## State Department of Geology and Mineral Industries

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## Report on Sourgrass-Agness Traverse

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At junction of trails SW1 sec 35, T 34 S, R 9 W is a phyllitic metavolcanic rock. From the junction plus 250 feet is the Dothan contact. The Dothan here is fractured, quartz-veined graywacke which is fairly coarse and contains shale and metavolcanic fragments up to 4 mm in size.

When leaving Galice quadrangle we noted that the location of the trail on the forest service map did not agree with either the Galice quadrangle map or the section markers posted on the trail.

A sample of unusual appearing graywacke (?), numbered 1-6-26, was taken near the center of the SE2 of sec 34, T 34 S, R 9 W. It has a purplish color and a mottled weathered surface. Normal graywacke is on either side and appears to be gradational with it.

On ridge in the NW/SE1 sec 27, T 34 S, R 9 W is interbedded graywacke and shale (platy) striking N 50° E and dipping 25° to the southeast.

At the benchmark in the NW $\frac{1}{2}$  of sec 27 (4061) the same type of sediments strike N 80° E and dip 50° to the south (excellent).

Three quarters of a mile up the trail there is an outcropping off contorted slaty shale which is about 200 feet wide. It strikes N 70° E and dips 70° S (good). This outcrop is a steep barren talus slope which the trail crosses near the center of section 22, T 34 S, R 9 W.

At the junction of trail with Windy Creek Way on section line between sections 21 and 16 we came through shale with pencil and platy structure. Sandstone (graywacke) is still the most predominant rock.

Plus 100 yards from here on the west slope of a ridge, the trail crosses an interbed of shale which we worked on for some time in search of fossils. A few pieces from this were taken in S# 2-6-26 which contains possible fossil fragments. This location is SE/NW sec 21, T 34 S, R 9 W.

About 250 yards on is a camp sight with a sign pointing to water at (unknown because of bullet holes) yards distance. Dothan shale here with N 45 E strike and 65° SE dip (poor).

Plus 75 yards is a section marker where trail crosses between sections 21 and 20 \( \frac{1}{4} \) mile south of northwest corner of section 21.

The next section marker located on the trail is between sections 17 and 20, T 34 S, R 9 W; 300 yards west to corner. The rock is still Dothan, predominantly quartz veined and sheared graywacke with occasional shale. The attitude is east and west strike and 60° dip to the south (poor).

We crossed the section line between 17 and 18, junction of trails to Lazy Creek Way, and came to Bark Shanty Camp (?) 250 yards beyond the junction. At this point massive Dothan gray-wacke cliffs striking N 40 E, and dipping 70° to the NW (good) have rod like cavities about one and ginches in largest diameter with eliptical cross section. These cavities look like they may be a belemnite or baculites mold.

Leaving Josephine County and entering Curry County we are still in typical Dothan with a N 30° E strike and 60° SE dip 12). (fair). Plus 250 yards is the junction of trail which leads up to Bear Camp L. O. where we stay for the night. The point on which the lookout is located is all in Dothan ss. and sh. There are steep cliffs on the east and west sides of the ridge nose. The graywacke has quartz veining and is highly sheared. The shale is contorted and has some pencil structure. There are several conflicting attitudes and some evidence of faulting. The predominant attitude is N-S strike and about 45° dip to the east.

About 2 miles west on the trail we pick up the same attitude as recorded at the lookout (good). One mile farther the Dothan seems more highly sheared and has increased quartz veining. At this point there is a sign, eleven mile marker (meaning eleven miles to Rogue River trail).

To ten mile marker plus 250 yards is a very narrow ridge which trends about N 80° E and seems to parallel the strike of the Dothan.

Plus about 500 yards and in the north part of section 10, T 34 S, R 10 W is a sharp ridge capped by a pebble conglomerate with a sandy matrix and interbedded coarse sandstone with layers of pebbles. The pebbles are chert, graywacke, metavolcanics and shale. This conglomerate is fairly flat lying with a strike of N 30 E and a dip of 15 NW (good). The nose of the ridge stands up sharply and the rock appears much like that of Table Mt. in the Dutchman Butte quad. The conglomerate was crossed at 4190 A., and seems to overly the Dothan unconformably. It is definitely not Dothan and probably Eocene.

About 300 yards on down the ridge there is a fairly hard,

well indurated, coarse, sandstone a good deal like Dothan but not sheared or quartz-veined.

After crossing an area of fairly level ground and losing altitude to a point about 400 yards down the trail and 3900 A., we were definitely back in Dothan. The junction of trail to Stair Creek Way is about 150 yards on.

We were definitely in Dothan to Bobs Garden Lookout which has been destroyed by wind. The aneroid read 4505 feet at the lookout.

Back to junction of trails and on 300 yards to NW side of the ridge is quartz-veined graywacke with N 40 W strike and 35° dip to the NE (good).

Dothan ends. On ridge top 3750 A. approximately in the SW1 of the third section down in range 102 west, and one mile east of the junction of Rogue River and Green Knob Way Trails are boulders probably weathered from conglomerate. They are mostly graywacke and chert and up to 8 inches in diameter. About 100 yards on see a dornick of conglomerate about 2 feet in diameter which is mostly chert, has shearing through the pebbles and looks somewhat like Dothan conglomerate. Seventy-five yards on is an outcropping similar to that seen capping the east end of Bobs Garden ridge, a pebble conglomerate with sandy matrix.

We come to the 6 mile marker in about 100 yards and are in the conglomerate to a point about 1 mile before reaching the junction of Rogue River and Green Knob Way trails, at which time we come to shale which looks like Eccene and contains badly weathered small fossils.

Fifty yards beyond the trail junction the sediments are coarser, grading into a fine grained sandstone on a steep climb up to a ridge top with fairly flat lying pebble conglomerate and coarse sandstone.

We make camp in the SW/NEt of section 23, T 34 S, R 11 W. This is about one mile beyond the junction of the trails. The rock is a massive bluish gray coarse grained sandstone with layers of pebble conglomerate.

On ridge top (on trail) we take S# 1-6-28, with fair leaf fossils and a poorly preserved shell, from a coarse sandstone which has abundant shale fragments and looks like a graywacke. It is fairly flat lying. The sample location is: NEI sec 23, T 34 S, R 11 W. One third of a mile farther the same type of rock is well exposed at edge of a clearing in a saddle 3750 A. It strikes N 80° E and dips 10° to the south (excellent). This also contains leaf fossils and impressions suggesting organic (flora) material. I took a picture with Ron sitting on the exposure.

Plus & mile is a large area of bare ridge side where about 300 feet of sediments are exposed. It is apparently the same rock described above. The coarse sandstone is an olive drab color and there are layers of conglomerate. There are a few suggestions of fossils (flora) in the sandstone. Thunder, lightning and rain drove us down off the ridge. This exposure is located on the trail about & of a mile east of Green Knob. The attitude is east and west with an 8 dip to the south (good).

The same formation persists. We go about 1½ miles to Blue Buck Camp. The trail passed under Green Knob on the north side. Ameroid reads 3450 feet at Blue Buck Camp.

About 300 yards down the trail which curves under the ridge is a defile trending N 80° E in which there is a frog pond. This defile is apparently parallel to the strike of bedding. The rock is a pebble conglomerate with a sandy matrix. The pebbles are chert, graywacke, and minor shale.

Down the trail about 1 mile come through sandstone and shale (weathering is deep) and some conglomerate. At this point in the NE1 of section 32, T 34 S, R 11 W, 2380 A, there is a clearing. From a shale talus in the clearing we collect S# 2-6-28 which contains "bugs" and dwarfed fauna.--Noted turritella, a natica type gastrapod, and nodosaria (?). They are poorly preserved but probably indicate the formation is Eccene age.

From the clearing we apparently took the wrong trail and headed southeast down toward Shasta Costa Creek. We were in flat lying conglomerate which forms bluffs to 750 A. where a narrow band of serpentine is apparently overlain by the conglomerate in the SE/NW½ sec 35, T 34 S, R 11 W. The serpentine is exposed for about 50 yards, then come to a metavolcanic rock and took S# 3-6-28 in the SE½ sec 35, T 34 S, R 11 W.

To Shasta Costa Creek at log cabin in metavolcanics.

We follow down the Creek for  $\frac{1}{2}$  mile and find the section corner stake between sections 34 and 35 of T 34 S, R 11 W. and 2 and 3 of T 35 S, R 11 W. This is a central land office stake.

About ½ mile down the creek we climb the north bank to a very poor trail and are in metavolcanics for about ½ mile, then the serpentine body mapped at east edge of Port Orford quadrangle.

LA.

