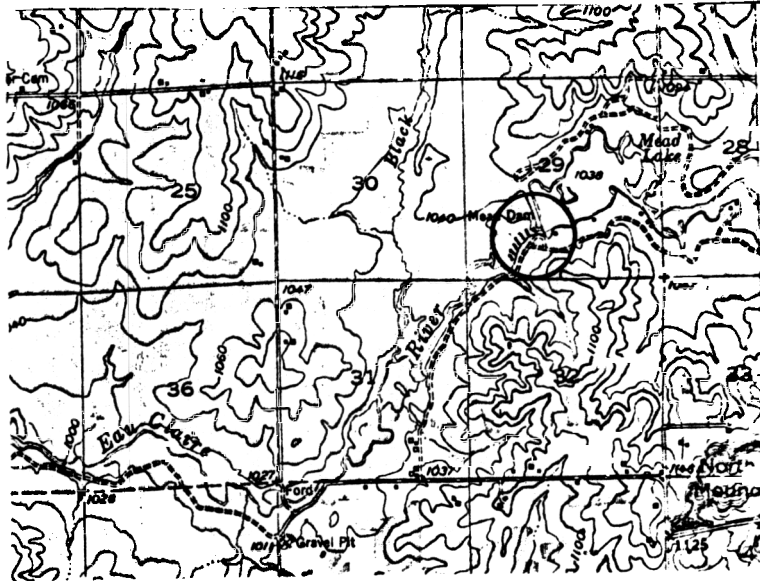


TITLE: Felsic Phyllonite, Granite Pegmatite, and Metaconglomerate

LOCATION: Mead Dam, SE 1/4 Sec. 29, T.27N, R.3W



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SUMMARY OF FEATURES:

White, fine-grained, muscovite-bearing phyllonite probably derived cataclastically from a felsic volcanic or intrusive rock is exposed on the south side of the spillway and for several hundred meters downstream. Cataclastic foliation (N70°E, 85°N) is produced by lenticulation of quartz and K-feldspar. Muscovite is distributed along cataclastic foliation, which is folded about axes plunging N70°E at 77°.

Large boulders in center-stream below the dam are coarse, sheared granite pegmatite. Large blocks of this same rock were used as rip rap along the south spillway of the dam. Distribution of these boulders indicates that the pegmatite is a sill-like intrusion roughly parallel to the cataclastic foliation in the phyllonite.

Probably the most interesting point at this locality is the occurrence in the rip rap used for dam spillway construction, of 1-2 meter, angular boulders of very fresh stretched-pebble metaconglomerate. The pebbles are largely quartz. Their shape is subangular to subrounded, and their size is between 0.5-5.5 cm. Occasional mafic (volcanic?) clasts also occur in the metaconglomerate. The strongly foliated matrix around the clasts is micaceous, and appears to consist mainly of muscovite, although biotite may also be present.

Although this rock has not been seen yet in outcrop in this area, the large size and freshness of the boulders, and the occurrence nearby of other siliceous clastic metasediments suggest a local derivation of the boulders.