

# Drill Hole Record

# Cominco

LOCATION Que River Area

PROPERTY Mackintosh EL 2/70

DISTRICT Tasmania, Australia ALTITUDE /RL 691.61

HOLE N° QR 17

COMMENCED 4.2.1975

COMPLETED 10.2.1975

CORE SIZE NQ to 90.17 m BQ to 223m E.O.H.

DATE 13.2.1974

OBJECTIVE To test coincident IP and geochemical anomalies.

%RECOVERY 98%

CO-ORDINATES 8301.15N 5077.12 E

LOGGED R.D. Birrell

GRID BEARING (M) 8.75

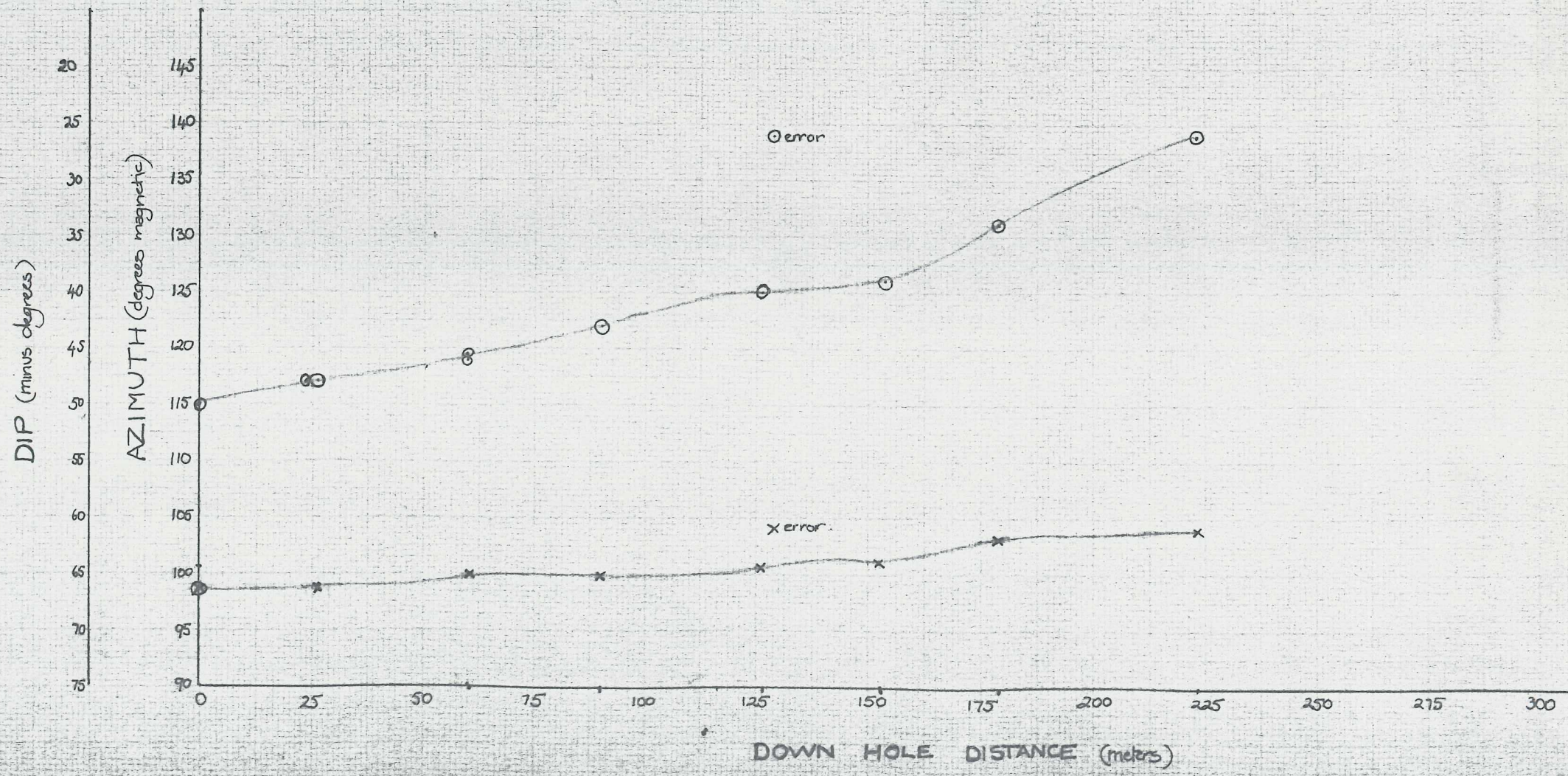
BEARING (M) 98°

DIP -50°

SURVEY DATA				GRAPH DERIVED DATA						REMARKS
DEPTH	DIP	BEARING(M)	INSTRUMENT TYPE	DEPTH	DIP	BEARING(M)	NORTHING	EASTING	ALTITUDE	
0	50	98	Compass & Clinometer	0	50	98	8301.15	5077.12	691.61	
26	48	98	Eastman	25	48	98.5	8301.29	5093.52	672.75	
24	48	N/R	Single Shot	50	46.5	99.5	8301.22	5110.49	654.39	
60	46	100	Camera	75	45.5	100	8300.92	5127.85	636.41	
60	45½	N/R	" "	100	42	100	8300.52	5145.90	619.13	
90	43	100	" "	125	40	100.5	8300.02	5164.76	602.73	
126	40	101	" "	150	39	101	8299.35	5184.04	586.83	
123	26	104	Error	175	35	103	8298.21	5203.96	571.79	
153	39	102		200	30	103.5	8296.55	5224.96	558.37	
178	34	103		223	26	104	8294.78	5245.18	547.58	
223	26	104	E.O.H.							




71-76 m thoroughly chloritised alteration zone may correlate with base metal mineralisation along strike.  
 96.5-98 m intensely chloritised, pyrite 7% trace galena, sphalerite and chalcopyrite.

QR 17.



O DIP  
X AZIMUTH





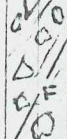



Feature :

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
	2.2	No core						
	2.1	<u>Pumice lithic agglomerate</u> Grey, becoming blue-grey below 12 m. Large (to 15 cm) angular to sub-rounded light grey fragments with chlorite and sericite patches and flecks with small discrete euhedral pyrite crystals.						Pyrite 3% as veins, disseminations and aggregates of euhedral to subhedral crystals.
	5	Carbonate spots are common. (Dacitic lava or pumice?)						
	2.5	Charcoal grey, siliceous fragments (to 4 cm) of fine quartz crystal tuff often contain abundant fine disseminated pyrite.						
	3.0	Grey angular to rounded chert? fragments (to 2 cm) have carbonated tension fractures. The unit is often disrupted and fragment outlines are obscure up to 2 cm carbonate veins increase below 15 m.						
	0.6							
	1.2	Foliation at 30° - 50° to core axis is locally emphasised by carbonate lenses and laths.						
	2.0	Fracture varies from 20° - 30° to the core axis.						
	15	The matrix is fine grained, grey and ashy.						
	3.0							
	2.0							
	20							
	2.2							
	1.4							
	2.0							
	24							
	25	<u>Fault zone</u> 60% broken and sheared core.						




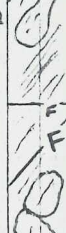





# DIAMOND DRILL LOG

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
		As above.				Pyrite 3% as above.
	3.0					
	3.0					
	55	55.3 m carbonated fault breccia.				Rare disseminated galena.
	3.0					
	58.5	Fault contact				Pyrite 5% as veins, disseminations and aggregates of euhedral to subhedral crystals.
		<u>Vitric tuff</u> A thoroughly carbonated grey alteration zone appears to be an agglomerate because of thoroughly disrupted bedding and carbonate veins.				
	3.0					
	60					
	3.0					
	65	Below 64 m, decreasing carbonate and increasing chloritisation gives the unit a dark green grey colour. Devitrified shards are completely sericitised. Highly chloritised bands (to 2 cm) have fine pyrite aggregates.				Sphalerite and galena has been noted.
	3.0					
	70	Sample for petrology 155544				
	3.0					
	71	<u>Gradational change</u>				Pyrite 3% as above.
		Thoroughly disrupted, chloritised carbonated <u>vitric tuff</u> with a spotted appearance, carbonate occasionally quartz patches to 1 cm. Possibly reaction halos.				
	3.0	<u>Note:</u> This alteration zone may correlate with base metal mineralization along strike.				
	75					

# DIAMOND DRILL LOG

Hole No. QR 17

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





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
	3.0							76	Pyrite 5% as fine aggregates veins and discrete euhedral crystals.
	3.0								
	80	Below 81 m the unit becomes extremely disrupted (possibly autobrecciated)							
	3.0	81.6 Vitric tuff. The unit is now light grey and has thoroughly sericitised devitrified shards that occasionally align with the foliation at 60° to core axis.						81.6	Pyrite 1% as above.
	3.0	85 The unit is carbonated, locally weakly silicified and chrome green aggregates of illite-hydromuscovite (to 1 cm) is associated with carbonate aggregates and pyrite.							
	3.0								
	1.07								
	1.83								Rare galena as aggregates of fine crystals.
	3.0								
	95	95 Chloritic coarse lithic tuff/vitric tuff. Dark green-grey, with thorough chlorite alteration.						95	Pyrite 3% as above.
	3.0	96.5 - 98 m intensely chloritised in local bands (to 30 cm) with abundant pyrite aggregates and trace galena, sphalerite and chalcopryrite. (Potential mineralised zone).							
	3.0	Below 98 m band (to 5 cm) have restricted pyrite.							96.5 - 98 m Pyrite 7% trace galena, sphalerite and chalcopryrite.
	100								

# DIAMOND DRILL LOG

 Hole No. QR 17

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**Feature :**

Bedding

Foliation

Fragment-

size &amp; 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
		Light grey lithic fragments (to 1 cm) have euhedral carbonate and sericite aggregates. (Relict feldspar in dacitic lava).	O						Pyrite 3% as fine aggregates, veins and discrete euhedral crystals.
	3.0	Grey chert fragments (to 2 cm) with carbonated tension fractures and pyrite fragments to 1 cm have been noted.	O						
	105		O						
	3.0		O						
	107.4	<u>Fault zone</u> 60% broken and sheared core.	F						
	3.0		F						
	109.5		F						
	110		F						
	3.0	Rounded aggregates of chlorite (lithic fragments) have carbonate and fine pyrite disseminated throughout.	O						
		Minor irregular carbonate veins (to 5mm) around 115 m.	O						
	3.0	The matrix is grey and fine grained.	O						
	115	Fractures are nearly perpendicular and 40° to core axis, while foliation is about 30° to 40° to core axis.	O						
	3.0		O						
			O						
	120		O						
	3.0		O						
	1.6		O						
	1.6		O						
	125		O						

# DIAMOND DRILL LOG

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**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
	0.8	As above.				
	2.0					
	1.1					
	129.7					
	1.8	130 Sheared and broken core small faults at 50° to core axis.				
	0.8	132.8				
	3.0	133.4 <u>Fault zone broken and sheared core</u> 133.8 Lithic pumice tuff/tuff agglomerate.			133.4	Pyrite 5% as bands and aggregates of fine euhedral to subhedral pyrite crystal.
	2.0	134.9 80 cm fault pug				
		135.9				
	2.1	136.9 <u>Fault zone</u> 80% sheared and broken core and pug.				
	0.6	138.6				
	1.4	140 133.4 - 145.7 m the unit is grey with pumice fragments (to 1 cm) and filamentous pumice bands (to 2 cm) with characteristic pale green sericite replacing devitrified shards.	BADLY BROKEN CORE			
	0.4	Angular to sub-rounded, thoroughly carbonated fragments (to 2 cm) have discrete fine euhedral pyrite crystals.				
	1.3	Charcoal grey angular fragments (to 5 cm) possibly a siliceous fine tuff.				
	0.5	145 The matrix is grey "ashy" and occasionally disrupted bedding occurs.				
	1.3	145.7 - 155 m mottled grey buff and green with sericitised, locally chloritised pumice fragments and filamentous pumice.				
	0.4				144	Pyrite <1% as above. Rare fragments of pyrite (to 5 mm).
	3.0					
	1.3					
	3.0					
		150				



# DIAMOND DRILL LOG

**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
	3.0	Bands of filamentus pumice (to 1 cm) are sericitised and siliceous fragments (fine tuff) have carbonated tension fractures.	○						Pyrite as above.
	1.2		○						
	180		○						
	2.3	Below 181 m local purplish-grey colouration in bands and patches occur and grey-buff siliceous fine grained fragments are common.	○						
	2.5		○						
	185		○						
	3.0		○						
	3.0	189 m purple-grey angular fragments (to 3 cm) with sericite, chlorite and carbonate patches and laths, give the unit a coarse appearance. The matrix is pale green, chloritised and occasionally siliceous.	○						
	190		○						
	3.0		○						
	193.4	Sample for petrology 155543.	○						
	3.0		○						
	195	Pale green colour, with off-white bands of filamentus pumice.	○						
	0.9	Locally a speckled green appearance because of chlorite and sericite flecks patches and lens shaped aggregates, roughly aligned to foliation direction of 60° to core axis.	○						
	2.9		○						
	200		○						

# DIAMOND DRILL LOG




















**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
	3.0								Pyrite rare as discrete euhedral crystals.
	3.0								
	205	Pink-grey dacitic lava? fragments (to 5 cm) have pale green sericite replacing feldspar, and quartz crystals <1 mm are abundant.							
	2.1	Grey fragments of fine siliceous tuff? are sub-rounded and occasionally chloritised.							
	0.9								
	3.0								
	210	Changing colour intensely throughout the unit is attributed to increase and decrease of chlorite and sericite respectively.							
	3.0								
	215								
	2.6								
	216.55								
	0.4	<u>Fault zone</u> 80% sheared and broken core, and fault pug. Extensive iron staining.							
	0.7								
	1.0								
	1.3								
	220								
	220.5								
	3.0	Weakly disrupted bedding has been noted.							
	223	E.O.H.							
	225		