

PPH /  $\Theta V$  HAVALLAN / VALMY FMS. (AVERY)

## COMPARISON - CONTRAST : WHY ?

IN THE MCCOY PROJECT AREA, THE POSSIBILITY OF DRILLING INTO BOTH THE PPH AND THE  $\Theta V$  IS PRETTY GOOD FOR ANY HOLE DEEPER THAN 2000'. THIS IS DUE TO THE MAJOR THRUST FAULTS THAT HAVE OCCURRED SINCE THE DEPOSITION OF THE VALMY. WHEN ONE LOOKS AT THE LITERATURE, DESCRIPTIONS OF THE TWO FORMATIONS BEAR RATHER FRUSTRATING SIMILARITIES! HOW WILL THE (AMAX) GEOLOGIST LOGGING CUTTINGS KNOW IF HE HAS PASSED FROM THE BEDDED CHERTS, SILTSTONES, SHALES, AND QUARTZITES OF THE PPH, INTO THE BEDDED CHERTS, SILTSTONES, ARGILLITES, AND QUARTZITES OF THE  $\Theta V$  ?

AFTER A RECONNAISSANCE MIKE WITH DEAN PICKINGTON TO THE THRUST FAULT CONTACT OF THE PPH, Pa (AFTER LONG) AND  $\Theta V$  (T 22 N R 41 E ON LAUDER CTY GEOLOGIC MAP), WE DECIDED THAT THE QUARTZITES HOLD ONE GOOD MEANS OF RECOGNITION, AND SEPERATION. THE QUARTZITES OF THE PPH ARE F-M.G. SANDSTONES WHICH RETAIN MOST OF THEIR ORIGINAL GRAIN-SIZE, SHAPE, AND TEXTURE. THEY, LIKE THE  $\Theta V$  QUARTZITES, ARE OFTEN IRON-STAINED, AND THOUGH USUALLY THIN-BEDDED, DO HAVE SOME MASSIVE SECTIONS. THE VALMY QUARTZITES, ON THE OTHER HAND, DO NOT RETAIN ANY ORIGINAL GRAIN SIZE, SHAPE, OR TEXTURE. THESE MASSIVELY BEDDED, OFTEN IRON-STAINED QUARTZITES HAVE A GLASSY TEXTURE; INTERLOCKING, CRYSTALLINE ~~CRISTALLINE~~ APPEARANCE TO THEIR GRAINS. (IT IS MORE OF A META-QUARTZITE). THE SAMPLES WE BROUGHT BACK SHOULD BE USED FOR A REFERENCE WHEN LOGGING QUARTZITES IN DEEPER PARTS OF OUR DRILL HOLES. MORE INFORMATION ON OTHER UNITS OF THE VALMY MAY PROVE HELPFUL (CHERT, ARGILLITE, ETC.), HOWEVER ONLY THE QUARTZITES WERE EXPOSED IN THE OUTCROP WE INVESTIGATED. DEAN IS GOING TO EXPLORE OTHER VALMY OUTCROPS LATER THIS WEEK, AND MAY HAVE SOME VALUABLE INSIGHTS THEN.

NOTE: TRIASSIC QUARTZITES COMPARE WITH THE PPH AS WELL.

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