

DRILL HOLE RECORD**COMINCO LTD.**

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Property: TAG
Commenced: 07/18/94
Completed: 07/20/94
UTM Coordinates: 414850E/6815750N
Contractor: D.J. Drilling
Logged by: D.Rhodes/H.C. Schultze
Drill: Boyles 25A

District: Watson Lk.
Location: Yukon
Core Size: NQ
Claim Reference: Tag 18
Tract/Claim: YB46244
Elevation: 1395 m

Hole No.: T94-23
Length: 258.2m
Cor. Dip: -90
True Brg.: -
% Recovery:

Metres From	To	Plot Code	Description
0	6.4	OVB	CASING/OVERBURDEN
6.4	6.6	FTC	QUARTZ/SERICITE SCHIST - FELSIC CRYSTAL TUFF Short interval of quartz/sericite schist quite quartz rich at top of hole.
6.6	9.1	MD	IRON CARBONATE RHOMB SPECKLED WEAKLY CALCAREOUS CHLORITE (QUARTZ) SCHIST - MAFIC DYKE Dark to medium green fine grained well foliated rock speckled with 0.1 to 2 mm euhedral white carbonate rhombs (iron carbonate only effervesces when powdered). Occasional bands 0.5 to 1.5 cm of white calcite and quartz cut rock paralleling foliation. Ground mass is chlorite with probably some silica & lenses carbonate. Even texture of rock suggests may have come from intermediate flows or compositionally very uniform tuffs. Foliation consistent @ 65° to core axis. Very fine 0.1-0.3 flakes of biotite are present in rock. Upper 0.6 m is transitional from felsic volcanic with more chlorite colouring basically siliceous rock.
9.1	12.7	FTC	QUARTZ SERICITE SCHIST - FELSIC CRYSTAL/LAPILLI TUFF Distinctly felsic schist similar to those close to mineralized horizon. Light yellow green sericite (slightly more green than most schists, forms matrix along with 0.1 to 5 mm silica grains from 10 to 30% lensoidal 1-15 mm long, 1-10 mm silica forms aligned along foliation. From 11.1 forms becoming fewer and finer and rock takes on more granular aspect. 2-3% po occurs as fine disseminations and 5-15 mm long wispy aggregates along foliation. Foliation consistent @ 60° to core axis.
12.7	13.9	OZVN	COARSE WHITE QUARTZ VEIN Bull white quartz vein incorporates fragments and portions of sericite rich schist at bottom.
13.9	15.3	MD	SERICITE/CHLORITE/BIOTITE QUARTZ SCHIST GOING TO CALCITE SPECKLED BIOTITE-CHLORITE-CALCITE SCHIST - MAFIC DYKE? Transitional interval of quartz sericite schist pervaded by brown biotite and green chlorite to produce wispily laminated mottled brown, yellow, green schist with finely accentuated foliation going into dark brown biotite, chlorite, calcite schist speckled with white calcite rhombs.
15.3	15.9	OZVN	COARSE WHITE QUARTZ VEIN Incorporating 25 cm of quartz sericite schist at bottom.
15.9	19.4	FTC	QUARTZ/SERICITE/IRON CARBONATE (CHLORITE/BIOTITE) GRANULAR SCHIST - MINOR BLUE QUARTZ EYES - CRYSTAL TUFF Light buff green silica/sericite rock with finely granular silica texture and good foliation giving at 18.6 to rock with fine 1-10 mm long 1-5 mm thick silica lenses. Pale iron carbonate crystals are also disseminated in rock. Occasional pale blue quartz eyes are scattered in schist. From 18.9 down to 19.4 patches and mottles of biotite chlorite become increasingly abundant and give rock a mottled green and brown look. These appear to be some alteration phenomenon adjacent to biotite/chlorite/calcite rich rocks.
19.4	21.0	MD	CALCITE RHOMB SPECKLED BIOTITE/CHLORITE/CALCITE SCHIST - MAFIC DYKE Moderately calcareous dark brown with biotite rich schist with lesser chlorite speckled with 0.5 to 5 mm calcite rhombs.

			<p>@ 20.5-20.6 coarse quartz vein cut by 5 mm wide veinlet and some calcite hosting fine ocular black tourmaline crystals and some calcite veinlet also cuts biotite schist where tourmalines are browner.</p>
21.0	38.1	FTC(FTL)	<p>QUARTZ/SERICITE/IRON CARBONATE/(CHLORITE/BIOTITE) - CRYSTAL/LAPILLI TUFFS Buff coloured dominantly quartz sericite rock with pale to cream iron carbonate crystals. Fine grains of quartz 0.1 - 5mm, sericite and carbonate from matrix from fine 5 mm, to coarse + 3 cm long silica, lenses and irregular forms that from 10-50% of rock aligned parallel to foliation. Texture varies depending on size and number of fragmental forms. For the most part the rocks are thought to derive from siliceous tuffs. Locally @ 28.0-28.3, 29.0-30.1 Rock is quite siliceous and might mark rhyolite flows/sills? (or thick cherty beds) rather than tuffs. Base of interval and contact with lithology below is 20 cm bull quartz vein. Foliation is even and consistent throughout interval @ 60° to core axis. 2-3% po as disseminations and fine wispy aggregates occur throughout.</p>
38.1	39.9	MD	<p>IRON CARBONATE RHOMB AND BIOTITE SPECKLED CHLORITE QUARTZ SCHIST - MAFIC DYKE as 7.6-9.1 10 to locally 30% 0.5 to 7 mm iron carbonate rhombs and 5% 0.1 to 2 mm biotite flakes and flake aggregates speckle fine grained medium green schist composed of chlorite and silica. Foliation @ 65° to core axis.</p>
39.9	54.6	FTC	<p>QUARTZ/SERICITE(IRON CARBONATE/CHLORITE) FRAGMENTAL SCHIST - FELSIC CRYSTAL TUFF Rock of generally similar character composed dominantly of quartz and sericite but with slight light green tint suggesting chlorite component, creamy iron carbonate flakes are still evident but less abundantly than in preceding intervals (Note: becomes very subjective n attempting to sort quartz sericite "fragmentals" on basis of minor minerals phases and subtle colour differentiation). Rock hosts 10-30% lensoidal to more amorphous silica forms speckled with some iron carbonate flakes. Foliation is even and consistent in interval @ 60° to core axis. 3-4% pyrrhotite occurs associated with silica wisps, mottles and lams colouring them darker. Locally isoclinal folding can be traced follow pyrrhotite bearing wisps and transposition is clearly evident.</p>
54.6	58.4	MD	<p>CALCITE/IRON CARBONATE RHOMB AND BIOTITE SPECKLED CHLORITE CALCITE (SILICA) SCHIST - MAFIC DYKE As preceding intervals, quartz sericite schist on either side of interval shows increased biotite/chlorite speckling mottling for 30-40 cm. From 57.3-58.4 rock becomes finer grained more planar laminated to banded alteration of biotite rich 1-2 cm bands with blue grey calcite and silica bands. Foliation @ 65° to core axis.</p>
58.4	67.6	FTC	<p>QUARTZ SERICITE SCHIST - FELSIC CRYSTAL/LAPILLI TUFF Light yellow grey quartz sericite rock (some iron carbonate) rock showing range of fine to medium irregular to more commonly lensoidal forms in silica/sericite matrix. 3-4% pyrite and lesser pyrrhotite occurs in silica wisps mottle and bands - in some of larger bands po can be seen rimming pyrite as if altering pyrite. Foliation consistent @ 65° to core axis.</p>
67.6	68.2	SX	<p>BIOTITE CALCITE SILICA SCHIST Dark brown biotite silica rock - weakly calcareous with some silica surrounded by 10 cm interval at top and bottom of very siliceous rock speckled with biotite chlorite.</p>
68.2	75.9	FTC	<p>QUARTZ SERICITE SCHIST as 58.4-67.6</p>
75.9	84.6	FTCD	<p>ZONE OF FRACTURING AND FAULTING COINCIDENT WITH PINK CREAM "FELDSPAR"? SPECKLED SILICA SERICITE ROCK - FELSIC CRYSTAL TUFF - FELDSPAR RHYOLITE? Distinct zone of fault gouge occurs @ 75.8-76.0 and is followed by zone of more fracturing with fractures at variable attitudes to core axis - further fault gouge is evident @ 79.0 and 80.1. Rock itself is prominently silica "ribboned" schist down to 78.4 speckled with 1 to 5 m pink to white crystals thought to be feldspar. Lower down takes on fine granular texture but still speckled with 1 to 5% pink to white crystals.</p>

			@ 77.7-78.2 Fractures filled with powder black acicular tourmaline crystals are present.
84.6	99.6	FTC	<p>QUARTZ/SERICITE/IRON CARBONATE (CHLORITE) FELSIC CRYSTAL TUFFS</p> <p>Not unlike fragmental quartz/sericite schist above in 68.2-75.9 m. Rock is light grey/green fine, grained with local lensoidal quartz forms 0.5 cm to 2 cm in size oriented parallel to S1. Mainly quartz-feldspathic groundmass 0.5-2 mm in size, 60-70% with fine light green sericite and chlorite?. Feldspar porphyroblasts 0.5 cm to 2 cm subhedral to euhedral in character @ random orientations across pervasive S1 fabric present between 93.5-98.0.</p> <p>Feldspar are light grey/white forming 10-15% of volume. Local quartz ribbons to 1 cm wide present white to light buff iron carbonate present as local frayed fill near margin of q.v. present between 95.8-96.3. Fine grained pyrite (1-3%) occurs as local wispy laminations 1-2 mm wide parallel to S1. S1 @ 60° to core axis.</p>
99.6	115.5	FTC	<p>QUARTZ/FELDSPAR/SERICITE/IRON CARBONATE (CHLORITE/BIOTITE) - FELSIC CRYSTAL TUFFS</p> <p>Light grey/green matrix rock as above with distinctive coarse fragmental fabric imported by 30-40% light grey/white feldspar porphyroblasts. Rock is semi-massive and more gneissic in character than schistose. Feldspar porphyroblasts similar in character to those noted above seemingly growing in matrix across So/S1. Iron carbonate as small flakes and grains. Bi 1-2% locally present as fine flakes while Py 2-5% and Po 1-3% typical as disseminated grains and blebs throughout. S1 to core axis @ 60° to core axis. Porphyry feldspar character decreases to a semihomogenous, more schistose fabric with few ghostly feldspar forms between 112.5-115.5.</p>
115.5	120.4	FZXF	<p>QUARTZ/SERICITE/IRON CARBONATE/FELDSPAR BANDED SCHIST</p> <p>Light grey/green hued rock exhibiting banded locally fragmented fabric. Feldspars as local anhedral to subhedral granules paralleling S1 notably between 116.3-117.7 S1 @ 65° to core axis.</p>
120.4	155.2	FZXR	<p>QUARTZ/SERIC/IRON CARBONATE RIBBONED SCHIST</p> <p>Light yellow green seric/quartz rock typical of "host" type schists described in other drill holes. Quartz 50-70% occurs as fine grained groundmass with interstitial sericite 30-40% and sericitic seams. Quartzose ribbons to 1 cm locally present and commonly contorted or disaggregated into lensoidal quartz forms. Po 3-6% and py 2-4% occur as elongate streaks and disseminations or local wispy laminations 1-3 mm wide. Compositional layering locally present subparallel to core axis but typically transposed into S1. Dark grey/black chlorite laminated/banded interval between 125.6-126.3(Fe) Base of interval marked by 20 cm. Bull quartz vein with chrome mica, chlorite and iron carbonate parallel to S1. S1 to core axis @ 65-70°.</p>
155.2	158.6	FZXO	<p>QUARTZ SERICITE/IRON CARBONATE CHLORITE SCHIST</p> <p>Rock essentially quartz sericite schist as above with addition of dark green to dark grey chlorite 2-15% as local wispy seams and laminations. A 10 cm siliceous dark grey chlorite rich interval (Fe type) occurs @ 155.4-155.5. Slight mottled fabric locally imported where iron carbonate occurs as diffuse lenses, 1-2 cm long. Large dark green chlorite/chloritoid? rich clots to 1 cm with quartz and trace po and sphalerite between 158.5-158.8. S2 to core axis @ 60°. Interval represents beginning of chlorite alteration in structural hanging wall.</p>
158.9	159.1	OJ	<p>CHLORITE IRON CARBONATE QUARTZ SCHIST WITH DISSEMINATED SULPHIDES</p> <p>Short interval of dark green chlorite rich rock (60-70%) with wispy iron carbonate (5-10%) seams and fine disseminations and laminations of po (5-10%) 1-2% Cp as clots disseminations and 1-2% Sp. quartz 5-8% occurs as lens band and swirl with iron carbonate in chlorite @ 159.0 m.</p>
159.1	163.6	FZXO	<p>QUARTZ/SERICITE/IRON CARBONATE CHLORITE SCHIST</p> <p>Similar to 155.2-158.6 interval. Wispy, mottled texture with varying chlorite compositions, typically 10-15%. Light to medium green in colour. Po and pyrite 2-5% occur as local disseminations and blebs.</p>
163.3	167.1	APD	<p>CHLORITE/IRON CARBONATE QUARTZ FELDSPAR RHOMB SCHIST</p> <p>Medium to dark green chlorite rock with white light grey, accents imparted by silicates and iron carbonate, feldspar occurs as porphyroblastic growths to 0.5 cm in chlorite matrix while fine grained quartz occurs with iron carbonate in local lenses and pseudobands. Feldspar porphyroblasts are typically clustered in intervals to 10 cm long. Po (5-8%) and locally pyrite</p>

		occur commonly with Cp (1-2%) and lesser Sp as wispy streaks and seams parallel to S2. Lower 15 cm between 160.95-167.1 is notably Cp rich with 8-10% cp with interstitial po in a band containing feldspar chlorite rimmed feldspar and chlorite.
167.1	168.2 OHF	SULPHIDE ROCK Narrow intercept with sharp upper and lower contacts. Generally very fine grained 0.5-1 mm to 167.8 mm comprising po and pyrite with 2-4% sphalerite as fine interstitial grains. Trace Cp and Ga as fine grains in matrix. Very little non-sulphide gangue except between 167.4-167.6 where quartz 8-10% and iron carbonate 5-8% indurate the zone with swirly matrix. 167.8-168.2 interval is coarser grained, 1-2 m, with grainy Sp (10-12%) and pyrite matrix with 8-10% quartz/iron carbonate gangue. S2 to core axis @ 75°.
168.2	169.5 ATO	CHLORITE/BIOTITE SCHIST Dark green/grey with homogenous fabric. Biotite 1-2% occurs as local fine flakes 1-2 mm floating in chlorite 60-70% and quartz? 20-30% matrix. Po 5-8% and lesser pyrite as local seam along cleavage with trace Cp and Sp.
169.5	176.4 FZXO	QUARTZ/SERIC/IRON CARBONATE/CHLORITE SCHIST Light to medium grey/green quartz rich schists (55-65%) with 25-30% phyllosilicates, mainly sericite with lesser chlorite 5-10% locally, and iron carbonate 5-10% in interstices with quartz. Quartz and iron carbonate dominant bands and lenses occur locally, pyrite and po (to 5%) occur as disseminations and wispy seams, commonly with small Cp blebs and grains. S2 to core axis @ 70°.
176.4	179.0 OC3	PO/CHLORITE/CHLORITOID/FELDSPAR (CP) ROCK Well developed networked altered rock characteristic to sections in some the other holes including intervals within sulphides of T94-22. Feldspar has pegmatoidal character forming coarse crystal mosaic between 176.9-178.6. Locally feldspar is rimmed with dark green chlorite and is commonly crosscut by po and cp veins and veinlets. Contact of zone with overlying quartz/sericitic/chlorite schist is sharp while @ base is fragmented in character into a vein. Sulphide sequence that should be capping this stockwork is missing!
179.0	180.5 QZVN	BULL QUARTZ VEIN WITH 10-15% IRON CARBONATE AND CHLORITE @ margins and light green talc along local fractures. Po and Cp as coarse patches between 179.0-179.3.
180.5	180.9 MD	IRON CARBONATE RHOMB CHLORITE (BIOTITE) SILICA SCHIST Light to medium green speckled rock with 2-3% fine biotite flakes.
180.9	211.8 MO	CHLORITE/BIOTITE/CALCITE SCHIST (FMS) Well developed ribboned/spotted mafic schist as chlorite and co dominated to 186.6 in after which Biotite 5-15% is present. Co present as small lenses and local bands. Pyrite and po occur as local coarse blebs to 1 cm. Rock has finer lamellar, less spotted character between 201.5-211.8 but would appear to be compositionally similar S2 to core axis @ 80°.
211.8	226.3 FZXO	QUARTZ/SERIC/IRON CARBONATE (CHLORITE) SCHIST Quartz rich (65-75%) host type schist with light green/yellow seric seams. Quartzose bands common. Dark banding locally imparted by pyrite and quartz rich stringers parallel to S1, notably between 220.4-224.7. Trace sphalerite with pyrite @ 220.4 in irregular 1 cm wide band. Chlorite rare but present as few disseminated dark green/black flakes and wispy bands between 215.5-218.0. S2 to core axis @ 80°.
226.3	227.7 VEIN	TOURMALINE AND CC FILLED FRACTURE RUNNING SUBPARALLEL TO CORE AXIS. Tourmaline indurated along S2 cleavage in quartz/seric schist.
227.7	258.2 SZXM	QUARTZ/SERIC/BIOTITE/CHLORITE (FELDSPAR/CC) SCHIST Light grey/green/brown mottled textured quartz seric/quartz feldspathic? schist not unlike basal mottled schist unit encountered in hole 12. Local less biotite and chlorite bearing sections more typical of hanging wall quartz sericite schists. Tourmaline crystals locally floating in schist. Tourmaline fractures between 249.6-251.5. S1 to core axis @ 75°.

END OF HOLE 258.2 m