4270

82M/13E

GEOLOGICAL REPORT

ON THE

BOULDER CLAIM GROUP

KAMLOOPS MINING DIVISION

LATITUDE 51°50', LONGITUDE 119°41.5'

By

D. L. Cook, P. Eng.

For

UNION CARBIDE CANADA MINING LTD.

Work Completed During Period

August 1st, 1972 - November 13th, 1972.

March 30th, 1973.

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GEOLOGICAL REPORT

On The

BOULDER CLAIMS GROUP, KAMLOOPS MINING DIVISION, B. C.

INTRODUCTION

The Boulder Claim Group was staked by Union Carbide Exploration Corp., during July and August 1972 to cover what appeared to be the source area of scheelite encountered in down-stream panning and in boulders in Maxwell Creek.

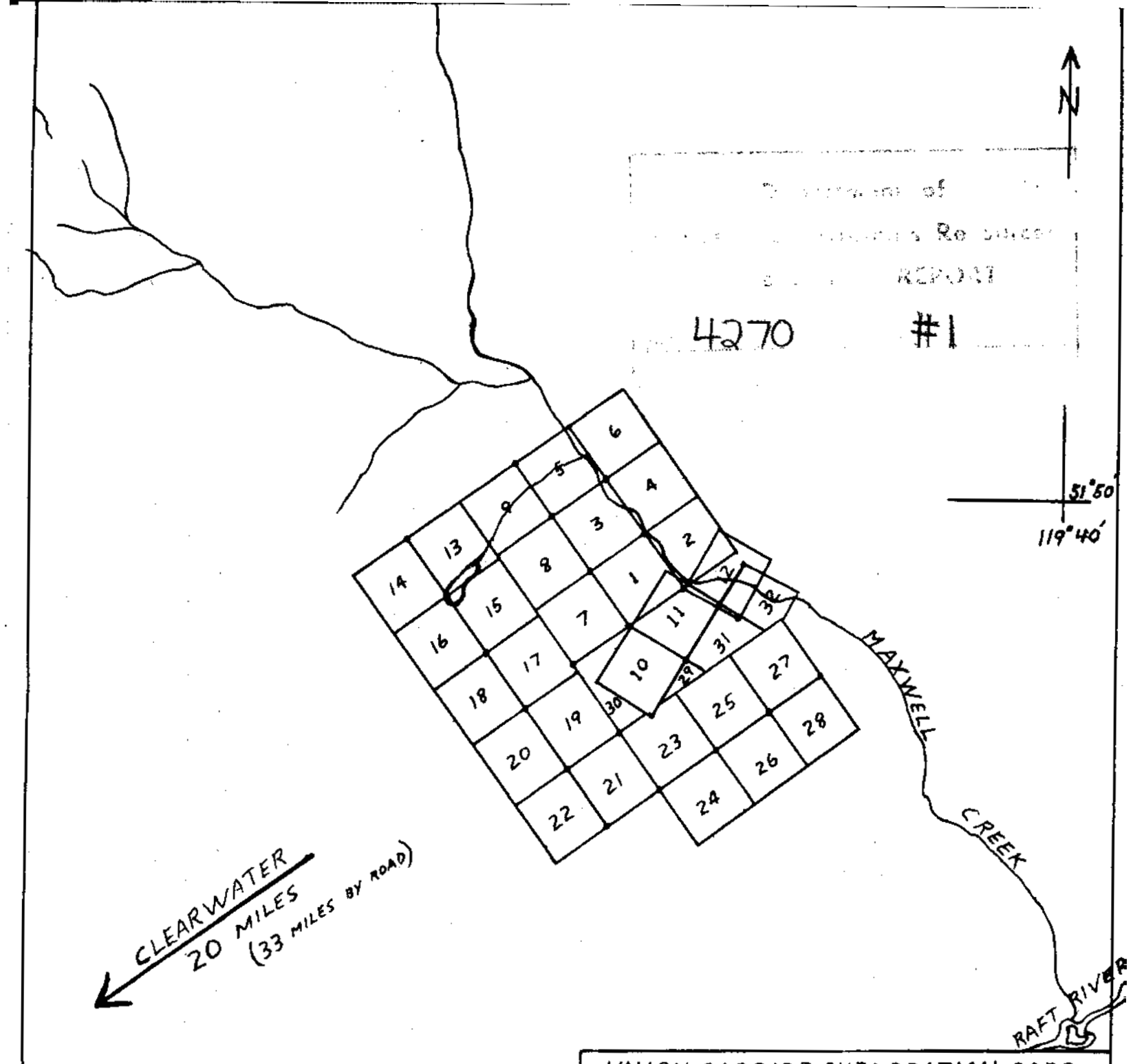
The present report outlines the results of the geological examination carried out on the property commencing August 1st, 1972.

Geological mapping, sampling and drilling were completed between August and November 1972 by B. D. Ryan and others under the supervision of D. L. Cook, P. Eng.

OWNERSHIP

The claims staked in the name of Union Carbide Exploration Corporation are as follows:

Name	Location Date	Recording Date	Record Number
Boulder 1 - 11	27 July 1972	1 August 1972	121089 - 121099
Boulder 12	1 August 1972	7 August 1972	121344
Boulder 13 - 22	19 August 1972	30 August 1972	121862 - 121871
Boulder 23 - 28	20 August 1972	30 August 1972	121872 - 121877
Boulder 29, 31 & 32	27 August 1972	30 August 1972	121878, 121880 & 121881
Boulder 30	26 August 1972	30 August 1972	121879



UNION CARBIDE EXPLORATION CORP.

LOCATION MAP

BOULDER CLAIMS

DRAWN BY: B.G.D.	DATE: APRIL 9, 1973
SCALE: 1" TO 5/9 MILE	1:36000

NTS 82 M/13 E

All were recorded with the Mining Recorder for the Kamloops Mining Division at Kamloops. No other claims are held in the immediate area by any other company. (See accompanying claim map).

LOCATION

The claims are located 20 miles N. E. of Clearwater on the W. side of upper Maxwell Ck. and 80 miles N. of the town of Kamloops. They are in the Kamloops Mining Division and in map area 82M/13E of the National Topographic Series.

ACCESS

By logging road along Raft River and Maxwell Creek for 25 miles which leaves the Yellowhead Highway (No. 5), 4 miles E. of Clearwater.

A 'cat' road gives access to drill-sites. A helicopter pad has been cut in the bed of Maxwell Creek.

TOPOGRAPHY

The claims and surrounding area are heavily forested with steep, rounded, flat-topped hills up to about 6000' which is also the tree line. The only peak above the tree-line in the immediate area is Raft Mtn. (8040').

The flat hill-tops are swampy with numerous small lakes, conditions which will undoubtedly lead to problems in reconnaissance drainage sampling.

REGIONAL GEOLOGY AND STRUCTURE

The most 'detailed' mapping in this region was by R. B. Campbell in 1962 and 1963 (Adams Lake Map Sheet: G.S.C. No. 48-1963). However, this work is of a very general nature with extensive areas of rocks being undifferentiated both lithologically and structurally.

On and around the Boulder claims, the rocks are of the Shuswap Metamorphic Complex described, but not mapped, as consisting of the following rock assemblages:

1. Metasedimentary gneisses of varied type.

2. Amphibolite
3. Quartz-mica schist
4. Quartzite
5. Marble and Skarn
6. Pegmatite
7. Granitic rocks

Numbers 3 to 7 have been identified on the property.

Structurally, the Shuswap Metamorphic Complex is the heart of the core zone of the S. part of the E. Fold Belt of S. British Columbia. Rocks are generally in the upper amphibolite or hornblende-hornfels facies. The Complex is flanked on the N. by the Caribou Mountains Sub-province, on the E. by the Kootenay Arc (physiographically the Selkirk Mountains) and on the W. by the Intermontane Zone (Physiographically the interior plateau).

The metasedimentary rocks and schists are intruded by an enormous number of dykes, sills, and small irregular bodies of the granitic rocks. Only the larger of these granitic rocks have been mapped by Campbell, well to the S. of the Boulder claims. These are described as unfoliated or weakly foliated, mainly medium-grained biotite granodiorite. The granitic dykes and sills are described as mainly in the N. part, i.e., around the Boulder claims. The mapping on the Boulder claims, although limited, suggests one of these larger granitic bodies (unrecognized by Campbell) occurs in that area.

The pegmatites intrude all the other granitic rocks.

The metasedimentary gneiss contains a lower sequence that is generally similar in lithology, though not in detail, to the Lower Cambrian Hamill quartzite-Badshot limestone succession in the Kootenay Arc.

This lower quartzite-carbonate sequence remained resistant to metamorphism (i.e. relative to the more pelitic rocks) forming marbles and schistose quartzites. The metasedimentary rocks of the Boulder claims are thought to be of this succession.

The principal deformation and metamorphism of the Complex occurred in post-Late Triassic or Early Jurassic time. It began in the E. part of the Complex with intense metamorphism and migmatization accompanying large scale east-west trending interfolding of the core and mantle. Such folds permitted the local rise of migmatitic core synchronous with a northwesterly arching along the E. edge of the Complex, producing a series of gneiss domes at about 50 mile intervals. The final deformation consisted of warping and development of some N.W. trending folds.

PROPERTY GEOLOGY

In general, the area of claims drilled and geologically mapped (claims 1, 3, & 11) is a series of north to north-northeast trending pendants of west to northwest dipping metasediments, (marbles, skarns, quartzites and schists) lying in intrusive rocks (mainly leucocratic quartz monzonite, biotite quartz monzonite and pegmatite). The pendants merge and diverge both horizontally and vertically which complicate the interpretation.

The Metasediments

Marbles and Skarns: This succession of quite variable rocks, has a probable stratigraphic thickness of about 140' but is interupted by a number of thin beds of quartz-mica schist, quartzite and all variations between.

The variations within the skarn are thought to reflect differences in the lithology of the original limestone as composition within a given bed does not seem to change unless perhaps on a regional scale. This continuity of composition can be seen not only in outcrop but in a general way between drill-holes e.g. the banded diopside skarn bands seem to correlate in holes 1, 2 & 5.

If looked at on an even broader scale however, there does seem to be some variation along beds as the amount of wollastonite (previously identified on this property as tremolite) and calcite increases southward between the site of drill-hole No. 1 to a marble outcrop about 300' S. of the 'cat' road/logging road junction, a distance of about one-third of a mile.

Calcite as marble, or in skarn, with variable diopside, garnet and wollastonite, occurs only in the S. part of the mapped area. This is interpretted as an indication of decreasing reactive and additive solutions from N. to S. This gradient does not correspond to distance from intrusive contact as the intrusive is common throughout the mapped area. The suggestion is that solutions (of a reactive and additive nature) originated from the intrusive somewhere to the N. possibly in the vicinity of the scheelite mineralization.

The skarn with high incidence of wollastonite indicates a high level of silica, possibly in the original limestone as detrital quartz, or derived from the intrusive.

The very general correlation between the incidence of both calcite and wollastonite suggest the latter may be a function of distance from the source of reactive and additive solutions and therefore has derived its silica from this source. Vein and patchy quartz obviously from pervading solutions, is common. This is thought to be post-wollastonite. The other skarn types have been recognized on the property; one predominantly coarse and with dominant mineral as garnet; the other predominantly fine and banded, with dominant mineral as diopside. Both types however, have the minerals of the other, as well as variable content of idocrase, quartz and occasional wollastonite and scheelite; the latter up to 2.60% WO_3 over stratigraphic thickness up to 12.3'.

Quartzites and Schists: These are the lithological end members of a gradational series of rock types varying from fine-grained 'clean' quartzite through biotite quartzite, quartzitic biotite schist to biotite-rich quartz schist.

These metasedimentary rocks are thought to be equivalent to the Lower Cambrian Hamill quartzite-Badshot limestone succession in the Kootenay Arc.

Intrusive Rocks:

The main intrusive rocks are fine to coarse-grained leucocratic quartz monzonite with variable content of muscovite; fine to coarse-grained biotite quartz monzonite; minor amounts of biotite quartz diorite and biotite granodiorite; muscovite, quartz, feldspar pegmatite.

The leucocratic quartz monzonite and the biotite granitics have been seen in sharp contact with each other and in one case the first appeared to be digesting and therefore intruding the second.

It is suggested that the biotite-rich granitics are the outer phase or phases of the migmatizing intrusive with the leucocratic quartz monzonite being a later phase which has breached the earlier phase. However the evidence for this is recognized as limited.

The contacts of the intrusive with the metasediments are usually parallel to the compositional banding but may be irregular or in rare cases show digestion and/or partial stoping of the sediments.

The intrusive then has apparently invaded the stratified rocks primarily along their bedding producing an irregular contact appearing in section as a myriad of narrow apophyses. Most of the stoping and digestion of the stratified rocks has then occurred at the advancing front of these apophyses with a sharp and relatively non-reactive contact paralleling the beds away from the reactive loci. This explanation would explain why drilling cut so many narrow intersections of intrusive and rarely cut the reactive loci of stoping and digestion.

Muscovite, quartz, feldspar, pegmatite in irregular masses and as dykes or veins are seen pervading all the granitic rocks.

STRUCTURE OF THE PROPERTY

What little is known of the structural geology of the region has been described above. Just how the area of the Boulder claims fits into this overall picture is not very clear.

The only structural feature mapped by Campbell in the claim area is a strike and dip of beds at 329/80N.E. This is not consistent with our own mapping on the claims where strikes and dips are mainly NE/35-70 S.W. in the north, south and east parts and W-E/40-75N in the western part.

Obviously we have not mapped enough area in order to understand the relationship of the claim area to the regional geology.

Considerable evidence for faulting has been encountered in drill-holes as well as some lesser evidence on the surface. Because of the frequency of faulting and poor outcrop it has not been possible (with two exceptions) to correlate between holes and outcrop in order to determine the aspect of the faulting beyond one dimension, or their relative displacement. The exceptions occur at drill-holes 1 and 3, (see geological map and sections).

SCHEELITE MINERALIZATION

Scheelite mineralization in place was seen at two locations on surface and in the core as follows:

	Location	Grade (% WO_3	Rock-type
DDH 2.	124.5' - 126.5'	1.07]	Coarse garnet, quartz idocrase diopside skarn
"	At 128.5'	Minor]	
"	At 129.5'	Minor]	
"	At 138.5'	>1]	
DDH 3.	15' - 19'	2.06	Fine-grained banded diopside, quartz skarn.
"	19' - 27.3'	2.86	Medium to coarse-grained garnet, quartz diopside skarn.

Location	Grade % WO_3	Rock-type
DDH 3. 27.3' - 32'	0.19	Fine-grained unbanded diopside quartz skarn and medium to coa grained garnet, diopside quart skarn.
DDH 5. At 70'	Minor	Limey, coarse garnet idocrase diopside skarn.
" 116.3' - 116.5'	> 0.5	Coarse quartz, garnet diopside, idocrase skarn.
Outcrop near DDH 1.	> 1	Coarse garnet quartz idocrase diopside skarn.
Outcrop near DDH 3.	> 1	Fine-grained banded diopside sk.

Of the most significant mineralization, most of it occurs within the coarse garnet quartz, idocrase, diopside skarn. The exception is a band of fine-grained, banded, diopside, quartz skarn intersected in hole 3 and outcropping near the collar of hole 3. This fine-grained band overlies the mineralized coarse-grained skarn.

The present interpretation of the geology (see sections) indicates that the known mineralization is closed off by intrusive down the dip of beds in the area of holes 2, 3 and 5. To the N. and E. the depressed topography would appear to limit the mineralization in that direction. However, elsewhere (i.e. S. and E.) there remains untested ground between drill holes where there may be a shoot or shoots of ore extending away from the known mineralization.
Faulting will undoubtedly compound the problem of locating these possible extensions.

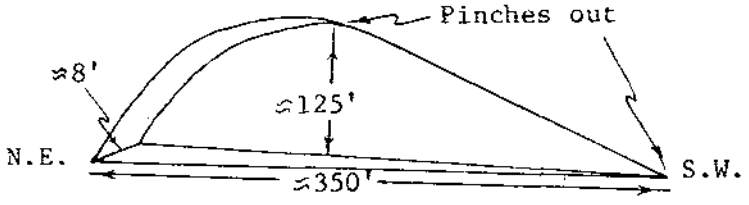
The first question to be asked is whether the intersections and outcrop of scheelite-bearing skarn are of one or more continuous horizons.
The confinement of the scheelite to one or possibly two units would help to establish the continuity of mineralization and improve the outlook for extensions. If no pattern of continuity can be seen between drill-holes and outcrop, then patchy mineralization (or continuous mineralization offset by faulting) would be suggested.

When examining a three dimentional model built up from drill-hole sections and the geological map, the mineralization in hole 2 and near hole 1 seem to correlate, but that in and near hole 3 does not.

Either the block of ground between holes 1 and 2 has been offset by faulting (and faulting is known to be quite common in the area drilled) or there are two mineralized horizons represented.

The pattern of scheelite-bearing boulders shows two distinct lines which when related to the outcrop at holes 1 and 3 strongly suggest two separate bands of mineralization.

Assuming two distinct bands, then the upper band (intersected by hole 2 and outcropping near hole 1) would appear to pinch out towards hole 2 as it is about 8' thick near hole 1, but only 2' thick in hole 2. It is further closed off by hole 5, Maxwell Creek, and at depth, probably by the intrusive. Thus this mineralized band may take the following form:



i.e. 5000 stu of 1% WO_3

Possibilities for extension exist to the S.W. where there is always the possibility of the body dilating again. This ground has not been tested.

The lower band (intersected by hole 3 and possibly represented by the E. line of boulders) would appear to be closed off by holes 2, 5 and 7, the intrusive down dip, and the depressed land surface at Maxwell Creek. This mineralized band would therefore probably have a similar volume to the upper band but about twice the grade, i.e. ≈10,000 stu. if of 2% WO_3.
Total possible reserves for the two bands might therefore be 15,000 stu. of between 1 and 2 % WO_3.

RECOMMENDATIONS

The possibilities for ore continuation are as follows:

1. Down dip extensions: Although the intrusive appears to close off down dip extensions of 'ore', it has nevertheless been seen to have a very irregular contact with its intruded rocks and significantly deeper extensions of the metasedimentary pendants containing scheelite may occur.

2. Being in the Shuswap Complex where structures are known to be complex, the same lithological setting may be repeated in any direction, not only on the property, but in the surrounding area. The most obvious area of interest in this regard is the on-strike continuation of the mineralized bands in metasedimentary pendants which may occur N.E. of Maxwell Creek.

3. The possibility of two distinct mineralized bands has been suggested. This can be tested by further drilling: See below.

The following recommendations are made:

1. Complete the following drilling at -45° declination, a total of about 1500' of drilling.

   (a) One hole near the collar of hole 5 to test for the intrusive contact and a possible extension of the suggested lower band of mineralized skarn.

(b) One hole between the collars of holes 1 and 5 or 1 and 3 to test for the continuation of mineralization found in hole 2 and in outcrop at hole 1. While realizing that this hole will not add significantly to tonnage even if it proves the continuation of mineralization between holes 3 and hole 1 outcrop, it would reveal something of the degree of persistance of mineralization which may be expected elsewhere.

(c) One hole 250' S.W. of holes 2 and 7 to test for the possible extension of the mineralization found in hole 2.

(d) One hole between 150' and 300' W.S.W., of hole 4 to test the ground in that area. If skarn is encountered in this hole then further holes to the W. should be planned.

2. Carry out the following with the purpose of finding a similar mineralized situation or situations to that already known.

(a) The panning of soils in the area of the known mineralization detected the mineralization, but only within 100' to 200' of it. It is recommended then that panning on say a 50' grid should be carried out over the extent of the claim area.

(b) Based on the results of this panning, further 'cat' trenching should be undertaken.

(c) The outcrop exposed by this trenching should be mapped and further drilling may be proposed.

3. The region surrounding the Boulder claims should be thoroughly prospected and mapped. This should include the Raft Mountain occurrence 10 miles to the S.W.

BOULDER CLAIM GROUP - ASSESSMENT COST, 1972.

Personnel

D. L. Cook, P. Eng., Field Examinations (Sept. 30, Oct. 1 & 28, 1972) Map Preparation (1 day) Report Preparation (1 day) Logging Drill Core (8 days) 14 days @ $40.	$ 560.00
B. D. Ryan, Geologist, Field Examination (August 1-4, 27-31, Sept. 1, 1972) Map Preparation (3 days) Report Preparation (1 day) 13 days @ $35.	455.00
H. Abendroth, Geologist, Field Examinations and Short-hole percussion drilling (Aug. 4 - 25, 1972) Diamond Drilling Supervision (Oct. 13 - 30, 1972) 40 days @ $35.	1,400.00
B. Dimitroff, Geologist, Diamond Drill Supervision (Oct. 17-19, 1972) 3 days @ $35.	105.00
P. Burt, Senior Field Assistant, Field Examinations (August 24 - 29, 1972) Diamond Drill Supervision (Sept. 7 - 15, 1972 and Oct. 31 - Nov. 21, 1972). 37 days @ $30.	1,110.00
D. Oatway, Senior Field Assistant, Map Preparation (1 day) Field Examinations and short-hole percussion drilling (August 4 - 29, 1972) 27 days @ $30.	810.00
Eight Field Assistants for a total of 107 man days between August 7 and Sept. 30, 1972. 107 days @ $30.	3,210.00

Assaying

Bondar & Clegg Co. Ltd. 135 Rock Assays @ $8.00 each	$ 1,200.00

Transportation

One Truck on hire between Aug. 1 & Nov. 21, 1972 4 months @ $400/month	1,600.00
Helicopter (August 4, 1972) 2 hours @ $150.00 per hour.	300.00

Drilling

Canadian Longyear Ltd.	
967.3' of diamond drilling @ $7.80/' (Sept. 10-29/72)	7,644.94
802' of diamond drilling @ $11.20/' (Oct. 13-Nov.13/72)	8,982.40
10 Moves between holes @ $341.00 each.	3,410.00
Mobilization and Demobilization	1,820.00
Reaming Hole No. 1.	205.87
Misc. Labour	28.60
Mud Operations	101.07
190 Core Trays @ $1.30.	247.00
Tractor Rental (October 1 & Sept. 9-30, 1972)	459.35

Miscellaneous

Cat. Trenching (August 15 - 18 & 29, 1972) 30 hours @ $30.00	900.00
Research and Productivity Council 3 Mineral Determinations	30.00
B. D. Ryan 2 Mineral Determinations @ $9.00 each.	18.00
Total	$34,597.23

Respectfully submitted

March 30, 1973.
Vancouver, B.C.

D. L. Cook, P. Eng.

SCALE

0 10 25 50 100 150 300'

N

TRUE NORTH, DECLINATION 25°30'

500 Ft. NS, EW GRID

CLOSURE ERRORS: SKETCH OF SURVEY LOOPS

LEGEND

- A — QUARTZ BIOTITE SCHIST
- B — QUARTZITE
- C — MARBLE
- SKARNS
  - D — COARSE GARNET SKARN
  - E — BANDED DIOPSIDE SKARN
  - F — TREMOLITE SKARN
  - G — LIMEY SKARN
  - SILICEOUS SKARN
- INTRUSIVE ROCKS
  - L — LEUCOCRATIC QUARTZ MONZONITE
  - B — BIOTITE QUARTZ MONZONITE
  - GD — GRANODIORITE
  - QD — QUARTZ DIORITE
  - PEGMATITE
- MAINLY INTRUSIVES (NOT EXPOSED)
- MAINLY METASEDIMENTS (NOT EXPOSED)
- DISCORDANT CONTACT
- COMPOSITIONAL LAYERING
- LINEATION
- OUTCROP & CONTACTS DEFINED
- SUB-OUTCROP & CONTACTS APPROXIMATE OR INFERRED
- BOULDER
- TRENCH OR ROAD
- STREAM
- SOIL SAMPLE: (10)=SCHEELITE GRAIN COUNT
- SURVEY STATION
- APPROXIMATE CONTOURS (altimeter set at station 113 to 4000')
- FAULT (60° Dip, 12" Thickness of crush and Gouge)
- COLLAR, AZIMUTH & SURFACE PROJECTION OF D.D.H.

Maxwell Creek

Lower Road

4270 M-2

APPROXIMATE LOCATION

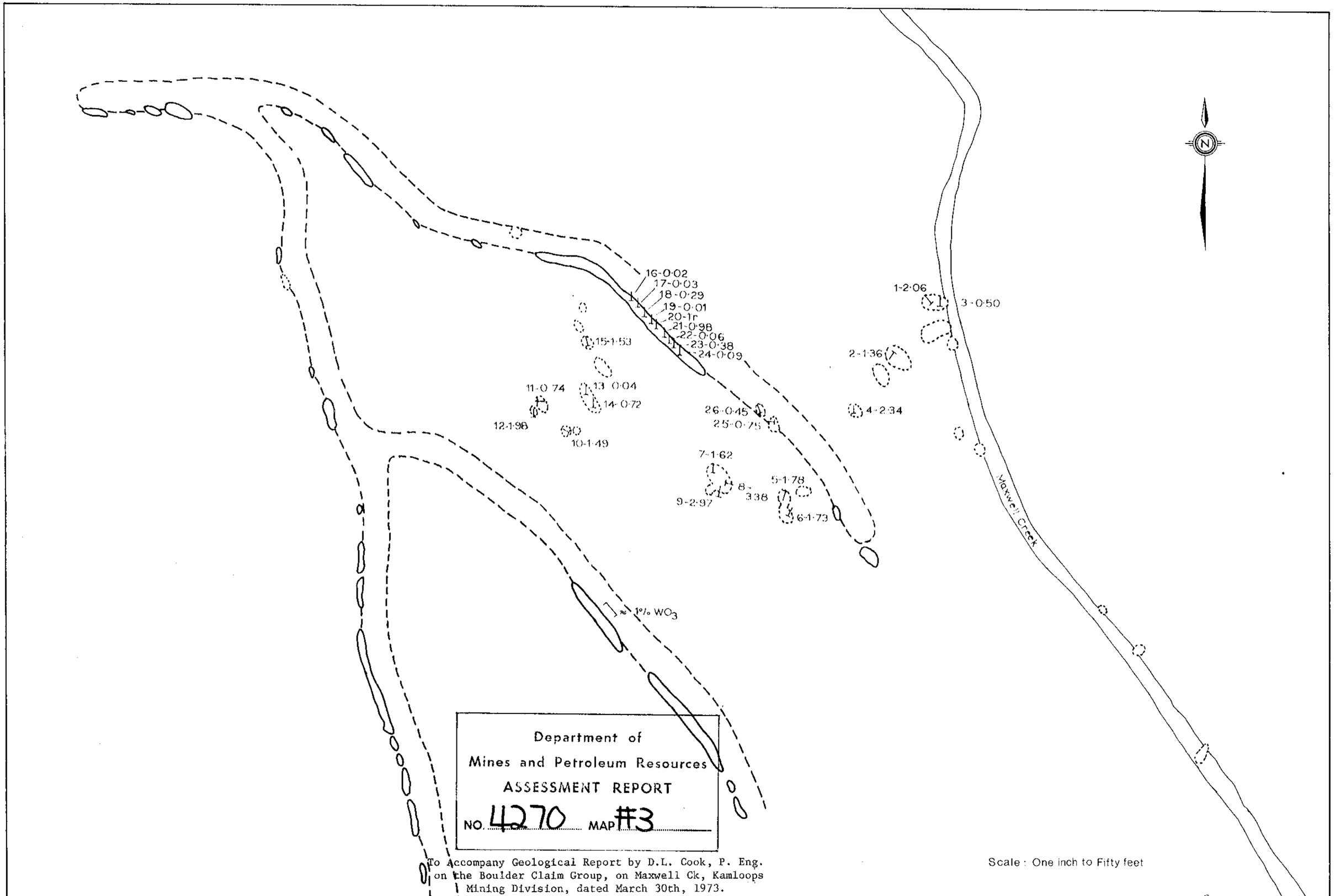
To Accompany Geological Report by D. L. Cook, P. Eng. on the Boulder Claim Group, on Maxwell Ck, Kamloops Mining Division, dated March 30th, 1973.

UNION CARBIDE EXPLORATION CORP.

BOULDER GROUP

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4270 MAP #2

GEOLOGY BY: B. RYAN & D. COOK	DATE: OCT. 1972 Revised NOV. 1972
SCALE: 1" = 50'	AREA: N.T.S.-82M 13E



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4270 MAP #3

To Accompany Geological Report by D.L. Cook, P. Eng.
on the Boulder Claim Group, on Maxwell Ck, Kamloops
Mining Division, dated March 30th, 1973.

Scale : One inch to Fifty feet

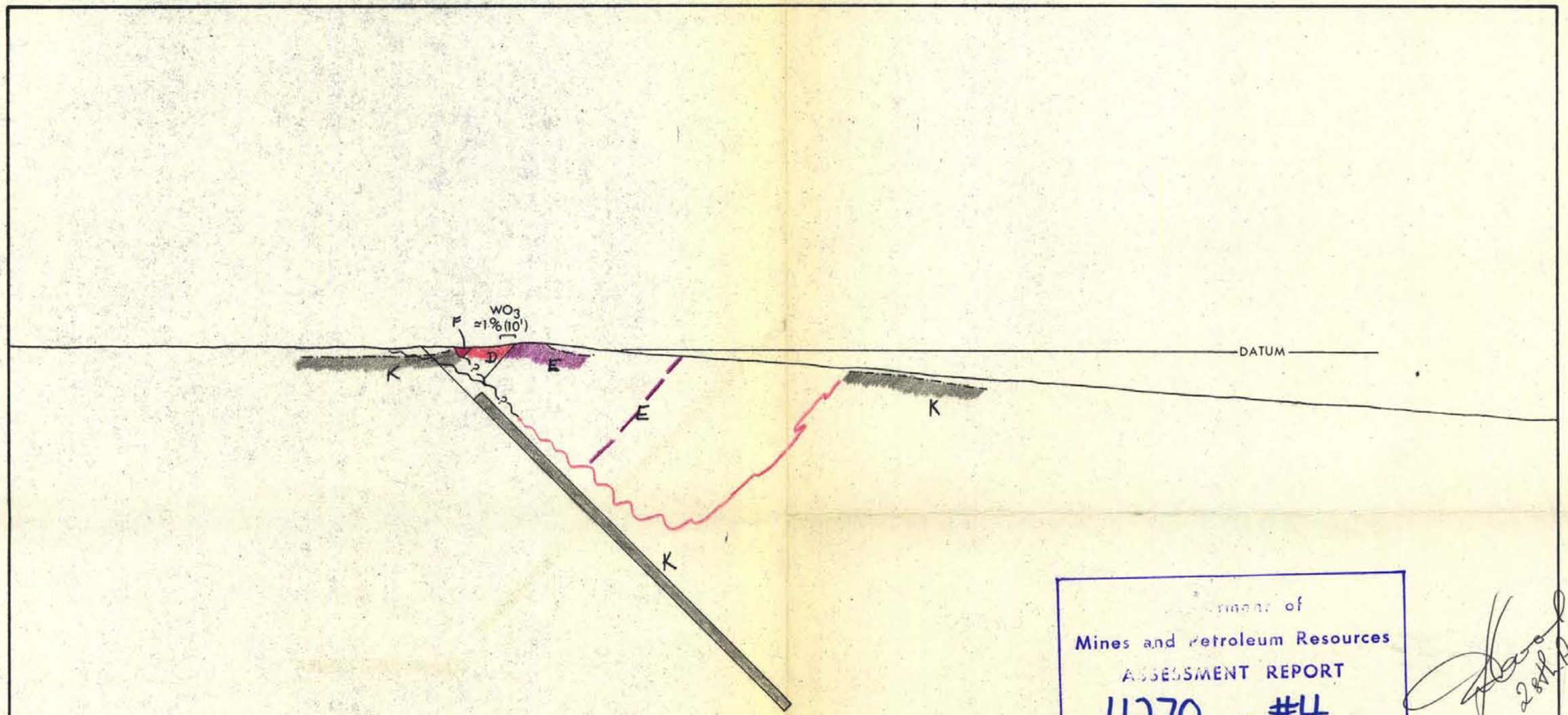
BOULDER GROUP
Assays and Visual Estimate of WO_3

To overlay geological map

Boulder — ⊥ Short percussion hole

Outcrop — 21-0·98 = Hole No. 21, 0·98% WO_3

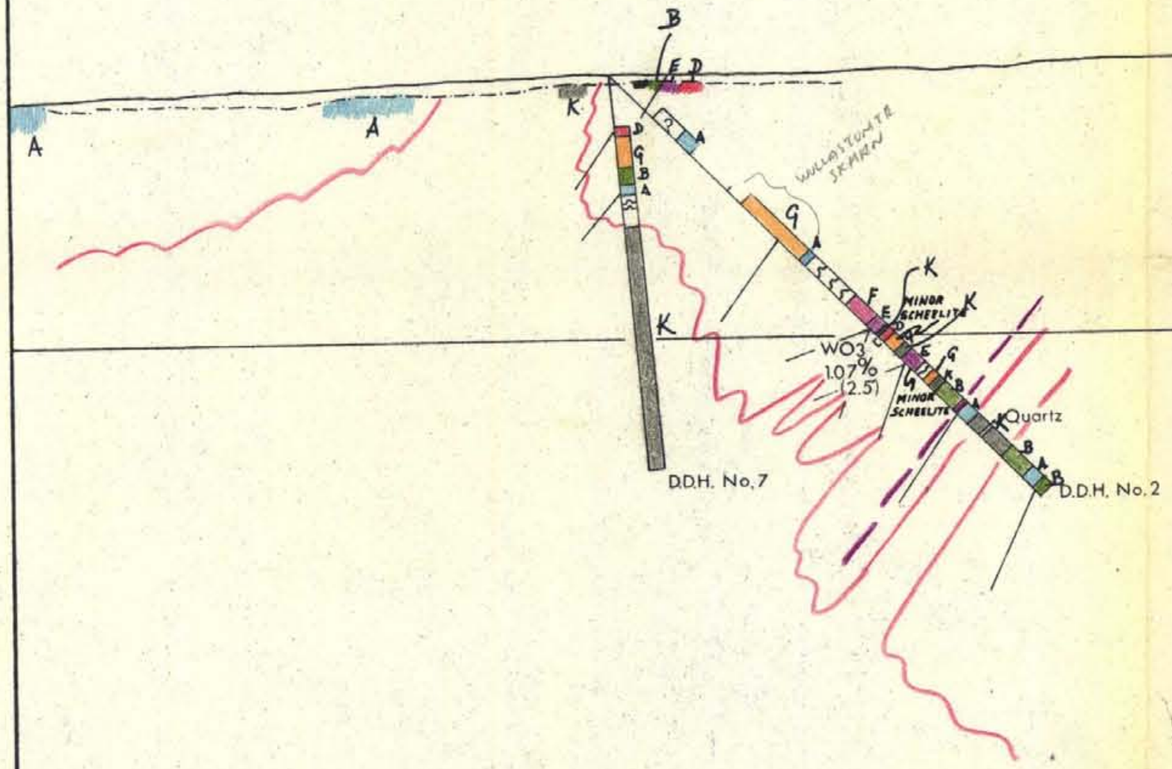
28th April 73



28th April/73

To Accompany Geological Report by D. L. Cook, P. Eng. on the Boulder Claim Group, on Maxwell Ck, Kamloops Mining Division, dated March 30th, 1973.

UNION CARBIDE EXPLORATION CORP.	
BOULDER GROUP NTS 82M13E	
D.D.H. No. 1	Geological Section Looking N.E.
COLLAR ELEVATION: 3692'	AZIMUTH: 150°
GEOLOGY and INTERPRETATION BY D. L. COOK	DATE: NOV., 1972
SCALE: 1" = 50'	DEPTH: 250'



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4270 MAP #5

28th April 73

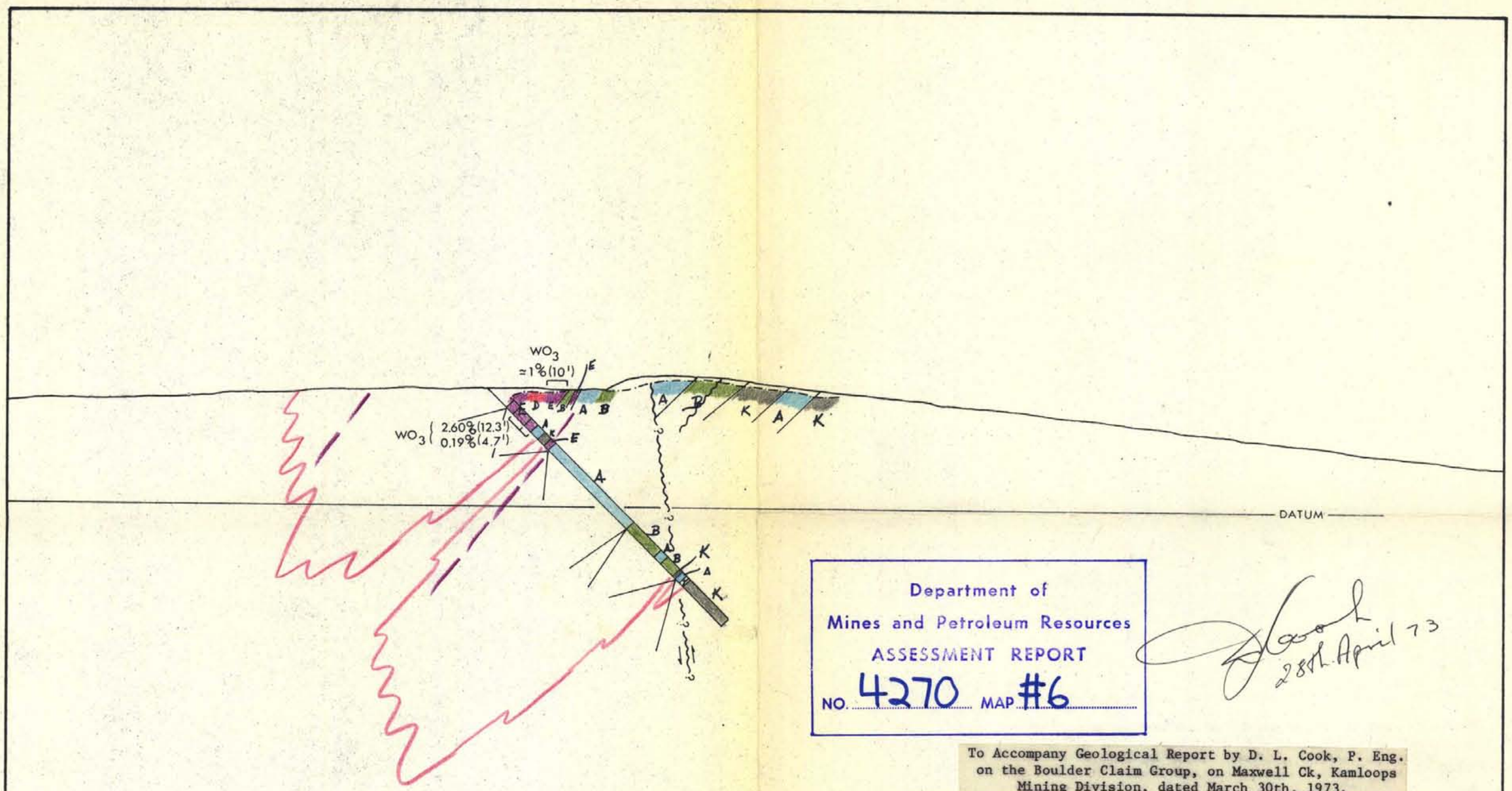
To Accompany Geological Report by D. L. Cook, P. Eng. on the Boulder Claim Group, on Maxwell Ck, Kamloops Mining Division, dated March 30th, 1973.

UNION CARBIDE EXPLORATION CORP

BOULDER GROUP NTS 82M13E

D. D. Hs. Nos. 2 & 7 — Geological Section Looking N.E.

COLLAR ELEVATION: 3779'	AZIMUTH: 150°
GEOLOGY and INTERPRETATION BY D. L. COOK	DATE: NOV., 1972
SCALE: 1" = 50'	DEPTH: 198.2' & 131'



28th April 73

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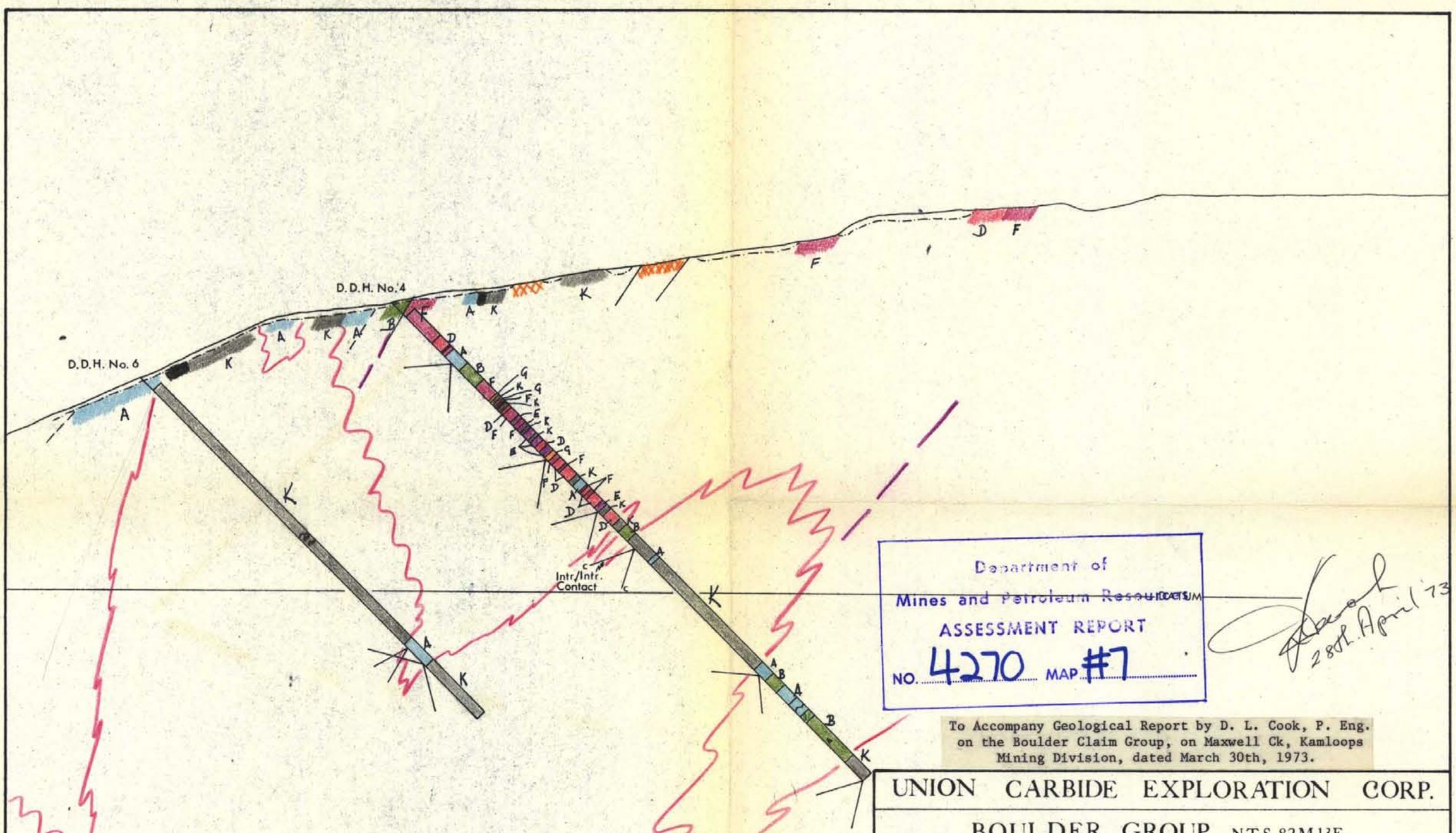
UNION CARBIDE EXPLORATION CORP.

BOULDER GROUP NTS 82M13E

D.D.H. No. 3 — Geological Section Looking N.E.

COLLAR ELEVATION: 3750'	AZIMUTH: 150°
GEOLOGY and INTERPRETATION BY D. L. COOK	DATE: NOV., 1972
SCALE: 1" = 50'	DEPTH: 169'



28th April 73

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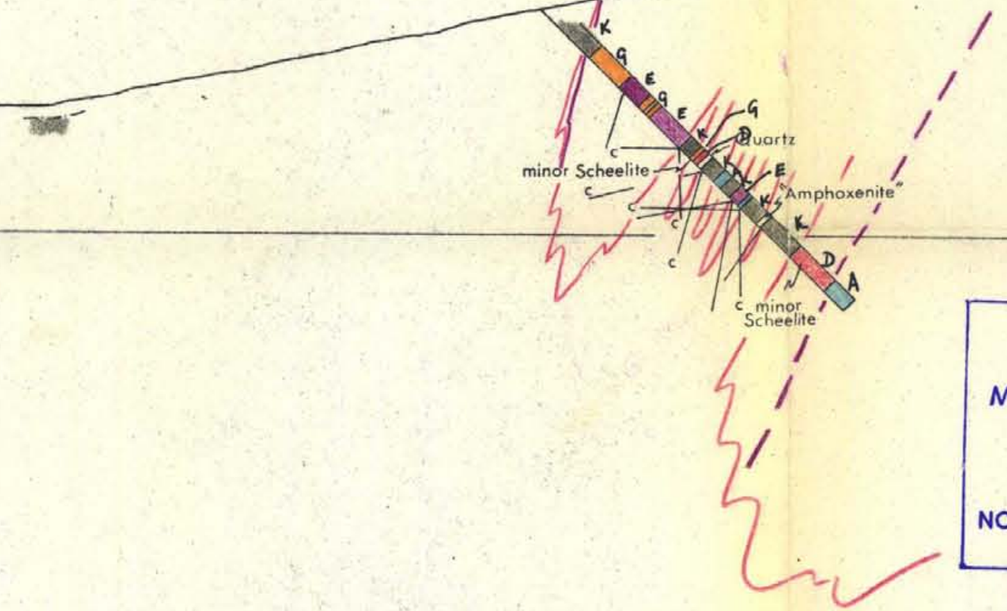
UNION CARBIDE EXPLORATION CORP.

BOULDER GROUP NTS 82M13E

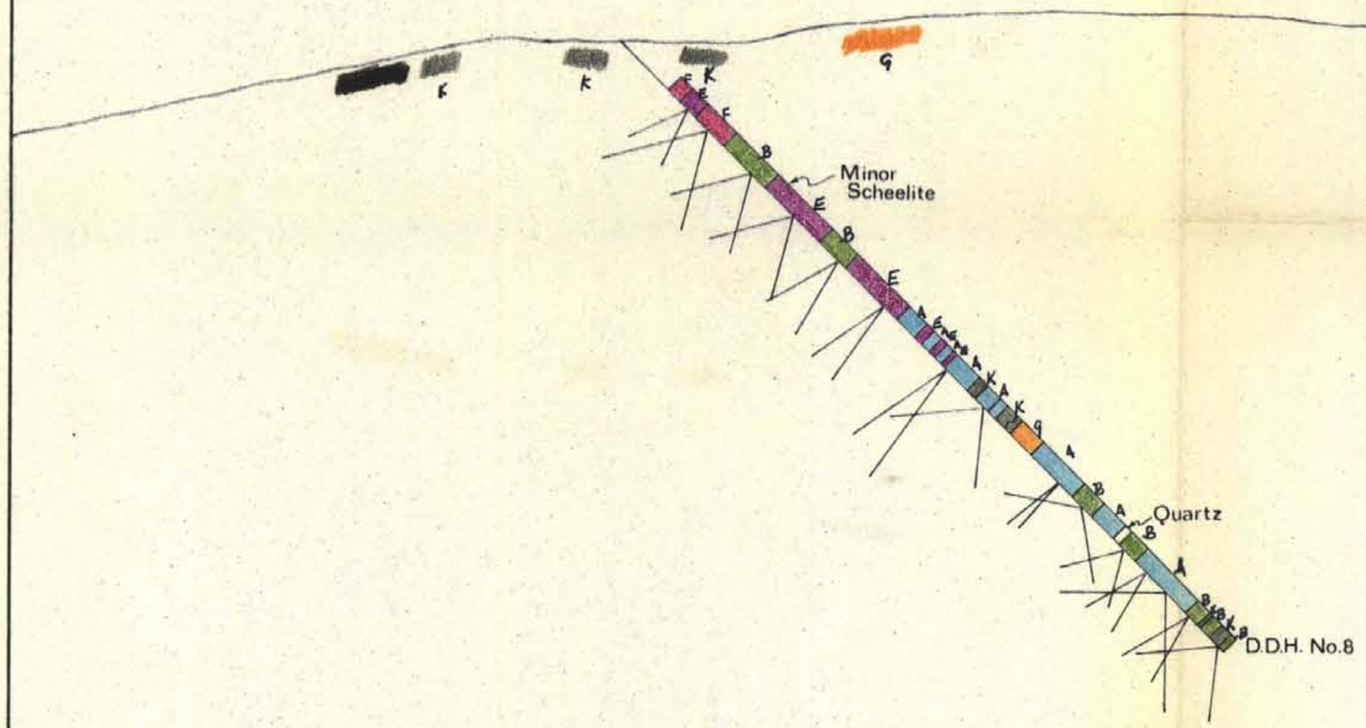
D.D.Hs. Nos. 4 &6 — Geological Section Looking E.

COLLAR ELEVATION: 3840' & 3802'	AZIMUTH: 173°
GEOLOGY and INTERPRETATION BY D. L. COOK	DATE: NOV., 1972
SCALE: 1" = 50'	DEPTH: 350.1' & 249'



To Accompany Geological Report by D. L. Cook, P. Eng. on the Boulder Claim Group, on Maxwell Ck, Kamloops Mining Division, dated March 30th, 1973.

UNION CARBIDE EXPLORATION CORP.	
BOULDER GROUP NTS 82M13E	
D.D.H. No. 5	Geological Section Looking E.
COLLAR ELEVATION: 3765'	AZIMUTH: 170°
GEOLOGY and INTERPRETATION BY D. L. COOK	DATE: NOV., 1972
SCALE: 1" = 50'	DEPTH: 141'



28th April 73

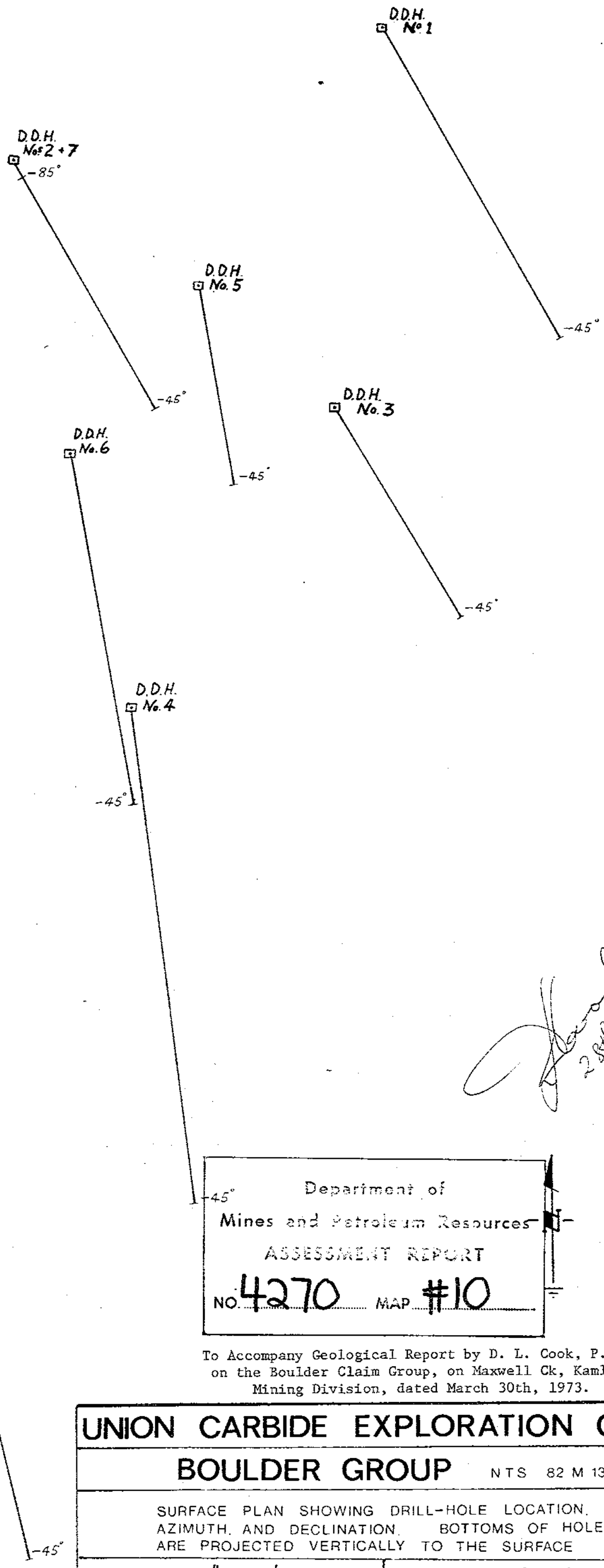
To Accompany Geological Report by D. L. Cook, P. Eng. on the Boulder Claim Group, on Maxwell Ck, Kamloops Mining Division, dated March 30th, 1973.

UNION CARBIDE EXPLORATION CORP

BOULDER GROUP NTS 82M13E

D.D.H. No. 8 — Geological Section Looking E.

COLLAR ELEVATION : 3939'	AZIMUTH : 167°
GEOLOGY and INTERPRETATION BY D.L.COOK	DATE : NOV. '72
SCALE : 1" = 50'	DEPTH : 281'



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Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4270 MAP #10

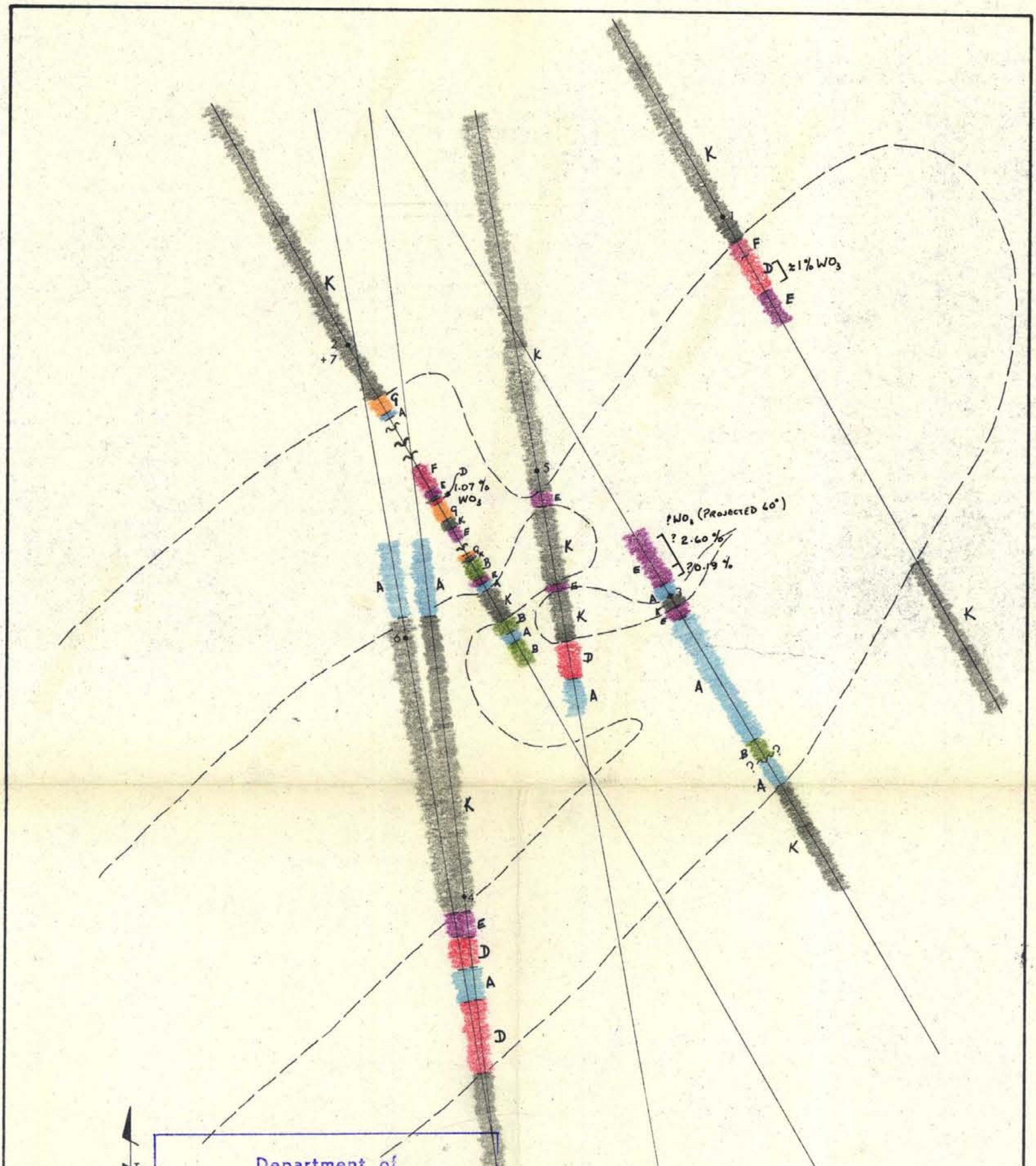
To Accompany Geological Report by D. L. Cook, P. Eng. on the Boulder Claim Group, on Maxwell Ck, Kamloops Mining Division, dated March 30th, 1973.

UNION CARBIDE EXPLORATION CORP

BOULDER GROUP NTS 82 M 13E

SURFACE PLAN SHOWING DRILL-HOLE LOCATION, AZIMUTH AND DECLINATION. BOTTOMS OF HOLES ARE PROJECTED VERTICALLY TO THE SURFACE

SCALE: 1" = 50'	DATE: NOV. 1972



NOTE
Vertically projected collars of drill-holes shown thus •

UNION CARBIDE EXPLORATION CORP.

BOULDER GROUP NTS 82M13E

PLAN AT 3692' LEVEL (Collar of Drill-Hole No 1)

Projected Drill-Hole and Surface Geological Information on Drill-Hole Sections Together with Interpretation of Intrusive/Metasediment Contact.

GEOLOGY and INTERPRETATION BY D. L. COOK	SCALE: 1" = 50'	DATE: NOV. 1972

28th April 73

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LEGEND FOR DRILL-HOLE SECTIONS

A — QUARTZ BIOTITE SCHIST

B — QUARTZITE

C — MARBLE

SKARNS

D — COARSE GARNET SKARN

E — BANDED DIOPSIDE SKARN

F — TREMOLITE SKARN

G — LIMEY SKARN

SILICEOUS SKARN

K — INTRUSIVE ROCKS (MOSTLY QUARTZ MONZONITE)

PEGMATITE

FAULT

c — DIP OF CONTACT

BRECCIATION

COVERED LITHOLOGY

INTERPRETATION OF INTRUSIVE [redacted]SKARN

DIP OF COMPOSITIONAL BANDING IN CORE. BOTH ALTERNATIVES SHOWN WHEN ACTUAL DIP IS IN DOUBT.

INTERPRETATION OF STRATIGRAPHIC LIMITS OF SKARN

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