COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

19 September 1975

# DIAMOND DRILLING REPORT

## RUDDOCK 75-1

## OLIVER CREEK

Kamloops, Revelstoke Mining Division

Maps

1. Loc. of DDH
2. Prop. Loc. map
3. Claim loc. map

PERIOD OF WORK

AUGUST 4, 1975 to SEPTEMBER 11, 1975

Vancouver, British Columbia

D.M. Paterson BSc.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5625 MAP

IN THE MATTER OF THE

B.C. MINERAL ACT

AND

IN THE MATTER OF A DIAMOND DRILL PROGRAMME

CARRIED OUT ON THE MINERAL CLAIM

IT 4

OF THE RUDDOCK 75-1 GROUP

Located at Oliver Creek

in the Kamloops, Revelstoke Mining Division of the

Province of British Columbia

More Particularly N.T.S. 82M

# A F F I D A V I T

I, DENNIS M. PATERSON, OF THE CITY OF VANCOUVER IN THE PROVINCE OF BRITISH COLUMBIA, MAKE OATH AND SAY:

1. THAT I AM EMPLOYED AS A GEOLOGIST BY COMINCO LTD. AND, AS SUCH, HAVE A PERSONAL KNOWLEDGE OF THE FACTS TO WHICH I HEREINAFTER DEPOSE;

2. THAT ANNEXED HERETO AND MARKED AS "EXHIBIT A" TO THIS MY AFFIDAVIT, IS A TRUE COPY OF EXPENDITURES INCURRED ON DIAMOND DRILLING ON THE MINERAL CLAIM IT 4.

3. THAT THE SAID EXPENDITURES WERE INCURRED BETWEEN THE 4TH DAY OF AUGUST, 1975 AND THE 11TH DAY OF SEPTEMBER, 1975 FOR THE PURPOSE OF MINERAL EXPLORATION ON THE ABOVE NOTED CLAIM.

Sworn Before Me at the City of Vancouver in the Province of British Columbia this 22nd day of September, 1975.

Margaret Brown
A NOTARY PUBLIC IN AND FOR THE PROVINCE OF BRITISH COLUMBIA

Dennis M Paterson
DENNIS M. PATERSON

COMINCO LTD.

EXPLORATION WESTERN DISTRICT

## STATEMENT OF QUALIFICATIONS

I, Dennis M. Paterson, with business address at 2200 - 200 Granville Square, Vancouver, British Columbia, V6C 2R2, do hereby certify that I have supervised the diamond drilling programme and logged the drill core, and have assessed and interpreted the data resulting from said programme on the Ruddock Creek Property.

I also certify that:

I am a graduate of the University of British Columbia with a B.Sc. degree in Geology (1975).

Respectfully Submitted: D M Paterson

D.M. Paterson, B.Sc.

Vancouver, British Columbia

EXHIBIT "A"

DIAMOND DRILLING COSTS

ON THE

RUDDOCK 75-1 CLAIM GROUP

Situate at Oliver Creek

51° 47' North Latitude
118° 54' West Longitude

N.T.S. 82M

| | |
|---|---|
| Salaries: | |
| D.M. Paterson, Geologist<br>12 office days (July 24-Sept. 19, 1975)<br>@ $44.30/day | $ 531.60 |
| 39 field days (Aug. 4-Sept. 11, 1975)<br>@ $47.16/day | $ 1,839.24 |
| A.B. Mawer, Senior Geologist (Supervision)<br>5 office days (Aug. 4 to Sept. 11, 1975)<br>@ $150.00/day | $ 750.00 |
| 1 field day (Aug. 4 to Sept. 11, 1975)<br>@ $150.00/day | $ 150.00 |
| Domicile and Camp Services: | |
| Camp costs -- 48.5 man days @ $36.30/day | $ 1,760.15 |
| Diamond Drill Mobilization & Demobilization: | |
| Okanagan Helicopters | $ 18,351.55 |
| Canadian Longyear Ltd. | $ 3,060.00 |
| Diamond Drilling Costs | |
| Canadian Longyear Ltd. | $ 49,789.11 |
| Transportation and Mobilization | |
| Okanagan Helicopters | $ 5,058.50 |
| Miscellanceous | $ 495.78 |
| Communication | $ 200.00 |
| TOTAL COST OF DRILL PROGRAMME | $ 81,985.93 |

Total Footage Drilled 2278 Ft.

Cost Per Foot Drilled $\frac{\$81,985.93}{2278}$ = $35.99 Ft.

Signed: Dennis M Paterson
Dennis M. Paterson B.Sc.

THIS IS EXHIBIT "A" TO THE STATUTORY DECLARATION OF EXPENDITURES RELATING TO THE DIAMOND DRILL PROGRAMME DECLARED BEFORE ME ON THE 22nd DAY OF September, 1975, A.D.

Raymond Brown
A NOTARY PUBLIC IN AND FOR THE PROVINCE OF BRITISH COLUMBIA

DATA FOR DIAMOND DRILL HOLES

#C-1-75

on the

RUDDOCK CREEK PROPERTY

| Drill Hole | Location | Claim Group | Dip | Depth | Core Size | Total Cost |
|---|---|---|---|---|---|---|
| C-1-75 | 1T4 | Ruddock 75-1 | -90° | 2278' | NQ | $81,985.93 |

All drill core is stored at the core shed, adjacent to drill site C-1-75 on claim number 1T4.

The location of the hole has not been surveyed and elevation is approximately 7830' above sea level.

Signed by: D M Paterson

D.M. Paterson B.Sc.

Endorsed by: D. W. Heddle

D.W. Heddle, P.Eng.

Approved for Release by: W.T. Irvine

W.T. Irvine, P.Eng.

Scale

Colour Plot & Dips

# Drill Hole Record

Cominco

| | | | | | |
|---|---|---|---|---|---|
| Property | RUDDOCK CREEK | District | Kamloops | Hole No. | C-1-75 |
| Commenced | AUGUST 8,1975 | Location | "E" Zone | Tests at | See sheet 28 |
| Completed | SEPT. 11,1975 | Core Size | N.Q. | Corr. Dip | |
| Co-ordinates | Lat 23, 680N | Dep: 23, 150E | | True Brg. | |
| Objective | "E" Zone plunge extension | | | % Recov. | 95% |

Hor. Comp.

Vert. Comp. 2278 ft.

Logged by D.M. PATERSON

Date SEPT. 16/1975

Claim IT 4 | T Brg. — | Collar Dip 90° | Elev. 7830 est. | Length 2278' | Hole No. C-1-75 | Sheet 1

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 0 | - 11' | Overburden - no recovery | | | |
| 11' | - 12' | Predominantly light green calc-silicate with up to 10% reddish brown sphene, minor quartz veining. | | | |
| 12' | - 17.5' | Coarse-grained, pegmatite, predominantly plag, quartz, minor muscovite & biotite; has rusty, oxidized appearance, although no iron sulphides are visible. Biotite gives a crudely laminated appearance to the section - possibly relic texture - contains 3" section of qtz-biotite-feldspar gneiss @ 16.8'. | | | |
| 17.5 | - 23' | Biotite-amphibole-qtz-gneiss. Foliation is about 60° to core axis. Garnet occurs in more biotite rich layers. Amphibole appears to be hornblende. A 2"seam of pegmatite occurs at 22'; containing small ( 1mm) garnets, qtz, plag & muscovite. | | | |
| 23' | - 36.9' | Coarse grained pegmatite; predom. qtz, plag, muscovite & biotite, rare calc-silicate and ortho-clase. | | | |
| 36.9' | - 45.8' | Qtz-biotite-feldspar gneiss. Numerous qtz augens occur at the top of the section. This section is riddled with minor coarse pegmatite bands, up to 3" thick. Contacts with the pegmatite are both sharp & gradational. From 40' - 41' the gneiss has undergone intense structural deformation; being finely crenulated and folded. With the exception of this area, foliation is about 40° to the core axis. | | | |
| 45.8' | - 47.5' | Coarse grained pegmatite (as in 23' - 36.9'). | | | |
| 47.5' | - 49' | Fine-grained qtz-biotite-feldspar gneiss, with minor interbanded calc-silicate gneiss. A 1" qtz. vein occurs at 48.7'. | | | |
| 49' | - 61.5' | Coarse to extremely coarse grained pegmatite. Contains 1' section (53' - 54') of qtz-biotite-feldspar gneiss (garneteferous). Minor interbands of calc-silicate gneiss also occur within this | | | |

D.M. Paterson

Scale

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# Drill Hole Record

Cominco

| | | | | | |
|---|---|---|---|---|---|
| Property | RUDDOCK CREEK | District | | Hole No. | C-1-75 |
| Commenced | | Location | | Tests at | Hor. Comp. |
| Completed | | Core Size | | Corr. Dip | Vert. Comp. |
| Co-ordinates | | | | True Brg. | Logged by |
| Objective | | | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 2

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| | | section. Both contacts with the pegmatite are sharp. Finely disseminated pyrite occurs in the | | | |
| | | pegmatite as do small red garnets. Areas in which pyrite occur are highlighted by an iron oxide | | | |
| | | halo. | | | |
| 61.5' | 67.5' | Quartz-biotite gneiss interbedded with calc-silicate gneiss. (light green) calc-silicate - | | | |
| | | possibly diopside). Calc-silicate gneiss is slightly garnetiferous & contains minor dissemina- | | | |
| | | ted pyrrhotite. Numerous quartzite bands cut the section. Extremely coarse pegmatite band | | | |
| | | occurs from 65' - 66'. | | | |
| 67.5' | 70.2' | Coarse to extremely coarse pegmatite - predominantly quartz feldspar (plag Kspar) biotite & | | | |
| | | muscovite. | | | |
| 70.2' | 87.2' | Hornblende, biotite quartz schist, abundant calc-silicate throughout the section. Minor | | | |
| | | quartzite bands and a 3" pegmatite band ( at 74') cut this unit. Contacts with the pegamatite | | | |
| | | are gradational, and biotite foliation in the pegmatite is the same as in the schist therefore | | | |
| | | very likely a relic texture. Minor pyrrhotite is disseminated throughout the more amphibolitic | | | |
| | | sections. Contortions due to folding occurs at 85'; otherwise foliation is between 20° & 30° | | | |
| | | to the core axis. | | | |
| 87.2' | 89.8' | Extremely coarse grained pegmatite. | | | |
| 89.8' | 101.1' | Medium grained hornblende-biotite-quartz gneiss; abundant calc-silicate. Garnets occur in- | | | |
| | | frequently in amphibolitic sections. Minor pyrrhotite is present as are traces of chalcopyrite | | | |
| | | in the amphibolitic sections. | | | |
| 101.2' | 154' | Coarse to extremely coarse grained pegmatite. Abundant biotite-quartz-feldspar gneissic material | | | |
| | | occurs as altered inclusions. Relic foliation has been preserved in part throughout the section. | | | |
| | | Very small garnets occur throughout the coarser pegmatitic sections; quartz augens are very common. | | | |

RB Brown

Scale

Colour Plot & Dips

# Drill Hole Record

Cominco

| | | | |
|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

| Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 Sheet 3 |
|---|---|---|---|---|---|
| | | | | | |

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| | | A 6" section of unaltered biotite quartz feldspar gneiss occurs from 136.5'-136'; followed | | | |
| | | by a highly altered 4" section of extremely fine grained biotitic-amphibole quartzite gneiss | | | |
| | | (possibly mylonitized); then back into an extremely coarse pegmatite containing numerous clots | | | |
| | | of extremely coarse muscovite & biotite. | | | |
| 154' | 158' | Hornblende-biotite schist; containing occasional quartz augens and coarse crystalline garnets | | | |
| | | near the end of the section. Both contacts with pegmatite are gradational. Pyrite & pyrrhotite | | | |
| | | are found disseminated throughout. | | | |
| 158' | 173.5' | Coarse grained pegmatite; containing minor relic sections of hornblende biotite quartz-feldspar | | | |
| | | gneiss. Peg. has very minor finely disseminated pyrrhotite. A small section of micaceous | | | |
| | | (biotite) quartzite occurs at 165'. | | | |
| 173.5' | 190' | Predominantly biotite-quartz feldspar gneiss - altered so that it appears quartz dioritic in | | | |
| | | texture. Contains numerous small pegmatite & quartzite bands. Abundant quartz augens appear | | | |
| | | throughout the section. This unit becomes well laminated by 185' with foliation at 20° to core | | | |
| | | axis. The unit becomes slightly amphibolitic at 185'. Small garnets occur infrequently in the | | | |
| | | biotite gneiss. Most contacts with pegmatite are gradational. | | | |
| 190' | 217' | Coarse to extremely coarse pegmatite, with occasional relic biotite quartz-feldspar gneiss | | | |
| | | sections. Biotitie lamination gives a crudely banded texture to the pegmatite. Minor | | | |
| | | pyrrhotite occurs disseminated throughout the contaminated sections. | | | |
| 217' | 285' | Relatively pure, coarse to extremely coarse pegmatite; garnets are rare and finely disseminated | | | |
| | | pyrrhotite occurs throughout. A dark green amphibole (probably hornblende) is also rare. At | | | |
| | | 264' a pronounced graphic granite texture occurs over an 8" section. | | | |
| | | | | | |

211-8437

Scale

Colour Plot & Dips

# Drill Hole Record

Cominco

| | | | | | |
|---|---|---|---|---|---|
| Property | RUDDOCK CREEK | District | Hole No. | C-1-75 | |
| Commenced | | Location | Tests at | | Hor. Comp. |
| Completed | | Core Size | Corr. Dip | | Vert. Comp. |
| Co-ordinates | | | True Brg. | | Logged by |
| Objective | | | % Recov. | | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 4

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 285' | 301' | Quartz-biotite-feldspar gneiss with occasional quartz blebs. This unit is cut by extremely | | | |
| | | coarse pegmatite at 287' - 288.5', 290-291, 292'-295.5' & 300'-300.5'. Biotite sections contain | | | |
| | | abundant disseminated pyrrhotite. | | | |
| 301' | 321' | Extremely coarse gr. pegmatite as in 217'-285'. | | | |
| 321' | 322.5' | Predominantly with occasional quartzite band and limestone. | | | |
| 321' | 322.5' | Up to 2" bands of fine grained marble, having dark green actinolite crystals associated with it. | | | |
| | | Minor reddish brown garnet (possibly sphene) occurs infrequently throughout. | | | |
| 322.5' | 332' | Quartz-biotite-feldspar gneiss interbanded with calc-silicate gneiss up to a few inches thick. | | | |
| | | Minor disseminated pyrrhotite occurs predominantly in calc silicate rich areas. This section is | | | |
| | | cut by extremely coarse pegmatite at 325' - 325.5'. | | | |
| | | The gneiss has been altered from 326' - 327.5'. Numerous quartz-feldspar augens are developed | | | |
| | | and the core has a mottled texture. | | | |
| 332' | 333' | Coarse grained pegmatite. | | | |
| 333' | 340' | Predominantly calc-silicate unit - at times appears gneissic - quite limey with minor actenolite | | | |
| | | and possibly minor apatite. The unit is fine to medium crystalline with minor pink idocrase | | | |
| | | and occasional quartzite seam. Minor fine disseminated pyrite occurs throughout this section. | | | |
| 340' | 343' | Quartz-biotite-feldspar gneiss - slightly altered at top 3" of section so that quartz augens are | | | |
| | | present - unit contains rare clusters of dark green amphibole. Minor quartzite seams present. | | | |
| 343' | 406' | Extremely coarse crystalline pegmatite - minor pyrrhotite is disseminated as small clusters | | | |
| | | throughout the unit. From 387.5 - 390.5 a section of altered quartz-biotite feldspar gneiss | | | |
| | | interlayered with calc-silicate gneiss occurs. The alteration of this section by pegmatites | | | |
| | | has resulted in the development of numerous quartz-feldspar augens. Minor pyrite & pyrrhotite | | | |

P.B. Mawer

Scale

Colour Plot & Dips

# Drill Hole Record

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| | | | | | |
|---|---|---|---|---|---|
| Property | RUDDOCK CREEK | District | | Hole No. | C-1-75 |
| Commenced | | Location | | Tests at | Hor. Comp. |
| Completed | | Core Size | | Corr. Dip | Vert. Comp. |
| Co-ordinates | | | | True Brg. | Logged by |
| Objective | | | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 5

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| | | are disseminated throughout the section. From 401.5' - 403' a calc-silicate layer (as in | | | |
| | | 333' - 340') occurs, and again at 405' - 406'; with sharp contacts with the pegmatite. | | | |
| 406' | 417' | Predominantly altered quartz-biotite feldspar gneiss with occasional interbands of calc-silicate | | | |
| | | gneiss. Section contains minor disseminated pyrrhotite. This section is repeatedly cut by peg. | | | |
| | | bands and numerous quartz-feldspar augens are present. Contacts with the pegmatite are both sharp | | | |
| | | and gradational (augens occur at gradational contacts). The lamination is uniform at 60° | | | |
| | | to the core axis. | | | |
| 417' | 468.5' | Coarse to extremely coarse grained pegmatite. A small unaltered section of interbedded biotite- | | | |
| | | quartz-feldspar gneiss & calc-silicate gneiss occurs from 425.5' - 426.9' Minor amphibole is | | | |
| | | present in that section. A single thin (1/2") limey section occurs @ 426.8'. Biotite lamination | | | |
| | | and quartz-feldspar augens from 456-457.5' & 465' represents relic gneissic material. | | | |
| 468.5' | 474' | Quartz-biotite feldspar gneiss containing very minor hornblende; more biotite rich sections contain | | | |
| | | garnet. Minor calc-silicates are present with red-brown sphene (?). Contacts are gradational | | | |
| | | and altered at both ends. | | | |
| 474' | 551' | Coarse to extremely coarse grained pegmatite. Relic biotite foliation can be distinguished from | | | |
| | | 493'-494' & 510'-511'. Very small garnets occur @ 504.5' and become common by 521'. Clots | | | |
| | | of pyrrhotite occur at 537'; being assoicated with garnet and calc-silicate. Calc-silicate may | | | |
| | | be a relic feature. | | | |
| 551' | 559' | Biotite-quartz-feldspar gneiss- highly contorted with foliation running at all angles to C.A. | | | |
| | | Several pronounced folds are obvious. Minor calc-silicate gneiss occurs as interbands. | | | |
| | | Occasional small and irregularly shaped quartzite bands cut the unit. A gradational contact with | | | |
| | | a pegmatite band at 557' results in the occurrence of numerous quartz-feldspar augens. Pegmatite | | | |

A B Mann

Scale

Colour Plot & Dips

# Drill Hole Record

Cominco

| | | | |
|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 6

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| | | occurs from 557' - 558'. In the last part of this section garnets are common in the greiss. | | | |
| | | | | | |
| 559' | - 578' | Coarse to extremely coarse ground pegmatite of numerous small patches of garnetiferous-quartz- | | | |
| | | biotite feldspar gneiss @ 564' - 564.1' | | | |
| | | 565.2 - 565.4' | | | |
| | | 566.2' - 568.5' | | | |
| | | 573' - 574' | | | |
| | | | | | |
| | | Contacts are both sharp and gradational. | | | |
| 578' | - 610' | Biotite-quartz-feldspar gneiss slightly garnetiferous, with small bands of pegmatite throughout. | | | |
| | | Foliation is variable but usually about 70° to C.A. Minor interbands of calcium-silicate gneiss | | | |
| | | occur. When pegmatites occur, melic laminations can be detected by biotite orientation. In other | | | |
| | | parts no foliation can be distinguished. Small folds and crenulations are visible in the gneiss | | | |
| | | structure. Hornblende occurs in the pegmatite bands. Numerous quartzite beds cut the unit. | | | |
| 578' | - 610' | Breccia textures are developed at pegmatite-gneiss contacts. Sericite bands cut the structure | | | |
| | | nearly perpendicular to the lamination and sericite is common around the breccia textures as well | | | |
| | | as lining fractures. | | | |
| | | | | | |
| 610' | - 612' | Coarse to extremely coarse pegmatite with abundant coarse crystallized biotite. This biotite | | | |
| | | gives a crudely laminated appearance to the pegmatite. | | | |
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| | | | | | |

211-8437

Scale

Colour Plot & Dips

# Drill Hole Record

Cominco

| | | | |
|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 7

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 612' | - 614' | Garnetiferous biotite quartz-feldspar gneiss with lamination varying from about 15° to -60° to C.A. | | | |
| 619' | - 617' | Micaceous quartzite - with quartz-feldspar augens - same unit as above mineralogically (except no garnets here) but no foliation is developed. Biotite rich streaks run parallel to C.A. but gneissic structure is not developed. | | | |
| 617' | - 621' | Extremely coarse grained pegmatite - contact with above unit is sharp. | | | |
| 621' | - 625' | Limey, strongly deformed biotite-quartz-feldspar gneiss; displays folding and numerous crenulations, gneissic structure is actutely cut by quartz veins. Occasional minor pegmatite band has altered adjacent areas and quartz-feldspar augens occur at these contacts. | | | |
| 625' | - 628.5' | Micaceous quartzite, crude banding is observable, but not well developed. White quartzite clots (not augens) occur sporatically throughout this section. | | | |
| 628.5' | - 631' | Extremely coarse grained pegmatite. | | | |
| 631' | - 632.5 | Garnetiferous biotite-quartz-feldspar gneiss with foliation ~65° to C.A. | | | |
| 632.5' | - 635.5 | Coarse to extremely coarse garnetiferous pegmatite. Minor sericite is present and breccia textured-calcium-silicates occur in the pegmatite. Abundant muscovite throughout. | | | |

A B Mann

Scale

Colour Plot & Dips

# Drill Hole Record

Cominco

| | | | |
|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 635.5' | 641' | Garnetiferous quartz-biotite-feldspar gneiss with foliation ≈ 30° to C.A. | | | |
| 641' | 648' | Extremely coarse pegmatite, containing occasional small garnet, abundant large muscovite flakes gives pegmatite a slight green cast. | | | |
| 648' | 654' | Garnetiferous quartz-biotite-feldspar gneiss. Foliation is ≈ 75° to C.A. except @ 653' - 654' where small scale folding and crenulations result in foliation being at all different angles. Minor calcium-silicate gneiss occurs interbedded throughout this unit, usually as 1" to 2" sections. Quartzite beds occur parallel to lamination and quartz veins cut foliation acutely. | | | |
| 654' | 680' | Coarse to extremely coarse pegmatite. Relic banding is seen on occasion. A minor section of the above (648' - 654') is seen from 657' - 659'. | | | |
| 680' | 689' | Amphibolite unit, predominantly hornblende, quartz and minor biotite pods. Hornblende crystals are allaigned @ ≈ 70° to the core axis, which although it does not have a well developed schistose texture, it readily fractures along that plane. From 684' - 687.5' a coarse grain pegmatite occurs, sharply contacted with this unit. In the last 1½' of this unit, biotite becomes more abundant at the expense of hornblende. | | | |
| 689' | 720' | Coarse to extremely coarse grained pegmatite; minor biotite-quartzite gneiss @ 712.2' - 712.5' - contact are gradational. Relic biotite foliation @ 713.5' - 717.2' - Garnets occur infrequently in biotite rich zone. | | | |

A.B. Mawer

211-9437

Scale

Colour Plot & Dips

# Drill Hole Record

Cominco

| | | | |
|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 9

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 720' | - 737' | Slightly garnetiferous biotite-quartz gneiss with 1" to 2" interbands of calcium-silicate gneiss. Foliation is variable and numerous folds and crenulations are obvious. Quartzite beds occur paralleling the foliation and quartz veins cut both quartzite and gneissic beds. Both the quartz veins and quartzite bands have been involved in the folding. Pegmatite bands occur with sharp boundaries @ 726' - 728' and 733' - 737'. | | | |
| 737' | - 740' | WEDGE - No core recovery. | | | |
| 740' | - 755' | Biotite-quartz gneiss. Extremely deformed structurally with biotite foliation at all angles to the core axis. Contains numerous blebs and small bands of calcium-silicates. Pyrrhotite occurs as very fine disseminations throughout. Garnets are uncommon in this section, but minor fine amphiboles can be distinguished (hornblende). | | | |
| 755' | - 760' | Coarse to extremely coarse grained pegmatite - gradational contact @ 755'. - At this point the hole was 5° 40' off target. It was cemented back to 709'; wedged to 714'. | | | |
| 714' | - 760' | This redrilled section was an exact repeat of the section (714' - 760') already logged. | | | |
| 755' | - 771' | Coarse to extremely coarse pegmatite - chlorite rims commonly surround biotite flakes - possibly an alteration of chlorite to biotite. | | | |

A.B. Mann

Scale

Colour Plot & Dips

# Drill Hole Record

Cominco

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|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 10

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 771' | 755' | Biotite-quartz-gneiss interbanded with biotite amphibole quartz gneiss. This section contains | | | |
| | | numerous amphibolitic quartzite bands up to ¼" thick. Garnets occur in more biotite rich areas. | | | |
| | | Minor fine disseminated pyrrhotite occurs throughout the section. | | | |
| | | | | | |
| 755' | 776.7' | Garnetiferous biotite quartz gneiss - contains a few quartzite blebs. | | | |
| | | | | | |
| 776.7' | 980' | Coarse to extremely coarse grained pegmatite. From 781' - 783.5' and 785' - 786.5' patches of | | | |
| | | hornblende garnet biotite schist and pure white quartzite occur, sharply contacted with the | | | |
| | | adjacent pegmatite. Both the schists and pegmatite contain finely disseminated pyrite and | | | |
| | | pyrrhotite. In the pegmatite these iron sulphides tend to concentrate in small clusters unevenly | | | |
| | | distributed throughout the section. Biotite crystals give the pegmatite a laminated texture. | | | |
| | | Several boudin shapes appear. | | | |
| | | WEDGE 794' - 807' - No recovery. | | | |
| | | Minor garnetiferous-biotite-quartz-gneiss appears from 817' - 818' and 822.5' - 823' pegmatite | | | |
| | | becomes slightly garnetiferous (small: <1 mm). At this point the pegmatite appears to be altered. | | | |
| | | Numerous fractures are lined by sericite and sericite becomes common in the matrix. Pyrite | | | |
| | | becomes quite abundant (~1%) and in patches a distinct breccia texture is well developed. Minor | | | |
| | | calcite is present and possibly minor vesuvianite. By 862' the pegmatite is unaltered, whitish | | | |
| | | grey, slightly garnetiferous and pyritic, coarse to extremely coarse quartz, plagioclase | | | |
| | | muscovite and biotite. Minor relic biotite foliation is visible from 945' - 946'. | | | |
| | | | | | |
| | | | | | A.B. Mawer |

211-8437

Scale

Colour Plot & Dips

# Drill Hole Record

Cominco

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|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

| Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet |
|---|---|---|---|---|---|---|
| | | | | | C-1-75 | 11 |

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 980' | 981' | Garnetiferous hornblende, biotite, quartz gneiss; foliation is ~35° to core axis. Minor disseminated pyrite and several quartzite pods occur. | | | |
| 981' | 982.5' | Granetiferous, actinolite, quartzite, calcite schist, pyritic in more calcite-silicate rich sections. | | | |
| 982.5' | 984' | Extremely coarse grained pegmatite - contains much chlorite and biotite (biotite after chlorite?). | | | |
| 984' | 987.7' | Hornblende-biotite-quartz gneiss (garnetiferous) interbedded with calcite-silicate gneiss. Both contain minor disseminated pyrite with foliation @ ~40° to core axis. | | | |
| 987.7' | 994.5' | Extremely coarse grained pegmatite with abundant biotite and chlorite. Contains several sections (up to 4" thick) of amphibolitic biotite quartz gneiss (garnetiferous). | | | |
| 994.5' | 996.8' | Garnetiferous hornblende biotite quartz gneiss (as in 980' - 981'). | | | |
| 996.8' | 1005' | Slightly garnetiferous and pyritic, quartzite limestone, abundant actinolite, becoming a siliceous -calcite-silicate gneiss by 1003'. This unit is cut from 1001'- 1003' by coarse grained garnetiferous pegmatite. The siliceous-calcite-silicate gneiss contains abundant fine disseminated pyrrhotite. | | | |

A.B. Mander

211-9437

Scale

Colour Plot & Dips

# Drill Hole Record

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|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 12

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 1005' | - 1007' | Coarse grained pegmatite - laminated by relic biotite quartz gneiss. | | | |
| 1007' | - 1016' | Interbedded calcite-silicate gneiss and biotite-quartz gneiss. Foliation is ~30° to core axis. This unit includes several small patches of white quartzite, plus minor pegmatite seams. Very minor pyrrhotite is disseminated throughout the gneiss. | | | |
| 1016' | - 1022' | Coarse to extremely coarse grained pegmatite. | | | |
| 1022' | - 1035' | Medium grained interbedded, slightly limey, calcite-silicate gneiss and biotite-quartz-gneiss. (As in 1007' - 1016') abundant pyrrhotite occurs over the last 3" of the section containing traces of chalcopyrite. | | | |
| 1035' | - 1043.5 | Extremely coarse grained pegmatite, contains abundant muscovite, biotite and chlorite. | | | |
| 1043.5 | - 1057.4 | Medium crystalline interbedded pyrrhotitic-calcite-silicate gneiss and slightly amphibolitic biotite-quartz gneiss. Occasionally garnets occur in more calcite-silicate rich areas. The calcite-silicate section contains occasional slightly limey sections. | | | |
| 1057.4 | - 1065' | Coarse grained pegmatite. | | | |
| 1065' | - 1066' | Micoceous quartzite - minor biotite in medium grained quartzite. | | | |

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# Drill Hole Record

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|---|---|---|---|
| Property | RUDDOCK CREEK | District | Hole No. C-1-75 |
| Commenced | | Location | Tests at Hor. Comp. |
| Completed | | Core Size | Corr. Dip Vert. Comp. |
| Co-ordinates | | | True Brg. Logged by |
| Objective | | | % Recov. Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 1066' | - 1073' | Interbedded calcite-silicate gneiss and biotite-quartz gneiss. Minor disseminated pyrrhotite occurs throughout. This unit is cut by several slightly biotitic, quartzites. Several quartz augen shapes occur @ 1072.8'. | | | |
| 1073' | - 1075' | Micoceous quartzite (biotite 1%) contains very minor disseminated pyrite plus very minor actinolite. | | | |
| 1075' | - 1094' | Interbedded calcite-silicate gneiss and biotite quartz-gneiss (very minor hornblende in biotite gneiss). Calcite-silicate sections are garnetiferous. This unit also contains minor quartzite bands, and is cut by occasional minor pegmatites. Very fine grained disseminated pyrrhotite occurs throughout the unit. Foliation is clear and @ 20° to the core axis. | | | |
| 1094' | - 1106' | Extremely coarse grained pegmatite - very micaceous. A 4" section of biotite-quartz gneiss interbedded with calcite-silicate gneiss occurs @ 1099', sharply contacted against the pegmatite. An 8" section of micoceous quartzite occurs from 1100.2' to 1100.8'. | | | |
| 1106' | - 1115.5' | Micaceous quartzite - fine grained, mainly biotite in quartzite host; unit is very slightly garnetiferous, cut by several coarse grained pegmatite bands up to a few inches thick. | | | |
| 1115.5' | - 1222' | Medium to coarse to extremely coarse grained pegmatite.- very micaceous, slightly garnetiferous. Minor biotite-quartz gneiss occurs over a 3" thickness @ 1134', sharply contacted with the adjacent pegmatite. Several very small micaceous quartzite sections can be identified. Most of these are 2" in thickness, with gradational contacts with pegmatite. Minor disseminated pyrrhotite | | | |

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Scale

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# Drill Hole Record

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|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 14

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 1115.5 | 1222 | occurs in the pegmatite, often in small clusters. Minor hornblende can be seen in rare patches, and very minor actinolite is present, commonly intimate with small garnets. Biotite content is variable and patchy, subsequently a banded texture appears from place to place. Relatively coarse and extremely coarse pegmatites also make this unit appear crudely laminated. Very minor sericite occurs along fractures @ 1176'. From 1175' to 1177' a relic section of amphibolitic biotite quartz gneiss appears with foliation 15° to core axis and sharp contacts. By 1195' the pegmatite starts to include numerous small ( 8") sections of biotite-quartz gneiss and hornblende quartz gneiss. Foliation varies from patch to patch from 15° to 90° to core axis. These gneissic units contain finely disseminated pyrrhotite and pyrite. The biotite rich sections are occasionally garnetiferous. | | | |
| 1222' | 1223.5 | Micaceous quartzite, cross cut by pegmatite ( ½" thick) of two different ages - One pegmatite band is cut by a later band. | | | |
| 1223.5 | 1224.6 | Extremely coarse grained pegmatite. | | | |
| 1224.6 | 1231' | Predominantly biotite quartzite, which has been altered by folding and pegmatite intrusion. Every couple of inches, a thin ( 1") band of biotite-quartz gneiss is visible, but in the majority of this unit, biotite foliation is not developed. | | | |
| 1231' | 1237.3 | Predominantly biotite-quartz-gneiss; cut by coarse grained pegmatite. Several quartzite patches occur in this section; most contacts are sharp. | | | |

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211-9437

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# Drill Hole Record

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|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

| Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 15 |
|---|---|---|---|---|---|---|
| | | | | | | |

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 1237.3 | 1242 | Actinolite-quartzite-calcite schist, occasionally slightly amphibolitic. Abundant garnet and possibly minor idocrase. Coarse crystalline quartz is associated with the garnetiferous (? - possibly sphere) zone. Minor disseminated pyrite occurs throughout the unit. | | | |
| 1242 | 1253' | Medium to coarse to extremely coarse grained pegmatite - containing minor amounts of biotite-quartz gneiss - most contacts are gradational numerous quartz-feldspar augens are developed. | | | |
| 1253' | 1257' | Biotite-quartz-gneiss; foliation varying from $10^{\circ}$ to $30^{\circ}$ to core axis; cut by pegmatite, gradational contacts and quartz-feldspar augens present. | | | |
| 1257' | 1262' | Coarse grained pegmatite; showing relic biotite foliation @ $30^{\circ}$ to core axis. | | | |
| 1262' | 1266.5 | Micaceous quartzite, clean quartzite with minor biotite present. Cut in part by coarse grained pegmatite. | | | |
| 1266.5 | 1267.8 | Coarse to extremely coarse, slightly garnetiferous pegmatite. | | | |
| 1267.8 | 1289' | Biotite-quartz gneiss; foliation is variable due to numerous crenulations and folds. A small fracture @ 1270' is lined with chalcopyrite. Thin pegmatite sands lace this unit; some contacts are sharp while others are gradational. | | | |

A. B. Mayer

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Colour Plot & Dips

# Drill Hole Record

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|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 16

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 1289' | 1293' | Coarse to extremely coarse grained pegmatite. Minor relic biotite foliation is preserved and @ 30° to core axis. | | | |
| 1293' | 1305.5 | Actinolite-quartzite-amphibole-calcite schist - minor pegmatite custs unit in several spots. Almost pure, recrystallized limestone occurs from 1297' - 1299.5'. A minor pink mineral (possibly pink vesuvianite) occurs along limestone pegmatite contact. Abundant disseminated pyrite is found throughout this unit. | | | |
| 1305.5 | 1315.5 | Micoceous quartzite, cut by bands of coarse grained pegmatite up to 4" thick. Last 7" of this section is pegmatite. | | | |
| 1315.5 | 1316.8 | Limey, garnetiferous calcite-silicate unit. | | | |
| 1316.8 | 1375' | Coarse to extremely coarse grained pegmatite, slightly garnetiferous. Throughout the section, minor thickness of micoceous quartzite appear. Pegmatite contains small patches of disseminated pyrrhotite. Foliation in this unit is seen by relic biotite lamination. The coarse grained pegmatite is either interbedded with or cut by a much finer grained pegmatite. Pyrrhotite is commonly associated with coarse biotite flakes. | | | |
| 1375 | 1376.5 | Limey, garnetiferous calcite-silicate-quartzite - unit is almost schistose in appearance. | | | |
| 1376.5 | 1384' | Extremely coarse grained pegmatite. | | | A.B Mawer |

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# Drill Hole Record

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| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 17

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 1384' | - 1396' | Actinolite-quartz-calcite schist (very minor hornblende) containing fine disseminated iron sulphides. Cut from 1385' - 1386' by coarse pegmatite. At times, almost pure crystallized limestone occurs over 3" - 4" sections. | | | |
| 1396' | - 1399.5 | Altered and folded, biotite-quartz gneiss - abundant quartz-feldspar augens, foliation is extremely variable. Unit is cut by minor thickness of pegmatite and contains finely disseminated pyrrhotite. | | | |
| 1399.5 | - 1403' | Coarse grained pegmatite, containing minor relic amphiboles and actinolite near the bottom of the section. | | | |
| 1403' | - 1405.5 | Altered biotite-quartz gneiss (as in 1396' - 1399.5'). | | | |
| 1405.5 | - 1411' | Coarse grained pegmatite, containing minor relic biotite - foliation is variable from $10^{\circ}$ to $70^{\circ}$ to core axis. | | | |
| 1411' | - 1412.5 | Altered and folded quartz-biotite gneiss (as in 1396' - 1399.5'). | | | |
| 1412.5 | - 1422' | Coarse to extremely coarse grained pegmatite. | | | |
| 1422' | - 1427.4 | Actinolite-quartzite-calcite schist - quite limey, containing few highly actinolitic pods - very slightly amphibolitic. | | | |

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Scale

Colour Plot & Dips

# Drill Hole Record

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| Property | RUDDOCK CREEK | District | | Hole No. | C-1-75 |
| Commenced | | Location | | Tests at | Hor. Comp. |
| Completed | | Core Size | | Corr. Dip | Vert. Comp. |
| Co-ordinates | | | | True Brg. | Logged by |
| Objective | | | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 1427.4 | 1430' | Coarse grained pegmatite. | | | |
| 1430' | 1432' | Limey-calcite-silicate schist - containing 3" amphiholitic section. Slightly garnetiferous and very minor biotite throughout. | | | |
| 1432' | 1435.2 | Extremely coarse grained pegmatite. | | | |
| 1435.2 | 1436.2 | Limey calcite-silicate gneiss interbedded by biotite-quartz gneiss contains a 2" pure white quartzite seam. | | | |
| 1436.2 | 1454' | Predominantly coarse grained pegmatite - contains altered section of biotite-quartz gneiss with abundant quartz-feldspar augens, plus a few limey calcite-silicate sections. | | | |
| 1454' | 1960.8 | Interbedded calcite-silicate gneiss and biotite quartz-gneiss. Calcite-silicate rich sections are slightly garnetiferous. Minor crenulations appear throughout the section, but foliation is usually $50^{\circ}$ to the core axis. | | | |
| 1460.8 | 1467' | Predominantly calcite-silicate-quartzite-calcite schist; from 1460.8' to 1462' is relatively pure limestone (recrystallized); then unit becomes amphibole and calcite-silicate rich. | | | |
| 1467' | 1482' | Predominantly coarse grained pegmatite, minor relic biotite-quartz gneiss. | | | |

A B Mawer

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Colour Plot & Dips

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# Drill Hole Record

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| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 19

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 1482' | - 1483.5 | Actinolite-quartzite-calcite schist; minor biotite occurs @ top 2" of section. Becoming almost pure recrystallized limestone in the bottom 4" of the section. | | | |
| 1483.5 | - 1497' | Medium to coarse grained pegmatite. Abundant biotite-quartz gneiss foliation; minor calcite silicate and amphibole also present (probably relic). | | | |
| 1497' | - 1529' | Interbedded biotite-quartz gneiss and sometimes limey calcite-silicate gneiss. Foliation is 35° to core axis. Becomes predominantly biotite-quartz gneiss @ 1498', with foliation starting to vary due to folding. Several contorted quartzite bands occur in the section concordant with the deformed host. The quartzite is very slightly garnetiferous. | | | |
| 1529' | - 1532.5 | Relatively pure, coarse grained quartzite, impurities account for 1% and these are made up by fine grained actinolite and finely disseminated pyrrhotite. The pyrrhotite tends to concentrate on fracture surfaces. | | | |
| 1532.5 | - 1538' | Interbanded, slightly garnetiferous, calcite-silicate schist and biotite-quartzite gneiss. Foliation is 38° to core axis. Contains thin, occasional quartzite bands. More calcite-silicate rich sections contain minor disseminated pyrrhotite. A pure quartzite band occurs @ 1537'. Abundant disseminated pyrite occurs from 1537' - 1538'. | | | |
| 1538' | - 1575.4 | Predominantly actinolite - quartzite-calcite schist, slightly biotitic bands occur through the section; unit is very slightly amphibolitic. Fine grained disseminated pyrite and pyrrhotite | | | |

A B Kramer

211-8407

# Drill Hole Record

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Colour Plot & Dips

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|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 20

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 1538' | 1575.4 | occur throughout. Unit contains numerous limey patches. Unit is cut by coarse-grained pegmatite from 1592' to 1543' - with sharp contacts. Very minor garnet is also present. Abundant micaceous graphite is also present. Pegmatite occurs from 1551' - 1555'. Foliation is variable; from 10° to 70° to core axis. Minor pegmatite also occurs at 1562' (3") and 1557' (2"). Almost pure recrystallized limestone makes up the last 18" of the section. | | | |
| 1575.4 | 1578' | Crenulated and folded biotite-quartz gneiss - has gradational contact with pegmatite at 1578'. Contains minor calcite-silicate and minor disseminated pyrite. Unit is altered throughout by thin ribbons of pegmatite. | | | |
| 1578' | 1628' | Coarse to extremely coarse grained pegmatite, containing minor relic patches of biotite-qaurtz gneiss. Slightly garnetiferous with minor actinolite occasionally associated with the garnets. Minor iron sulphides occur disseminated throughout the section. | | | |
| 1628' | 1637.5' | Gradational contact with pegmatite such that numerous quartz feldspar augens occur at 1628', then good biotite-quartz gneiss. Foliation is 50° to C.A. By 1628.8', unit becomes very slightly limey calc-silicate quartz schist, containing up to 30% pinkish vesuvianite. A 3" seam of pegmatite occurs at 1631' and then an interbedded sequence of biotite-quartz gneisses and calc-silicate quartz schists begin. The bands are in the order of several inches, but some range in size up to 1'. This section is cut by a 3" pure quartzite band at 1633', and from 1633' -1637.5' the unit is predominantly calc-silicate quartz schist, with disseminated pyrite, very minor biotite and occassional garnets. | | | |

A.B. Mainar

Scale

Colour Plot & Dips

# Drill Hole Record

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| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 21

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 1637.5' | 1664' | Coarse to extremely coarse grained pegmatite. | | | |
| 1664' | 1666' | Marble unit, predominantly coarsely recrystallized calate, with minor actinolite and dissiminated pyrite. Unit is very slightly amphibolitic. | | | |
| 1666' | 1667' | Coarse grained slightly pyritic pegmatite. | | | |
| 1667' | | Wedged back to 1651', no core recovered until 1666'. | | | |
| 1666' | 1714' | Coarse to extremely coarse grained pegmatite, containing minor limey patches, although crystalline calcite is not discernable. Unit is highly fractured from 1672'-1673' and light greenish to white sericite coats many fractures. Pegmatite is slightly garnetiferous in patches and minor biotite and calc-silicate occurs sporatically throughout. | | | |
| 1714' | 1734' | Calc-silicate quartzite calcite schist - slightly garnetiferous and amphibolite containing disseminated pyrrhotite. But by a thin pyrrhotitic pegmatite band at 1718'. Contains traces of chalcopyrite and minor graphite at 1719'. From 1719-1721.1' is an extremely coarse grained pegmatite band. Unit becomes quite pyritic and pyrrhotite at 1721' and graphite is abundant from 1721' to 1727'. Traces of chalco are visible associated with pyrrhotite, these sulphides are commonly associated with coarse hornblende crystals. Minor vesuvianite is present. | | | |
| 1734' | 1793' | Coarse to extremely coarse grained pegmatite, contained many quartz-feldspar augens and biotite. From 1751'-1752' a slightly limey calc-silicate quartzed schist occurs containing minor pyrrhotite and associated trace chalcopyrite. Coarse hornblende crystals are also present. Pegmatite is slightly pyritic, especially near contacts with calc-silicate sections and in association with calc-silicate minerals within the pegmatite itself. | | | |
| 1734' | 1793' | From 1758'-1759' a section of amphibolitic calc-silicate quartzite occurs. Pyrrhotite ( 2%) with traces of chalcopyrite and possibly very fine grained sphalerite (?) can be seen in this | | | |

A B Mawer

Scale

Colour Plot & Dips

0

# Drill Hole Record

Cominco

| | | | | | |
|---|---|---|---|---|---|
| Property | RUDDOCK CREEK | District | | Hole No. C-1-75 | |
| Commenced | | Location | | Tests at | Hor. Comp. |
| Completed | | Core Size | | Corr. Dip | Vert. Comp. |
| Co-ordinates | | | | True Brg. | Logged by |
| Objective | | | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 22

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| | | interval and then rock changes back to pegmatite. | | | |
| 1793' | 1826' | Biotite-quartzite gneiss over first few inches of section, then into an amphibolitic -calc-silicate quartz schist with minor pink vesuvianite and minor iron sulphides. The unit is cut by a pegmatite bond from 1795'1796'. Following this, an interbanding of these units occurs. Each section is gradational into the next and most sections are only several inches thick. The calc-silicate quartz schist is slightly garnitifecous and both units contain disseminated iron sulphides. A pegmatite band intersects this section from 1808' to 1811.8'. Foliation is distinct at 10° to C.A. The section becomes predominantly biotite-quartz gneiss from 1806.5' although actinolite does appear now and again. More pegmatite occurs from 1818' to 1819' and 1822.7'-1823.1'. Contacts with the gneiss and pegmatite are highly pyritic and sharp. The final 2' of the section is predominantly calc-silicate-quartz schist, occassionally containing slightly limey patches. | | | |
| 1826' | 1840' | Slightly pyritic coarse to extremely coarse pegmatite, sharply contacted. | | | |
| 1840' | 1857.5' | Predominantly calc-silicate quartz schist. Contains minor (up to 2") bands of biotite-quartz gneiss. This unit is quite graphitic and contains disseminated from sulphides. Few garnets occur in patches. Unit is also slightly limey in patches up to 2" long. Several relatively pure white quartzite pods and bands occur (up to 2") throughout. The unit is cut by coarse grained pegmatite from 1854.2' - 1855.3'. From 1855.6' to 1856.6' a biotite-quartz gneiss occurs with foliation at 10° to C.A. Then from 1856.6'-1857.5' go back to calc-silicate schist. | | | |
| 1857.5' | 1870' | Coarse to extremely coarse grained pegmatite -- containing several sections of biotite quartz gneiss (1859.5'-1860.5'). Contacts are gradational. Other gneissic inclusions occur but are less than 2". | | | |

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Scale

Colour Plot & Dips

# Drill Hole Record

Cominco

| | | | |
|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 23

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 1870'-1890' | | Predominantly biotite-quartz gneiss. Most of the section has been altered by pegmatite bands (which are usually <1"). Unit is slightly garnetiferous. Small scale faulting is visible with displacements being in the order of 1/4". Unit is very broken and fractured. Minor chalcopyrite occurs at 1877'. Iron sulphides are abundant over a 4" section at 1874'. in an altered section. Pyrrhotite and possibly minor sphalerite, appears as the matrix to quartzite (five grained) fragments. The unit is highly distorted and almost mylonitic in places. Pegmatite cuts the section from 1885'-1886'. Then at 1886' gets into a biotite-amphibole-cole-silicate-quartz schists, containing minor pyrite. This section is also altered by pegmatite. Slightly limey bands occur in this area. | | | |
| 1890'-1957' | | Coarse to extremely coarse grained pegmatite, pyrite and garnets occur throughout. Few fine grained sections contain abundant muscovite. Except for the presence of plagioclase the finer grained sections appear quartzitic. The pegmatite is quite sheared from 1924-1936', in this section, crystals appear almost oplitic. Abundant pyrrhotite occurs at 1949' and traces of chalcopyrite; possibly sphalerite are visible. Patches of a vitreous green (epidote or apatite) mineral occur in pods in the last few feet of this section. More trace chalcopyrite occurs with pyrrhotite from 1955'-1957'. | | | |
| 1957'-1967' | | Quartzitic limestone, quite rich in iron sulphides, plus contains numerous apatite pods. Trace of sphalerite occur as does minor pink vesuvionite. | | | |
| 1967'-1989' | | Medium grained pyritic and pyrrhotitic pegmatite. A graphic-granite texture occurs at the top of the section. Very minor calc-silicates are present. Small sections of micaceous quartzite occur from 1970'-1971'; then pegmatite becomes much coarser grained. Unit is fractured parallel to relic biotite foliation ( approximately 70° to C.A.) and these fractures are coated by well | | | |

A. B. Mauer

211-9437

Scale

Colour Plot & Dips

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# Drill Hole Record

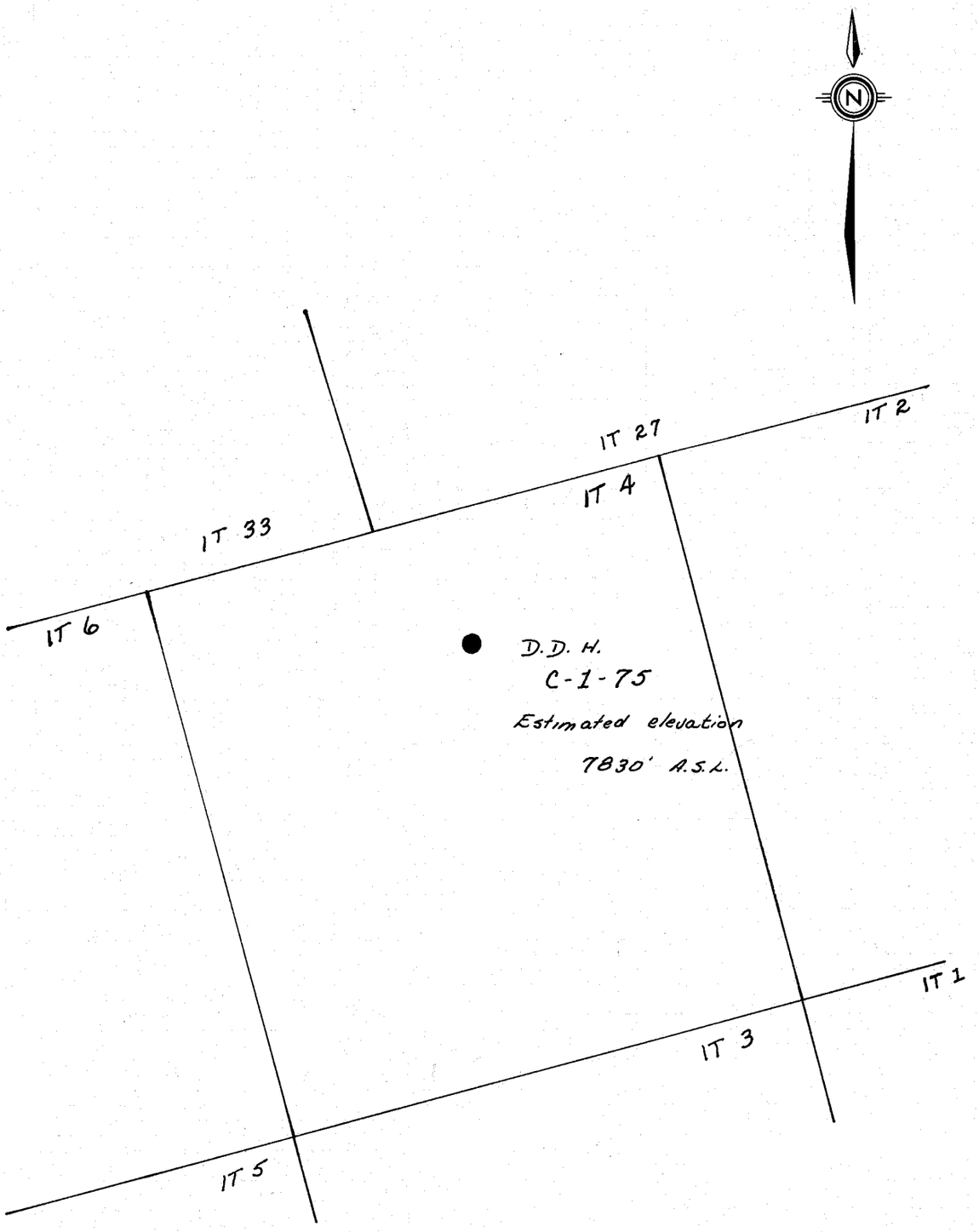
Cominco

| | | | |
|---|---|---|---|
| Property RUDDOCK CREEK | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet 24

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| | | crystallized pyrite cubes. Small scale faulting is visible in this unit and pegmatite appears to have been structurally deformed. Mineral grains are twisted and often distorted. Graphic texture reappears at 1982'-1988'. | | | |
| 1989'-1991.8' | | Quartzitic limestone, very pyritic, contains very minor actinolite near top of section, also contains minor fine grained vesuvianite. | | | |
| 1991.8'-1994' | | Fine to medium grained, relatively pure pegmatite, very minor pyrite is present and graphic texture is less pronounced. | | | |
| 1994'-1995' | | Quartzitic limestone, as in 1899'-1991.8', not quite as pyritic and contains traces sphalerite. | | | |
| 1999'-2023.5' | | Predominantly quartzite -- well mineralized with sphalerite and to a lesser extent, pyrrhotite, pyrite and galena with trace chalcopyrtie, associated with the pyrrhotite. Sulphides occur as fine grained disseminations, in clots, bands or massive patches. Very minor actinolite is present. Pegmatite occurs over 9" at 2114'. Quartzite pods occur at 2115'. Iron sulphides become predominant at 2018' and minor biotite and graphite occurs. Very minor sphalerite is disseminated through the latter part of the section. | | | |
| 2023.5'-2027.6' | | Coarse to extremely coarse grained pegmatite. Abundant pyrrhotite occurs at 2026' for a 2" section. | | | |
| 2027.6'-2029.6' | | Quartzite, containing sphalerite, pyrite, pyrrhotite and galena. Very minor actinolite. Contains very few small limey pods. | | | |
| 2029.6'-2030.6' | | Coarse grained pegmatite. | | | |
| 2030.6'-2033.5' | | Mineralized quartzite. Sphalerite is disseminated throughout. Central part of this unit is altered by pegmatite over an 8" section. | | | |
| 2033.5' | -2038' | Coarse grained pegmatite, slightly pyritic, with a 5" section of sphaleritic quartzite @ 2037' Contacts with adjacent pegmatites are sharp. | | | |

A B Mauer




Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5625 MAP 1

| Drawn by: D.M.P. | | Traced by: | |
|---|---|---|---|
| Revised by | Date | Revised by | Date |
| | | | |
| | | | |
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| | | | |
| | | | |
| | | | |
| | | | |

RUDDOCK CREEK PROPERTY

LOCATION OF D.D.H. C-1-75

| Scale: 1" = 400' | Date: | Plate: |
|---|---|---|

210-0610

Scale

Colour Plot & Dips

0

# Drill Hole Record

Cominco

| | | | | | |
|---|---|---|---|---|---|
| Property | RUDDOCK CREEK | District | | Hole No. | C1-75 |
| Commenced | | Location | | Tests at | Hor. Comp. |
| Completed | | Core Size | | Corr. Dip | Vert. Comp. |
| Co-ordinates | | | | True Brg. | Logged by |
| Objective | | | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C1-75 | Sheet 25

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| 2038'-2041.1' | | Quartzite containing sphalerite, pyrite, pyrrhotite and minor galena. Traces of chalcopyrite occur with pyrrhotite. Unit is cut by a 4" pegmatite seam at 2040'. Minor graphite is also present. | | | |
| 2041.1'-2064.1' | | Predominantly coarse grained pegmatite. A 2" massive section of sphalerite and iron sulphides occurs at 2045' and more sulphides occur in a quartzite -- altered by pegmatite over a 10" section at 2047'. Pegmatite is highly fractured and broken from 2060'-2062'. Pyrite is disseminated throughout. | | | |
| 2064.6'-2092' | | Micaceous quartzite; abundant biotite, quite pyrrhotitic at top of section -- possibly traces of sphalerite. Slightly garnetiferous containing bands and patches of relatively pure quartzite. Actinolite appears at 2072' and is contained in varying amounts through the rest of the section. Minor graphite is present as fine micoceous flakes. Very slightly limey patches up to several inches thick occur randomly throughout. This unit is cut at 2077' by 1' of coarse grained pegmatite. From 2078'-2079' the section is very actinolitic and slightly pyritic. Most foliation is at 40½ to the C.A.; folding and crenulations are common. Unit is quite biotitic and contains many quartzite bands and blebs. | | | |
| 2092'-2094' | | Amphibolitic quartzite -- abundant fine grained actinolite, and minor fine grained disseminated pyrite occurs, giving a dark coloured banded appearance to core. | | | |
| 2094'-2119 | | Interbedded biotite-quartz gneiss and calc-silicate gneiss. Most bands are on the scale of several inches, but range up to 10". Both contain pyrite, but the calc-silicate tends to be slightly more pyritic. Thin limey bands occassionally occur in the calc silicate unit which also contains minor hornblends. Pure actinolite bands occassionally occur over small intervals. Thin pegmatite bands with sharp contacts cut the unit. Foliation is distinct throughout the unit and variable from 50½ to 70½ to the C.A. A very small (2") patch of calc-silicate occurs | | | |

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211-9437

Scale

Colour Plot & Dips

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# Drill Hole Record

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|---|---|---|---|---|---|
| Property | RUDDOCK CREEK | District | | Hole No. | C-1-75 |
| Commenced | | Location | | Tests at | Hor. Comp. |
| Completed | | Core Size | | Corr. Dip | Vert. Comp. |
| Co-ordinates | | | | True Brg. | Logged by |
| Objective | | | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| | | at 2103' has minor pinkish vesuvianite and very minor fine grained dessiminated sphalerite. | | | |
| 2119' | 2124.5' | Coarse grained pegmatite. | | | |
| 2124.5' | 2143 | Same as 2094'-2119'. Calc-silicate layers are occassionally graphitic. The unit is cut by | | | |
| | | pegmatite from 2133.5'-2138.5'; contacts are gradational. | | | |
| 2143' | 2157' | Coarse to extremely coarse grained pegmatite. | | | |
| 2157' | 2165.5' | Pegmatite - pyrite along fractures -- minor patchy quartz - biotite gneiss. | | | |
| 2165.5' | 2172' | Fault zone - dark, chloritic; broken up - fault gouge: carbonate bands; 1/2" at 2166' -- blebs | | | |
| | | and patches of disseminated pyrite and pyrrhotite. Calc-silicate remnants at 2167' -- patches | | | |
| | | or specs of pyrrhotite and chalcopyrite. - slikenside surfaces are common. | | | |
| 2172' | 2176' | Quartz-biotite gneiss -- plus pyrrhotite banding 1/4" (Occassionally); garnet plus actinolite | | | |
| | | bands, 1/4"-1/2" (calc-silicate bands). | | | |
| 2176' | 2180' | Extremely coarse crystalline pegmatite. | | | |
| 2180' | 2184' | Quartz-biotite gneiss -- blebs and bands of pyrrhotite throughout; blebs of garnet plus actino- | | | |
| | | lite; 2181-2182 -- abundant disseminated pyrrhotite (banded) up to 30% -- pyrrhotite over 4"; | | | |
| | | angle of foliation approximately 30½ to 60½ to C.A. | | | |
| 2184' | 2205' | Pegmatite as above; muscovite greater than and biotite patches, pegmatite occassionally foliated | | | |
| | | gneissic biotite foliation indicated in biotite rich portions of the pegmatites, one 1/4" | | | |
| | | argillaceous partings associated with pyrrhotite, @ 2203 -- patches of calcsilicate (actinolite | | | |
| | | and garnet); @ 2204 - calcsilicate patches within the above mentioned pegmatite; | | | |
| 205' | 2209 | Pegmatite; as above; @ 2206.5 - patches of calcsilicate, | | | |
| 2209' | 2217' | Carbonate -- white, friable (chalky), weak foliation, possibly relic bedding, pegmatite bands | | | |
| | | from 2212.5 to 2214' ; coarse crystalline limestone with minor disseminated biotite; pyrrhotite | | | A B Mawer |

Scale

Colour Plot & Dips

# Drill Hole Record

Cominco

| | | | | | |
|---|---|---|---|---|---|
| Property | RUDDOCK CREEK | District | | Hole No. | C-1-75 |
| Commenced | | Location | | Tests at | Hor. Comp. |
| Completed | | Core Size | | Corr. Dip | Vert. Comp. |
| Co-ordinates | | | | True Brg. | Logged by |
| Objective | | | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. C-1-75 | Sheet

| Footage From | Footage To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| | | plus actinolite at contact of limestone and pegmatite; At 2215.5' 6" of coarse crystalline pyrrhotite, actimolite plus patches of recrystallized white limestone. Approx. 65% massive pyrrhotite; at 2216-2217' pegmatite. | | | |
| 2217'-2242' | | Pegmatite; foliated, biotite indicates gneissic foliation; at 2227' Biotite-gneiss integrated with gneissic-pegmatites. | | | |
| 2242'-2268' | | Biotite-schist; gneissosity at approx. 45¼ to C.A.; at 2245-2246' pegmatite bands and from 2250 to 2253.5' more pegmatites at 2249 -- 1" band of coarse biotite plus acinolite, 2255-2260 predeominantly pegmatite bands within the biotite schist; bands of pegmatite vary from 2" to 2'. | | | |
| 2268'-2277' | | Pegmatite; coarse grained; with biotite clots, occassional blebs of pyrrhotite and patches of muscovite. | | | |

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211-9437

Scale

Colour Plot & Dips

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# Drill Hole Record

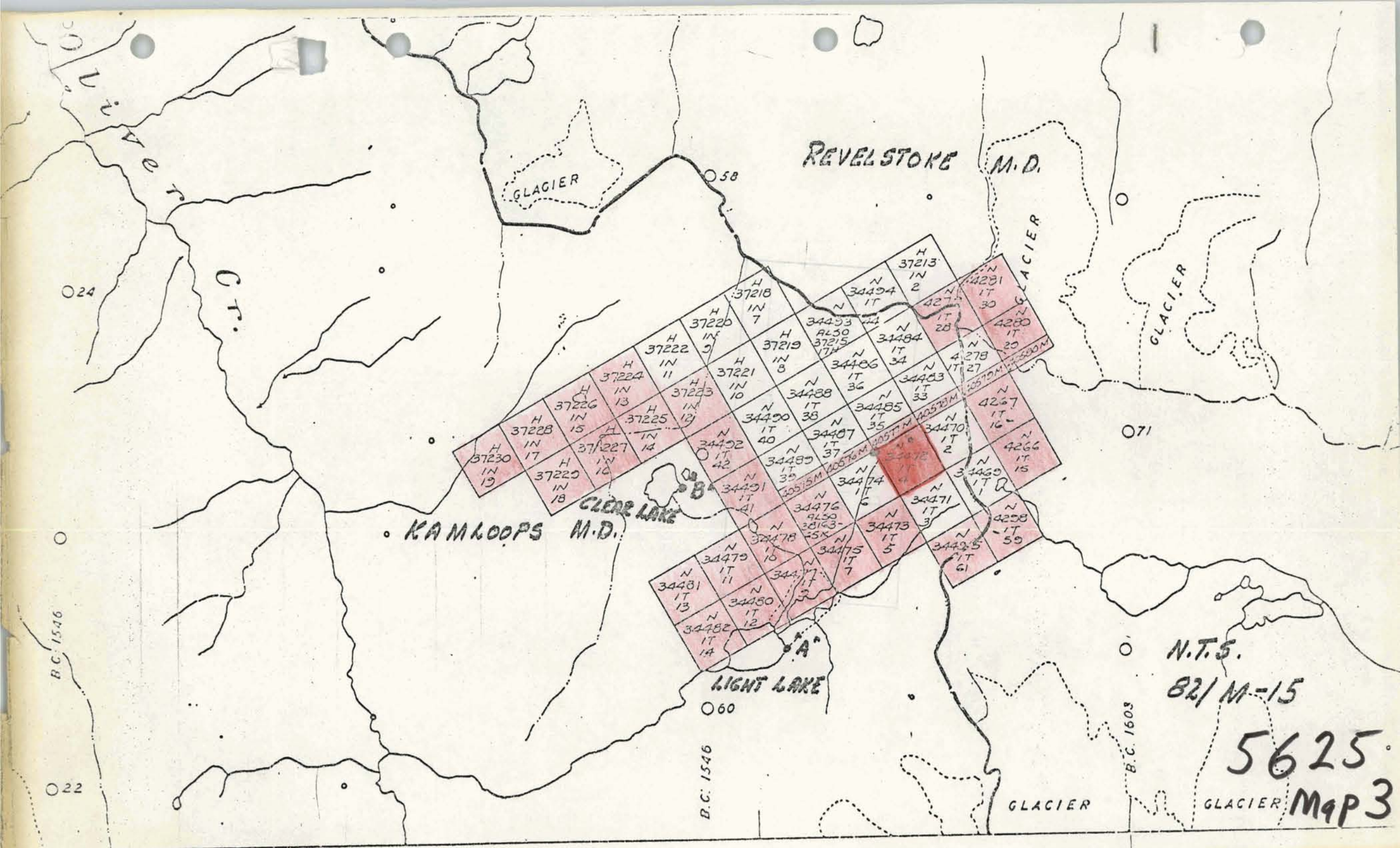
Cominco

| | | | |
|---|---|---|---|
| Property Ruddock Creek | District | Hole No. C-1-75 | |
| Commenced | Location | Tests at | Hor. Comp. |
| Completed | Core Size | Corr. Dip | Vert. Comp. |
| Co-ordinates | | True Brg. | Logged by |
| Objective | | % Recov. | Date |

Claim | T Brg. | Collar Dip | Elev. | Length | Sheet 28 | Hole No. C-1-75

| Footage From | To | Description | Sample No. | Length | Analysis |
|---|---|---|---|---|---|
| | | Dip tests were taken at the following depths: | | | |
| | | | | | |
| | | DEPTH — DEVIATION — BEARING — WEDGE | | | |
| | | 100' — -- — -- | | | |
| | | 200' — -- — -- | | | |
| | | 300' — -- — -- | | | |
| | | 385' — -- — -- | | | |
| | | 400' — -- — -- | | | |
| | | 700' — 3°20' — S75°E — 737' | | | |
| | | 760' — 5°45' — " — 702' | | | |
| | | 728' — 2°20' — " | | | |
| | | 801' — 3°00' — " — 794' | | | |
| | | 819' — 1°30' — " | | | |
| | | 974' — 1°35' — " | | | |
| | | 1327' — 2°40' — " | | | |
| | | 1647' — 4°30' — " — 1667' | | | |
| | | 1705 — 2°4' — " | | | |
| | | 2007' — 3°30' — " | | | |
| | | 2164' — " | | | |
| | | 2170' — " | | | |
| | | 2277' — 6°00' — " | | | |
| | | | | | |

A B Mawer


REVELSTOKE M.D.
KAMLOOPS M.D.
GLACIER
CLORE LAKE
LIGHT LAKE
B.C. 1546
B.C. 1603
N.T.S.
82/M-15
5625
Map 3

Cominco Ltd./200 Granville Square/Vancouver, B.C./Canada V6C 2R2
Tel. (604) 682-0611/Telex 04-507730

Cominco

Exploration

Mr. E.J. Bowles,
Chief Gold Commissioner,
Parliament Buildings,
Victoria, B.C.
V8V 1X4

DEC 16 '75 AM

13298

11 December 1975.

DEPT. OF MINES
AND PETROLEUM RESOURCES

Dear Sir:

Further to your letter, dated October 27,1975 (copy attached) which we received December 8, 1975, please find enclosed a claim sketch showing the location of all the claims within this group.

We have shown mineral claim IT 4 in dark red and the remainder of NOTICE TO GROUP RUDDOCK 75-1, dated August 25,1975 is shown in lighter red.

The following two tie-ins should give you the requested specific location of claim IT 4.

From LIGHT LAKE - POINT "A" to N.W. corner of mineral claim IT 4
DISTANCE: 5,990' BEARING: 6° 20'

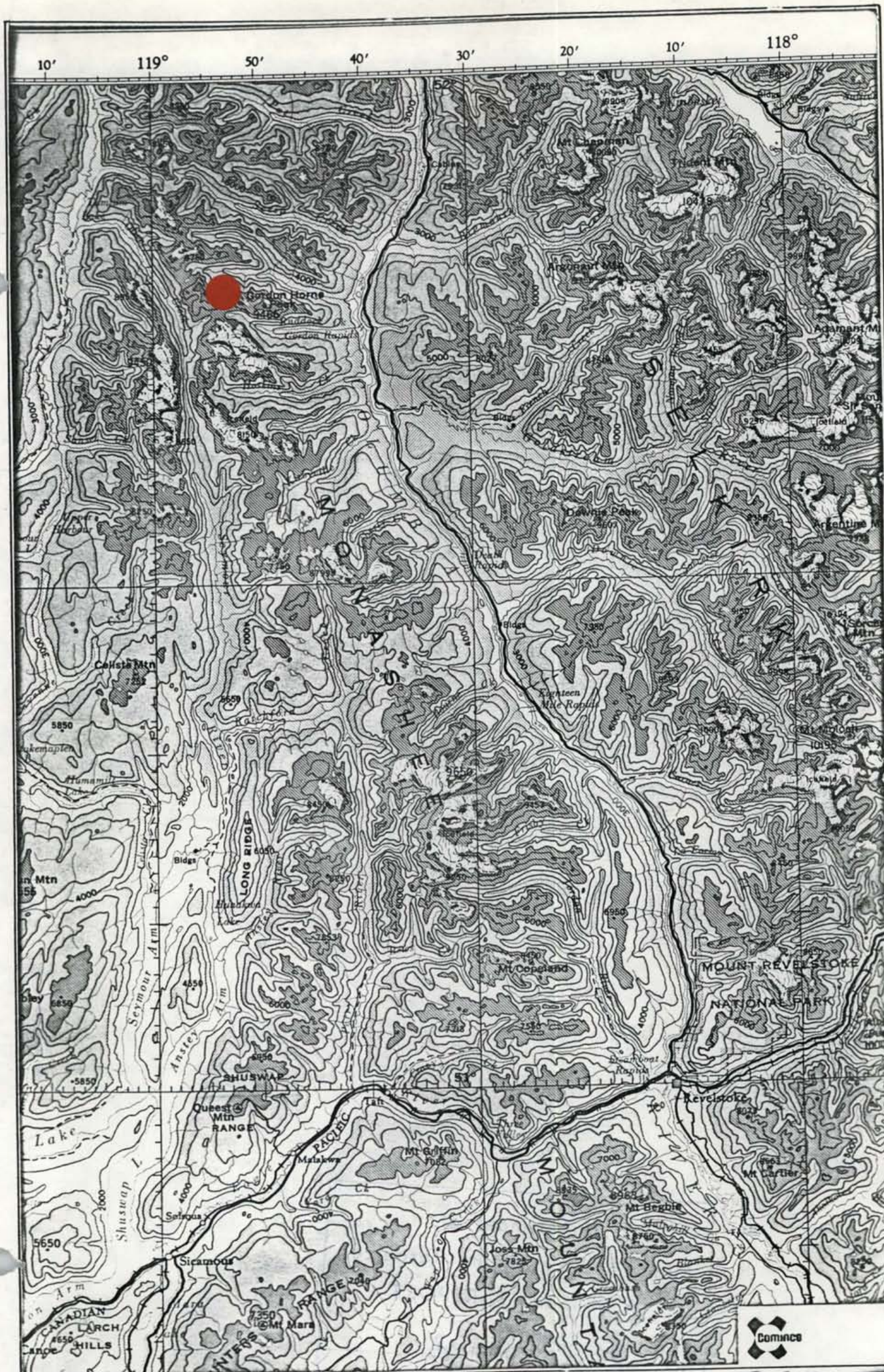
From CLEAR LAKE - POINT "B" to N.W. corner of mineral claim IT 4
DISTANCE: 3,410' BEARING 62° 45'

Yours very truly,

S. S. Selke,
Senior Technician,
Exploration.

SSS/pm

| REFERRED TO | DATE | INITIAL |
|---|---|---|
| D.M. | | |
| ADM (M) | | |
| ADM (O) | | |
| ADM (P) | | |
| C.P.R. | | |
| G.S. | | |
| INSP. | | |
| M. REV. | | |
| M. DEV. | | |
| FILE NO. | | |
| FILING CLERK | | |

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| Revised By | Date | Revised By | Date |
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| | | | |
| | | | |

LOCATION MAP

RUDDOCK CREEK PROPERTY.

5625

Map 2

Scale:

Date:

Plate