Cominco

# DRILL HOLE RECORD

**Location** Que River Area **Property** MackintoshEL2/7 **District** Tasmania, Australia **Alt./R.L.** 702.17 **Hole No** QR36

**Commenced** 29/4/75 **Completed** 1/5/75 **Core size** NQ to 148.6mEOH **Co-ordinate** 7300·6N, 5129·6E **Date** 3/5/75

**Objective** To define the southern limit of "S" lens. **% Recovery** 85% (96% for cored interval - 16.8m to EOH) **Bearing (M)** 98° **Grid bearing (M)** 8.75 **Logged** EHS **Dip** 46

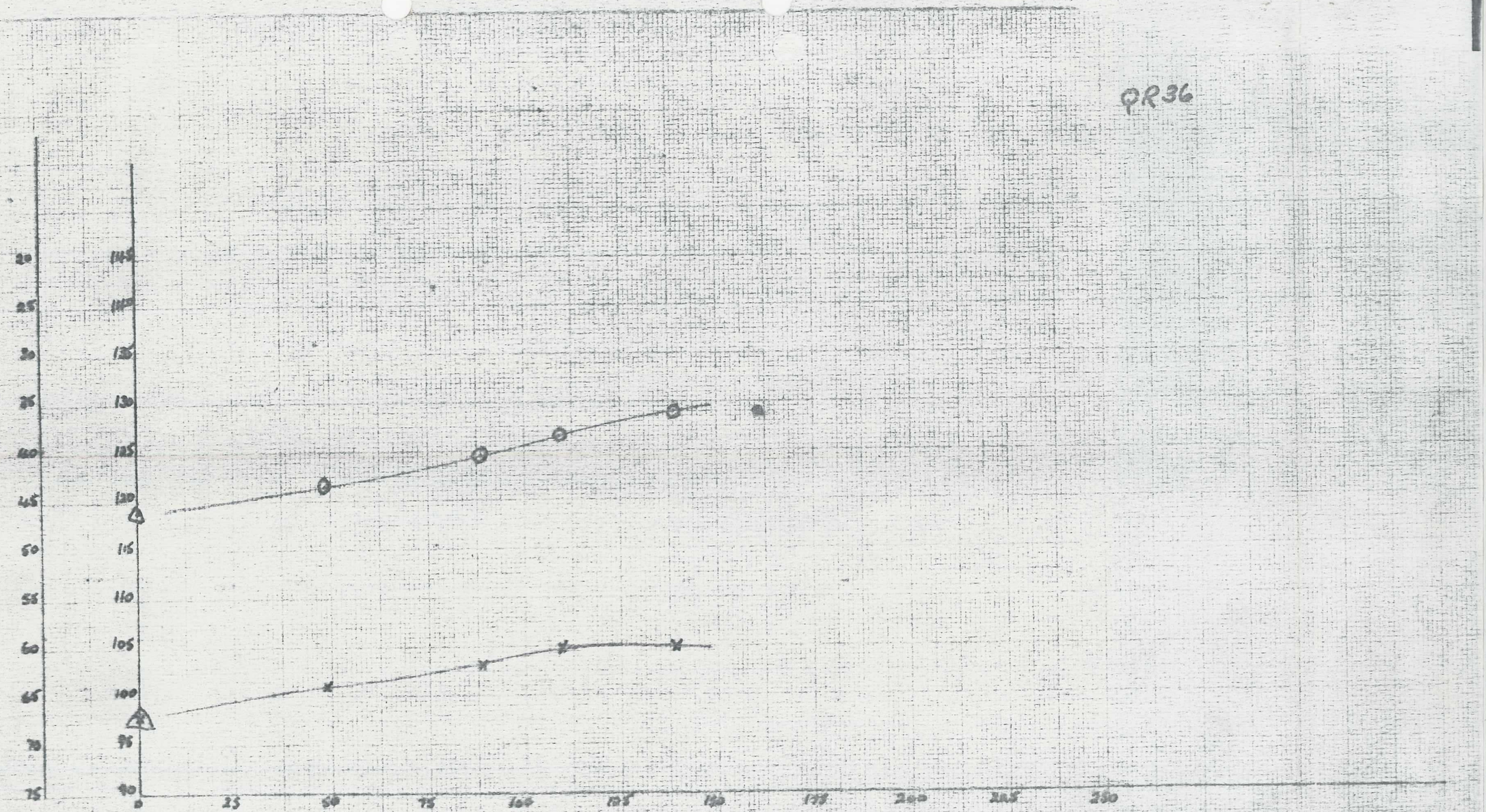
## SURVEY DATA

| DEPTH | DIP | BEARING(M) | INSTRUMENT TYPE |
|---|---|---|---|
| 0 | 45 | 99 | Clino/Compass |
| 48 | 43.5 | 101 | Eastman |
| 79 | 40.5 | 103 | single |
| 109 | 38.5 | 105 | shot |
| 139 | 36 | 105 | camera. |
| 0 | 45°55' | 98°29' | Theodolite |

## GRAPH DERIVED DATA

| DEPTH | DIP | BEARING(M) | NORTHING | EASTING | ALTITUDE | REMARKS |
|---|---|---|---|---|---|---|
| 0 | 46 | 98 | 7300.6 | 5129.6 | 702.17 | |
| 25 | 45 | 99.5 | 7300.6 | 5147.1 | 684.3 | |
| 50 | 43.5 | 101 | 7300.1 | 5165.0 | 666.9 | |
| 75 | 41.5 | 102.5 | 7299.2 | 5183.4 | 650.0 | |
| 100 | 39.5 | 104 | 7297.7 | 5202.4 | 633.8 | |
| 125 | 37 | 105 | 7295.7 | 5221.9 | 618.0 | |
| 139 | 36 | 105 | 7294.5 | 5233.1 | 610.0 | |
| 148.6 | 35.5 | 105 | 7293.7 | 5240.8 | 604.4 | E.O.H. |
| | | | | | | Theodolite pick-up of HQ drill string. |

QR36




Eastman Single Shot Camera

⊙ Dip

× Azimuth

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# DIAMOND DRILL LOG

Hole N° QB36 Page N° 1

**Feature :** Bedding, Foliation, Fragment - size & shape; Shearing, Fault (F), Vein (c carbonate, q quartz)

**Mineralization :** Trace 1-5%; Common 5-15%; Abundant 15-60%; Massive ≥60%

| CORE REC'D | DEPTH m | GEOLOGY | VISUAL LOG | TRACE | COMMON | ABUNDANT | MASSIVE | DEPTH m | MINERALIZATION |
|---|---|---|---|---|---|---|---|---|---|
| 0.20 | 16.80 | Coarse lithic tuff, with dark grey sericitic sheared fragments in an off-white carbonate rich matrix. Some sulphide rich fragments, also major leached quartz carbonate veins (17.60m - 18.00m) | q-c | | | | | | Py 2%, traces of Sph and Gn with quartz-carbonate. |
| 0.40 | | | F | | | | | | |
| 0.70 | | | q-c | | | | | | |
| 1.20 | 19.93 | PyP | THROUGHOUT | | | | | 19.93 | |
| 0.70 | 20.75 | Massive sulphide, sheared, with sericitic matrix. | | | | | | 20.30 | Pyrite 90% |
| | | Fine sheared, sericitised & carbonated feldspar crystal tuff? PyP | | | | | | 20.75 | Py 50%, Cn 20%, Sph10 |
| 1.95 | 21.35 | Fine buff tuff or tuff lava, with alteration to blue-grey along fractures. (DTL) | | | | | | | Py 10%, massive zones parallel to foliation |
| | 22.0 | Sheared, carbonated sericitic lithic tuff, cherty. (PyP) DTL | | | | | | 21.35 | Py 2% |
| | 22.4 | Fine tuff, buff to grey, some concentric and fracture alteration to dark grey. Foliation is either bedding or flow banding, visible only locally, 40° to core axis, in part 30° to core | CORE | | | | | 22.0 | Py ≥1% as fragments & stringers |
| 1.50 | | | BROKEN | | | | | 22.1 | Py ≤5%, as veinlets stringers, also as small accretions parallel to the foliation. |
| | 25 | | F | | | | | | |

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# DIAMOND DRILL LOG

Hole Nº QR36 Page Nº 2

**Feature :** Bedding, Foliation, Fragment - size & shape; Shearing, Fault (F), Vein (c carbonate, q quartz)

**Mineralization :** Trace 1-5%, Common 5-15%, Abundant 15-60%, Massive >60%

| CORE REC'D | DEPTH m | GEOLOGY | VISUAL LOG | DEPTH m | MINERALIZATION |
|---|---|---|---|---|---|
| 0.90 | | axis. Carbonate veining occurs throughout and occasional flecking may be after feldspar. | | | |
| 0.35 | | | | | |
| 0.20 | | | | | |
| 0.75 | | | | | |
| 1.05 | | | | | |
| | 30 | | | | |
| 2.25 | | | | | |
| 2.00 | | | | | |
| | 35 | | | | |
| 2.90 | | | | | |
| 1.00 | | | | | |
| 1.96 | | | | | |
| | 40 | | | | |
| 0.90 | | | | | |
| 2.60 | | | | | |
| | 43.95 | DTL<br>Fault Contact PyP<br>Sheared, variably sericitic and carbonated lithic tuff to tuff agglomerate. Some foliation, vicinity 69m, could be flow banding? Cleavage normally 50° to core axis. Colour dominantly blue-grey but is markedly light greenish fawn in the matrix between 50m and 58.6m. Sericite replaces feldspar in many fragments, appearing as ellipsoidal masses to 3mm in long axis. White to yellow | BROKEN CORE | 43.95 | Py 7%, Gn 3%, Sph 5% coarsely recrystallised material associated with gangue |
| 2.75 | 45 | | | 45.20 | Py 10-12% as irregular bands and veins parallel to the foliation, 55° to the core axis. |
| 0.92 | | | BROKEN CORE | 48.00 | |
| 2.00 | | | | | Py trace to 2% as disseminated grains. |
| | 50 | | | | |

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# DIAMOND DRILL LOG

Hole N° QR36 Page N° 3

**Feature :** Bedding, Foliation, Fragment - size & shape; Shearing, Fault (F), Vein (c carbonate, q quartz)

**Mineralization :** Trace 1-5%, Common 5-15%, Abundant 15-60%, Massive >60%

| CORE REC'D | DEPTH m | GEOLOGY | VISUAL LOG | DEPTH m | MINERALIZATION |
|---|---|---|---|---|---|
| 0.73 | | carbonate occurs as diffuse zones irregular veinlets, also as spotting. Fragments are mostly dark grey, some are pale green to light grey. | | | |
| 3.02 | 53.8 | | | | |
| | | FAULT ZONE Broken core to 53.8m to 57.5m approx., the puggy material with some chips of solid rock. | | | |
| 1.10 | 55 | | | | |
| 0.40 | | | | | |
| 0.50 | | | | | |
| 0.55 | | | | | |
| 0.80 | | | | | |
| 0.80 | | | | | |
| | | | | 59.0 | Approx. contact. Py 5-7% as patches of finely crystalline material, crudely in bands parallel to the foliation (shearing) |
| 0.80 | 60 | | | | |
| 0.95 | | | | | |
| | 62.0 | As above fault. | | | |
| 5.50 | | | | | |
| | 65 | | | 64.5 | Pyrite, trace only. |
| 0.50 | | | | | |
| 3.18 | | | | | |
| | 70 | | | | |
| 2.13 | | | | | |
| 0.50 | | | | | |
| | 75 | | | | |

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# DIAMOND DRILL LOG

Hole No QR36 Page No 4

**Feature :** Bedding, Foliation, Fragment - size & shape; Shearing, Fault, Vein (c carbonate, q quartz)

**Mineralization :** Trace 1-5%; Common 5-15%; Abundant 15-60%; Massive >60%

| CORE REC'D | DEPTH m | GEOLOGY | VISUAL LOG (TRACE / COMMON / ABUNDANT / MASSIVE) | DEPTH m | MINERALIZATION |
|---|---|---|---|---|---|
| 2.90 | | In the interval 84m to 94m (approx) banding of carbonate/ sericite at 30° to the core axis is apparent in lengths of core up to 1m and also in fragments. It is interpreted as flow banding or bedding and is rotated from the cleavage by about 20-25°. Angles to core axis are similar. (30-35°) | | | |
| 3.06 | 80 | | | | |
| 2.93 | | | | | |
| 1.18 | | | | | |
| 2.69 | 85 | | | | |
| 2.19 | | | | | |
| 2.21 | 90 | | | | |
| 1.78 | | | | | |
| 0.90 | | | | 93.0 | Approx. Py 5-7% as veins and irregular patches of fine Py. Sph and Gn occur as minor constituents of carbonate veins, also separately in small aggregates. |
| 0.30 | | | F | | |
| 3.20 | 95 | | c | | |
| | | | c | | |
| 2.15 | | | | 98.0 | Massive Sph in carbonate vein, some Gn. |
| | | | F | | |
| | 100 | | | | |

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# DIAMOND DRILL LOG

Hole Nº QR36 Page Nº 5

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**Mineralization :** Trace 1-5%; Common 5-15%; Abundant 15-60%; Massive ≥60%

| CORE REC'D | DEPTH m | GEOLOGY | VISUAL LOG | TRACE | COMMON | ABUNDANT | MASSIVE | DEPTH m | MINERALIZATION |
|---|---|---|---|---|---|---|---|---|---|
| 1.30 | | | | | | | | | |
| 3.00 | | | | | | | | | |
| 2.90 | 105 | | | | | | | | |
| 3.09 | 108.45 | General change to more chloritic aspect, lithic tuff perhaps tuff-agglomerate<br><br>Sheared, chloritic and sericitic to varying degree throughout. Carbonate veining, above 128m, is very fine and erratic.<br><br>Vein displacements are common by fractures, also with carbonate. | | | | | | | Py continues at 5-7% as fine disseminations, also as ovoid to elongate accretions, possibly after pyrite rich rock fragments, now chloritised. |
| 2.72 | 110 | | | | | | | | |
| 3.12 | 115 | | | | | | | | |
| 2.95 | | | | | | | | | |
| 2.00 | 120 | | | | | | | | |
| 1.20 | | | | | | | | | |
| 0.70 | | | | | | | | | |
| 2.20 | | | | | | | | | |
| | 125 | | | | | | | | |

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# DIAMOND DRILL LOG

Hole N° QR36 Page N° 6

**Feature :** Bedding, Foliation, Fragment - size & shape; Shearing, Fault, Vein; c carbonate, q quartz

**Mineralization :** Trace 1-5%, Common 5-15%, Abundant 15-60%, Massive ≥60%

| CORE REC'D | DEPTH m | GEOLOGY | VISUAL LOG | DEPTH m | MINERALIZATION |
|---|---|---|---|---|---|
| 3.10 | 130 | 126.60m: 20cm pug with rock/ carbonate chips. (Postdates carbonate veining) | | 129.60 | |
| 2.80 | | Cleaved, intensely in part; chloritic. | | 130 | Py 10% as irregular bands, and veinlets, 2 occasionally diffuse masses, up to 25% where shown. |
| | 131 | Contact obscured by shearing and chlorite/sericite development. Medium to fine grained lithic tuff. | | 131.2 | |
| 3.07 | | | | 132.5 | |
| | 133 | Uncertain contact with sheared, carbonated, sericitised and chloritic, tuff agglomerate to agglomerate. Texture shows a glassy, diffused appearance, (due to development of alteration minerals across fragment boundaries). Colour is greenish grey to black. White carbonate veining occurs throughout; some veins are ptygmatically folded, others displaced by later fracturing. | | | |
| 3.10 | 135 | | | 137 | Py 15% as amoeboid masses after fragments? |
| | | 139.4m ; 15cms pug | | 139.4 | |
| 3.02 | 140 | | | | Py 5%, locally 30 to 50% as veins with chlorite. |
| 2.92 | 145 | Cleaved intensely in part. | | | |
| 2.66 | | | | | |
| | 148.6 | End of Hole. Abandoned. Deflection too severe to attain target. | | | |