Drill Hole Record

Cominco

HOLE N° QR 14

LOCATION Que River Area | PROPERTY Mackintosh EL 2/70 | DISTRICT Tasmania, Australia | ALTITUDE / RL 697.68 new RL. | DATE 4.2.1975

COMMENCED 21.1.1975 | COMPLETED 31.1.1975 | CORE SIZE NQ to 174.45 m BQ to 303.95 E.O.H. | LOGGED C.H. Young

OBJECTIVE To test coincident IP and geochemical anomalies and the strike projection of the west lens. | %RECOVERY 98% | CO-ORDINATES 7701.74N 5076.86E

GRID BEARING (M) 8.75° | BEARING (M) 95° | DIP -52°

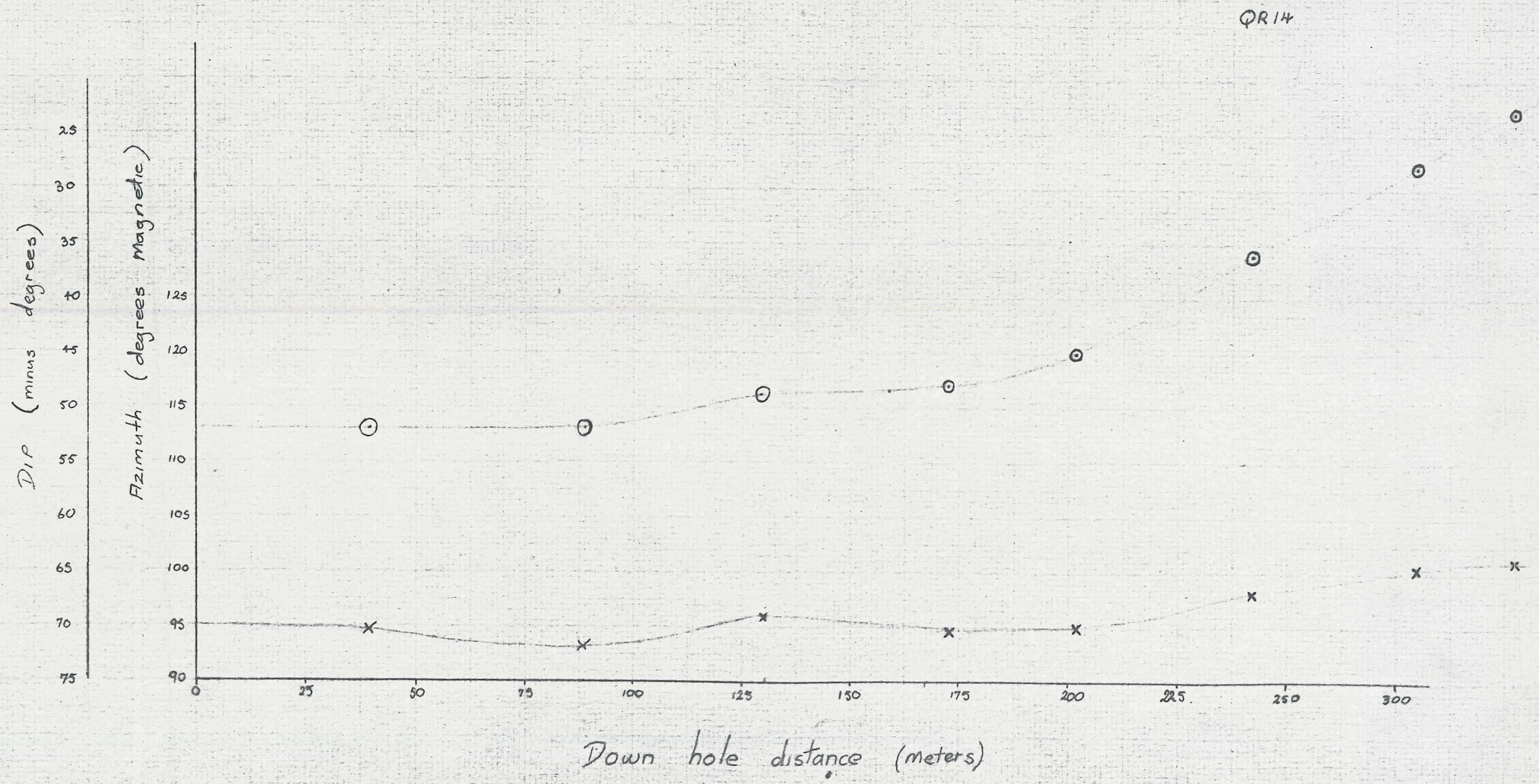
SURVEY DATA

DEPTH	DIP	BEARING(M)	INSTRUMENT TYPE
0	52	95	Compass & Clinometer
39.6	52	94.5	Eastman
89	52	93	Single Shot
129.6	49	96	Camera
172.9	48	94.5	" "
202	45	95	" "
242	36	98	" "
279.6	28	100.5	" "
303	23	101	" "

GRAPH DERIVED DATA

DEPTH	DIP	BEARING(M)	NORTHING	EASTING	ALTITUDE	REMARKS
0	52	95	7701.74	5076.86	697.68	
25	52	95	7702.75	5092.22	677.98	
52	52	94	7703.98	5108.80	656.70	52 - 69 m bands of massive pyrite with
69	52	94.5	7704.80	5119.23	643.31	fragments of massive sphalerite to 60 cm.
100	51.5	94.5	7706.22	5138.37	618.96	
131	49	96	7707.42	5158.15	595.13	131 - 148 m zone of semi-massive base
148	48.5	95.5	7708.01	5169.34	582.35	metal sulphides.
159	48.5	95	7708.46	5176.62	574.11	159 - 167 m bands and stringers of base
167	48	95	7708.81	5181.93	568.15	metal sulphides.
200	45	95	7710.29	5204.59	544.22	
237	37	97.5	7711.47	5232.42	520.00	237 - 248 m west lens position semi-
249	34.5	98.5	7711.59	5242.15	512.99	massive base metal sulphides.
275	28	100	7711.39	5264.34	499.52	
303.95	23	101	7710.58	5290.43	487.07	

QR 14


QR 14
Dip (minus degrees)
25
30
35
40
45
50
55
60
65
70
75
Azimuth (degrees magnetic)
125
120
115
110
105
100
95
90
0
25
50
75
100
125
150
175
200
225
250
300
Down hole distance (meters)
Eastman single shot camera
⊙ Dip
× Azimuth

DIAMOND DRILL LOG

Hole N° QR 14 Page N°. 1.

Feature: Bedding, Foliation, Fragment – size & shape (Og); 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.							
3.0	4.6 5	Not appreciably weathered. Coarse <u>dacitic agglomerate</u>. Autobrecciated down to the fault at 17.8 m. The fragments of dacitic lava are grey coloured rounded and closely packed, often 10 - 20 cm and exhibit concentric zoning in alternate light to dark grey bands. Small pale green sericite aggregates within the fragments often exhibit euhedral outlines - relict feldspar. There are occasional smaller (to 3 cm) fragments of angular grey pumice. Some grey chert fragments to 10 cm have been noted. The matrix is dark grey and fine grained, generally rich in fine disseminated pyrite.	BROKEN CORE						Pyrite 3%, 10% where indicated fine grained as irregular veins, nettworks and interstitial to the fragments.
0.6									
3.05	10		BROKEN CORE F						
3.05		14 m carbonated fault breccia. Fractures 30° - 50° to core axis.	F c						
3.05	15		F c						
	17.8								
3.05	18.4	<u>Fault zone</u> sheared and broken core. 18.4 - 22.35 m the unit is sheared and disrupted. Foliation and fractures 30° to core axis.	F						
	20		F						
3.05	22.35	<u>Fault zone</u> 80% sheared and broken core some pug, 30° to core axis.							22.0 m secondary galena and sphalerite in an irregular vein 2 mm wide have been noted.
3.05	24.3	Autobrecciated as above.							
	25								

DIAMOND DRILL LOG

Hole N° QR 14 Page N° 2.

Feature: Bedding, Foliation, Fragment – size & shape (Og); 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
		Autobrecciated dacitic agglomerate as above.			3% pyrite 15% where indicated as above.
3.05	27.7	Fault contact. Fault zone pug, sheared and broken core. 40° to core axis. Some fractures parallel to core axis.		27.7	Pyrite 15%, 70% where indicated. The pyrite occurs as fine disseminations within the matrix, irregular veins and nettworks of fine to medium grained (to 1 mm) subhedral to euhedral crystals. Some rounded fragments of massive pyrite to 2 cm have been noted. Occasional veins (to 2 cm) and irregular shaped fragments of very pale brown sphalerite together with fine grained disseminated galena have been noted, trace overall.
	29.9	Disrupted grey silicified lithic tuff			
3.05	30.7	Fault zone 70% sheared and broken core.			
	33.0	This unit is similar to the pumice lithic tuff QR 13 151.7 - 184.7 m.			
3.05		The most common lithic fragments are dark grey and siliceous, sub-angular, generally less than 1 cm rarely 5 cm. These fragments are often flooded with fine disseminated pyrite. Light grey pumice fragments to 3 cm have been noted as well as angular fragments of dacitic lava. Pyrite fragments have also been noted. The matrix is dark grey fine grained and ashy.	BROKEN CORE F F F F F		
3.05	41.3	Fault zone pug, sheared and broken core. 40° to core axis.			
3.05	43.4	44.45 m bands of massive pyrite to 3.5 m in a sheared and sericitised lithic tuff matrix.		44.45	Pyrite 80%, 90% where indicated as massive bands of fine to coarse grained (to 1 cm subhedral to euhedral crystals. Trace sphalerite and galena.
	45.1	Fault zone sheared and broken core some pug. 30° to core axis.			
3.05	46.3		F F		
3.05	50				

DIAMOND DRILL LOG

Hole N° QR 14 Page N°. 3.

Feature: Bedding, Foliation, Fragment – size & shape (Og); 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
		Massive pyrite as above.							90% pyrite as above. 50.9 m 3 cm band of very pale sphalerite and fine disseminated galena.
3.05	52.4	Barite ore, irregular bands of white barite with pyrite, silica and disseminated galena and fragments of massive sphalerite in a lithic tuff.						52,4	Pyrite 20%, barite 20%, disseminated galena 5%, sphalerite 1%.
	54	Bands of massive pyrite up to 1.3 m wide and bands and fragments of massive sphalerite to 60 cm in a grey disrupted and silicified lithic tuff matrix, as above. Some rounded chert fragments to 3 cm have been noted.	F					54.0	Pyrite 60%, locally 90% fine to medium grained (2 mm) subhedral to euhedral crystals. Sphalerite 5% very pale brown massive fragments, to 10 cm. Galena 3% as disseminations associated with the massive sphalerite and as small secondary veins to 1 cm.
	55		F						
6.1		It should be noted that due to the fragmental nature of the massive sphalerite, grade calculations based on drill core may be unreliable.	F						
	60							59.9	Pyrite 10%, 80% where indicated.
3.05								61.0	Pyrite 50%, 80% where indicated. Sphalerite 3% as massive fragments to 3 cm, galena 3% as disseminations and secondary veins.
3.05	65		F					65.1	Pyrite 60%. Sphalerite 20% as pale brown to brown massive fragments. Galena 8% as disseminations and secondary veins to 5 mm.
3.05								68.1	Pyrite 50%. Galena 5% as disseminations and secondary veinlets. Trace sphalerite.
	68.9	Fault zone sheared and broken core some pug 40° to core axis.						69.2	
	70								Pyrite 15%, 70% where indicated. Some fragments of pale brown massive sphalerite to 5 cm associated with secondary galena. Trace sphalerite and galena overall.
	70.3	70.5 – 71.9 m disrupted chert? bands, grey silica.							
3.05			F						
			F						
3.05									
	75								

DIAMOND DRILL LOG

Hole N°. QR 14 Page N°. 4.

Feature: Bedding, Foliation, Fragment – size & shape (Og), 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
3.05		Silicified and disrupted lithic tuff as above.	F		15% pyrite, 70% where indicated as above.
3.05	80				78.35 – 79.4 m barite 10% trace sphalerite and galena.
3.05					81.4 15 cm disseminated and remobilised galena 3% trace sphalerite.
3.05	85	85.2 m 5 cm disrupted chert? band, grey silica.			85.4 m 5 cm fragment of massive pyrite and sphalerite. 86.5 m fragments of massive sphalerite to 3 cm.
3.05	87.8	Fault zone 80% sheared and broken core some pug zones. 30° to core axis. Minor drag folds have been noted.		87.8	Pyrite 10% fine and disseminated subhedral to euhedral crystals.
	90				
	91.6	Fault contact.		91.6	No apparent mineralizatic
3.05		Silicified and carbonated, buff coloured lithic tuff agglomerate. Similar to the unit QR 13 184.7 – 267.1 m.	F c		
3.05	95	The lithic fragments are sub-angular to sub-rounded, up to 6 cm. Alteration has to a great extent obscured the nature of the fragments, some appear to be dacitic lava with sericite aggregates outlining relict feldspar. The more common fragments are a buff to pink coloured fine grained quartz crystal tuff? Less common are pale buff to green coloured filamentus pumice that are characteristically sericitised.			
0.95					
2.1		The matrix is fine grained and occasionally contains small carbonated			
	100				

DIAMOND DRILL LOG

Hole N°. QR 14 | Page N°. 5.

Feature : Bedding, Foliation, Fragment – size & shape (Og); 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
3.05		relict feldspars. The unit is hard and fairly competent fractures at 40° - 60° to core axis approx. every 30 cm. Small carbonate veins to 5 mm are common below 96 m.	F, F						Barren as above.
3.05	105		F						
3.05			q						
3.05	110		q, F						
1.85									
1.2	115								
3.05									
3.05	120	119.5 - 119.8 m small bedded pumice tuff band at 40° to core axis.	F						
3.05		121.6 - 123 m heavily carbonated, numerous small irregular carbonate veins. Below 120.0 m the unit has become bright pink in colour.	c						
	125								

DIAMOND DRILL LOG

Hole N°. QR 14 Page N°. 6.

Feature: Bedding, Foliation, Fragment – size & shape (Og); 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
6.1		Pink lithic tuff agglomerate as above. Sample for petrology 155548 126 m.			Barren as above.
	130				131.5 – 132.6 m pyrite 20%, 50% where indicated black sphalerite 5% galena 1% barite 5%
	131.5			131.5	trace chalcopyrite.
3.05		Sharp fault contact 70° to core axis, post mineralisation. Zone of semi-massive sulphides in a grey sericitised, locally silicified disrupted lithic tuff.	F	132.6	Disrupted bands and fragments of semi-massive sulphides. Pyrite 25%, 50% where indicated. Black sphalerite 10% galena 5% chalcopyrite 3% barite 10%.
3.05	135	Weakly banded at 40° to core axis. Some fine disrupted bedding 70° to core axis.	F		
3.05			BROKEN CORE	137.6	Disseminated pyrite 15% trace sphalerite and galena. Minor 5 cm band of pyrite 50% sphalerite 10% galena 5% barite 10% as indicated.
	140			140	
3.05			BROKEN CORE F		Pyrite 35%, 60% where indicated. Fragments to 5 cm of black and pale brown sphalerite 8%. Galena 5% barite 10% trace chalcopyrite.
				142.5	142.5 – 144.2 m pyrite 15% as disseminations and irregular veins and nett-works of fine subhedral to euhedral crystals. Trace sphalerite, galena.
3.05			F	144.2	
	145				144.2 – 148.5 m pyrite 30% 60% where indicated with pale brown and black sphalerite 3%, galena 5%.
	146.7				
3.05		Fault zone 70% sheared and broken core.			
	148.5	Fault contact, pug, 60° to core axis.	F	148.5	Pyrite 3% as irregular veins of fine subhedral to euhedral crystals. Below 149 m barren.
		Silicified and carbonated pink to pale green coloured lithic tuff agglomerate.	q/c	149	
	150				

DIAMOND DRILL LOG

Hole N°. QR 14 | Page N°. 7.

Feature: Bedding; Foliation; Fragment – size & shape (Og); 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
3.05		As above, similar to the unit 91.6 – 131.5 m.			Rare pyrite, aggregates of very fine euhedral crystals.
3.05		Pale green filamentus pumice becomes more predominant below 152 m. Weak foliation 30° to core axis. Fractures 30° – 70° to core axis. Note: This unit and those above may correlate with the fine magnetic tuff unit QR 10 0–66.3 m.			
	155				
3.05					
	158.9	Fault contact. 40° to core axis.		158.9	Pyrite 15%, 25% – 80% where indicated as bands and irregular veins of fine to medium grained subhedral to euhedral crystals and as disseminations within the matrix, often together with intermittant bands and stringers of pale brown to black massive sphalerite with associated galena and trace chalcopyrite. Overall sphalerite 6%, galena 2%
3.05		Fault zone Pug and highly sheared 30° to core axis. Some manganese and rhodochrosite in the contact zone.	c		
	160				
	160.7	Bands and stringers of massive sulphides.			
3.05		Grey sericitised and silicified, disrupted lithic tuff. Fragments, where visible, are small >2 cm angular to amoeboid shaped pumice with pale green sericite aggregates replacing glass shards? Occasional small chert fragments have been noted.	q-c		
	165				
3.05		The matrix is light grey fine grained and "ashy". Minor carbonate veins to 5 mm are common.		165.65	Minor irregular veins as indicated. Overall pyrite 50% sphalerite 6% chalcopyrite 1% trace galena.
				166.7	
3.05		Fractures are parallel to the foliation at 10° – 40° to core axis.	c		166.7 – 202.6 m pyrite 10%, 60% where indicated as irregular veins and nettworks often together with stringers of massiv sphalerite and associate galena up to 20 cm. Overall sphalerite <2% galena 1%.
	170				
1.75					
1.1		Below 171 m the unit is locally chloritised.			
1.5			c		
	175				

DIAMOND DRILL LOG

Hole N°. QR 14 Page N°. 8.

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
1.5		175.7 m fracture at 20° to core axis with slickensides at 80° to core axis. Sericitised, silicified and chloritised disrupted lithic tuff as above.							As above, pyrite 10%, 60% where indicated together with occasional veins and stringers of massive sphalerite <10 cm
3.05									
3.05	180								
2.6									
	185								
3.05									
3.05	190								
3.05									
	195								
3.05									
3.05	200								

DIAMOND DRILL LOG

Hole No. QR 14 Page No.

Feature: Bedding, Foliation, Fragment – size & shape (Og); 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
		As above.			As above.
	201				
3.05		Fault zone disrupted and sheared 45° to core axis."Contorted " carbonate stringers are common.			
	202.6			202.6	Pyrite 15%, 60% where indicated as fine disseminations and occasional veins and aggregates of fine subhedral to euhedral crystals. Trace very fine disseminated galena and minor bands of dark brown to black sphalerite have been noted, particularly below 216.5 m.
		Below the fault zone the unit is thoroughly disrupted, highly sericitised and sheared, locally silicified.	F		
3.05	205	204.9 - 207.2 m numerous thin (<3 mm) contorted carbonate stringers are common.			
	207.8				
3.05		Fault zone highly sheared and sericitised some pug, 45° to core axis.			
	210				
3.05	210.9				
		Below 213 m occasional light grey filamentus pumice fragments to 3 cm have been noted.			
3.05		Foliation at 50° to core axis.			
	215		F		
	215.9				
		Fault zone sheared and broken core 45° to core axis.			
3.05					
	217.8	Fault contact 45° to core axis.	F	217.8	Pyrite 3% as disseminations and discrete fine grained euhedral crystals (secondary). Spherical (framboidal) patches have been noted.
		Yellow-green, grey-green to chrome-green altered lithic quartz crystal tuff. (Similar QR 12 144.1 - 163.5 m). Petrology QR 12 156.2 m dacitic			
3.05	220	altered lithic tuff.			
		A rather varied unit, in part fragmental with angular to amoeboid shaped highly chloritised fragments to 3 cm some grey chert and light green coloured filamentus pumice.			
3.05		222.1 - 222.45 m white to grey coloured barite band 30° to core axis.			
		In general the unit is fine and tuffaceous with small < 2 mm somewhat corroded			
	225	quartz crystals .			

DIAMOND DRILL LOG

Hole N°. QR 14 | Page N°. 10.

Feature: Bedding, Foliation, Fragment – size & shape (Og); 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
3.05	227	Matrix is fine grained and carbonate rich.	c			Pyrite 3% as above.
3.05	230	Below 227 m the unit is a tuff agglomerate, generally mottled in appearance and chrome-green in colour due to illite-hydromuscovite replacement and granular carbonate patches. Some of the fragments are of dacitic lava? and are (vesicular) with carbonate amygdules to 8 mm. Below 235.4 m the unit is highly sericitised and green filamentus pumice has been noted.				
3.05	235					
3.05			F		236.3	Pyrite 10% as fine disseminations, aggregates and small framboidal patches.
3.05	237.25	West lens position. Semi-massive sulphides. Grey disrupted, silicified and locally sericitised <u>lithic pumice tuff agglomerate</u>. Fragments of pumice wispy to angular to 6 cm are grey-green in colour and completely sericitised. The lithic fragments are angular to sub-rounded to 5 cm nondescript light grey siliceous tuff? The matrix is fine grey and siliceous and heavily indurated with fine disseminated pyrite.			237.25	237.25 – 239.8 m pyrite 15%, pale brown to dark brown massive sphalerite 25%, galena 8% and trace chalcopyrite.
3.05	240				239.8	239.8 – 241.8 m minor bands of massive sulphide. Pyrite 15% sphalerite 10% galena 5% trace chalcopyrite.
3.05					241.8	241.8 – 249.15 m pyrite 20%, 60% where indicated as fine disseminations within the matrix and irregular veins and nettworks of fine subhedral to euhedral crystals. Disseminated galena locally 5% is common, some minor bands of pale brown sphalerite up to 1% overall.
3.05	245					
3.05					249.15	Pyrite 15%, trace sphalerite and galena.
	250					

DIAMOND DRILL LOG

Hole N°. QR 14 Page N°. 11.

Feature: Bedding, Foliation, Fragment – size & shape (Og); 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
3.05		Disrupted lithic tuff agglomerate as above.		252.2	Pyrite 10% fine grained as disseminations and irregular veins and aggregates. Trace sphalerite and fine disseminated galena.
3.05	255		c c		
3.05	256.6	Grey fine grained quartz crystal vitric tuff small corroded quartz crystals >1 mm and pale green sericite aggregates (replacing vitric shards) to 2 mm and occasional chert fragments are common in a fine grey matrix.	F	256.6	Pyrite <1% as discrete euhedral crystals and fine disseminations within the matrix.
3.05	260	Foliation 30° to core axis.			
3.05	261.35	Mottled grey-green lithic tuff agglomerate. The fragments are sub-rounded, pale-buff to white siliceous dacitic lava? in a fine grained grey "ashy" matrix.	c	261.35	Pyrite 3% as fine disseminations within the matrix, irregular veins and nettworks, some euhedral crystals to 2 mm.
3.05	263.6	Grey-green fine grained lithic vitric tuff. The fragments of lava are siliceous and rounded generally <1 cm, they are not abundant. Small pale green sericite aggregates (to 2 mm) replace vitric shards. The matrix is very fine grained. Foliation 40° to core axis.		263.6	Pyrite <1% as discrete fine euhedral crystals.
3.05	265				
3.05	267.6	Gradational contact. Mottled grey siliceous lithic tuff agglomerate, partly disrupted. Fragments are generally sub-rounded to 10 cm although mostly <6 cm. One variety has the appearance of dacitic lava with pale green sericite aggregates to 3 mm, often euhedral in outline replacing feldspar in a fine grained grey to buff coloured matrix. Pale mottled grey coloured siliceous fragments of tuff and smaller rounded chert fragments are present. Occasional pyrite fragments have been noted.		267.6	Pyrite 3% as irregular veins, nettworks and aggregates, often as fine subhedral to euhedral crystals.
3.05	270				
3.05	275				

DIAMOND DRILL LOG

Hole N°. QR 14 Page N°. 12.

Feature : Bedding, Foliation, Fragment – size & shape (Og), 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
3.05		Sericitised filamentus pumice has also been noted.							Pyrite 3% as above.
		The matrix is light grey fine grained "ashy" and siliceous.							
3.05		Weak foliation 40° to core axis.							
	280								
3.05									
3.05									
	285								
		Sample for Petrology 155549 286.8 m.							
3.05									
	290								
3.05									
3.05									
	295								
3.05									
3.01									
	300								

DIAMOND DRILL LOG

Hole N° QR 14 Page N°. 13.

Feature: Bedding, Foliation, Fragment – size & shape (Og); 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
		Lithic tuff agglomerate as above.						300.15	Pyrite 5% with minor stringers of sphalerite and disseminated galena Sphalerite < 1% galena 1
3.05								302.8	Pyrite < 3% as above.
	303.95	E.O.H.						303.95	
	305								

HOLE No QR 14 DATE 4/2/75

SAMPLE No	FROM |M|	TO |M|	|W| cm	REMARKS	INITIAL ANALYSIS: %Cu AAS	%Cu XRF	%Pb AAS	%Pb XRF	%Zn AAS	%Zn XRF	%Fe TIT	ppm Ag AAS	ppb Au AAS	ppm Au FIRE	CHECK LAB: INT	%Cu	%Pb	%Zn
156254	243.11	243.74	63		0.35			1.54		1.06		46	> 500	1.3				
156255	243.74	244.44	70		0.24			3.06		6.64		39	> 500	3.3				
156256	244.44	244.96	52		0.14			3.16		5.03		37	> 500	1.3				
156257	244.96	245.57	61		0.03			1.22	0.88			12	> 500	0.7				
156258	245.57	246.33	76	Block 246.10 Measured 245.92	0.11			2.15		3.32		33	> 500	1.7				
156259	246.33	247.11	78		0.21			4.56		5.82		58	400					
156260	247.11	247.68	57		0.09			2.02		2.97		28	> 500	0.7				
156261	247.68	248.27	59		0.06			1.70		1.99		20	280					
156262	248.27	248.95	68	Block 249.15 Measured 248.95	0.13			5.17		7.01		44	> 500	1.3				
156263	248.95	249.54	59		0.04			1.41		2.14		16	> 500	0.5				
156264	249.54	250.38	84		0.07			3.33		3.45		23	> 500	1.0				
156265	250.38	251.21	83		0.07			2.21		3.81		25	> 500	2.0				
156266	251.21	251.91	70	Block 252.20 Measured 251.91	0.14			3.19		5.00		51	> 500	3.3				
156267	251.91	252.71	80		0.06			1.54		2.55		28	> 500	1.7				
156268	252.71	253.54	83	Block 255.25 Measured 254.95	0.06			1.60		3.20		34	> 500	2.3				
	237.26	253.54	1628		0.19			4.21		5.80		73.2		2.1				
(includes	237.26	241.80	454		0.39			9.06		12.16		184.0		4.1				

HOLE No QR 14 DATE 4/2/75

SAMPLE No	FROM (M)	TO (M)	W (cm)	REMARKS	INITIAL ANALYSIS: %Cu AAS	%Cu XRF	%Pb AAS	%Pb XRF	%Zn AAS	%Zn XRF	%Fe TIT	ppm Ag AAS	ppb Au AAS	ppm Au FIRE	CHECK LAB: INT.	%Cu	%Pb	%Zn
156222	147.49	148.38	89	Block 148.5 Meas.148.4	0.10			1.43		3.17		17	345					
156223	148.38	149.10	72	Block 151.50 ties in	<0.01		0.02		0.02			< 2	<20					
156224	158.56	158.93	37	Datum block 157.65	<0.01		<0.01		0.03			< 2	<20					
156225	158.93	159.71	78		<0.01		0.05		0.07			14	<20					
156226	159.71	160.43	72		0.01		0.08		0.24			4	35					
156227	160.43	161.16	73	Block 160.63 Measured 160.68	0.05		0.04			1.12		2	50					
156228	161.16	161.86	70		0.16		0.27			3.38		17	305					
156229	161.86	162.26	40		<0.01		0.03		0.10			< 2	30					
156230	162.26	162.50	24		<0.01		0.03		0.12			< 2	30					
156231	162.50	163.16	66		0.01		0.23		0.25			4	35					
156232	163.16	163.96	80	Block 163.75 Measured 163.88	0.29		0.22			10.1		12	80					
156233	163.96	164.84	88		0.08		0.49			1.35		27	30					
156234	164.84	165.49	65		0.02		0.22			1.26		10	110					
156235	165.49.	166.10	61			1.11	0.22			5.62		< 2	55					
156236	166.10	166.73	63		0.50		0.25			5.18		17	45					
156237	166.73	167.47	74	Block 166.80 Measured 166.97	0.08		0.04		0.86			< 2	40					
156238	167.47	168.11	64		<0.01		0.03		0.12			< 2	50					
156239	168.11	168.81	70		0.10			1.59		2.10		63	60					
156240	168.81	169.39	58		0.01		0.32		0.24			6	45					
156241	169.39	169.97	58		0.09		0.09			1.21		4	30					
156242	169.97	170.72	75	Block 169.85 Measured 170.02	<0.01		0.02		0.04			< 2	30					
156243	170.72	171.24	52		0.75		0.44			16.5		20	30					
156244	171.24	171.94	70	Block 171.60 Measured 170.94	0.02		0.15		0.31			2	30					
156245	236.30	237.26	96	Datum 238.90, Block 236.95 ties in.	<0.01		0.17		0.14			12	160					
156246	237.26	238.29	103		0.61			17.2		24.1		390	>500	5.7				
156247	238.29	239.34	105		0.46			8.97		13.5		240	>500	5.3				
156248	239.34	240.01	67	Block 240.00 ties in	0.09			1.07		1.15		32	>500	1.7				
156249	240.01	240.55	54		0.14			1.73		2.91		45	>500	2.0				
156250	240.55	241.00	45		0.22			5.71		9.87		53	>500	1.3				
156251	241.00	241.80	80		0.52			12.2		11.8		140	>500	5.3				
156252	241.80	242.56	76		0.05		0.73		0.53			8	305					
156253	242.56	243.11	55	Block 243.05 ties in	<0.01		0.36		0.21			5	150					

HOLE No QR 14 DATE 3/2/75

SAMPLE No	FROM (M)	TO (M)	W (cm)	REMARKS	INITIAL ANALYSIS: %Cu AAS	%Cu XRF	%Pb AAS	%Pb XRF	%Zn AAS	%Zn XRF	%Fe TIT	ppm Ag AAS	ppb Au AAS	ppm Au FIRE	CHECK LAB: INT.	%Cu	%Pb	%Zn
156217	144.70	145.23	53	Block 145.45 Measured 145.10	0.15			6.11		7.37		38	<20					
156218	145.23	145.81	58		0.07			2.29		2.47		17	260					
156219	145.81	146.31	50		0.31			6.45		10.0		47	<20					
156220	146.31	147.00	69		0.11			4.17		5.68		26	<20					
156221	147.00	147.49	49		0.06			2.31		3.45		30	<20					
				Block 148.50 Measured 148.42														
	65.56	69.22	366		0.46		3.09		11.10			61.7	0.5					
	131.41	147.49	1608		0.29		2.48		4.90			48.5	0.1					
(includes	132.51	137.32	481		0.66		4.00		7.01			98.0	0.2)					

HOLE No QR 14 DATE 1/2/75

SAMPLE No	FROM (M)	TO (M)	W (cm)	REMARKS	INITIAL ANALYSIS: %Cu AAS	%Cu XRF	%Pb AAS	%Pb XRF	%Zn AAS	%Zn XRF	%Fe TIT	ppm Ag AAS	ppb Au AAS	ppm Au FIRE	CHECK LAB: INT.	%Cu	%Pb	%Zn
156194	69.97	70.58	61		0.09		0.66			1.71		17	80					
156195	70.58	71.34	76		0.02		0.44		0.54			11	220					
156196	71.34	71.96	62		0.05			1.00		1.68		17	220					
				Block 72.25 ties.														
156197	130.94	131.41	47	Datum block 130.20	<0.01		<0.01		0.04			5	120					
156198	131.41	131.90	49		0.09		0.70			3.28		23	280					
156199	131.90	132.51	61		0.03		0.35			1.50		11	70					
156200	132.51	133.28	77		0.24			1.51		6.43		38	220					
156201	133.28	133.83	55	Block 133.25	0.79			6.06		9.71		71	220					
				Measured 133.38														
156202	133.83	134.56	73			1.37		2.72		6.11		35	220					
156203	134.56	135.52	96		0.51			6.38		7.47		300	70					
156204	135.52	136.11	59	Block 136.3	0.08			1.08		1.11		20	120					
				Measured 136.11														
156205	136.11	136.62	51		0.75			3.24		7.59		44	120					
156206	136.62	137.32	70		0.94			6.23		10.4		79	120					
156207	137.32	138.07	75		0.18			1.04		2.50		23	170					
156208	138.07	138.81	74		0.07		0.79			2.72		20	200					
156209	138.81	139.33	52	Block 139.35	0.07		0.60		0.67			11	65					
				Measured 139.26														
156210	139.33	140.33	100		0.34			1.62		7.89		44	330					
156211	140.33	140.93	60		0.16			1.35		4.56		41	400					
156212	140.93	141.59	66		0.43			3.24		10.8		85	<20					
156213	141.59	142.27	68	Block 142.40	0.06		0.57			2.42		17	<20					
				Measured 142.01														
156214	142.27	142.91	64		0.05			1.07		1.53		17	<20					
156215	142.91	143.76	85	3.05 Driller Error	0.02		0.55		0.86			11	80					
156216	143.76	144.70	94		0.07			1.05		1.91		14	<20					
				Block 145.45														
				Measured 145.10														

HOLE No OR 14 DATE 28/1/75

SAMPLE No	FROM |M|	TO |M|	|W| cm	REMARKS	INITIAL ANALYSIS: %Cu AAS	%Cu XRF	%Pb AAS	%Pb XRF	%Zn AAS	%Zn XRF	%Fe TIT	ppm Ag AAS	ppb Au AAS	ppm Au FIRE	CHECK LAB: INT.	%Cu	%Pb	%Zn
156159	49.17	49.87	70	Datum Block 47.85	0.48		0.08		0.11			14	<20					
156160	49.87	50.57	70		0.04		0.23		0.99			12	<20					
156161	50.57	51.16	59	Block 50.9, Meas.51.0	0.11		0.47			5.22		21	<20					
156162	51.16	51.92	76		0.03		0.43		0.45			18	<20					
156163	51.92	52.53	61		0.02		0.33			1.37		11	<20					
156164	52.53	52.98	45		0.06		0.85			3.48		16	280					
156165	52.98	53.38	40		0.03		0.44		0.76			8	240					
156166	53.38	54.04	66	Block 53.95 Measured 53.98	0.13		0.72			1.70		19	350					
156167	54.04	54.69	65		0.27			2.04		4.18		73	40					
156168	54.69	55.20	51		0.23			4.40		13.1		65	<20					
156169	55.20	55.90	70		<0.01		0.15		0.17			2	420					
156170	55.90	56.59	69		0.09		0.78			2.10		13	<20					
156171	56.59	57.16	57		0.28			2.19		4.19		78	<20					
156172	57.16	57.74	58		0.31			2.86		11.3		69	<20					
156173	57.74	58.40	66		0.09		0.84			2.45		19	<20					
156174	58.40	59.14	74		0.10			1.49		15.7		35	<20					
156175	59.14	59.66	52		0.04			2.28		2.74		46	<20					
156176	59.66	60.10	44		0.01			1.39		2.85		23	<20					
156177	60.10	60.87	77	Block 60.05 Measured 60.24	<0.01		0.17		0.14			8	50					
156178	60.87	61.36	49		0.03		0.47			4.98		13	<20					
156179	61.36	61.88	52		<0.01		0.17		0.40			2	230					
156180	61.88	62.43	55		0.02			2.10		3.80		38	60					
156181	62.43	63.44	101		0.05		0.66			2.76		19	<20					
156182	63.44	64.07	63		0.03		0.61			2.04		9	230					
156183	64.07	64.48	41		0.03		0.28			3.47		8	320					
156184	64.48	65.05	57		0.01		0.18		0.95			10	220					
156185	65.05	65.56	51		0.06		0.35			1.23		13	<20					
156186	65.56	66.19	63		0.80			3.91		6.67		66	<20					
156187	66.19	66.53	39	Block 66.15 Measured 66.27		1.08		3.15		9.55		76	<20					
156188	66.53	67.04	51		0.03		0.55			1.00		17	<20					
156189	67.04	67.59	55		0.24			3.30		21.0		44	290					
156190	67.59	68.07	48		0.59			7.11		29.9		140	410					
156191	68.07	68.61	54		0.48			2.19		5.56		65	>500	1.7				
156192	68.61	69.22	61	Block 69.20 Measured 69.22	0.12			1.50		5.40		32	500	1.0				
156193	69.22	69.97	75		0.10		0.77			1.39		20	220					

HOLE No QR 14 DATE 30/5/75

SAMPLE No	FROM (M)	TO (M)	W (cm)	REMARKS	INITIAL ANALYSIS: %Cu AAS	%Cu XRF	%Pb AAS	%Pb XRF	%Zn AAS	%Zn XRF	%Fe TIT	ppm Ag AAS	ppb Au AAS	ppm Au FIRE	CHECK LAB: INT.	%Cu	%Pb	%Zn
159293	174.45	175.40	95	Datum Block 174.45	0.03		0.12		0.87			3	45					
159294	175.40	175.95	55	175.95 ties in	0.05		0.28			3.20		8	75					
159295	175.95	176.54	59		0.02		0.15			1.32		5	40					
159296	177.14	177.88	74		<0.01		0.02		0.04			<2	20					