802146

R V. KIRKHAM

ABBREVIATED LOG

W 139

SECTION: 119+40E DIP: 90° ELEVATION: 1455.6' 122+21.7N 119+32.8E

FOOTAGE (ft)	DESCRIPTION
(960) - 994.5	"SHARP-BANDED TUFF" — mafic and cherty fine to medium well to moderately bedded tuffs with chert to 75%. Sills and dykes of crystalline fine to medium grained mafic (basalt) are ~ 30 to 70% of the section; locally they are (possible) flows. In one instance, pegmatitic gabbro was cored.
994.5 - 1066	ANDESITE — massive to coarsely brecciated. Occurs discontinuously below the "SBT" north of the Lynx-Myra zone. Not the "G Flow". Strong epidote alterations of matrix (or cement) is common.
1066 - 1156	PURPLE & GREEN ZONE — overall, a variable unit with beds, locally graded, of fine to agglomeratic tuffs and breccias which may contain quartz eyes. Non-hematitic mixed green volcaniclastics are commonly interbedded. Clast size and degree of hematization increase closer to the Lynx-Myra-Price zone. To the north, the unit is generally more bedded (distal) and has less hematite and thickness. Epidote alteration is pervasive. FELDSPAR-QUARTZ PORPHYRY (FQP) — The upper, discontinuous FQP domes and clastics occur within this zone. The Lynx-Myra-Price Rhyolites are within this zone.
1156 - 1459.5	BEDDED DACITE+MAFIC FINE → MEDIUM TUFFS & LAPILLI TUFFS — note the (relatively) high degree of sorting - this is more common north of the Lynx-Myra zone in Myra Valley, but rapid facies changes (including coarser mixed breccias) are common. 1156 - 1180' has several percent quartz eyes as transition to the FQP zone above. Note that only minor, sporadic hematized beds are seen.
1459.5 - 1598	"PR-7 ZONE" (ORE CLAST BRECCIA) — heterolithic, coarse mixed volcaniclastics with rhyolite ± sulfide clasts (py;cpy-py;sph-gn-bar;po-sph). W 139 has relatively few sulfide clasts. Elsewhere they can be in excess of 6" Ø. Extreme inhomogenity typifies this unit. Rhyolite occurs as clasts (silicified) and beds of tuffs + lapilli tuffs with abundant quartz eyes ± ore sulfides. Note the coarsening of clast size downhole. Variable epidote alteration.
1598 - 1851	ANDESITE, MASSIVE (HW HANGINGWALL ANDESITE) — massive with local zones of monolithologic flow breccias (see 1608-1615'; 1622-1656'). Clastic texture is enhanced by pervasive strong to moderate epidote alteration. Commonly feldspar ± mafic porphyritic (both amphibole and primary pyroxene have been seen). Locally, but rarely amygdaloidal.

W 139 - ABBREVIATED LOG

1851 - 1859.5	Qz-PORPHYRITIC RHYOLITE TUFF & LAPILLI TUFF (Top of HW RHYOLITE ZONE)
1859.5 - 2008	DACITE, MASSIVE (720 XCN DACITE) — occurs along the length of the HW horizon as a linear ridge (like a squeeze of toothpaste...) In Thelwood Valley, ~ 7000 feet to the east, it is much larger, but quite similar in character. Clastic phases are < 20%. Commonly, it is weakly siliceous with small feldspar phenocrysts; weak epidote as thin stringers is common.
2008 - 2092	HW RHYOLITE ZONE — note tuffaceous nature and argillites to 2065'; below 2065' occur somewhat coarser clastics with minor to 2% quartz eyes. Sericitization is pervasive.
2092 - 2160	Note mixture of andesite clasts to rhyolite - the brown-gray colour is typical of the strongly sericitized andesite in the footwall. Silica and sericite alteration is strong.
2160 - 2257	HW ORE ZONE

2160 - 2173.6	zinc-barite-cpy-py pyrite
2173.6 - 2228.6	massive pyrite, low Cu, 3% sphalerite
2228.6 - 2232	zinc pyrite-barite (low precious metals) (this layer occurs throughout the HW main zone)
2232 - 2257	Cu (Zn) Pyrite ore types

2257 - 2355 (END OF HOLE)	ANDESITE FOOTWALL — strongly sericitic and siliceous alterations with granular, crystalline pyrite stringers.

W 130 — 250' North of W 139 — SECTION: 119+40E

(1930) - 2152	ANDESITE FOOTWALL — much less altered equivalent of above. This intersection cuts the ridge between the north and south parts of the HW ore zone. Note how the primary andesite textures are preserved through the alteration process.

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