1160 0006

Esmeralda County

PROPERTY NAME: Coaldale Prospect

OTHER NAMES: locality no. 181 (Garside, 1973); Larry claims

MINERAL COMMODITY(IES): U

TYPE OF DEPOSIT: Stockworks

ACCESSIBILITY:

OWNERSHIP: Paul Burkett (Goldfield); sold to Pacific Gold and Uranium, 10880 Wilshire Blvd., Suite 105, Los Angeles, CA

PRODUCTION: None.

HISTORY:

County: Esmeralda Item 18

Mining District: Gilbert? (Coaldale)

AMS Sheet: ~~Tonopah~~ GOLDFIELD

Quad Sheet: Rhyolite Ridge 15' C

Sec. 33, T 2N, R 37E

Coordinate (UTM):

North 4 2 0 4 2 5 0 m

East 0 4 2 3 9 7 5 m

Zone +11

DEVELOPMENT: 6 or more rotary drill holes drilled, probably in 1981. The drill holes were all drilled in the lowrelief area to the south of the main radioactive locality on the low hill.

ACTIVITY AT TIME OF EXAMINATION: None.

GEOLOGY: Anomalous radioactive and minor amounts of yellow 6-valent uranium minerals occur in association with dark gray silica (chalcedony)-filled veinlets in a rhyolitic welded tuff. The rhyolite welded tuff is in fault contact with Tertiary sedimentary rocks about 100m to the northeast. The fault separating these two Tertiary units is not known to be radioactive, and is somewhat sinuous, possibly due to east-west cross faults. Chalcedony and calcite in horizontal slickensides along one of these cross faults 200 m north of the main radioactive locality are anomalously radioactive (400cps, background= 100 cps for the rhyolite, 80cps for the sedimentary rocks). Thus, it is possible that mineralization is younger than the main north-south fault as well as the cross faults which appear to displace it.

The main radioactive area (radioactivity up to 4800 cps) is located in an area about 75m in diameter on the side of a small hill of welded tuff. Veinlets of dark gray chalcedony from 4mm to 2cm in width and up to several meters long cut the welded tuff in numerous directions. A major direction is N10-20W; also N 40-60E. Directions of veinlets of N80E and N50W are also noted. Most are near vertical. The highest radioactive readings are nearly always associated with these veinlets; however, yellow uranium minerals are absent or rare at many radioactive spots. When noted, the yellow uranium mineral occurs as partial fillings in holes once occupied by feldspars (which are generally altered to clay (smectite?) - in the tuff at this locality. Also, the yellow uranium mineral occurs as fracture coatings, and sometimes as a thin (1mm) selvage along the siliceous veinlets. There are specks of iron-oxide minerals (probably oxidized pyrite) disseminated in the tuff outwards from the siliceous veinlets. The amount of visible yellow uranium minerals can not account for the amount of radioactivity at most localities. The most obvious answer is that hypogene (4-valent?) uranium minerals are present as very fine

REMARKS disseminations in the siliceous veinlets. This should be checked with a micro-probe. Not all veinlets are strongly radioactive. The most radioactive may have black quartz phenocrysts (smoky quartz) in the tuff for up to 10cm away from the veinlet.

Many of the veinlets are obviously silica-cemented hydrothermal breccia zones; but some are mostly replacement features from a narrow fracture (quartz phenocrysts can still be seen in some chalcedonic veinlets. A very few hydrothermal breccia zones are still partly uncemented; the cavities are lined with very fine drusy quartz. Yellow uranium mineral is probably secondary. Siliceous veinlets pinch & swell (4mm - 2cm) and form an anastamosing network or stockwork. Hydrothermal breccias are not limited to the radioactive area, but are much more common there. Veinlets occur from a few centimeters to over 1m apart.

Sample 459 is select veinlet matter that is the most radioactive (for geochemical signature)

References: Garside, L.J.(1973) Radioactive mineral deposits of Nevada: Nevada Bureau of Mines and Geology Bull.#81

EXAMINER: L.J. Garside

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