

COAL

702 Woodlark Building
Portland, Oregon

CAMAS VALLEY and FLOURNOY VALLEY (west of Roseburg)

Coal is reported in both Camas Valley and Flourney Valley which lie in the southeast quarter of the Sitkum quadrangle, principally in T. 27, 28, & 29 S., R. 7 & 8 W. The Camas Valley occurrence was called to our attention by John Walsh, of Marshfield, Oregon. The Flourney Valley coal was called to our attention by Harry Finninger, Secretary of the Roseburg Chamber of Commerce, regarding drilling. The coal mine known as the Callahan Mine was found by the writer.

Field Work

Field work was done during the week of Nov. 15th to 20th, 1942, during one of the most severe storms southern Oregon has experienced in years. Roads were traversed, trying to locate someone who could take us to coal outcrops, or who had pertinent data regarding coal. Some areal geology was done in an attempt to identify geologic structure which might aid in interpreting the feasibility of a coal field.

Topography

The area is characterized by ridges that have a general northeast-southwest trend, and wide valleys. Topographic age might be classed as early mature. Relief is a maximum of 2000 feet, and will average around 1000 feet.

The ridge which crosses the Coos Bay Highway at Camas Mt. State Park separates the Middle Fork of the Coquille River drainage from that of the South Fork of the Umpqua River drainage.

The Upper Middle Fork of the Coquille River and Lookingglass creek are the principal streams.

Geology

General Statement: The principal formation is the Eocene Umpqua formation which consists of massively bedded sandstones, shales, and conglomerate. At least in part, it must be marine as large oyster shells (of the *Ostrea* type?) are reported from sec. 11, T. 27 S., R. 7 W., north of the Callahan coal mine. As a rule the conglomerate has pebbles up to an inch in diameter and metamorphic rocks commonly are represented. A heavy, well indurated conglomerate is found just north of the Coos Bay Highway. The shale usually consists of alternating bands six inches wide of hard shale with finely laminated shale.

Structure: Time did not permit any extensive, or conclusive work on structure. Out crops are poor, as the overburden is heavy and slumping is characteristic. At the northeast, the general dip is northeast to northwest. In the Camas Valley it is northwest. Along the Coos Bay Highway over Camas Mountain it is southerly. This might suggest that the area separating the drainage is a broad, flat anticline.

As a rule, the shales are more common in the valleys, and the massive sandstones in the hills. This suggests that the hills and valleys may have been determined by differential erosion.

Relation to Older Formations: Diller's Myrtle formation is exposed in the extreme southeast corner of the quadrangle, generally south of the Coos Bay Highway. Northwest of the Myrtle is a south dipping heavy conglomerate which is bounded on the northeast by a

fault (?). Similar rock is classed by Diller as Umpqua, but this may be open to question.

The Umpqua (?) conglomerate contact with the Myrtle is approximately between the Coos Bay highway and the Olalla road in northwest T. 29 S., R. 7 W., and then must turn sharply southward thru the east center of T. 29 S., R. 8 W.

Coal in Camas Valley

John Walsh reported that he found considerable coal in Camas Valley. An attempt was made to check this observation without a great deal of success. I was unable to get on his trail as everyone I talked with, both in Camas Valley and in Flournoy Valley, had not ever heard of him.

It was not feasible to get far off gravelled roads, as the inch of rain a day had made dirt roads impassible. Coupled with a high wind that brought down timber across the roads and threatened to trap the Field Geologist (whose equipment had been loaned to Nixon) it was exceedingly difficult to get around.

Albert H. Krogel, Camas Valley mentioned coal in the east center of sec. 22, T. 29 S., R. 8 W. He reports the vein as being 3 feet thick and dips westerly about 15°. He says that the coal slacks readily. He hasn't been to the locality for 15 years. The road into that area is not passable at this time and the trip of several miles seemed unjustifiable. He says he will prospect the vein as soon as feasible, send us samples, and take us to the property.

Coal is reported in Holmes Creek in southeast T. 29 S., R. 9 W., "about a mile from the mouth". The coal vein is about six inches thick. This outcrop was not visited.

There is a report of an old shaft "somewhere north of the Camas Valley postoffice along the creek". Supposedly it was worked during the early days and the coal was shipped to Marshfield for blacksmithing purposes. Other than the rumor, I could get no more accurate data from anyone.

It was reported that Tom Taylor had a coal mine "somewhere south of Camas Valley postoffice". A small tunnel opened the coal and he had to crawl around inside. People were concerned that he might be killed. Eventually he died a natural death. No one seemed to know the general location of the coal.

I contacted a number of people, some of them "old timers" for information about coal, but these reports were as far as I could get. Walsh is reported to have spent several weeks in the area. With such an investigation it might be possible to scare up more data. However, I had less than a week to do anything, and was further handicapped by bad weather.

Flournoy Valley

Harry Pinninger, Secy. Roseburg C. of C., had reported some drill logs in the area west of Roseburg, as showing coal. Most of the time in the field was spent in running down this information and on investigating the Callahan Coal Mine.

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Location: West of Roseburg and S.W. of Melrose in T. 27 S.,
R. 7 W.

Drill holes: J. W. Perkins (now manager of Roseburg liquor store) caused the area to be drilled about 1910. Three holes were put down. Coal was struck in all three. Veins measured from a few inches to 4 feet. Best showings about 350 ft. below the surface. One vein had 4' of coal, 2' of shale, and 2' of coal reported.

Quality: Perkins reports B. T. U.'s in excess of 13,000 also that it had good coking qualities. He also said the coal had considerable sulfur.

Gas: A strong flow of gas was struck in #1 hole. A 2" pipe was used and the gas would shoot many feet into the air. No noticeable decrease in pressure even when well was uncapped. Hole was abandoned and capped because it was too dangerous to work around it.

Location of holes: As nearly as Perkins could remember, #1 is in NE $\frac{1}{4}$ sec. 32; #2 in center sec. 15; #3 at south center sec. 3, all in T. 27 S., R. 7 W.

History: Mr. J. E. McClintock, Roseburg insurance man wrote for the well logs and received them on January 16, 1941, at a cost of \$5. He wants the five bucks for the logs. I didn't buy them. The drilling company is now known as:

Diamond Drill Contracting Co.,

S. 18 Stone St., P.O. Box 947

Spokane, Washington

W. A. Stone, Manager.

ADDENDA #1

Mr. J. W. Perkins, who then lived in Medford became associated with Col. Mundy of that city. They leased the Callahan

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coal mine area and raised money to develop it. Failure to drive their adit, which opened on the Emery place, into Callahan ground lost them their lease. Then they started oil activity and caused the three holes mentioned to be drilled. Gas was struck in No. 1, coal and a sulfur spring in No. 2, and a small amount of coal in No. 3.

Perkins says the Diamond Drill Co. has all the records, including analyses of coal and gas. Later Perkins went broke through acquiring oil leases, and destroyed all his records, including the drill cores.

Perkins claims the fact that coal at the Callahan mine had a westerly dip led them to believe that they could find it in the Flournoy Valley where it "would have more weight on it and therefore be better coal." This story does not check with the one previously mentioned as related by Frank Dunn.

Apparently the oil deal blew up and Perkins tried to salvage something out of the coal. On the basis of the drill records he interested:

Charles Hyskell,
Oswego, Oregon

Phone Oswego 4587

who lives at the address indicated. Hyskell was then editor of the Portland Evening Telegram. The two of them went East, - Hyskell to raise money in New York for development. He was successful until the Harriman interests heard of it and they killed the deal. Local money couldn't be raised to finance the deal so it fell through.

Please note that in all this story, which Perkins firmly believes, there is little or no evidence. I saw the drill logs (in McClintock's possession five dollars please) and they record shale,

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sandstone, conglomerate, coal, bone, etc. There are no drill cores so there is no way to check the quality of the coal. The only way I can see to duplicate these data is to drill at the former locations.

Perhaps a 4' vein plus 2' of shale plus 2' of coal might be commercial, but overburden and hoisting of 350 feet is something else. I fear that all this makes a nice story for our records but I fail to see what we can do about it.

Quoting from a letter written by Harry Pinninger to David Eccles on Sept. 14, 1942, he mentions only 2 holes; #1 which struck gas at 615 feet; #2 "was drilled to 1109' and a flowing sulfur spring opened up. At a depth of 290' a $\frac{1}{2}$ ft. coal vein, and at 346', 2 ft. of coal; at 352', 4 ft. of coal, and at 377', 2 ft. of coal."

Informants: Harry Pinninger, Sec'y Roseburg Chamber of Commerce

J. E. McClintock

J. W. Perkins, Mgr. Roseburg liquor store.

Frank Dunn, Melrose, Oregon

Report by: RCT 11/17/42

Exhibit: Sketch map of the area.

COMMENTS ON THE GEOLOGIC MAPS OF THE CAMAS VALLEY AND ROSEBURG, OREGON, QUADRANGLES

Introduction

The work on these two 15-minute quadrangles was done during portions of August and September 1956 as a contribution to the State Geologic Map project. The primary purpose in mapping this area was to outline the Tertiary - pre-Tertiary contact, the nature of the contact, and to determine, if possible, the identity of the pre-Tertiary units.

My investigation was of a reconnaissance nature and mostly consisted of examining road cuts and outcrops exposed along creeks and streams. Most of the time was spent examining and checking the Tertiary - pre-Tertiary contact, especially in the Camas Valley quadrangle on which there is no published information. The contacts between the various units are shown as solid lines on the maps, but this was done only for convenience and clarity. The faults are shown as slightly wider, dashed lines. On the Roseburg quadrangle most of the contacts between the various units were taken directly from Diller's map, but were checked wherever possible as time allowed. You will note that I could find little to correct as far as the location of Diller's contacts is concerned.

Previous work

The only previous published work on this area was that done by J. S. Diller (1898) on the old Roseburg 30-minute quadrangle. In it, Diller grouped all of the pre-Tertiary sedimentary rocks into the "Myrtle formation" of probable Cretaceous age. Later, when Diller mapped the Riddle quadrangle,

which borders the south edge of the Roseburg 30-minute quadrangle, he subdivided his old "Myrtle formation" into two Jurassic units (Galice and Dothan formations) and two Cretaceous units (Knoxville and Horsetown formations).

Dole and Inlay recently studied Diller's Cretaceous Knoxville and Horsetown units, and, on the basis of lithology and fossil content, have proposed two new formational names: the Riddle formation of late Jurassic age (middle-upper Portlandian) and the Days Creek formation of early Cretaceous age (middle Valanginian - middle Hauterivian). The type localities for these formations are along the South Umpqua just upstream from Days Creek in the Days Creek quadrangle of the old Riddle 30-minute quadrangle.

Stratigraphy

The oldest rocks in the area are the serpentine and "metagabbro" (Diller) occurring as a northeast trending belt in the southeast corner of the Roseburg quadrangle. "Windows" of metagabbro" are also found in the central portion of the Roseburg quadrangle and scattered through the southeast quarter of the Camas Valley quadrangle. Lenticular bodies of amphibole schist accompany the "metagabbro" but because of minor extent were not mapped separately. Where I have examined it in this area, the "metagabbro" is actually a fine-grained siliceous greenish metavolcanic probably basaltic or andesitic in composition, and does not have the coarse-grained texture typical of what is commonly termed a "gabbro". Diller later apparently changed his mind on the nature of this unit as it is indicated as "greenstone" on the adjoining Riddle quadrangle. Later work by Wells has shown that most of "greenstones" can be correlated with the Rogue formation that separates the Galice and Dothan formations. However, Dole, who has mapped the Dutchman Butte quadrangle, believes that the "greenstones" associated with the Dothan in the northeast corner of the Dutchman Butte

quadrangle, northwest corner of the Canyonville quadrangle, and all of that occurring in the Camas Valley and Roseburg quadrangles is older than the Rogue formation and lies at the base of the Dothan formation.

The general lithology of the large belt of "Myrtle formation" that passes through the central portion of the Roseburg quadrangle and extends westward for a short distance into the Camas Valley quadrangle indicates that it is all part of the upper Jurassic (Callovian) Dothan formation. The rocks are mostly highly sheared and intensely folded fine to coarse grained graywackes with minor shale and pebbly conglomerate. The upper Jurassic (upper Oxfordian - lower Kimmeridgian) Galice formation which is younger than both the Dothan formation and the Rogue volcanics apparently does not crop out in either the Camas Valley or Roseburg quadrangles.

No lithologies characteristic of either the Riddle or Days Creek formations were found in these sediments. The only definite outcrops of the Riddle and Days Creek formations occur in the southeast corner of the Roseburg quadrangle in the Myrtle Creek valley and the adjacent South Umpqua valley. The general structure there is synclinal with Days Creek siltstone and shales occupying the center of the syncline and Riddle conglomerate and graywacke exposed on the flanks.

You will note that I have located on the Roseburg quadrangle some late Jurassic (Portlandian) and early Cretaceous (Valanginian-Hauterivian) fossil localities that lie within the area of the Dothan formation. These localities were originally found by Diller and his assistants during the time he was mapping in this area. Some time was spent in trying to find these localities but without success. With one or two exceptions no Mesozoic fossils have been reported from the adjacent Camas Valley quadrangle. The consensus is that most of these occurrences are: (1) remnants of younger sediments preserved in

downfolded or faulted zones within the older series, and (2) float in stream beds derived from Days Creek and Riddle deposits to the south. The occurrence of both Aucella piochii and A. crassicollis localities on the ridges in the southwestern portion of the Roseburg quadrangle shows that there is some Riddle formation and Days Creek formation present in that area. The "chopped up" nature of the rocks in that vicinity makes it impossible to draw any definite contact (see map). A. piochii have also been reported in or near the massive sandstones I have called "Umpqua" in the NW $\frac{1}{4}$ sec. 4, T. 29 S., R. 7 W., Camas Valley quadrangle, but may actually have come from the pre-Tertiary graywacke also present in that area. Inlay reports a Valanginian locality originally collected by Diller on "Olalla Creek just below Dickinsons Rocks." "Dickinsons Rocks", now called Dickerson Rocks, is the hill of Eocene Umpqua conglomerate in the SWSE sec. 16, T. 29 S., R. 7 W., Camas Valley quadrangle. The Tertiary - pre-Tertiary contact crosses Olalla Creek approximately 1 mile downstream from here. The pre-Tertiary along Olalla Creek is composed of fine to coarse grained graywacke sandstone and pebble conglomerate. One outcrop in NWSE sec. 8, T. 29 S., R. 7 W. is a fine-grained, well indurated greenish sandstone that may perhaps be a small sliver of Days Creek formation, but no fossils were seen in it.

Probably the oldest Tertiary rock in the Roseburg-Camas Valley area is the basalt unit called "Diabase" by Diller. This unit is very extensive throughout much of the Roseburg quadrangle north of the Tertiary - pre-Tertiary contact, but pinches out westward a short distance into the Camas Valley quadrangle (see map). One of the most distinguishing characteristics of the basalt is the pillow structure locally developed in it indicating much of it flowed out under water. The rock is typically dark gray to black and fine grained. The pillows are usually rimmed with palagonite. The exact age of the basalt cannot be determined, however it has been reported (oil geologists - verbal) that foraminifera of lowermost Eocene (Meganos) age have been found in shales and siltstones supposedly interbedded with the lavas.

There is a marked angular unconformity between the Tertiary and pre-Tertiary rocks in this area and in addition they are often in fault contact with each other. It is interesting to note also that the contact between the Eocene basalt and the younger Umpqua formation is a fault contact wherever it is well enough exposed to reveal the true relationship.

The thickest section of Tertiary sedimentary rocks present in this area are the massive marine sandstones, conglomerates and rhythmically bedded siltstones and shales of the middle Eocene Umpqua formation. This formation, one of the most widespread in southwestern Oregon, can be traced from the foothills of the Western Cascades westward to the coast. In the Camas Valley quadrangle where it is the most widely exposed, the formation can be divided into at least three and perhaps four distinct members. The lowermost is a light-colored medium to coarse grained, massive, fairly friable, fairly well sorted arkosic sandstone. It usually contains a minor amount of biotite which tends to give it a "speckled" appearance. Typical exposures of this sandstone can be seen in the hill in the SE $\frac{1}{4}$ sec. 27, T. 28 S., R. 7 W.

The massive conglomerates of the Umpqua formation probably overlies the massive sandstone described above, but the two were not seen in actual contact. The conglomerate is usually poorly sorted with well rounded cobbles ranging up to as much as one foot in longest dimension. They are predominantly gray-wackes and metavolcanics with subordinate chert, quartzite, schist, and ultrabasics. Typical exposures of Umpqua conglomerate can be seen on Alexander Butte in NE $\frac{1}{4}$ sec. 23, T. 28 S., R. 7 W., and on ^{Bushnell}~~Dickinsons~~ Rocks (?) in N $\frac{1}{2}$ sec. 24, T. 28 S., R. 8 W.

Probably the most typical lithofacies of the Umpqua formation is the rhythmically bedded siltstones and shales that overlies the massive conglomerate. This member is certainly the thickest of those within the formation and appears

to overlie the conglomerate conformably, although there is probably a slight erosional break between the two. It is from this unit that most of the fossils from the Umpqua formation have been obtained. A foraminiferal collection was taken from some dark gray Umpqua shales in Ten Mile Creek, in the NW-SW sec. 27, T. 28 S., R. 7 W. The shale crops out a few hundred feet west of a strong fault zone marking the contact in this area between Dothan graywacke and associated metavolcanics and the Umpqua formation. According to R. E. Stewart, based on a preliminary examination, the fauna is equivalent to the middle part of the Glide Umpqua section at the Glide fossil locality on the North Umpqua River, approximately 27 miles to the northeast. The age of these beds is therefore of probably middle Eocene age. Beds of this characteristic lithology can be traced from the Anlauf quadrangle northeast of the Roseburg quadrangle and can also be seen west of this area along the Middle Fork of the Coquille River. It is well exposed in this area along State Highway 42 between Ten Mile Creek and Camas Valley.

The rhythmically bedded member of the Umpqua formation appears to grade upward into a more massive greenish claystone or siltstone. The unit is fairly soft and readily weathers down into subdued slopes. It is best exposed at the base of the Tye escarpment that crosses the Camas Valley quadrangle from the northeast corner to the southwest corner.

Overlying the Umpqua formation is a series of massive, micaceous, fairly well indurated, fairly well sorted sandstones with subordinate interbeds of siltstone of probable upper Eocene age belonging to the Tye formation. This series of rocks occupies the entire northwest half of the Camas Valley quadrangle. The contact between the fairly soft claystones and siltstones of the Umpqua formation and the relatively hard sandstones of the Tye formation is well marked by an erosional escarpment several hundred feet high crossing the Camas Valley quadrangle in a northeast-southwest direction as noted above. The nature of

the contact, at least where I had an opportunity to examine it, appears to be gradational, although Diller shows the two to be in fault contact with each other. The apparent gradational relationship is well exposed along a logging road down the steep face of the escarpment in the center $N\frac{1}{2}$ sec. 19, T. 27 S., R. 7 W. Within a vertical distance of approximately 50 feet the lithology passes upward from a greenish shale to a micaceous sandstone with interbeds of greenish shale to a predominantly massive micaceous sandstone. The attitude of these beds appears to be the same although it is difficult to make any accurate reading because of the large amount of slumping along the face of the escarpment.

Structure

All of the pre-Tertiary formations show evidence of great deformation by their intense folding and shearing along a general northeast-southwest trending belt. The contacts between the various units appear to be faulted although direct evidence in the field was difficult to obtain. The highly disturbed and slickensided serpentine belt lying between the metavolcanics and the Riddle conglomerate almost certainly shows that the serpentine occupies a large fault zone. This same relationship is well illustrated in the Dutchman Butte quadrangle to the southwest where the Riddle formation is separated from Dothan sediments and volcanics by long narrow belts of serpentine which also appear to be in fault zones. The presence of Dothan graywackes as relatively thin lenses in the greenstone and serpentine indicate in-faulted "slivers" of younger material in older. Examination of these lenses showed the Dothan formation to be even more "chewed up" than usual and in some instances even to have undergone some low grade metamorphism which gave the sediments a semi-schistose texture. This deformation is to be expected as the graywackes, conglomerates, chert and volcanics of the pre-Tertiary units are typical of those associated

with unstable eugeosynclinal deposits. This area lies in the zone between the older Mesozoic Klamath Highlands to the south and the younger Tertiary marine basin to the north and has probably been an active orogenic area for a considerable period of geologic time. Highly compressive forces appear to have persisted into early Tertiary time as is indicated by the nature of the contact between the Tertiary and pre-Tertiary units. Wherever the contact was well exposed, the two were shown almost invariably to be in fault contact with each other. This was also true with regard to the relationship of the lower Eocene basalt to the middle Eocene Umpqua formation. The faults in the Tertiary units appear to die out northward in the Sutherlin and Anlauf quadrangles where they are represented as northeast trending folds in the Umpqua and younger Tertiary formations.

Report by: R. E. Corcoran

Date of report: December 17, 1956

Camas Valley

Monday - July 22, 1963 - Leave
Grant Pass 7:15 to meet
Ewart Baldwin in Winston
at 8:30 - ~~not~~ make a short
stop at the Shady Oaks Motel
to make reservation for
Tuesday evening at the
Shady Oaks -

Happy Valley
Took the Green Valley - looking -
road onto Weston - glass
continued on the Coos Bay
Wagon Road to the Burnt
Ridge Road to right - did
some geology on this road
across the NW corner of
the Camas Valley quad and
Sittum quad to the west
along Middle Creek. -
Arrive in Coos Bay 5:30 pm.

Overnight in Coos Bay at Bay
Shore Motel - With Ewart in
the evening at a lecture at the
Marine Biology Station.

Meet Bob McCollum ^{Tues, 23}
Standard Oil Co. for breakfast
and they leave for return
trip to Roseburg - up the
Coos River to Weyerhaeuser
headquarters and get key

from Al Jetty (P.A.) - Took
Weyerhaeuser Road along
Tulliam River to Cedar Creek
over Jug. Peak to
Bateman then returned
allahan road past
Bauman Lookout along
allahan River to Floumby
Valley to Looking Glass Lake
and into Roseburg.

In the evening Phil Sahlstrom
Standard Oil came in and
to to bed.

July 24
Ed. A.M. - Tour with Standard
Oil - to Tenmile then to Reston
Crescent Park - back to
Tenmile then to Camas Valley
then to Signal Tree Lookout
then to Camas Valley for lunch.

then to Berry Creek road and
to Berry Creek - Step Rock
Creek - on to Olalla
go up Olalla Creek to
Compton Creek - pick up
oil locality - return and
all Olalla Creek for
out 1 mile - return

~~Monday~~ August 1

Traverse up Kent Creek and over the top to the head of Byron Creek - drop Ewart to make a foot traverse and I drive around to pick him up.

P.M. Into Berry Creek - hike in to the Barrett Ranch to get a key to the gate - made a traverse up Berry Creek to the west until we reached the south boundary of the Camas Valley Quad

Thursday, Aug 1

Direct to Barrett Ranch and make a traverse up Bear Creek and its tributaries south to the Dutchman Butte border. All our mapped contact and structure seems to check out all right in this area - Lunch at Barrett Ranch P.M. On around to the head of Camas Valley to the head of Munn Creek