Cominco

DRILL HOLE RECORD

Location Que River Area
Property Mackintosh EL 2/70
District Tasmania, Australia.
Commenced 8.3.1975
Completed 12.3.1975
Core size NQ to 30 m BQ to 208.6 EOH.
Objective To test coincident I.P. and Geochemical soil anomalies.
% Recovery 96

Alt./R.L. 715.91
Co-ordinate 6900.64N 4877.93E
Bearing (M) 104
Grid bearing (M) 8.68°

Hole No QR 26
Date 15.3.1975
Logged R. BIRRELL
Dip 50

SURVEY DATA

DEPTH	DIP	BEARING(M)	INSTRUMENT TYPE
0	50	104	Compass and Clinometer
34	48.5	105	Eastman
64	46	105	Single Shot
101	41	106	Camera
140	36	109	" "
176	29	109	" "
208.6	20	108	" "

GRAPH DERIVED DATA

DEPTH	DIP	BEARING(M)	NORTHING	EASTING	ALTITUDE
0	50	104	6900.64	4877.93	715.91
25	49	105	6898.99	4894.08	696.90
50	47	105	6897.15	4910.71	678.32
75	44.5	105	6895.23	4928.04	660.42
100	41	106	6893.05	4946.26	643.46
125	38	107.5	6890.34	4965.35	627.56
150	34	109	6886.97	4985.28	612.88
175	29	109	6883.15	5006.23	599.83
208.6	20	108	6877.96	5036.26	585.94

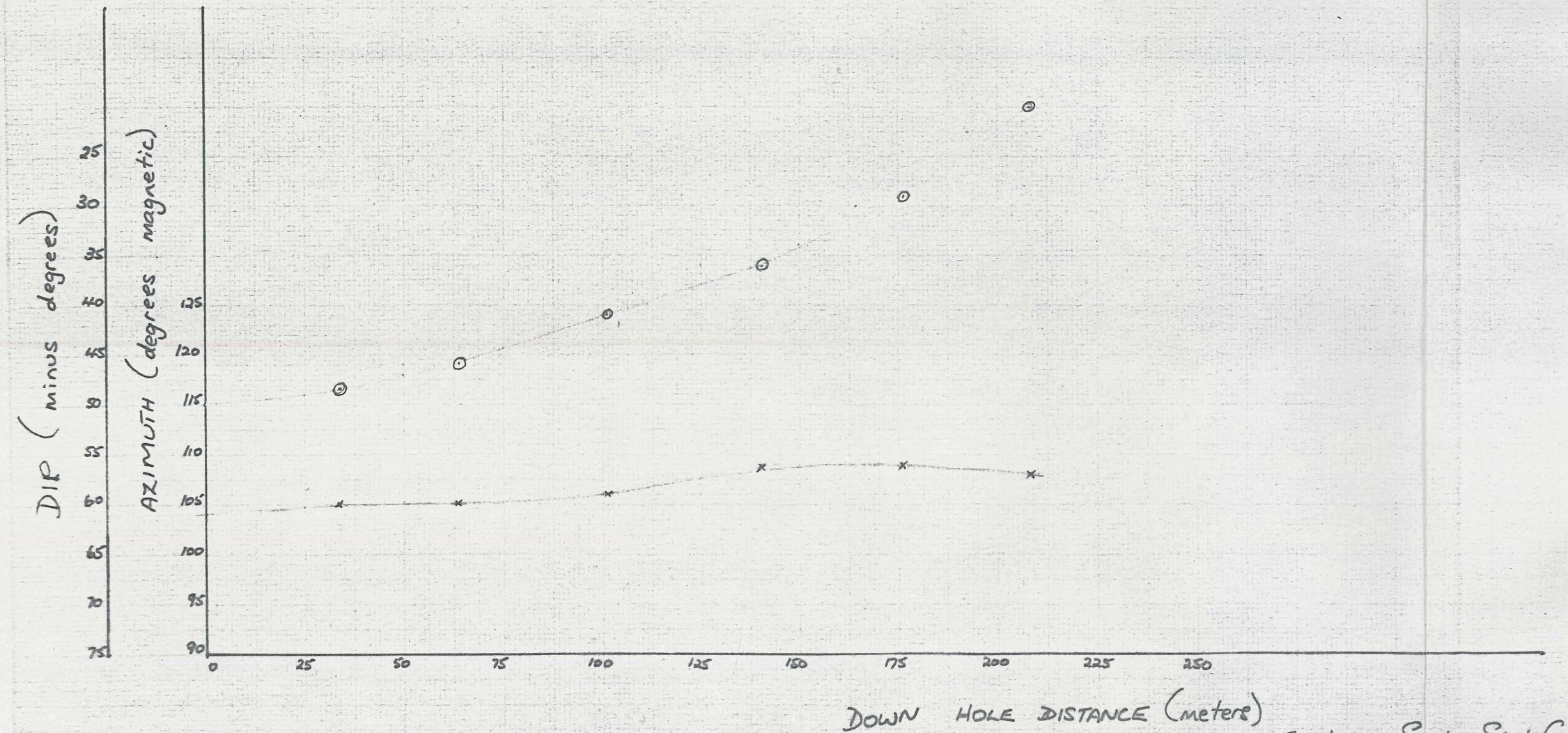
REMARKS

50 - 51 m Disseminated sulphides. Pyrite 5% galena 4%, sphalerite 7%, trace chalcopyrite.

61.1 - 61.5 m Disseminated sulphides Pyrite 5%, sphalerite 10%, galena 5% trace chalcopyrite.

125.37 - 126.3 m Massive sulphides Pyrite 50%, galena 5%, sphalerite 10% trace chalcopyrite.

QR26



Eastman Single Shot Camera.

⊙ DIP

× AZIMUTH

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DIAMOND DRILL LOG

Hole N° QR 26 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
		No Core.							
	5								
1.1		Blue grey chloritised <u>feldspar crystal tuff</u>.							Pyrite <1% as disseminations and veins of euhedral to subhedral crystals.
0.7		The unit is broken and carbonate aggregates (to 3 mm) replace relic feldspars?							
1.2	8.2								
1.5	8.8	<u>Fault zone</u>	F						
1.5	10	Local areas are pale green because of carbonate alteration. Random charcoal grey, angular to sub-angular fragments (to 3 cm) are thoroughly sericitised and have fine pyrite disseminated throughout.	BROKEN CORE						
0.8		Fractures are at irregular angles to the core axis and weak foliation is at 30° to the core axis.							
1.2									
1.0									
0.6									
1.0	15								
	16								
1.4		Grey sericitised coarse <u>lithic tuff</u>. Angular to sub-angular fragments of pumice? (to 4 cm), are thoroughly sericitised, often white, with characteristic pale green lenses of sericite replacing sheared feldspars? Dusty pyrite is often associated with sericitisation.	F						
2.0									
3.1	20	Random pale grey colouration can be attributed to thorough carbonate alteration.	F						
0.9									
3.0									
	25								

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DIAMOND DRILL LOG

Hole N° QR 26 Page N° 2.

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	MINERALIZATION
		Chert nodules and bands along with pyrite fragments also occur. Small angular fragments (to 1 cm), fine grained and siliceous are possibly a fine tuff.	Pyrite as above.
3.0		The matrix is essentially fine feldspar crystal tuff.	
1.0	30	Below 30 m the unit is light grey in colour and is consequently the result of decreased sericitisation and increased carbonate and silicification.	Pyrite 1% as aggregates veins fragments and disseminations of euhedral to subhedral crystals.
2.0			
0.6		Fragments are essentially the same and irregular carbonate and quartz veins are common.	
1.0			
1.4			
	35		
3.0			
3.0	40	The matrix is light grey with carbonate aggregates (< 1 mm) and fine grey sugary quartz crystals.	
3.0			
2.0	45		Minor secondary galena and sphalerite has been noted.
1.0			
3.0		Illite-hydromuscovite has been noted.	
	50		

VISUAL LOG: TRACE, COMMON, ABUNDANT, MASSIVE; BROKEN CORE

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DIAMOND DRILL LOG

Hole N° QR 26 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
2.3		Grey thoroughly sericitised and carbonated <u>lithic vitric tuff.</u> The unit is disrupted and has abundant irregular carbonate veins.	BROKEN CORE	50	Pyrite 5% galena 4% sphalerite 7% trace chalcopyrite. 4 cm fragment of massive sulphides.
1.0				51	
					Pyrite 5% trace galena, sphalerite and chalcopyrite.
				53	
2.7	55	Lithic fragments (to 3 cm) angular to sub-angular, and highly sericitised are possibly pumice?			Pyrite 3% as aggregates, disseminations and veins of euhedral to subhedral crystals, except where indicated.
1.8		Pale green lenticular aggregates of sericite probably represent devitrified glass.	F		
3.0		The matrix is fine grey "ashy" and has sugary quartz crystals.	F		
	60				
1.2				61.1 61.5	Pyrite 5%, sphalerite 10% galena 5% trace chalcopyrite.
2.4					
2.4	65	The foliation is usually 30° to the core axis while fractures are between 40° and 70° to the core axis.	F	65.8	Pyrite 90%.
1.2					
	68	Gradational Contact.			Pyrite 1% occurs as above.
3.0	70	Initially disrupted, the unit is a speckled grey, coarse <u>pumice vitric tuff.</u> Spotted carbonate aggregates with obscure outlines probably represent altered pumice fragments? Some small grey angular fragments have euhedral sericite aggregates and may represent altered feldspars of a feldspar crystal tuff.			
3.0					
	75				

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DIAMOND DRILL LOG

Hole N° QR 26 Page N° 4.

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
3.0		Abundant lenticular aggregates of pale-green sericite possibly represent sheared vitric tuff which constitutes the major proportion of this unit.							Pyrite 1% as above.
3.0									
	80								
3.0									
3.0		Pale grey chert fragments to (2 cm) are commonly associated with carbonate veins.							
	85								
3.0			c						
3.0									
	90								
3.0		Irregular carbonate veins become prominant below 92 m.							
3.0									
	95								
3.0									
3.0									
	100								

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DIAMOND DRILL LOG

Hole Nº QR 26 Page Nº 5.

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
		Below 100 m, local bands (to 25 cm) of fine grey tuff are sericitised and have associated pyrite dust.			Pyrite as above.
3.0					
	105				
3.0		The unit is reasonably competant and fractures are between 30° and 60° to the core axis. Foliation is usually 40° to the core axis.			
3.0					
	110				
3.0		Illite-hydromuscovite has been noted.			
	113.6		F		
1.9	114.1	Fault zone	F	114.1	Pyrite 5% as veins, aggregates and disseminations of fine euhedral to subhedral crystals.
	115	Coarse grey locally sericitised lithic tuff.			
1.1		Similar to above unit between 16 - 30 m.	F		
2.3		The unit is locally disrupted and has bands (to 10 cm) of fine grey tuff.			
2.7			F		
	120				
	120.6		F		
1.0		Fault zone Broken and sheared core and pug, some core loss.			
0.6					
0.6					
	123.3		F		
0.9					
	125				

TRACE COMMON ABUNDANT MASSIVE

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DIAMOND DRILL LOG

Hole N° QR 26 Page N° 6.

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
0.8		Massive base metal sulphides. Badly faulted at either extremity.	F					125.37	Pyrite 50%, galena 5% sphalerite 10% trace
1.7		Light green-grey, locally sericitised and silicified coarse lithic tuff. A varied and partly disrupted unit.	F					126.3	chalcopyrite. Pyrite 3% as veins aggregates disseminations and rare fragments (to 1 cm).
0.8		Lithic fragments are commonly up to 5 cm and are essentially grey siliceous tuff, buff to grey dacitic lava? with pale green sericite aggregates and filamentus pumice bands? are pale green to white.							
1.8	130	Localised areas have a fawn-green colour due to carbonate alteration and sericitisation.							
2.6		The matrix is fine grained, "ashy" and usually contains fine dusty pyrite.							
2.2		Carbonate aggregates and "spots" are common.	F						
	135								
3.1									
0.6		Below 138.6 m the unit is disrupted and badly broken, while below 140 m it is thoroughly chloritised.							
0.5									
	140								
0.75									
1.05									
1.5	142.7	Fault zone	F						
0.7		Badly broken and faulted core. Fault pug and chloritisation common.							
0.7									
0.9	145								
1.3	146		F						
2.1			F						
	150								

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DIAMOND DRILL LOG

Hole N° QR 26 Page N° 7.

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
2.3									Pyrite 3% as above.
2.2									
	154								
1.4		Fine dark grey sericitised feldspar crystal tuff.							
	155								
1.8									
	157.1								
1.4		Fine buff-grey feldspar crystal tuff, bedded? at 40° to the core axis.							
0.5	158.7								
0.7		Buff-grey coarse lithic tuff similar to the unit 126.3 - 154 m. Carbonate aggregates to 15 cm and abundant irregular carbonate veins are common.	F						
1.6	160								
0.6									
1.4			F						
0.9									
1.3	165								
3.1									
2.8	170	Below 170 m occasional light green colouration is probably caused by thorough sericitisation.	C						
3.1									
	175								

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DIAMOND DRILL LOG

Hole N° QR 26 Page N° 8.

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
2.0		Grey chert nodules (to 3 cm) have carbonate tension fractures.							
3.0									
	180	Gradational Contact.						180	Pyrite 1% as disseminations veins and aggregates of euhedral to subhedral crystals.
2.65		Grey tuff lava? The unit is initially very disrupted and broken and is sericitised giving a green-grey colour. Carbonate veins and aggregates are common, with siliceous and carbonate amygdules.							
0.85			BROKEN CORE						
0.6									
0.6									
1.4									
	185								
3.0									
	188	Gradational contact.							
3.0		Lithic vitric tuff. Grey and often locally sericitised and silicified the lithic fragments have obscure outlines as a result of extensive alteration.							
	190								
2.6		Filamentus pumice? and fragments of grey chert, and charcoal grey quartz crystal tuff also occur. Pale green lenticular aggregates of sericite possibly represent sheared devitrified shards.							
3.1		Occasional fragments of grey tuff lava? (see above 188 m) occur in bands.							
	195								
2.2									
	200								

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DIAMOND DRILL LOG

Hole N° QR 26 Page N° 9.

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
3.0		Fractures are usually at 60° to the core axis, while foliation is indistinct.							Pyrite as above.
	202.3	Gradational Contact.							
3.1		Charcoal grey lithic tuff. Some areas of this unit are reasonably fine grained with minor filamentus pumice? fragments other fragments may include chert, quartz crystal tuff and feldspar crystal tuff but are very obscure resulting from alteration.							
	205								
1.1		206.8 - 208 m green-buff vitric tuff lava? with carbonate filled vesicles.							
2.5									
	208.6	E.O.H.							
	210								