824744 #114

I am O'Shaster #1

Location on road below shaft approximately -45° to the west. This hole is designed to drill beneath the shaft to test for depth potential of whatever was being excavated in the old shaft. The hole reached a depth of 481 feet and was stopped due to squeezing. Apparently the kaolin of the feldspars in the arkose was absorbing water and the hole was expanding. The whole country rock was squeezing the rocks.

0-12 ~~0-12'~~ - Casing

12-14 12-14' Overburden - ground up float pebbles

14-90 13-14 - oxidized ~~catalyzed~~ Kaolinized volcanic arkose; fractures are oxidized; 1% disseminated pyrite.

14-15 - crushed - has weathered ~~the~~ to clay in the box

15-16 - clay like gravel; Rock is creamy-white colored, relatively equigranular fragments 1/10 inch, mainly feldspar; Maybe 10% quartz fragments, Occasional drusy 1/4 inch quartz veinlets cutting at about 20° to core axis; Occasional angular to subrounded argillic fragments, Small, less

than 1/4 inch.

45' - open ring about 2 inches by 1/2 inch 70% as deep as the BQ core stick, appears to be lined with quartz crystals and carbonate; appears to be a quartz veinlet about every 10 feet. The fine feldspar-quartz fragments around 1/10 inch appear to be fairly equigranular with dark angular argillite fragments showing in the groundmass. These are about 10% by volume.

77' - about a 1 foot fine-grained banded zone showing banding ~~running~~ at about 60° to core axis; occasional zone where the core oxidizes a hematitic red.

89' - grey fine-grained silicified zone about 6 inches thick

100' - silicified carbonate zone about 3 inches thick

90' - feldspars have a translucent green cast as if they are being altered to sausserite; occasional blade of anhydrite near the silicified zone

214' - slight increase in the size and amount of argillic fragments.

225' - argillite zones appear, up to a foot wide; seem to be interbedded with slump features in the volcanic arkose; zones are generally quite pyritic.

250' - 15 feet of pyritic arkose with a lot of shatter texture; filled with white carbonate and quartz.

250-481 360' - 3-foot silicified zone; Quite a lot of grinding in some places then it becomes claylike altered volcanic arkose; Appears to be more ~~oxidized~~ kaolinized than normal. The last bores have turned into sandy mud. Some of these argillic fragments are quite silicified and heavily ~~pyritized~~ pyritized. Some fragments are black silica and sulfide ph. ~~The~~

480' ~~- The hole ends.~~ Bedding seems fairly constant throughout at about 60° to 70° to core axis indicating a flat dip. The silicified zones and the veining is at

about 15° to the core axis