THE PEDRO MOUNTAINS URANIUM PROSPECTS

The Pedro Mountains are in parts of Ts. 27 and 28 N., Rs. 83 and 84 W. The claims examined are in Secs. 13, 14, 23, 24, T. 27 N., R. 84 W. Access to the claims is gained from the Sinclair-Alcova road on a west fork about two miles north of the junction with the Hanna-Alcova road. Three miles west on this road is a north fork which is followed one-and-one-half miles to the foot of the mountains.

The prospect visited is on claim No. 1 of the Terry Dean group at this point; the locations of the other two prospects visited is not known accurately even as to section. The prospect visited on claim No. 20 of the Terry Dean group is roughly a half mile northeast of claim No. 1. The prospects visited at claims No. 1 and 2 of the Little Man group are roughly a mile northwest of claim No. 1 of Terry Dean group.

OWNERSHIP

The prospects visited are on three groups of claims totaling 56 claims and named Terry Dean group, Terry Wayne group, and the Little Man group. These groups of claims are held by the following: Alec Pascoe, Eric Lipponen, John Rimmer, Tom Rimmer, Mark Lee, Dick Lee, Dave Freeman, Frank Reed, Jimmy Klanadoes, John P. Bedford. These three groups of claims are in parts of Secs. 13, 14, 23, 24, T. 27 N., R. 84 W.

These prospects were examined during parts of the 26th of April and the 9th of June, 1954.

GENERAL GEOLOGY

The claims are located in a pre-Cambrian terrane composed mostly of well foliated coarse grained granites or granodiorites. In general the rocks are light tan in color, and they have 20% of less dark minerals. They are somewhat porphyritic in places, 1" laths of plagioclase are set in a ground mass of 1/4" quartz, feldspar and dark minerals. The foliation is controlled by bands where dark minerals are more heavily concentrated. The direction of the foliation varies from N 30 E to N-S and the dip varies from 20° to 60° east.

Large envelope shaped inclusions of gneisses of variable composition are present. The variable composition is assumed because of the variation in color of the rocks from tan to black. The foliation in the inclusions observed parallels the foliation in the granite.

Several large diabase dikes were observed in the Pedro Mountains.

One present in the vicinity of the claims examined is exposed for over a mile and is in excess of 100' wide. This dike strikes N 60 E and is vertical.

DESCRIPTION OF THE PROSPECTS

The prospect on claim No. 1 of the Terry Dean group is shallow excavation in a hillside about 25' long, 5' deep, and 51 into the hillside.

The excavation has been made on an envelope shaped body of amphibolite.

This body is about 10' thick and several hundred feet long. It strikes approximately N-S and dips about 20° E. The rock appears to pinch and swell.

Dikelets of quartz and feldspar crosscut the foliation and in some cases parallel it. At the southern end of the pit, magnetite granite borders the amphibolite.

The highest radioactivity observed was .2 mr/hr and that was intermittent.

The association of the radioactivity was not discovered.

The prospects on claim No. 20 of the Terry Dean group are two slight excavations, one a quartz vein, the other on a quartz amphibole rock.

The rocks on this claim are partly obscured by tallus, but a body of amphibolite outcrops where the rocks are exposed.

One of the excavations exposes an 8" quartz veinlet bounded by foliated amphibolite. The veinlet strikes N 80 E. Radioactivity as high as .6 mr/hr was detected on this veinlet.

The other excavation at claim No. 20 in the Terry Dean group has been made on quartz-amphibolite rock. Radioactivity as high as .3 mr/hr was detected at this place. The boundaries of this rock are obscured by tallus but it appears to be an elongate vein or zone and may be an extention of a N 5 E striking pegmatite dike which was observed cutting exposed amphibolite a short distance away. Claims Nos. 1 and 2 of the Little Man group were examined without a radiation detector. A sample reportedly collected from a prospect in one of these claims has 2 mr/hr radioactivity. This sample appears to be nearly all quartz; it contains a very small amount of unidentified black mineral and has a yellow coating.

Claims Nos. 1 and 2 were formerly graphite claims. A tunnel is present on No. 1 and shistose, siliceous graphite is present on the dump from this tunnel. A narrow zone of foliated dark rock is present at the mouth of the tunnel. This zone strikes roughly N-S and dips about 60° E. A prospect pit on claim No. 2 of the Little Man group contains a zone

of shistose graphite which strikes N 15 W and dips 70° E. The highly radioactive sample reportedly came from a prospect lying between the old prospect pit and the tunnel entrance.

