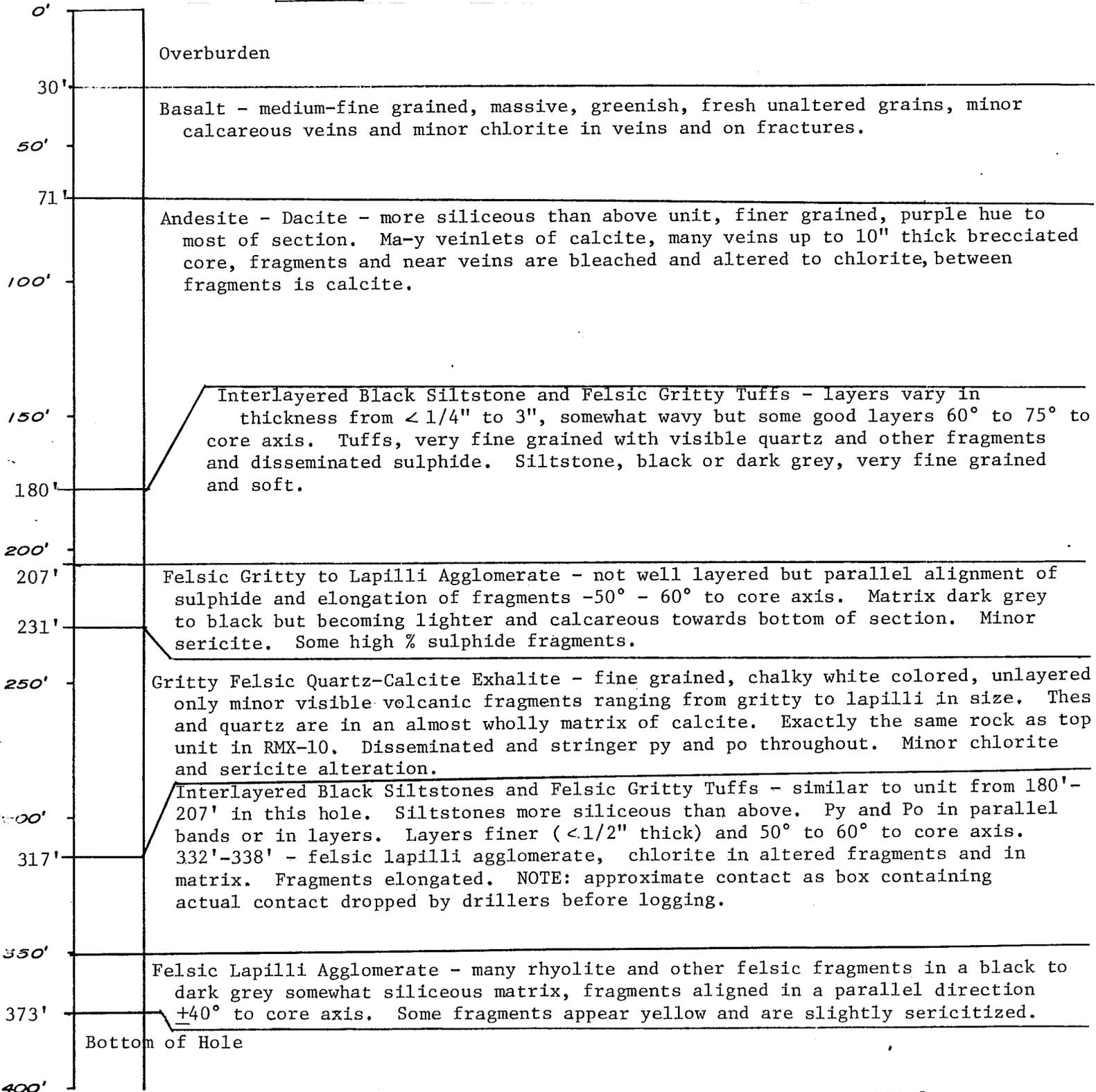


LITHOLOGIC LOG

Project Ragged Mtn. Extension Hole no. RMX-12 Dip -45° Started 12/19/80 Elev. _____

Job no. 272.2 Township T9-R10 See Sketch
 Coord. 272-8 Direction 336° Mag Completed 1/10/81
 SW 1/4 - Roads S & W of Ragged Mtn.

Lithotype



NOTE: 207-317' is the limey tuff section with grit and lapilli fragments at the top. (TCW)

RE-EVALUATION

RMX-12

- 30 - 71 - basalt, examined core at 54', no binoc, log okay
- 71 - 150 - andesite-dacite (core ranges in composition), examined core at 95', andesite (or possible basalt), slightly harder, lighter colored and contains less mafic minerals than above unit, no binoc, examined core at 132'; dacite (or possible andesite?), core is identical to RMX-2 at 69' only without brecciation
- 180 - 207 - layered intermixed siltstone and weakly calcareous greywacke, very similar in appearance to RMX-10 at 89', examined core at 194', no binoc
- 207 - 231 - altered tuffaceous lapilli fragmental, core at 229' contains abundant obvious altered felsic lapilli volcanic frags, some with semi-massive to massive sulphide alteration, frags show parallel alignment in a matrix of dk. grey patches of fine siliceous grains plus fine white sericitic wisps, sericitic wisps are very similar to lapilli fragments in texture and may possibly be fine altered volcanic frags, examined core at 229' and did binoc, core at 216' (no binoc) very similar to 229', but contains lesser lapilli sized frags, these core pieces are somewhat similar to weakly calcareous portion of RMX-10 (25'-31'), the differences are: 1) presence grey, hard, siliceous material in core of RMX-12; and 2) abundance, clarity and layering of altered felsic lapilli volcanic frags; and 3) lesser total sericitic alteration in RMX-12
- 231 - 317 - highly sericitic and calcareous felsic tuff?, a fragmental?, examined core at 259', no binoc, core is identical to RMX-10, 25'-77', calcareous section from 31' down (see binoc for RMX-10 at 51'), as in RMX-10 at 51', this core is highly altered (sericite >50%) and contains abundant calcite (as fragments?), sericitic "matrix", could be fine altered frags, contains 3-5% pyrrhotite and pyrite
- 317 - 350 - layered intermixed shale and greywacke, drill log says interlayered black siltstones and felsic gritty tuffs like 180' to 207' above, black siltstones referred to are probably shales and from core at 346', felsic gritty tuff referred to in log is probably a weakly tuffaceous greywacke, (binoc done at 346'), drill log also notes felsic lapilli agglomerate from 332' to 338', from description this is probably a felsic lapilli fragmental (need core in office)
- 350 - 373 - weakly altered felsic tuffaceous lapilli fragmental, as described in log, abundant white rhyolites and other felsic volcanic rock frags with varying degrees of chlorite-sericite alteration contained in a fine grey somewhat siliceous matrix, matrix also contains some grit sized altered felsic volcanic frags, all frags are weakly aligned and highly welded to matrix

RE-EVALUATION

D. Coles
February, 1982

RMX-12 (207'-231') - "Felsic Gritty to Lapilli Agglomerate"
(upper part of limey tuff)

Hard black siliceous matrix	-	+ 30%	
Calcite matrix	-	+ 20%	
Quartz grit	-	+ 15%	sub-rounded
Altered felsic grit	-	+ 2%	sub-angular
Rhyolite	-	+ 30%	sub-rounded
Black chert or rhyolite	-	+ 3%	sub-angular

This rock looks like it is probably not a true pyroclastic. The chemical precipitate matrix (especially the calcite) tend to indicate that the fragments of volcanic rock were washed or blown? (is some pyroclastic nature) into a sedimentary basin.

<1% of this rock is made up of high sulphide clasts.

Matrix looks like sediment, not like infilling.

RMX-12 (332'-338') - Agglomerate Layer in Black S. Stone and
Felsic Gritty Tuff

Matrix - white filament like material between fragments,
purplish siliceous material and minor calcite (25% of rock)

Rhyolite frags and grit	-	+ 35%	sub-rounded
Chloritized frags	-	+ 15%	sub-rounded
Quartz grit	-	+ 10%	anhedral
Feldspar grit	-	+ 15%	anhedral

Fragments are aligned with their long axis parallel to each other.

Appears more pyroclastic than clastic. There is fine quartz and feldspar ash that was not noted in 207'-231'. There is also the absence of "sedimentary matrix".

RE-EVALUATION

D. Coles
February, 1982

RMX-12 (350'-373')

Matrix - hard siliceous material and chlorite - ± 35%

Rhyolite fragments	-	60% sub-angular to angular
Quartz grit	-	<1% sub-hedral to anhedral
Feldspar grit		5% anhedral or sub-rounded

This unit is probably pyroclastic, the fragments are generally angular and a nondetrital matrix with feldspar and quartz ash is present. Mudstone layers were found at 362'-363' and at 372' tending to make a pyroclastic origin less than definite.

The felsic gritty tuffs found with mudstones within this hole consist of rounded very fine grit. They are probably true gritty tuffs (some mudstone in matrix). Sometimes very little matrix.

J. S. Cummings, Inc.

DDH RMX-12 - (Assays for Portion of Hole)

<u>DEPTH (FEET) FROM COLLAR</u>	<u>LENGTH</u>	<u>% Zn</u>	<u>% Cu</u>	<u>% Pb</u>	<u>Oz/Ag</u>	<u>Oz/Au</u>	<u>Approx. % Sulphide</u>
207 - 217	10'	Trace	None		None	None	11.1
217 - 227	10'	0.10	0.006		None	None	9.2
227 - 237	10'	0.05	0.037		None	None	7.7
315 - 325	10'	Trace	None		0.4	None	5.5
325 - 338	13'	None	None		0.4	None	5.2

Bottom of Hole: 373'