

| GEOLOGICAL DESCRIPTION | SAMPLE NUMBER | RADIO-ACTIVITY IN CPS BGS-1SL | GEOCHEMISTRY AND ASSAY | | | | % RECOV | GEOLOGY | STRUCTURE | | HOLE DEPTH (FEET) | MOUNT SOPRIS GAMMA PROBE LOG |
|---|---------------|-------------------------------|--------------------------------|--------|--|--|---------|---------|------------------------|------|-------------------|------------------------------|
| | | | $\frac{1}{2}\%U_2O_8$ ppm U | ppm Cu | | | | | $\frac{L}{10}$ core | | | |
| 0-11.5': OVERBURDEN: tinguaitite and syenite in glacial till and talus. | | | | | | | 0 | | | | 5 | |
| 11.5'-24.8': MIXED TINGUAITE: weakly altered plt lenses are mixed with weakly to moderately sheared plt at a ratio of 1:1. The weakly altered plt consists of 30-40%, 3-14mm, subhedral to euhedral pinkish beige to light grey, pl phenocrysts, 1%, 1-5mm, prismatic, subhedral to euhedral white orthoclase phenocrysts in a medium grey groundmass. The weakly sheared tinguaitite is the direct equivalent of the plt, with only minor flattening and alignment of the pl phenocrysts. The moderately sheared plt exhibits brecciation of the orthoclase phenocrysts and extensive alteration and flattening of the pl phenocrysts, resulting in their destruction.. The foliation is at 30-40° to the core axis. Only minor pyrrhotite is present. Some cave occurs mixed with the core at 12 and 17'. Most open fractures are weakly coated with clay and limonite. The closed fractures are filled with white orthoclase. | H37217 | | 29 | | | | | | 20° 30° | 2-3' | 15 | |
| | H37218 | | 16 | | | | | | 30° 40° | 1-2' | 20 | |
| | H37219 | BKGD | 26 | | | | | | 10° 20° | 3-4' | 25 | |
| 24.8'-35.0': WEAKLY SERICITIZED PSEUDOLEUCITE TINGUAITE: a pervasive, weak, pale green sericite alteration with occasional patches of more intense sericitization has attacked plt consisting of 20-25%, 2-15mm, anhedral to subhedral, light grey-white pl phenocrysts, exhibiting pronounced light grey rims, 5-10% light grey-white subhedral orthoclase phenocrysts in a medium grey groundmass. Disseminated pyrite composes about 0.2% of the rock. The fractures differ from those higher in the hole by the presence of strong brown to yellow brown limonite stains. Some of the stronger shallow angle fractures are chloritized and have 1cm wide limonite flooded and/or sericitized alteration envelopes. | H37220 | | 14.5 | | | | | | 30° 40° | 3-4' | 30 | |
| 30.7'-31.0': a strong, 1-2mm, 20° fracture contains strong yellow-orange brown limonite and minor residual arsenopyrite and molybdenite. The fracture has an 8mm bleached clay alteration envelope. | H37221 | | 9 | | | | | | 50° 60° | 1/2' | 35 | |
| 35.6'-52.0': MIXED TINGUAITE: lenses and fragments of relatively unaltered plt with a modal distribution similar to the overlying altered plt are surrounded by sheared and weakly biotite altered tinguaitite, at a ratio of 1:1. The sheared tinguaitite has flattened the pl phenocrysts often causing them to behave plastically, enclosing fragments of orthoclase phenocryst and tinguaitite groundmass. The net effect of this destruction of the pl phenocrysts is to produce a lighter grey groundmass. There is a weak somewhat erratic foliation in the sheared tinguaitite at 50-70° to core axis. In places the sheared tinguaitite contains abundant brecciated orthoclase fragments. 2/3 of the fractures are open; they are usually coated with clay + weak limonite stains. The closed fractures are usually the shallow fractures and are filled with white orthoclase + black mafics. Minor pyrite is associated with mafic phenocrysts. | H37222 | 20/BKGD | 50 | | | | 100 | | 20° 30° | 1/2' | 40 | |
| | H37223 | | 40 | | | | | | 30° 40° | 1-2' | 45 | |
| | H37224 | BKGD | 33 | | | | | | 10° 20° | 1/2' | 50 | |
| 52.0'-61.8': MIXED TINGUAITE: differs from the above in that the plt to sheared tinguaitite ratio is now 1:4; biotite alteration is moderate to strong in the sheared tinguaitite, the pl phenocrysts are indistinct in parts of the plt, and the rock is weakly to moderately radioactive. | H37225 | 10/BKGD | 72 | | | | | | 10° 20° | 1/2' | 55 | |
| | H37226 | 20/BKGD | 72 | | | | | | 10° 20° | 1/2' | 60 | |
| 61.8'-87.8': MIXED TINGUAITE: has an even lower plt to sheared tinguaitite ratio - 1:6 - with the plt lenses ranging from 3-10cm wide. The sheared tinguaitite is moderate to strongly foliated and generally makes a 15-30° angle with the core axis although it can range up to 60°. This sheared tinguaitite is also moderately to strongly altered to biotite. The orthoclase phenocrysts are unaltered but are often brecciated. The foliation is best expressed by the mafics both the original mafic phenocrysts and the stretched out biotite altered pl phenocrysts. Disseminated sulphides are rare. | H37227 | | 37 | | | | | | 10° 30° | 1/2' | 65 | |
| | H37228 | BKGD | 3 | | | | | | 60° 70° | 1/5' | 70 | |
| | H37229 | | 3 | | | | | | 60° 70° | 1/5' | 75 | |

PROJECT 1 HOLE TH 14 LOCATION - CORE SIZE 60 STARTED 08/07/93 FINISHED 12/08/93 PAGE 2 OF 6
GROUP TRANSITION LENGTH 432' DIP 10 AZIMUTH 302 COLLAR ELEVATION 4935' DRILLED BY 1/100 LOGGED BY 1/100

149.4'-172.4': MIXED TINGUAITE: as above except that the foliation is at 20° to the core axis and the plt to sheared ratio is 1:1. Fractures are rare. Biotite alteration is moderate to strong in the sheared tinguaites.

DRILL HOLE LOG

PROJECT U-1 HOLE TH14 LOCATION

CORE SIZE 1E0

STARTED 05/01/59

FINISHED 10/02/92

PAGE 3 OF 6

CLAIM GROUP INDIVIDUAL

LENGTH 42.2'

DIP 1144

AZIMUTH 002.

COLLAR ELEVATION 4935'

DRILLED BY SAFARI

LOGGED BY JAL

[illegible]

| GEOLOGICAL DESCRIPTION | SAMPLE NUMBER | RADIO-ACTIVITY IN CPS BGS-ISL | GEOCHEMISTRY AND ASSAY | | | | % RECOV | GEOLOGY | STRUCTURE | | HOLE DEPTH (FEET) | MOUNT SOPRIS GAMMA PROBE LOG |
|--|---------------|-------------------------------|---|--------|--|--|---------|---------|------------|----------|-------------------|------------------------------|
| | | | (%U ₂ O ₈) ppm U | ppm Cu | | | | | to core | | | |
| 233.0'-239.5': foliation is subparallel to the core axis. | H37260 | | 3 | | | | | | | | 230 | |
| | H37261 | | 4.5 | | | | | | | | 235 | |
| | H37262 | | 6.5 | | | | | | | | 240 | |
| | H37263 | | 7 | | | | | | 30° to 90° | 1 1/3' | 245 | |
| | H37264 | | 7.5 | | | | | | | | 250 | |
| 250.5': a 1mm, 75° leucocratic syenite dykelet has a fold in it whose axis parallels the foliation at 50°. 250.6'-250.8': a 25°, 1mm fracture is filled with orthoclase and sericite and is surrounded by a 3mm secondary orthoclase alteration envelope. 252.4'-258.0': PSEUDOLEUCITE TINGUAITE: consists of 10-15% light grey, 2-12mm, anhedral, often cracked pseudoleucite phenocrysts, 1-2%, 1-5mm, white subhedral orthoclase phenocrysts in a medium to dark grey groundmass. The rock contains only a trace of finely disseminated sulphides. 256.8'-257.0': a 6mm, leucocratic syenite dykelet cuts the core axis at 20°. 258.0'-269.0': MIXED TINGUAITE: 2cm-1m bands or lenses of normal plt as above are surrounded by foliated and/or brecciated, sheared tinguaites. The sheared tinguaites are generally moderately altered to biotite. The foliation is at 30-40° to core axis. Sulphides are rare. All fractures contain white orthoclase; about 2/3 of the fractures are closed. | H37265 | | 7.5 | | | | | | | | 255 | |
| | H37266 | BKGD | 13.5 | | | | 100 | | | | 260 | |
| | H37267 | | 10.5 | | | | | | 20° to 35° | 1-2 1/2' | 265 | |
| | H37268 | | 6.5 | | | | | | 70° to 90° | 1/5' | 270 | |
| | H37269 | | 8.5 | | | | | | | | 275 | |
| 272.4'-273.0': a 25mm porphyritic syenite dykelet consisting 10% of light grey, 3-8mm orthoclase phenocrysts in a fine grained groundmass of 80% orthoclase and 10% interstitial mafics cuts the core axis at 18° which is parallel to the foliation. 276.0': a 7mm dyke similar to the 269.5-269.7' dyke cuts the core axis at 80°. These may be fine grained equivalents of the 272.4-280.0' dyke. 276.7'-277.8': a 20 cm porphyritic syenite dyke identical to the 272.4-273.0' dyke also cuts the core axis at 18°. 281.0'-283.4': another porphyritic syenite dyke. This one is 30cm wide and has a 20° upper contact and a 30° lower contact. The contacts of this dyke and those of the surrounding similar dykes parallel the foliation of the tinguaites. 286.8'-288.5': another 30cm porphyritic syenite dyke has a 20° upper contact and a 10° lower contact. | H37270 | | 10.5 | | | | | | | | 280 | |
| | H37271 | | 16.5 | | | | | | 20° to 35° | 1-2 1/2' | 285 | |
| | H37272 | | 11.5 | | | | | | 70° to 90° | 1/5' | 290 | |
| | H37273 | | 8.5 | | | | | | | | 295 | |
| | H37274 | | 8 | | | | | | | | 300 | |

PROJECT UUV HOLE 1214 LOCATION - CORE SIZE 22 STARTED 4/1/79 FINISHED 4/1/79 PAGE 5 OF 6
CLAIM GROUP 10112 1015 LENGTH 400' DIP 50' AZIMUTH 240' COLLAR ELEVATION 4935' DRILLED BY SAFON LOGGED BY LAVERO

| GEOLOGICAL DESCRIPTION | SAMPLE NUMBER | RADIO-ACTIVITY IN CPS BGS-ISL | GEOCHEMISTRY AND ASSAY | | | % RECOVER | GEOLOGY | STRUCTURE to core | HOLE DEPTH (FEET) | MOUNT SOPRIS GAMMA PROBE LOG |
|--|---------------|-------------------------------|--|--------|--|-----------|---------|----------------------|-------------------|---------------------------------|
| | | | 1% U ₂ O ₈ ppm U | ppm Cu | | | | | | |
| 303.8'-304.3': a 10", 18mm, brecciated fracture is filled with white orthoclase fragments of tinguaitite wall rock, 1% black mafic, 1% pyrite and a trace of chalcopyrite. | H37275 | | 6.5 | | | | | 20° to 35° 1-2 1/2' | 305 | |
| 305.5'-310.2': a swarm of narrow, 5mm-5cm, fine to medium grained, slightly porphyritic syenite dykelets comprised of 90% orthoclase and 10% mafics parallels the foliation in the sheared tinguaitite at 40° to the core axis. | H37276 | | 8.5 | | | | | 70° to 90° 1/5' | 310 | |
| 311.5'-323.5': BLEACHED (?) SHEARED TINGUAITE: light grey, moderate to strongly foliated, sheared tinguaitite which is chiefly distinguished from the above sheared tinguaitite by its lighter grey, bleached appearance. Accompanying the shearing is a moderate to strong biotite alteration which has resulted in numerous flattened pl phenocryst ghosts. Unsheared tinguaitite lenses are absent in this rock. Sulphides are still rare. | H37277 | | 16.5 | | | | | | 315 | |
| | H37278 | | 9.0 | | | | | 30° 1/5' | 320 | |
| 323.5'-334.8': SHEARED TINGUAITE: slightly less sheared with a medium grey groundmass. Biotite and clay altered pl phenocryst ghosts are common. Foliation is generally at 30-45° to core axis. | H37279 | | 28 | | | | | | 325 | |
| | H37280 | | 3.0 | | | | | 70° to 80° 1/10' | 330 | |
| 334.8'-338.5': BLEACHED (?) SHEARED TINGUAITE: as between 311.5'-323.5'. Biotite alteration of pl phenocrysts moderate to strong. Foliation at 40-45° to core axis. | H37281 | | 11.5 | | | | | | 335 | |
| 338.5': GRADATIONAL 40° CONTACT: rock goes from bleached sheared tinguaitite to sheared tinguaitite to pl tinguaitite in 10 cm. | | | | | | | | | 340 | |
| 338.5'-348.1': PSEUDOLEUCITE TINGUAITE: consisting of 5-10%, light grey, 2-12mm, anhedral pl phenocrysts and 1%, 1-5mm, white, subhedral orthoclase phenocrysts in medium grey, aphanitic groundmass. In places pl phenocrysts are slightly flattened at 40° to core axis. Very local patches of strong biotite alteration otherwise alteration minimal. Sulphides are rare. The fractures are generally filled with white orthoclase or blue feldspathoid. | H37282 | BKGD | 20.0 | | | 100 | | | 345 | |
| | H37283 | | 9.5 | | | | | 60° to 70° 1-2 1/3' | 350 | |
| 347.4'-367.2': MIXED TINGUAITE: 5-60cm bands and lenses of normal plt as described above are surrounded by sheared tinguaitite at a ratio of 1:1. The sheared tinguaitite is moderately to strongly foliated; brecciation is only locally significant. Moderate biotite and clay alteration of the pl phenocrysts in the sheared tinguaitite is common. The sheared tinguaitite groundmass is slightly lighter grey than the plt groundmass. Between 352' and 354' blue feldspathoids are common in the pl phenocrysts. Sulphides are rare. Most fractures are filled or coated with white orthoclase. | H37284 | | 9.5 | | | | | | 355 | |
| | H37285 | | 6.5 | | | | | 30° 1/2' | 360 | |
| | H37286 | | 7.0 | | | | | 70° to 90° 1-2 1/2' | 365 | |
| | H37287 | | 5.0 | | | | | | 370 | |
| 367.2'-389.8': ALTERED SHEARED TINGUAITE: a few lenses of plt occur in this interval however the plt to sheared tinguaitite ratio is <1:7. The most striking aspect of the interval is the abundance of intensely biotite and clay altered pl phenocrysts. In the plt lenses the pl phenocrysts are generally indistinct with a pale green tint suggesting sericitization. The sheared tinguaitite is weakly to moderately foliated and often has a significant breccia component. Near the top of the interval the foliation cuts the core axis at 30° but is gradually steeper until it hits 70° near the bottom of the interval. Similarly, there is a general decrease in the intensity of the foliation from top to bottom. Disseminated pyrite comprises 0.2% of the rock. | H37288 | | 6.5 | | | | | 20° to 30° 1/3' | 375 | |
| | H37289 | | 14.5 | | | | | 70° to 90° 1/10' | | |

PROJECT UVV HOLE TH14 LOCATION - CORE SIZE 33 STARTED 02/1/92 FINISHED 10/1/92 PAGE 6 OF 6
CLAIM GROUP TOMBSTONE LENGTH 432' DIP 50° AZIMUTH 090 COLLAR ELEVATION 4035' DRILLED BY W.D.H. LOGGED BY W.D.H.

[illegible]