

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Lincoln County Coal Area

Lincoln County

Judge Gelkey requested this examination, as he had no idea how, or where, to start work to develop the coal, or if it should be developed at all. He had done considerable work scaring up persons who could tell us about coal, and seems to be willing and anxious to do anything within reason to expedite the work. I think the Court should have some support in their desire to get the dope on their coal. The Judge concurred with the suggested recommendations and I believe that they will be willing to spend some money to open the coal, as suggested.

Mr. Newkirk, of the Leader, is a youngish man, maybe in his late 30's and is very much interested in this development. I think he will do anything within reason to help. I think he should be kept informed of all developments.

It rained like the very devil all the time we were at Toledo. I was amused to find that the local residents tend to resist going into the brush when it's wet. I doubt if any of them would have gone even if they had known where the coal was.

If you agree with my recommendations, I would like to suggest that you advise Judge Gilkey of the situation, and send a copy to Newkirk. Also send Newkirk a story that he can use in the newspaper. He asked for such a story but I told him that the Portland Office did that.

Ray C. Treasher
Aug. 23, 1943

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Report by: Ray C. Treasher
Date: Aug. 30, 1943
Visited by: R.C.T. & F. G. Wells.

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Coal was mined in Lincoln County in the late 1800's and early 1900's, from Yaquina northeastward in T. 10 S, R. 10 W. Diller (96) reported on the coal, indicating it was observed over an area a mile wide by five miles long. No coal has been mined in later years and outcrops and old workings are "lost" in the heavy underbrush. It will be necessary to "face up" outcrops and old workings ^{should be} and ^{cleaned} out, before the coal can be adequately sampled and measured.

Previous work: J. S. Diller (96) reported as follows:

This field is in Lincoln County, north of the Yaquina River, and 6 miles from the coast. It borders Depot Slough upon the west, and has its greatest extent north and south.

A few miles west of Toledo, in sec. 13, T. 11 S., R. 11 W. coal has been found in a number of gulches. At one place the coal is exposed in a tunnel nearly 200 feet in length. It is greatly fissured, and the cracks contain a yellowish coating that makes the coal look muddy. The bed at the end of the tunnel is about 20 inches in thickness. It becomes thinner to the northwest, as the bottom rises in that direction, and it lies between soft sandstones, the top one of which contains marine shells. The inclination of the strata was not accurately measured, but it has been estimated at 20 degrees. Analysis No. 14 is of coal from this locality.

Dr. J. H. Bryant, who systematically prospected this field with a diamond drill, bored a hole a short distance southeast of the tunnel, but I have not yet been informed what he found. In this same neighborhood there are other exposures of coal, but so far as yet known they are small and of no value. In places the sandstones contain many small films or lenses of coal, and there are all grades in size from this to beds 20 inches in thickness and a mile or more in lateral extent. The character of the deposits everywhere not only in this field, but in others, is such as to indicate that they are very local and in most cases not of commercial importance.

In sections 36 and 30 of the next two townships to the north

several outcrops of coal have recently been prospected with the diamond drill by Dr. J. H. Bryant. One bed having a thin parting of sand is reported to average 3 feet of coal. A sample from this bed was given me by M. P. T. Johnson. Its composition is numbered 15 in the list of analyses. The extent of this coal is not yet known, but it is not believed to be great.

Farther northward traces of coal have been found near the head of Depot Slough, and also on the Siletz River, but the outcrops are less promising than those already noted.

The Yaquina coal field has a length from north to south of about 5 miles and a breadth of not over a mile. It contains, apparently, several beds of coal which belong to nearly the same horizon. Although not very far from marine transportation, it does not promise to be of great commercial importance.

No.:	Mois- ture :	Volatile Matter :	Fixed Carbon :	Ash :	Sul- phur :	Physical properties of coke
14:	8.11:	41.15	33.59	17.15	0.95:	Sooty, noncoherent
15:	8.53:	39.95	45.79	5.73	2.00:	Partly brilliant and coherent
16:	15.50:	31.40	39.80	13.30	:	

Yaquina Coal Field, Lincoln Co.

14 Shaw Place, $1\frac{1}{2}$ mi. west of Toledo. Sec. 15, T. 11 S., R. 11 W.

15 4 mi. N.W of Toledo. Sec. 30, T. 10 S., R. 10 W.

16 Yaquina Bay. Noted by Sharpless and Winchell

Several residents are familiar with the old work.

C. K. Crosno recalls a mine in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31, T. 10S, R. 10 W. Mr. Newkirk, as a boy, recalls prowling the hills and entering old workings. Neither have visited the localities in years. Pete Rasmussen (Yaquina Pete), Yaquina, Oreg. has a coal adit on his land, 2 miles southeast of Yaquina. No coal was seen anywhere in the County at the time of the visit.

The coal was used locally, and some was shipped to San Francisco by boat.

Recommendations: As no coal exposures are available, - as brush and timber are so dense that one can pass within a few feet of an outcrop without seeing it, - and as our schedule was very limited, - I recommended to County Judge Gilkey as

follows:

- (1) Have the outcrops found, (also old workings), as we can get to them with a minimum expenditure of State Dept. personnel.
- (2) Have the outcrops "faced up" so that the coal may be measured and sampled. If information is desired from old workings, these should be opened, drained, and the coal vein made accessible for measurement and sampling. I feel it would be inadvisable right now to dig into fresh coal for a U. S. Bureau of Mines type of sample. (25 ft. from a weathered surface).
- (3) Optional: To open outcrops and workings to good bright coal for a U. S. Bureau of Mines type of sample.
- (4) When (1) and (2) are done, I felt that our Dept. would be willing to return, cut samples and advise the County Court as to recommended action.

Properties: C. K. Crosno, real estate, told of a mine in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31, T. 10 S., R. 10 W. A 50 ft. slope produced 100 tons of coal which was used locally and shipped to San Francisco by boat. The mine was on the old Romtvedt property, now owned by E. L. Dean. It was worked post-1906 and pre-1914. Crosno could find the old workings in half a days time.

Pete Rasmussen took us to a coal adit in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T. 11 S., R. 11 W., 1.7 miles southeast of Yaquina on the old railroad grade, and 200 feet east of channel light #9. He owns the property. A 125 foot tunnel was driven in hard sandstone. The coal vein is reported as 6 inches thick and getting thicker toward the face. The sandstone has a northwest dip.

The tunnel had 2 feet of water in it. Mr. Rasmussen said he could drain it with an hour's work.

Mr. Newkirk of the Lincoln County Leader assisted with information.

Comparative Cost of Wood and Coal.

Fire wood of almost any grade is selling for about \$12.00 a cord in Aug. 1943. Coos Bay coal is selling for \$9.00 delivered in North Bend. It is interesting to compare the cost per unit of heat, the British thermal unit, abbreviated B.t.u. Figures on the B.t.u. value of wood are difficult to obtain. None could be found for fir, but as oak is classed as a better fuel wood, and figures for oak are available, they are used. The weight of a cord of dry old growth Douglas fir was obtained from a reliable coastwise trucking concern.

	B.t.u's per lb. dry (?)	Wt. per cord dry	B.t.u's per cord		¢ per B.t.u.
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Wood	8316	2100lbs.	17,463,000.	¢ 12	0.0000681
			18,000,000.	¢ 9	0.0000500
Coal	9000 (low grade)	per ton of	2000 lbs.		
Coal	9500 (med. low gr.)	" "	19,000,000	¢ 9	0.0000482

In other words, very low grade coal at \$9 a ton costs 73% as much as wood at \$12, per unit of heat. Even if wood dropped to \$9 a cord, coal would still be slightly cheaper.

On the basis of the above figures, heat could be supplied to Lincoln County residents cheaper by means of Lincoln County coal than it can by wood, under present conditions.

Reference: Diller (96)

Diller, J. S., The Yaquina Coal Field: U. S. Geological Survey, 17th. annual report, pp. 491-496, 1895-1896.