Cominco

DRILL HOLE RECORD

Location QUE RIVER | Property MINERAL LEASE 3m/75 | District TASMANIA | Bearing (M) 92°.48' | Hole No QR.101

Commenced 14·9·76. | Completed 1·10·76. | % Recovery 98.6 | Grid bearing (M) 8°.45' | Date 8·10·76.

Objective To test for N extension of P lens at 8100N 350 RL. | Core size HQ TO 3m, NQ TO 139.5, BQ TO COMPLETION | Logged C.H. YOUNG

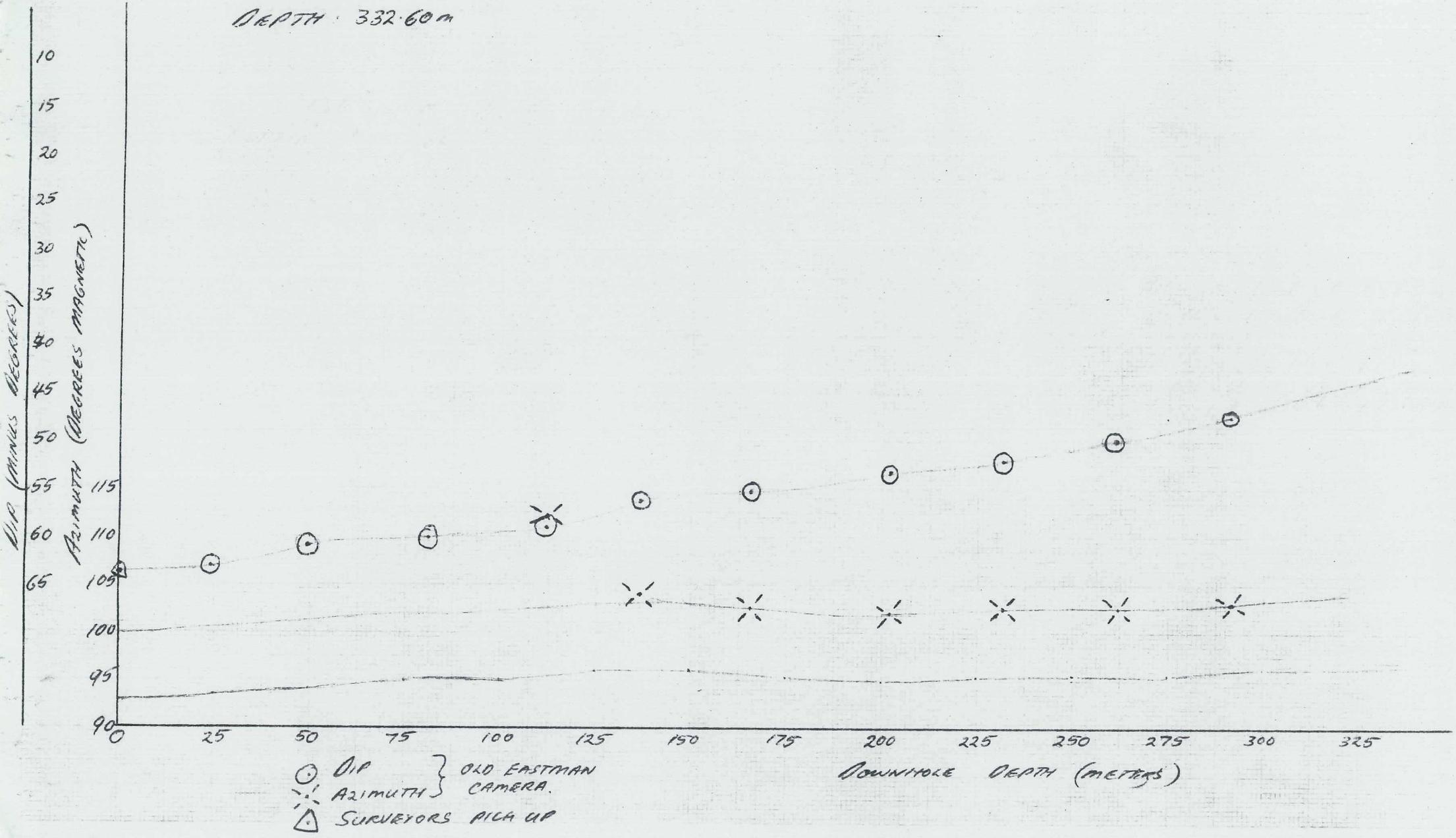
Co-ordinates 8095.54N. 5050.35E | Dip 63°.45' | Alt./R.L. 681.97

SURVEY DATA			
DEPTH	DIP	BEARING(M)	INSTRUMENT TYPE
0	64°	095	THEODOLITE AND BRUNTON
0	63°.45'	92°.48'	SURVEYORS PICK-UP
24	63°	—	OLD EASTMANN
49	61°	—	"
81	60°	—	"
112	59°	112	"
137	56.25°	104	"
166	55.25°	102.5	"
202	53.75°	102	"
232	52°	102.5	"
262	50°	102.5	"
292	47.25°	103	"

GRAPH DERIVED DATA			CALCULATED CO-ORDINATES			REMARKS
DEPTH	DIP	BEARING(M)	NORTHING	EASTING	ALTITUDE	
0	63.8	92.8	8095.54	5050.35	681.97	
25	63.0	93.5	8096.64	5061.50	659.62	
50	61.0	94.0	8097.66	5073.19	637.55	Hole abandoned at 331.5m Drill rods stuck in hole.
75	60.3	95.0	8098.57	5085.42	615.77	
100	59.5	95.0	8099.39	5097.92	594.14	
125	58.0	96.0	8100.12	5110.89	572.77	The "favourable" horizon is considered to have been intersected 256.6 – 273.4m
150	55.8	96.0	8100.77	5124.53	551.84	
175	55.0	95.0	8101.58	5138.71	531.27	
200	53.5	95.0	8102.54	5153.28	510.98	
225	52.5	95.5	8103.45	5168.30	491.01	
250	50.8	95.5	8104.33	5183.79	471.42	
275	48.8	95.5	8105.25	5199.92	452.34	
300	46.5	96.0	8106.13	5216.74	433.87	
325	44.0	96.5	8106.90	5234.32	416.12	
331.5	43.5	96.5	8107.08	5239.01	411.63	

QR101 EASTMAN SINGLE SHOT DOWNHOLE CAMERA SURVEYS.

COMMENCED: 14.9.76.
COMPLETED - 1.10.76
DEPTH - 332.60m



Cominco

DIAMOND DRILL LOG

Hole No DR101 Page No 1

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
HQ / NQ		P.D. Grey carbonated locally sericitized grey-buff feldspar porphyritic dacite (Autobrecciated)	BROKEN CORE						Pyrite 5% locally 10% Trace Sph, Cp. as disseminations, aggregates and irregular veins or stringers.
1.5	5.0	The rock is relatively unweathered at surface. Feldspar phenocrysts to 3mm are represented by aggregates of pale grey-green sericite.							
3.0		The groundmass is fine grained quartzo-feldspathic.							
3.0	10	The rock is locally fractured, autobrecciated with pyrite commonly infilling intrafragmental areas.							
3.0		3.1 – 5.0m Intense silica alteration with trace metals, pyrite, chlorite filling intrafragmental spaces.							
3.0	15								
3.0									
3.0	20								
3.0		Below 23.5m the rock is rich in carbonate - minor carbonate veinlets to 1cm are common.							
3.0	25								

Cominco

DIAMOND DRILL LOG

Hole N° PR101 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	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
3.0		Below 26.0 m. The rock is locally fragmental. Fragment to 3 cm are common.	BROKEN CORE						Py 5% locally 10% Trace Sph, Cp as above.
3.0	30								
3.0									
		Below 34.5 m the rock is massive							
3.0	35								
3.0									
3.0	40								
2.5	45								
3.0									
	47.9	GRADATIONAL CONTACT							
		Py Grey carbonatized and sericitized silicic tuff agglomerate / agglomerate							
	50	Silicic fragments are subrounded							

Cominco

DIAMOND DRILL LOG

Hole No QR101 Page No 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	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
3.0		to angular xl outlines from 5 mm to 15 cm. They consist of porphyritic dacite and occasional cemented tuff?							Pyrite 5% locally 10% Trace Sph, Gn as above
3.0		The matrix is light grey in colour fine grained and siliceous.						52.0	Pyrite 10% Sph 5-7% Gn 3% Sphalerite and irregular veins.
	55	Minor white carbonate veins to 2 cm have been noted.						52.9	
3.0									Pyrite 5% locally 10% Trace Sph, Gn as above.
0.5									
3.1	60								
3.0									
3.0	65								
3.0									
3.0	70								
	70.9								
0.4		Fault Zone Minor Pug, sheared and broken core.							
0.3	72.25	FAULT CONTACT							
3.1		PyD Grey-buff carbonated and sericitized feldspar porphyry lava. Feldspar phenocrysts are represented by aggregates of pale green sericite	F						
	75								

Dominco

DIAMOND DRILL LOG

Hole No QR101 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
2.2	75.35	Fault zone Rugged Breccia. 30° to CA							Pyrite 5% locally 10% Trace Sph, Gn as above.
	78.0								
2.8	80	The groundmass is fine grained grey in colour, quartz-feldspathic. The rock is commonly autobrecciated	C F					79.0	Pyrite 5%-10% Sph 1%-3% Gn 1%-2% as disseminations, aggregates and stringy veins sub parallel to C.A.
3.1								81.5	Pyrite 10%. Sph 1% Gn <1% as above
								83.2	
1.5	84.3	Fault zone Rug and breccia. 80% Sheared and broken core.							Pyrite 5% locally 10% Trace Sph, Gn. as above.
	85								
1.0	85.8							85.8.	3cm Py 50%
0.4									
0.3									
1.2			F						
0.7	88.5	Chlorite alteration zone. Chlorite/ Sericite alteration of Pyritic dacite.	BROKEN CORE						
0.4									
0.9	90	Fault zone Rug, Sheared and Broken Core.	C						
0.1									
1.4	91.6								
1.2		Porphyritic dacite as above green due to chlorite alteration Autobrecciated.	C					92.8	Pyrite 1% Tr Sph, Gn.
								93.1	
1.4									Pyrite 5% trace Sph, Gn.
	95		BROKEN CORE						
3.0			C					95.8.	3cm Gn 20% in q/c vein
1.3									
	99.5		F					99.4.	10 cm Sph 10 Gn 5 in irregular stringer.
1.1	100	Grey-green carbonated variably chloritized							

Cominco

DIAMOND DRILL LOG

Hole No QR101 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
2.1		porphyritic dacite, locally autobrecciated.			Pyrite 5% Tr Sph, Cm. as above
3.0	105				
1.5	105.7	Below 105.7. Chlorite alteration is very weak. Grey-buff-porphyritic dacite (autobrecciated)	C		
1.5			F		
1.5	109.6		C	109.6	Pyrite 15% Sph 3% Cm 2% 3%
	110	Carbonated and Chloritized, Grey-green porphyritic dacite (as above 105.7m).	C F	110.2	as a vein 30° C.A.
1.4			F		Pyrite 5% (10%) Trace Sph, Cm. as dissemination, aggregates and irregular veins or stringers.
2.8			C F		
	115	Below 115m The rock is locally fractured and dismembered. Chlorite alteration is localized in irregular veins up to 10 cm wide. This sequence is interpreted as stringer (stockwork) mineralization.	C F		
0.5					
2.6			F		
3.0	120	The rock locally is fragmental in appearance.	C		
3.0			C		
	125		C		

Cominco

DIAMOND DRILL LOG

Hole No DR101 Page No 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 (TRACE / COMMON / ABUNDANT / MASSIVE)	DEPTH m	MINERALIZATION
3.0		PyD as above, weakly chloritized.			Pyrite as above.
3.0	130				
3.0	132.8			132.8	
3.0	135	Chlorite alteration zone. Irregular veins of massive chlorite/sericite to 1m. Interpreted as stringer zone. The rock is locally sheared 40° CA. Minor carbonate veining is common. (Autobrecciated porphyritic pyritic dacite)			Pyrite 10% Sph 5, Gn 3 as disseminations, aggregate and irregular stringer veins.
3.0	137.9			137.9	
NQ 3.0		PyD Grey-buff carbonated and sericitized autobrecciated porphyritic dacite. as above			Pyrite 5% locally 10% Trace Sph, Gn as above.
BQ 0.6	140				
2.4					
3.0	145				
3.0					
	148.5			148.5	
2.5	150	PyD Grey-buff carbonated locally sericitized lithic tuff/lithic tuff			Pyrite 3% - 5% as disseminations, aggregates and irregular veins.

Cominco

DIAMOND DRILL LOG

Hole No QR101 Page No 7

Feature : Bedding, Foliation, Fragment - size & shape 0%, 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
		agglomerate. Lithic fragments from 5mm to 15cm of buff. porphyritic dacite.							Pyrite 3% - 5% or above.
	152.4								
3.0		Rhyolite. Grey coarse lithic tuff fragments of buff feldspar porphyry lava are very common. to 3cm. Occasional sericitized streaky tuff, and stromite have been noted.							
3.0	155								
3.0		The matrix is grey fine grained and "salty".							
	160								
	160.5								
3.0		Grey carbonated locally sericitized lithic tuff agglomerate - as above.							
3.0	165								
0.6									
3.1		Crude fragment alignment 30° C.A.							
	170								
2.3									
2.2									
	175								

Cominco

DIAMOND DRILL LOG

Hole No QR101 Page No 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	DEPTH m	MINERALIZATION
		PyP as above.		Pyrite 3%-5% as above.
	176.5		176.1	Pyrite 15% as aggregate, veins
3.0		PyD Grey-buff carbonated locally sericitised - feldspar porphyry dacite locally autobrecciated.	176.5	Pyrite 1%-2% as disseminations, aggregates and irregular veins.
	178.25	DFP Grey carbonated locally sericitised lithic tuff / lithic tuff agglomerate	178.25	Pyrite 3%-5% as above
3.0	180	178.6 — 180.5 PyD fragment or dyke?		
3.0		Lithic fragments are commonly buff to pale green-yellow coloured porphyritic dacite - sericitised trachyte and fiamme have been noted.		
2.3	185			
0.7		The matrix is dark grey in colour - sericite rich representing a high argillaceous content.		
3.0				
	190	190.8m Bedding 40° C.A. Grading indicates top up hole.		
3.0				
3.0	195		194.6	. 20 cm Py 30%
3.0				
	199	199.0 - 200.8. PyS.hT with abundant fiamme. - 40° CA	199.0	Pyrite 10% as disseminations and aggregates.
	200			

Cominco

DIAMOND DRILL LOG

Hole No PR101 Page No 9

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
		Py Sh T. as above				
	200.8				200.8	Pyrite 10% as above.
3.0		PyP Grey carbonated locally sericitised lithic tuff alternating with lithic tuff agglomerate similar to above 199.0 m.				Pyrite 3% - 5% as above
3.0						
	205	Lithic fragments are irregular to subrounded to 6 cm, commonly buff coloured porphyritic dacite.			206.4	15 cm Py 30. Rare Sph, Gn
3.0		- fragments of cream coloured porphyritic dacite with green illite - hydromuscovite alteration have been noted.			208.2	Pyrite 40% as irregular rem
					208.5	Pyrite 3% 5% as above
3.0	210	The matrix is "tuffaceous" light grey - fine grained and "dirty".				
3.0						
		213.5. Fine tuff bed bedding 70° CA. Grading indicates top is down hole?				
	215					
3.0						
3.0					219.2	5cm Pyrite 30%
	220					
3.0						
3.0						
	225					

Cominco

DIAMOND DRILL LOG

Hole N° QR101 Page N° 10

Feature : Bedding, Foliation, Fragment - size & shape (D%), 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
	225 S	CONTACT 70° CA.						225 S	Pyrite 1-2% as disseminations and aggregates.
3.0		Py SP green-grey to buff, carbonated locally sericitized with illite-hydromuscovite - coarse lithic tuff to lithic tuff agglomerate.							
3.0	230	Lithic fragments are irregular to subrounded in outlier - porphyritic dacite, amygdaloidal lava, most commonly pale green yellow altered pumice.							
3.0		The matrix is fine grained light grey-green in colour - siliceous although locally carbonated.							
3.0	235	Foliation 40° CA. to 60° CA.							
3.0	240		BROKEN CORE	F	C				
3.0				C					
3.0	245			C				244.5	Pyrite 5%-7% as irregular veins
				F				245	Pyrite 1%-2% as above.
3.0									
3.0	250								

Cominco

DIAMOND DRILL LOG

Hole N° QR101 Page N° 11

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
		as above. Pale green fuchsite is common. Foliation 30° C.A.			Pyrite 1% - 2% as above.
3.0	252.4	CONTACT 30° C.A. Similar to some ASP. varieties.		252.4	Pyrite < 1%
3.0	255	Buff to pale green carbonated locally sericitized and with minor illite hydromuscovite. Feldspar porphyry dacite? locally lithic tuff agglomerate			
3.0		Fragments of porphyritic "steady" fuchsite (fuchsite) to 3 cm - altered to sericite and commonly green due to illite hydromuscovite occurs in a matrix of fine grained - porphyritic dacite.			
3.0	260			261	Pyrite 2% - 3% as dissemination and fracture filling.
3.0	265				
3.0	268.6	P.P (PP) Grey sericitized and carbonated lithic tuff / coarse lithic tuff.		268.6	Pyrite 3% - 5% as above.
3.0	270				
2.4	273.4	contact sharp 25° C.A.		273.4	Pyrite 2% - 3%
		SP Green - buff carbonated locally sericitized feldspar porphyry dacite? with minor lithic tuff agglomerate bands.			
	275				

Cominco

DIAMOND DRILL LOG

Hole No PR101 Page No 12

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	DEPTH m	MINERALIZATION
3.1		Similar to the rock above 265.6 m.	275.1	Pyrite 2% - 3% as above.
	277.0	Minor PyP band. Grey ser [illegible]		
3.1	277.8	SP. as above.		
	280			
2.8				
3.1	285			
	286.5	Crfl Porphyritic dacite PyD Locally autobrecciated. Pyrite veining	286.5	Pyrite 3% as disseminations and veins.
3.1				
	290			
3.1	291.3	SP. Pale green carbonated, locally chloritised coarse lithic tuff. Lithic fragments are irregular in outline, "shredded" in appearance possibly pumice? up to 2cm. The matrix is finegrained quartzo-feldspathic.	291.3	Pyrite <1%
3.1	295			
3.1				
	300			

Cominco

DIAMOND DRILL LOG

Hole N° QR101 Page N° 13

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
		Sf as above.							Pyrite < 1% as above.
2.8									
0.10	305	Note Core - 1060 - broken ground.	BROKEN CORE						
0.20									
3.0									
	310								
3.0									
3.0	315								
	316.5	GRADATIONAL CONTACT.							
3.0		AP Dark green lithic tuff agglomerate. (Carbonated and weakly chloritized) Lithic fragments are green porphyritic andesite, occasionally amygdaloidal. Up to 15 cm. The matrix is fine grained lithic material similar to the fragments.							
3.0	320								
3.0									
	325								

Cominco

DIAMOND DRILL LOG

Hole No QR 101 Page No 14

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
		AP or clast.							Pyrite < 1% or clast.
3.0									
3.0	330		C						
	331.5	E.O.H.							
N/C	332.6	Hole abandoned. 198m BQ Rod lost.							