

PROJECT UJY HOLE TH9 LOCATION Zone 517 CORE SIZE BQ STARTED 17/08/79 FINISHED 19/08/79 PAGE 1 OF 6
CLAIM GROUP TOMBSTONE LENGTH 387' DIP 50° AZIMUTH 270° COLLAR ELEVATION 498' DRILLED BY CARON LOGGED BY EATON

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PROJECT UVV HOLE TH9 LOCATION Zone 513 CORE SIZE BQ STARTED 17/02/79 FINISHED 19/02/79 PAGE 2 OF 6
CLAIM GROUP TOMBSTONE LENGTH 323' DIP -50° AZIMUTH 270° COLLAR ELEVATION 4985' DRILLED BY CARON LOGGED BY EATON

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| GEOLOGICAL DESCRIPTION | SAMPLE NUMBER | RADIO-ACTIVITY IN CPS BGS-ISL | GEOCHEMISTRY AND ASSAY | | | | % RECOV | GEOLOGY | STRUCTURE L to core | HOLE DEPTH (FEET) | MOUNT SOPRIS GAMMA PROBE LOG |
|---|---------------|-------------------------------|---|--------|--|--|---------|---------|------------------------|-------------------|---------------------------------|
| | | | (%U ₃ O ₈) ppm U | ppm Cu | | | | | | | |
| 153.0'-154.0': a series of narrow fractures running subparallel to the core axis are surrounded by intense sericitic and argillic altered rocks and are filled with pyrrhotite, chalcopyrite, arsenopyrite, purple fluorite, dolomite and an unidentified brownish mineral. | H37186 | BKGD | 9 | | | | | | | | |
| | H46386 | 60/BKGD BKGD | 45 | | | | | | | 155 | |
| 158.4': 5mm, white to pink orthoclase dykelets at 85° to core axis. | | 20/BKGD | | | | | | | | | |
| | H37187 | 10/BKGD | 11 | | | | | | 15° 1-2/1' | 160 | |
| 161.4': trace of molybdenite occurs with pyrrhotite. | | | | | | | | | | | |
| 162.1'-163.7': a coarse grained, green grey syenite dyke cutting the core axis at 45° appears to be 80% orthoclase, 15% nepheline and 5% chloritized mafics. The dyke and adjacent tinguaitite have undergone pervasive sericitic and argillic alteration. The dyke contains only traces of sulphide and purple fluorite. | H37188 | | 36 | | | | | | 30° 1-5/1' | 165 | |
| 166.0': a 6mm-10mm white orthoclase and pyrrhotite bearing dyke cuts the tinguaitite at 55°. | | | | | | | | | | | |
| 167.0'-168.5': a number of <1/2-2mm fractures are filled with pyrrhotite. They are accompanied by hematite stains and narrow alteration envelopes. Some of the biotite clusters in this interval have hematite halos. | H37189 | BKGD | 18.5 | | | | | | | 170 | |
| | H37190 | | 6 | | | | | | | 175 | |
| | | | | | | | | | | | |
| 180.8' SHARP 45° CONTACT with 20 cm weak sericite envelope. | H46387 | 25/BKGD | 52 | | | | | | | 180 | |
| 180.8'-246.9': SYENITE DYKE: coarse grained, grey-green syenite with anhedral to subhedral, elongate, frequently twinned orthoclase comprising 80% of the rock, and interstitial, dark green to black, chlorite after pyroxene making up the remainder. The greenish tint of the orthoclase may indicate weak sericitic alteration. The orthoclase crystals are often slightly aligned yielding a subtrachytic texture. Pyrrhotite and arsenopyrite together comprise about 1/4% of the rock, locally up to 1%. Purple fluorite is relatively common usually on closed fractures but also as disseminations. Both sulphides and fluorite are common on the 50° fractures. | | | | | | | 100 | + | | | |
| 181.8'-182.3': fine grained dyke with similar mineralogy cuts the main dyke at 45°. | H46388 | 5/BKGD | 73 | | | | | + | 15° 25° 1/1' | 185 | |
| | | | | | | | | + | | | |
| 185.0'-187.0': another finer grained dyke cuts the main dyke with 2-10mm prismatic to stubby orthoclase phenocrysts and 1mm subhedral mafic phenocrysts in a fine grained groundmass. The greenish sections are sericitized envelopes around pyrrhotite bearing fractures. The pink tint is due to hematite stains surrounding the mafic phenocrysts. | H46389 | 30/BKGD | 69 | | | | | + | 40° 60° 50° 1/1' | 190 | |
| 187.4'-187.5': a 1-3mm wide, 60° fracture contains purple fluorite coating the walls which are in turn coated by pyrite which are then coated by pyrrhotite. Some of the pyrite has invaded the adjacent wall rocks. | | | | | | | | + | | | |
| 190.3'-190.4': a 3mm wide, 70° fracture similar to the preceeding but containing relatively more purple fluorite and pyrite and less pyrrhotite. | H46390 | 35/BKGD | 56 | | | | | + | | 195 | |
| 195.2': a 2mm, 70° fracture is coated with purple fluorite > pyrite. | | | | | | | | + | | | |
| 201.3'-201.5': 2, 8mm, 60-70° fractures are partially filled with purple fluorite, pyrite and pyrrhotite. | H46391 | 15/BKGD | 66 | | | | | + | 70° 80° 90° 1/4' | 200 | |
| | | | | | | | | + | | | |
| | H46392 | 30/BKGD | 58 | | | | | + | | 205 | |
| | | | | | | | | + | | | |
| | H46393 | | 61 | | | | | + | | 210 | |
| | | 40/BKGD | | | | | | + | | | |
| | H46394 | | 51 | | | | | + | | 215 | |
| | | | | | | | | + | | | |
| | H46395 | 30/BKGD | 58 | | | | | + | | 220 | |
| | | | | | | | | + | | | |
| 223.0'-226.9': still syenite as before however pyrrhotite and pyrite are much more abundant than previously, comprising up to 4% of the rock. They appear to be replacing interstitial mafics. | | | | | | | | + | | 225 | |

DRILL HOLE LOG

PROJECT UJV HOLE TH9 LOCATION Zone C17 CORE SIZE BQ STARTED 17/08/79 FINISHED 19/08/79 PAGE 4 OF 6
 CLAIM GROUP TOMBSTONE LENGTH 387' DIP 50° AZIMUTH 230° COLLAR ELEVATION 4185' DRILLED BY CARON LOGGED BY EATON

| GEOLOGICAL DESCRIPTION | SAMPLE NUMBER | RADIO-ACTIVITY IN CPS BGS-ISL | GEOCHEMISTRY AND ASSAY | | | | % RECOV | GEOLOGY | STRUCTURE L to core | HOLE DEPTH (FEET) | MOUNT SOPRIS GAMMA PROBE LOG |
|---|---------------|-------------------------------|--|--------|--|--|---------|---------|---------------------|-------------------|------------------------------|
| | | | (% U ₂ O ₈) ppm U | ppm Cu | | | | | | | |
| 226.4'-226.7': finer grained dyke with same mineralogy crosses main dyke at 45° to core axis. | H46396 | 40/BKGD | 89 | | | | | + | 15° to 25° | 1/1' | |
| 229.0': sulphide again abundant as replacement of mafics. Comprise 1-3% of the rock to the bottom of the dyke. | H46397 | | 88 | | | | | + | | | 230 |
| 236.7'-237.0': strongly foliated, fine grained rock appears to be a mylonite zone. Foliation at 45° to core axis. Rock is grey-green like surrounding rocks, except for a small red hematite stain surrounding a bleb of magnetite. | H46398 | 60/BKGD | 96 | | | | | + | 40° to 50° | 1/1' | 235 |
| 237.0'-237.8': well foliated syenite but still recognizable as syenite. Foliation parallels mylonite zone. | | | | | | | | + | | | |
| 237.8'-239.0': a second mylonite zone, not quite as well developed as the first contains small blebs of pyrite and pyrrhotite. A group of fractures in these three zones parallels the foliation and is filled with chlorite and talc bearing slickensides. | H46399 | | 70 | | | | | + | 70° to 90° | 1/7' | 240 |
| 240.8'-242.4': 3, 1mm, 10° fractures are filled with calcite and small crystals of pyrrhotite, pyrite and purple fluorite. | | | | | | | | + | | | |
| 245.5'-246.1': another fracture as above. Higher angle, 30-50° fractures between these calcite filled fractures contain traces of purple fluorite and pyrite. | H37191 | 40/BKGD | 46 | | | | | + | | | 245 |
| 246.9'-248.4': SHARP 45° CONTACT with a 30 cm sericitized envelope in tinguaitite. | | | | | | | | | | | |
| 248.4'-262.0': MIXED TINGUAITE: normal plt lenses up to 5 cm across surrounded by brecciated tinguaitite. Pl phenocrysts in brecciated tinguaitite are indiscernible and have again blended into the groundmass; they appear to have behaved plastically under stress. Plt to sheared tinguaitite ratio 1:4. Fragments in the sheared tinguaitite range from 1-4mm. Disseminated pyrrhotite is common but does not exceed 1/4% of the rock. A number of 1-4mm orthoclase > sodalite > pyroxene mafic dykelets cut the tinguaitite at various angles. Fractures are rare; where present they are usually open and weakly coated with limonite. | H37192 | 10/BKGD | 12.5 | | | | | | | | 250 |
| 251.5'-251.9': a 8 cm wide, green-grey, sericitized and chloritized syenite dyke containing 5% pyrrhotite after mafic cuts the tinguaitite at 60° to the core axis. | H37193 | BKGD | 7 | | | | | | 30° | 1/5' | 255 |
| 256.3'-256.6': an irregular patch of brecciated tinguaitite has a dark grey groundmass and is strongly radioactive (300 over background). Also contains blebs of a dark mineral. | H46501 | 340/BKGD | 723 | | | | 100 | | | | |
| 262.0'-269.0': SERICITIZED MIXED TINGUAITE: an envelope around a syenite dyke, as usual the alteration principally affects the pl phenocrysts and produces a mottled grey-green rock. | | | | | | | | | | | |
| | H37194 | | 9 | | | | | | | | 260 |
| | H37195 | BKGD | 9 | | | | | | | | 265 |
| 269.0'-281.7': SYENITE DYKE: rock is variably fine to coarse grained grey-green, sericitized? syenite as was found in the earlier thicker dykes. Pyrite is common comprising from 1/8 to 1% of the rock. | H46502 | | 65 | | | | | + | 10° to 15° | 1/3' | 270 |
| 270.0'-270.5': a 7 cm fine grained leucocratic syenite dyke cuts the grey-green syenite at 45° to core axis, that is, parallel to the grey-green syenite contact. This dyke contains relatively few sulphides. | | | | | | | | + | | | |
| 277.4'-278.0': a small xenolith of altered plt. Parts of the pl phenocrysts are dark green possibly representing an initial biotite alteration now gone to chlorite. | H46503 | 60/BKGD | 93 | | | | | + | 30° | 1/5' | 275 |
| 278.5'-280.0': another coarse grained syenite dyke cuts the main syenite dyke with sharp but somewhat irregular 45-70° contacts. This smaller dyke is distinguished from the larger dyke by its dark almost black hornblende phenocrysts which have only partially gone to chlorite and its tan, almost pink orthoclase crystals. The smaller dyke also contains a few larger, up to 1.5 cm, grey orthoclase crystals. | H46504 | 50/BKGD | 70 | | | | | + | | | 280 |
| 281.0'-281.7': another small dyke similar to the above has intruded between the main syenite dyke and the adjacent tinguaitite. This dyke is even more porphyritic than the one above with grey twinned orthoclase phenocrysts up to 5 cm long in a medium-coarse grained groundmass. A band of hornblende crystals 1cm wide occurs adjacent to the tinguaitite contact. This dyke intrudes the other dyke at 45° to core axis and contacts the tinguaitite irregularly at about 50°. | H37196 | 20/BKGD | 12 | | | | | | | | 285 |
| 281.7'-290.0': MIXED TINGUAITE: similar to the tinguaitite above the dyke with a normal plt to sheared plt ratio of 1:4. Weak to moderate biotite alteration in the sheared tinguaitite. Many phenocrysts in the normal plt contain as much as 30% sodalite or blue cancrinite. Most fractures are closed with orthoclase. | H37197 | BKGD | 16.5 | | | | | | | | 290 |
| 290.0'-291.2': SYENITE DYKE: a porphyritic syenite dyke with sharp contacts cuts the tinguaitite at 30° to core axis. It is composed of 25% euhedral, light grey orthoclase phenocrysts up to 2 cm long in a fine grained medium grey groundmass. 1mm hornblende phenocrysts comprise 20% of the rock. Probably represents a rapidly cooled equivalent of the dyke 8' above. | | | | | | | | | | | |
| 291.2'-310.0': MIXED TINGUAITE: as above, is often cut by 1-2mm orthoclase veins. Biotite | H37198 | 10/BKGD | 22.5 | | | | | | 20° to 30° | 1/4' | 295 |
| | H37199 | BKGD | 6 | | | | | | | | 300 |

DRILL HOLE LOG

PROJECT UJV HOLE TH9 LOCATION Zone S17 CORE SIZE BQ STARTED 17/08/79 FINISHED 19/08/79 PAGE 5 OF 6
CLAIM GROUP TOMBSTONE LENGTH 307' DIP -50° AZIMUTH 272° COLLAR ELEVATION 4985' DRILLED BY CAROL LOGGED BY EATON

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DRILL HOLE LOG

PROJECT UJV HOLE TH9 LOCATION Zone 517 CORE SIZE BQ STARTED 17/08/79 FINISHED 19/08/79 PAGE 6 OF 6
CLAIM GROUP TOMBSTONE LENGTH 387' DIP -50° AZIMUTH 270° COLLAR ELEVATION 4985' DRILLED BY CARON LOGGED BY EATON

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