3950 0125

5/26/78 327

ITEM 141

141

Distinctive field characteristics of Paleozoic and Pre-Cambrian sedimentary rocks in western Utah -- as explained by Hal Morris and recorded by Joe Briskey

Sheep Rock Series (pЄ)

Lower Sheep Rock -- underlies Dutch Pk. tillite. Basal ~2700+ ft are dominated by black banded phyllite; overlain by ~1300 ft tan quartzite, conglomerate, and slate; overlain by 20-60 ft of diabase; overlain by ~70 ft of quartzite and argillite.

Dutch Peak Tillite -- medium dark green to black phyllite containing boulder to pebble size clasts of exotic rock types, including granite and quartzite. Quartzite lenses common in central parts of unit. Diabase (basalt flows?), i.e. greenstone occurs near the base.

Upper Sheep Rock -- 2000 to 3000 feet of tan and light green argillite ideally overlie the Dutch Pk.; followed by 0-2000 ft of brown to pure white quartzite and variable amounts of olive drab shale that increases upward toward the overlying Inkom Fm.

Inkom Fm (pЄ) -- interbedded brightly colored maroon and green shale and argillite, that may repeat in varying combinations and thickness up through the section. It may rarely be represented only by olive drab shale typical of the Upper Sheep Rock.

Mutual Fm (pЄ) -- coarse sand, grit, and pebble size quartz conglomerate that may have white finer grained portions. Usually with red to maroon hematite stained sand to grit matrix. May be a flaggy

siltstone lacking pebbles locally. Tends to be somewhat more feldspathic than Tintic quartzite, and commonly has siliceous silty interbeds.

Tintic (Prospect Mt) Quartzite (C) -- white to yellowish and light orangish brown fine to medium grained clean quartzite which may contain olive drab shale-argillite. Feldspar and pebbles present locally, but these features are atypical.

Pioche Horizon (C) -- olive drab shale and maroon fine to medium grained quartzite. Cabin shale and Busby quartzite respectively upward in the section. May be prominant cliff former. Also called Ophir to east.

Shadscale Formation (C) -- medium gray to bluish finely crystalline limestones with interbedded o.d. shale and characteristic mud chips. Algal clumps (discs) of "Girvanella" are characteristic. Minor trilobites. Graptolites? Teutonic (East Tintic Mts) is a time equivalent and is characterized by its mottled (silty interbeds) powder blue color. "Creamy text."

Ora Fm (C) lower portion is dolomite, but upper dark gray is (some light gray interbeds) limestone; medium to thin bedded with discontinuous chert lenses, beds, and nodules. Fine laminar weathering common.

Notch Peak Fm (C) -- lower portion is limestone, but rest is medium gray, medium to thick bedded dolomatized limestone.

Pogonip Group (O) -- muddy bluish limestone with pebbles derived internally (intraformational conglomerate) - especially the Juab Fm. Smashed chicken wire texture of contained mud chips is also distinctive.

Kanosh Shale (O) -- olive-drab shale, commonly with abundant graptolites and lingulella brachiopods; i.e.

Some maroon and greenish areas.

Eureka - Swan Peak Quartzite (O) very white to white to pale pinkish, clean, fine-grained quartzite. Crystal Peak dolomite may separate these two units (e.g. Fish Springs Range).

Fish Haven Dolomite (O) -- characteristic "elephant skin" texture due to criss-crossing calcite filled fractures. Usually dark gray to black, but may be bleached light gray locally.

Gardison Limestone (LM) -- (Escalante age) -- gray-blue massive limestone with abundant fossil trash including small brachiopods, horn corals, "tree" corals, & crinoids. Unit is medium bedded and slightly cherty in the upper 100 ft. Especially abundant miscellaneous fossil fauna.

Great Blue Limestone (UM) -- large thickness (~2500 ft) of blue limestone with interbeds of black shale and dark brown medium grained quartzite. Mississippian fauna like the Gardison. Middle member of Great Blue is Chainman Shale - several hundred to a thousand feet of black fissil shale containing an interbedded quartzite rib.