
1500
1400
1300
1200
ODr
Eof
1100
1000
Dol. some weathers to yellow blocks.
Dol. white m+ln, weathers white
Dol. white, m+ln. in 5-1 beds.
Dol. white, m+ln. some laminations
② Dol, light grey, m+ln. weathers in 1/1 dull brown plates
③ Siltstone, red with mudcracks plus orange dolomite
④ Quartzite, light grey fine-grained dolomitic (scree) weathers orange
① Ls. black shaly
Dol. light grey m+ln. banded light grey with thin dark grey bands, faint laminations top silicified
Dol. forms tiered cliffs.

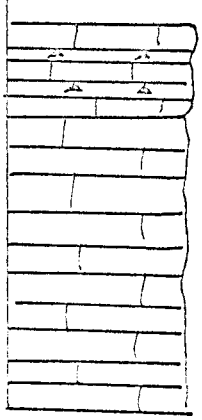

1000
900
800
700
600
500
400
300
200
100
Eof
6
Est.
BB Group north side Holt
Hz hydrozincite
Dol. light grey, silicified in part to grey chert.
Hydrozincite in brecciated grey-black dolomite
5
Breccia, highly silicified
Dol. light grey, with black dolomite and silicified dolomite clasts.
Dol. tan. mtln., massive with laminations, weathers tan.
6 Dol. dark grey mtln.
Cover
Dol. tan. massive sandy? weathers tan.
tan weathering dol Scree.
Cover
siltstone, red and light grey quartzite
Quartzite, grey, fine-grained
2000
1900
1800
ODr
Eof
1700
1600
1500
1400
1300
1200
1100
1000
Ls. black graphitic weathers to papery scree
top highly silicified to light grey chert
Dol. light grey, mtln. weathers white; forms vertical cliffs.
silicified dol. with lenses and fracture fillings of white quartz
Hz. hydrozincite

2300

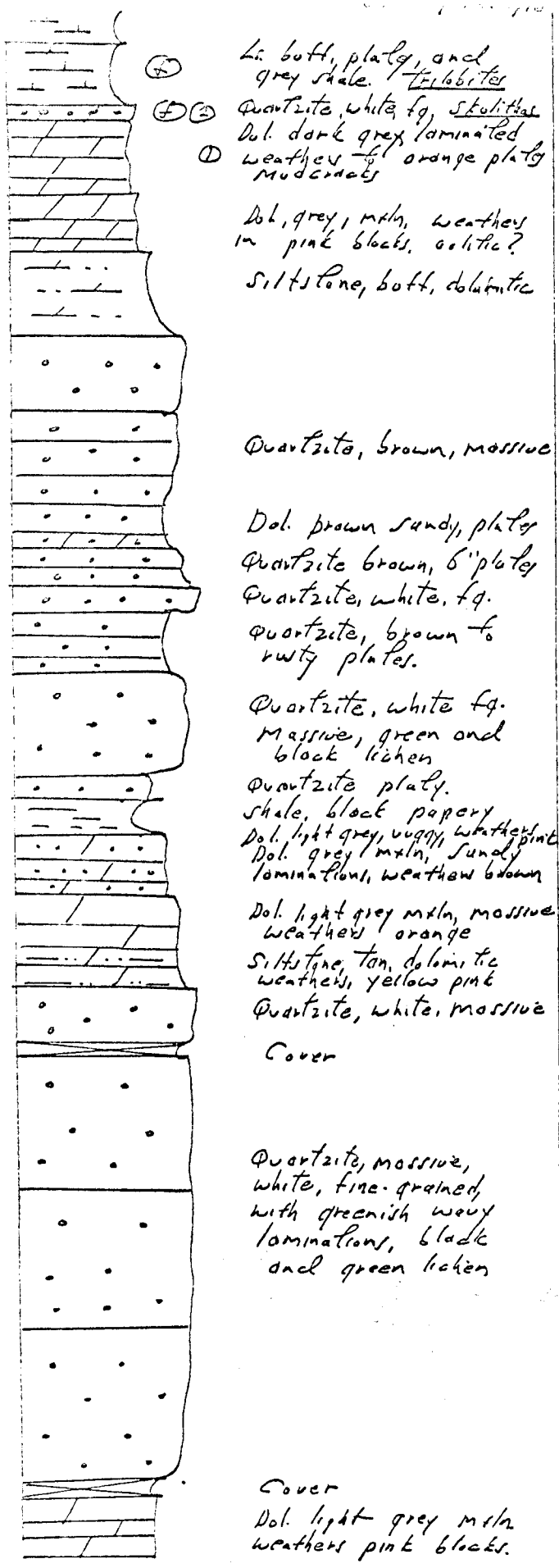
2200

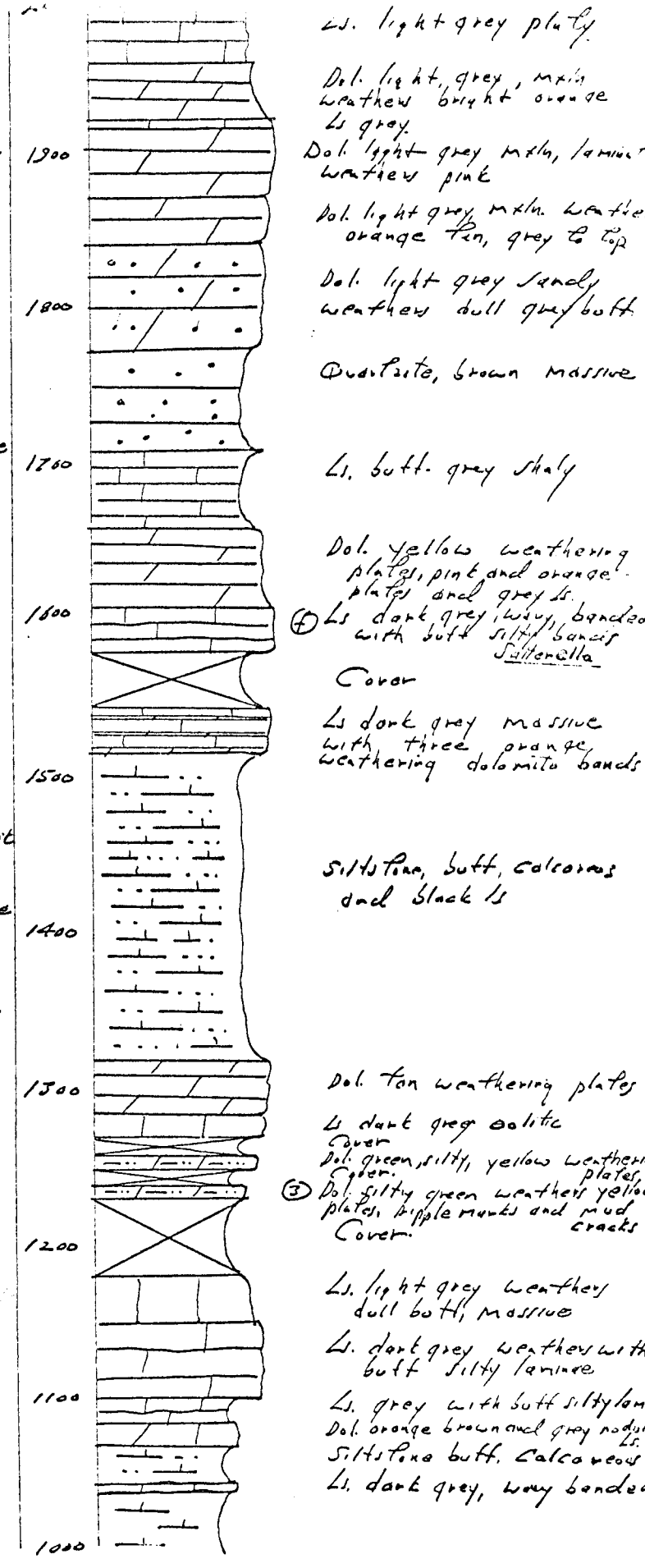
2100

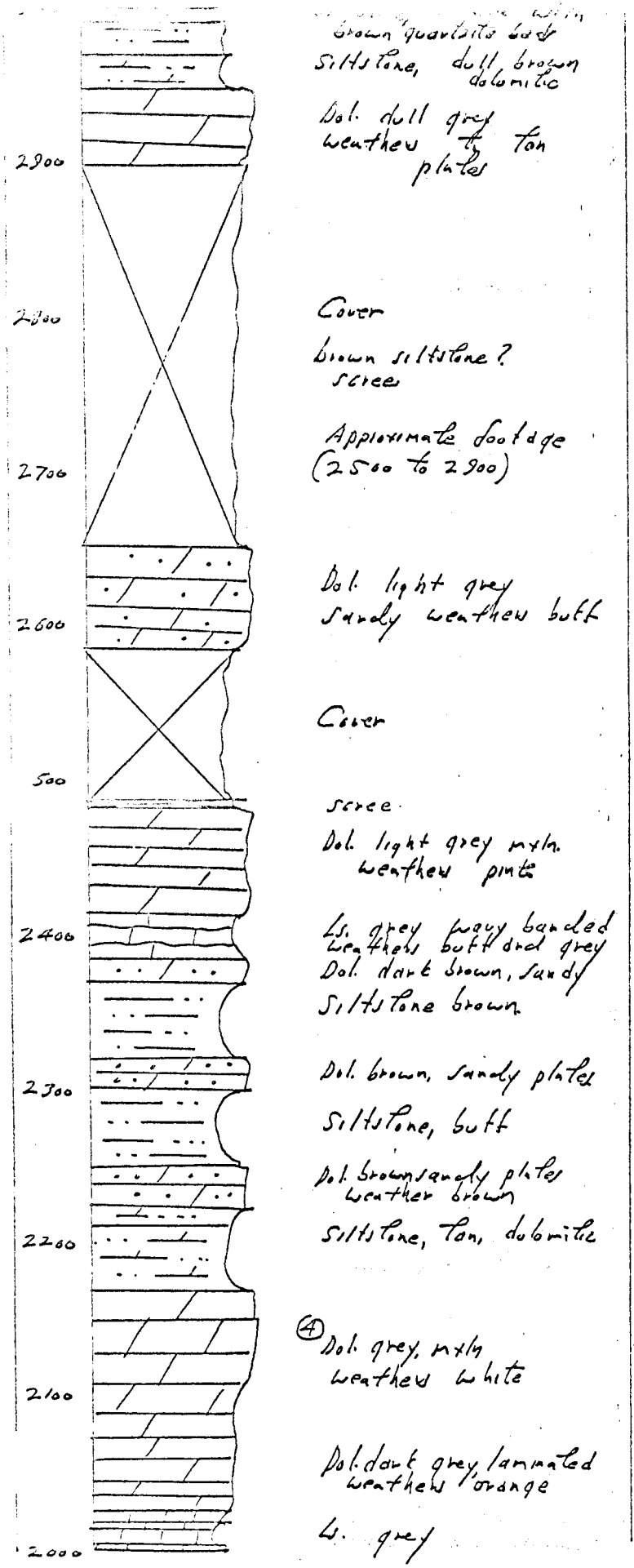
2000

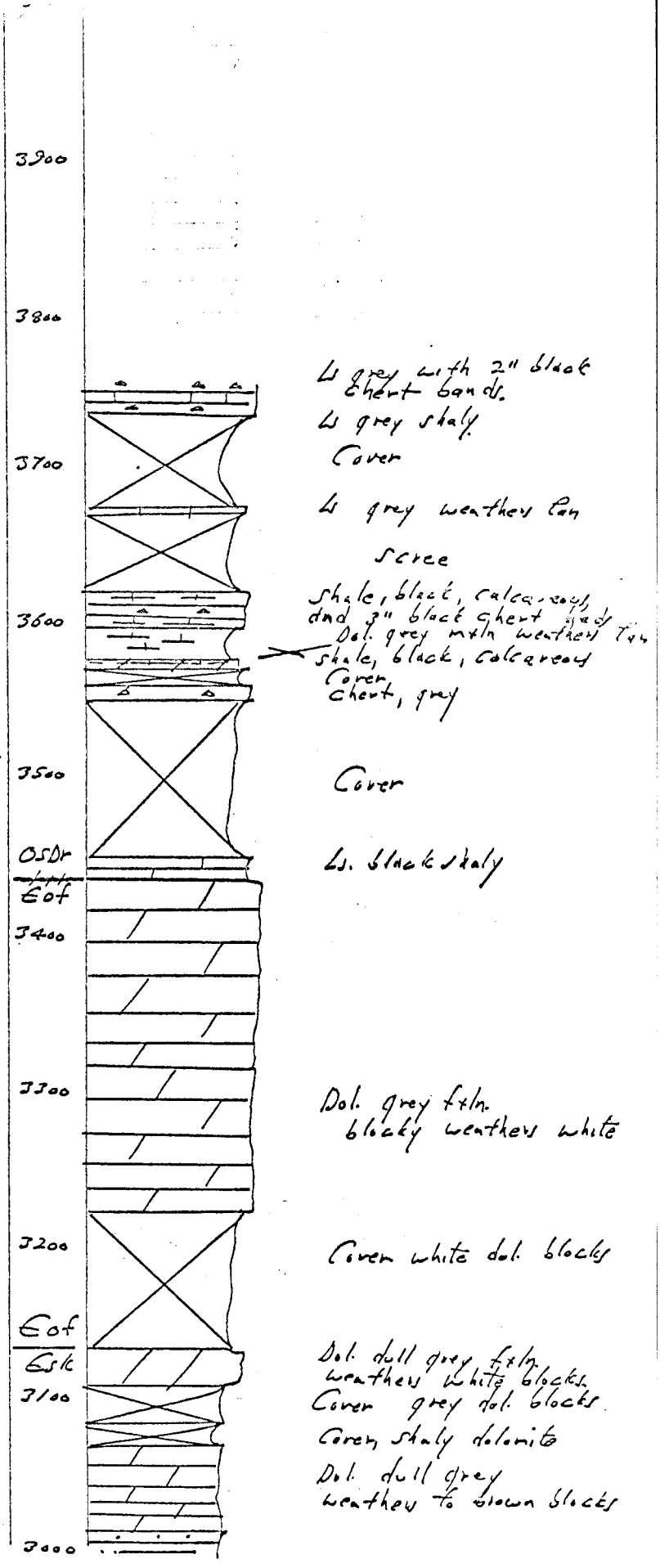


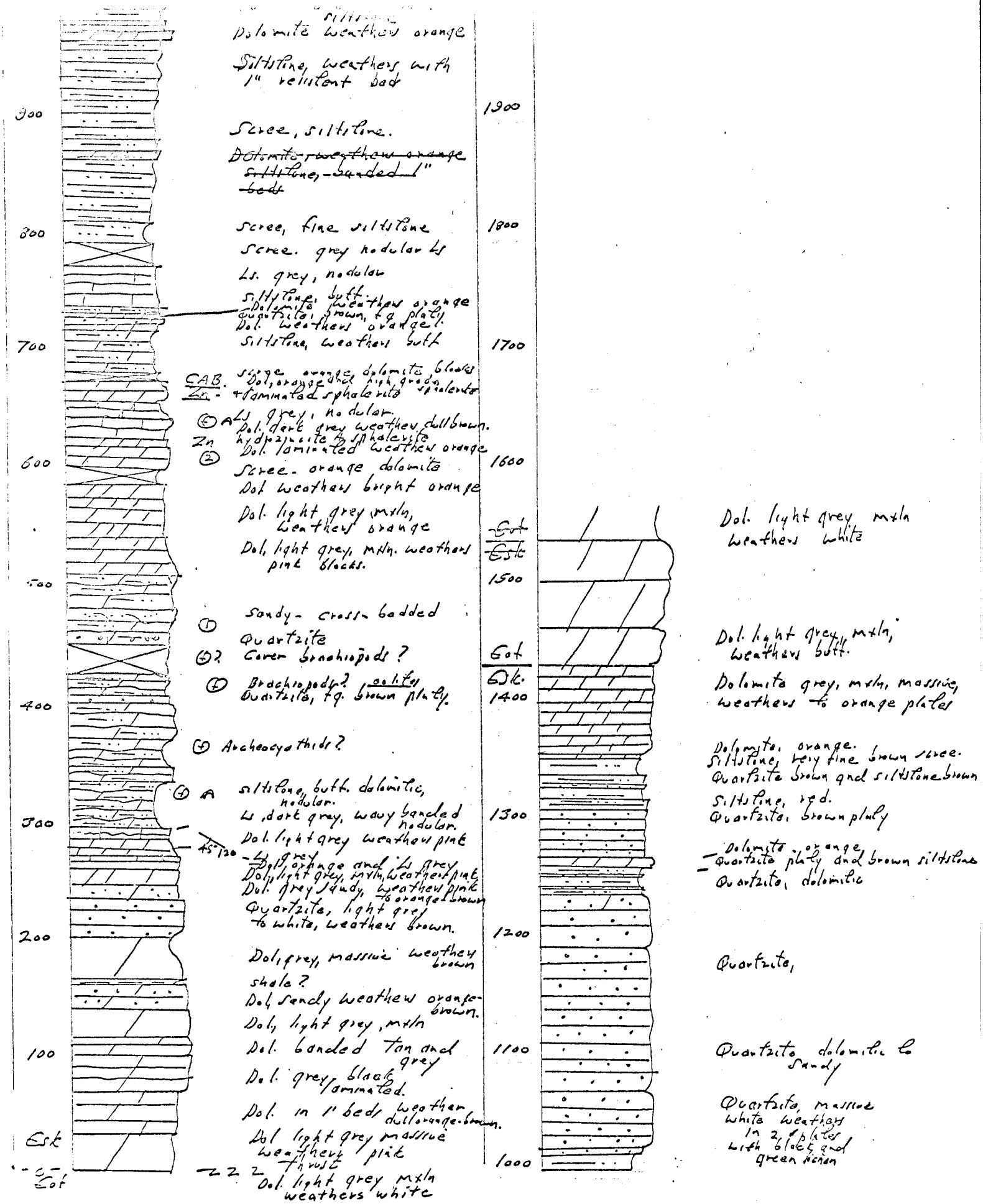
Ls. dull gray, weathers dull gray with 2" shiny black chert bands, cliff forming

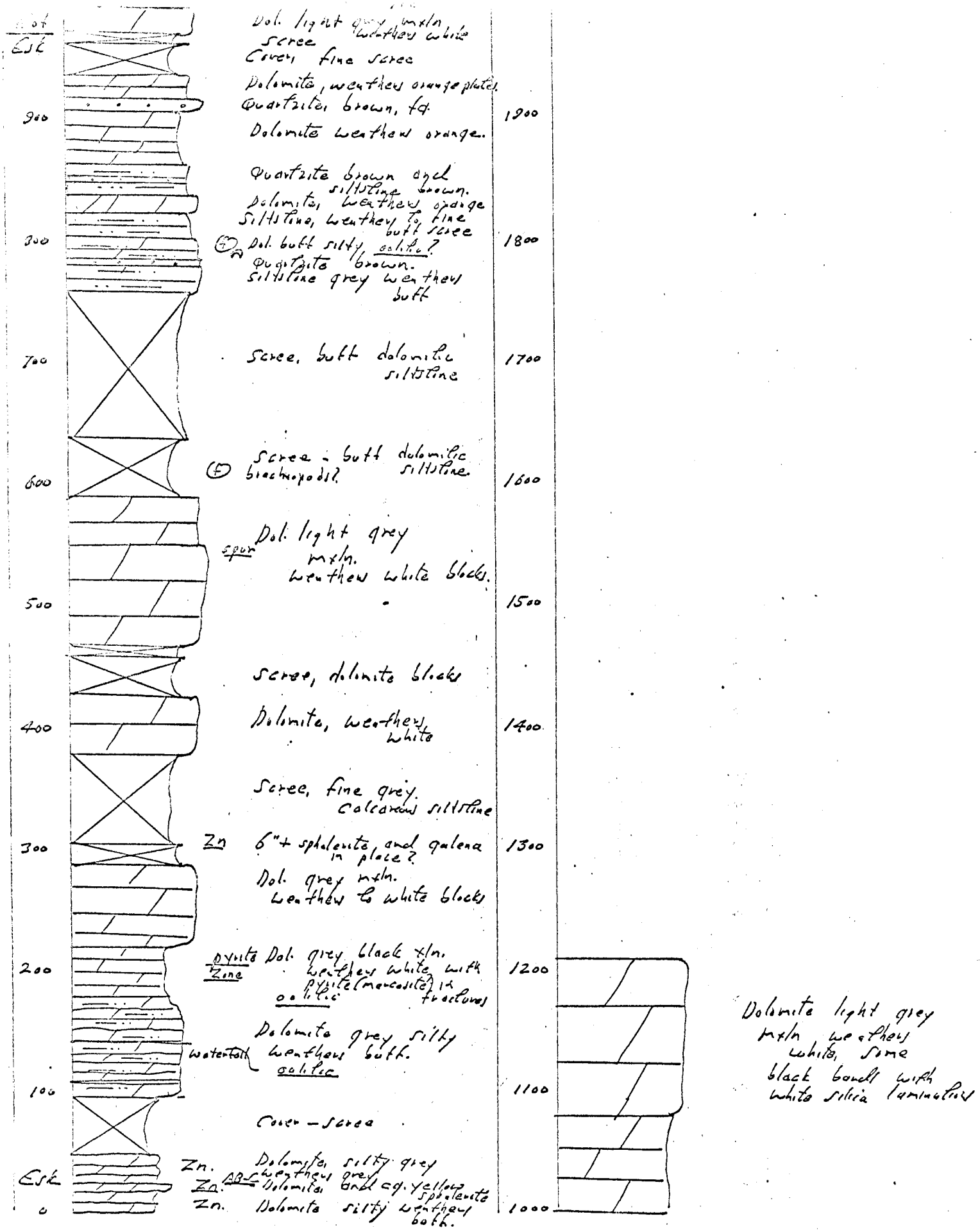

Ls. buff, platy, and grey shale. Trilobites
Quartzite, white fg, Skolithos
Dol. dark grey laminated weathers to orange platy Mudcracks
Dol, grey, mxln, weathers in pink blocks, oolitic?
Siltstone, buff, dolomitic
Quartzite, brown, massive
Dol. brown sandy, platy
Quartzite brown, 6" plates
Quartzite, white, fg.
Quartzite, brown to rusty plates.
Quartzite, white fg. Massive, green and black lichen
Quartzite platy.
Shale, black papery
Dol. light grey, vuggy, weathers pink
Dol. grey mxln, sandy laminations, weathers brown
Dol. light grey mxln, massive weathers orange
Siltstone, tan, dolomitic weathers, yellow pink
Quartzite, white, massive
Cover
Quartzite, massive, white, fine-grained, with greenish wavy laminations, black and green lichen
Cover
Dol. light grey mxln weathers pink blocks.
CSK
Eq.
900
800
700
600
500
400
300
200
100
Eq
0


Ls. light grey platy
Dol. light, grey, mxln weathers bright orange
Ls grey.
Dol. light grey mxln, laminated weathers pink
Dol. light grey mxln. weathers orange tan, grey to top
Dol. light grey sandy weathers dull grey buff
Quartzite, brown massive
Ls. buff. grey shaly
Dol. yellow weathering platy, pink and orange plates and grey ls.
Ls dark grey, wavy, banded with buff silty bands Sellenella
Cover
Ls dark grey massive with three orange weathering dolomite bands
Siltstone, buff, calcareous and black ls
Dol. tan weathering plates
Ls dark grey oolitic
Cover
Dol. green, silty, yellow weathering plates.
Cover.
Dol. silty green weathers yellow plates, ripple marks and mud cracks
Cover.
Ls. light grey weathers dull buff, massive
Ls. dark grey weathers with buff silty laminae
Ls. grey with buff silty lamina
Dol. orange brown and grey nodular ls.
Siltstone buff. Calcareous
Ls. dark grey, wavy banded
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000


2900
2800
2700
2600
500
2400
2300
2200
2100
2000
brown quartzite buff
Siltstone, dull brown dolomitic
Dol. dull grey weathers tan plates
Cover
brown siltstone? scree
Approximate footage (2500 to 2900)
Dol. light grey sandy weathers buff
Cover
scree
Dol. light grey m-xln. weathers pink
Ls. grey heavy banded weathers buff and grey
Dol. dark brown, sandy
Siltstone brown
Dol. brown, sandy platey
Siltstone, buff
Dol. brown sandy platey weather brown
Siltstone, tan, dolomitic
(4) Dol. grey, m-xln weathers white
Dol. dark grey laminated weathers orange
Ls. grey

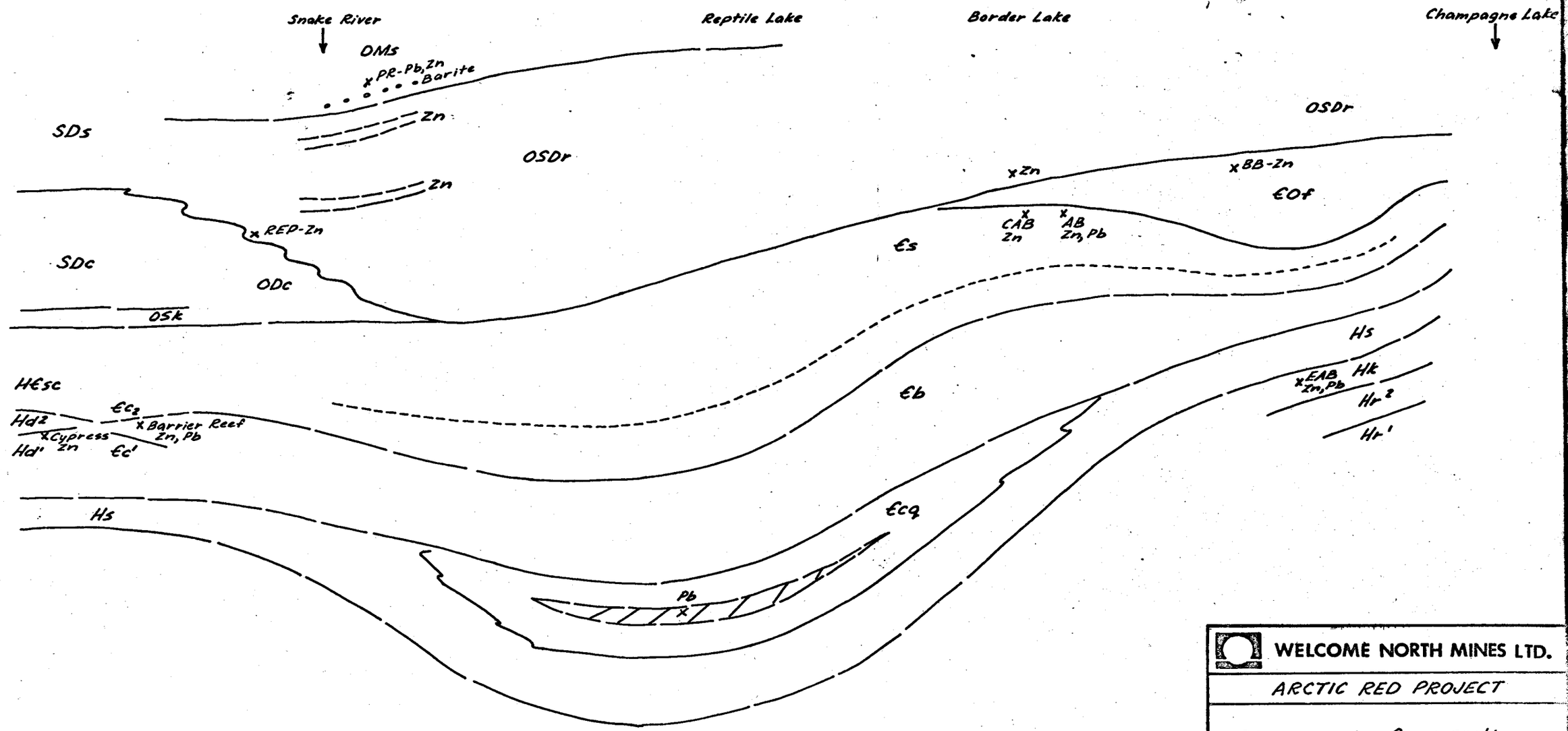

3900
3800
3700
3600
3500
OSDr
Eof
3400
3300
3200
Eof
Esk
3100
3000
Ls grey with 2" black chert bands.
Ls grey shaly
Cover
Ls grey weathers tan
scree
Shale, black, calcareous and 2" black chert
Dol. grey m-xln weathers tan
Shale, black, calcareous
Cover, Chert, grey
Cover
Ls. black shaly
Dol. grey f-xln. blocky weathers white
Cover white dol. blocks
Dol. dull grey f-xln. weathers white blocks.
Cover grey dol. blocks
Cover, shaly dolomite
Dol. dull grey weathers to brown blocks


Dolomite weathers orange
Siltstone, weathers with 1" resistant bed
Scree, siltstone.
~~Dolomite weathers orange siltstone, banded 1" beds~~
Scree, fine siltstone
Scree. grey nodular Ls
Ls. grey, nodular
Siltstone, buff.
Dolomite weathers orange
Quartzite, brown, fg platy.
Dol. weathers orange.
Siltstone, weathers buff
Sdge orange dolomite blocks
CAB. Dol, orange, fine grained, sphalerite
Zn - laminated sphalerite
Ls grey, nodular.
Dol. dark grey weathers dull brown.
hydrozincite & sphalerite
Dol. laminated weathers orange
Scree. orange dolomite
Dol weathers bright orange
Dol. light grey, mtln, weathers orange
Dol, light grey, mtln. weathers pink blocks.
Sandy - cross - bedded
Quartzite
Coiled brachiopods ?
Brachiopods? oolitic
Quartzite, fg. brown platy.
Archeocyathids?
A siltstone, buff. dolomitic, nodular.
Ls, dark grey, wavy banded nodular.
Dol. light grey weathers pink
45/120
Ls grey
Ls orange and Ls grey
Dol, light grey, mtln, weathers pink
Dol. grey sandy, weathers pink to orange brown
Quartzite, light grey to white, weathers brown.
Dol, grey, massive weathers brown
shale?
Dol sandy weathers orange-brown.
Dol, light grey, mtln
Dol. banded tan and grey
Dol. grey, black laminated.
Dol. in 1' beds weather dull orange-brown.
Dol light grey massive weathers pink
Dol. light grey mtln weathers white
Dol. light grey mtln weathers white
Dol. light grey, mtln, weathers buff.
Dolomite grey, mtln, massive, weathers to orange plates
Dolomite, orange.
Siltstone, grey fine brown scree.
Quartzite brown and siltstone brown
Siltstone, rgd.
Quartzite, brown platy
Dolomite orange
Quartzite platy and brown siltstone
Quartzite, dolomitic
Quartzite,
Quartzite, dolomitic to sandy
Quartzite, massive white weathers in 2' plates with black and green veins
900
800
700
600
500
400
300
200
100
Esk
Eot
1900
1800
1700
1600
1500
Eot
Esk
1400
1300
1200
1100
1000


Dol. light grey m+ln weathers white
Scree
Cover, fine scree
Dolomite, weathers orange plates
Quartzite, brown, fg.
Dolomite weathers orange.
Quartzite brown and siltstone brown.
Dolomite, weathers orange
Siltstone, weathers to fine buff scree
Dol. buff silty oolitic?
Quartzite brown.
Siltstone grey weathers buff
Scree, buff dolomitic siltstone
Scree - buff dolomitic siltstone
brachiopods?
Dol. light grey m+ln. weathers white blocks.
spur
Scree, dolomite blocks
Dolomite, weathers white
Scree, fine grey calcareous siltstone
Zn
6"+ sphalerite and galena in place?
Dol. grey m+ln. weathers to white blocks
Pyrite Zone
Dol. grey black +ln. weathers white with pyrite (marcasite) in fractures
oolitic
Dolomite grey silty weathers buff.
Waterfall
oolitic
Cover - scree
Dolomite, silty grey
Zn.
Dolomite, weathers grey
Zn.
Dolomite, buff cg. yellow sphalerite
Zn.
Dolomite silty weathers buff.
ESL
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
Dolomite light grey m+ln, weathers white, some black bands with white silica laminations

Bonnet Plume High

Mackenzie Arch



WELCOME NORTH MINES LTD.

ARCTIC RED PROJECT

Diagrammatic Cross-section through Reptile Lake

Scale: —	Date: April 1977	N.T.S.
Revised:	By: J. Crawford	File