

HARRIVEL'S TYPE 2

F. to M.G. ~~is~~ INTRUSIVE, USUALLY WITH SOME EPIDOTIZATION, FRACTURING, GRAIN SIZE VARIABLE, AND CONTAINING IN IT PODS & LENSES OF AN ALTERED, V.F.G., dk grn VOLCANIC. THE VOLCANIC IS NEARLY ALWAYS EPIDOTIZED TO SOME EXTENT. THE INTRUSIVES OF THIS TYPE QTZ POOR. SULPHIDES USUALLY IN MORE ALTERED SECTIONS OF VOLCANIC INCLUSIONS MOSTLY PYRITE BUT V. SMALL AMOUNT CPY SEEN BY JEC DOUGLAS.

## TYPE 1

SEEN ONLY ATOP MOUNTAIN SOUTH OF CAMP VALLEY DISTINGUISHABLE BY SILICEOUS APPEARANCE AND CONCHOIDAL FRACTURE WHERE WE LOOKED AT IT. FRESH SURFACE (WET) LT. GREEN, V.F. GRAINED, DENSE. THIS ROCK ALSO HAS UNDERGONE SOME EPIDOTIZATION. SOME ROCK HAD ROUND PATCHES OF <sup>incipient</sup> EPIDOTE IN AN OTHERWISE UNALTERED F.S. FELDSPAR PHENOCRYSTS WERE SEEN, BUT NOT EVERYWHERE. THERE IS A PYRITE-RICH BAND RUNNING THROUGH THIS ROCK TYPE NEAR (SW) OF CAMP. THIS TYPE APPEARS TO BE OF LIMITED EXTENT.

## TYPE 4

A FRESH LOOKING QUARTZ-FELDSPAR PORPHYRY, QUITE DISTINCT FROM OTHER ROCK TYPES, COMMONLY CONTAINING SOME DISSEMINATED PYRITE. OCCURRENCE OF THIS ROCK TYPE IS OVER A LARGE AREA AS (PROBABLY) A SERIES OF DYKES, BUT WE SAW NO OUTCROPS EXPOSED CLEARLY ENOUGH TO GET A DIKE TREND, DIP.

## TYPE 3

JEC DOUGLAS HAVE NOT (JULY 14) WORKED MUCH IN AREAS DESIGNATED TYPE 3 (C.G. GRANODIORITE). FROM THE LIMITED AMOUNT WE HAVE SEEN THE CONTACT WOULD APPEAR TO BE GRADITIONAL WITH

TYPE TWO ROCKS. IT IS (A) COARSER-GRAINED, (B) CONTAINS NO VOLCANICS. WE SAW NO QUARTZ IN ANY OUTCROP (DID SEE SOME IN INTRUSIVE BOULDERS) AND SO CANNOT AGREE WITH NAME OF ROCK. HOWEVER, HAVE EXAMINED ONLY A VERY SMALL PORTION OF THE TYPE 3 AREA ON MAP (WHILE FOLLOWING CLAIM LINES) AND SO CANNOT CONCLUDE ANYTHING YET POSITIVELY.

CONTACTS: WE SAW NONE EXPOSED SAVE IN ONE OUTCROP (DE-70-76) WHERE A DIKE (?) OF TYPE 4 IS IN CONTACT WITH THE ALTERED VOLCANICS INCLUDED WITH TYPE 2

THE CONTACT BETWEEN TYPE 1 & TYPE 2 SEEMS TO LIE ALONG THE 'CAMP' VALLEY FOR SOME DISTANCE, BEFORE CURVING OFF SSE. OUTCROP EXPOSURE OVER THIS AREA IS V. SPARSE, THOUGH LOOSE BOULDERS ABOUND ON MOUNTAIN SLOPES.

AS MENTIONED, CONTACT BETWEEN TYPE 2 & TYPE 3 APPEARS GRADITIONAL, BASED ON GRAIN SIZE & VOLCANIC INCLUSION CONTENT, AND COULD BE QUITE IRREGULAR. TO PRESENT, WE HAVE ASSUMED LAST YEAR'S CONTACT TO BE ESSENTIALLY CORRECT.

AS ONE GOES SOUTH, AWAY FROM THE 'NORTH' MOUNTAIN RIDGE (N. OF CAMP), THE PROPORTION OF ALTERED VOLCANICS BECOMES INCREASINGLY GREATER, ALTHOUGH THE VOLCANICS THEMSELVES REMAIN THE SAME ALTERED VARIETY FOUND NEAR THE CONTACT WITH TYPE 3 (AND DISTINCT FROM TYPE 1 VOLCANICS, AT LEAST FROM THOSE TYPE 1 OUTCROPS EXAMINED BY US)

FRACTURING, JOINTING - PRESENT TO SOME EXTENT EVERYWHERE. IN PLACES JOINTING VERY PRONOUNCED (ON THE MASSIVE ROCK OTC. TO NW OF CAMP) AND A COUPLE OF SMALL SHEAR ZONES NOTED IN TYPE 2 ROCK.

NO CLEAR EVIDENCE OF ANY FAULTING SEEN, HOWEVER, A COUPLE OF

LOOSE BOULDERS (IN CLAIM 16) WERE SEEN WITH SLICKENSIDED SURFACES.

SLIDES : SLIDES ARE EVIDENT IN THIS TERRAIN, SOME LARGE IN SIZE. IN PARTICULAR, JEC DOUGLAS FEEL THAT A LARGE L-ULAR MASS ON THE SLOPES OF NORTH MOUNTAIN, ~~BE~~ IN THE AREA OF LINES 92E-96E ON THE SOIL SAMPLE GRID, IS A LARGE SLIDE AREA. VISUALLY THIS IS QUITE STRIKING. THE SLOPE ABOVE THE FEATURE ARE CONED BACK, THE SLOPES THEMSELVES MUCH STEEPER ~~EXCEPT~~ THAN OTHERS NEARBY, AND SEVERAL SMALLER SLIDES (ONE QUITE RECENT) CAN BE SEEN ON THESE SLOPES. SOME 'OUTCROP' MAPPED ON THE UPHILL EDGE OF THE MAIN SLIDE LAST YEAR IS ; NOT IN SITU (AND TECHNICALLY NOT OUTCROP). OTHER SMALLER SLIDES WERE SEEN (NONE NEARLY AS LARGE. SEVERAL TYPE 1 'OUTCROPS' MAY NOT IN FACT, BE ANYTHING OTHER THAN MASSES OF ROCK & EARTH WHICH HAVE BROKEN FREE FURTHER UP THE SLOPE AND SLID DOWNHILL.

MINERALIZATION : NOTHING IN ADDITION TO LAST YEAR NOTED. THE MOST STRIKING CHUNKS OF GOSSAN CAME FROM THE TALUS SLOPE UP WHICH LINE 60E RUNS. SOME PYRITE, COPPER STAIN (c. ABIT OF CPY) FOUND IN JTC AT HEAD OF THIS SLOPE. OTHER STAINED OUTCROPS WERE SEEN TO THE NW OF 460E, BUT NOT EXAMINED.

PYRITE APPEARS TO BE A WIDESPREAD ACCESSORY IN THE TYPE 2 INTRUSIVES, AND ALSO OCCURS IN THE ALTERED VOLCANICS. MINERALIZATION OCCURS BOTH DISSEMINATED AND ALONG FRACTURES. NOWHERE DID WE SEE ANY 'MASSIVE' TYPE SULPHIDE MINERALIZATION

ALTERATION MINERALS : EPIDOTE IS THE MOST COMMONPLACE, BEING NEARLY UBIQUITOUS. IT COMMONLY FORMS 'VEINS' IN THE ROCK