

March 4, 1940

Jordan Coal

Thomas Creek District Linn County

Location: On Jordan, Bilyeu, and Neal Creeks, in section 3, 4, and 10, T. 10 S., R. 1 E.W.M.

Owners: Property #1-4 on ~~XXXXXXXXXXXX~~ deeded land owned by James and Emma Vasek; #5 and 10 to St. Benedict's Abbey of Mt. Angel; #6, Jos. Foltz; #7, Jungwuth Estate; #8, Charles H. Salzl; #9, Charles H. Fulz; #11 Annie Thomas; and #12, Alice C. Burton.

History: Throughout the four sections listed above, coal seams of varying thickness have been encountered at various depths in wells dug for water. About "thirty years ago" the seam which is said to have been exposed in the bluff north of the Jungwuth place (#7) and about $\frac{1}{2}$ mile due east of Jordan on the south side of the creek was mined for coal for a blacksmith shop. Last year (1939) considerable work was done to develop the seams on the Vasek place (#1-4) and a ton or two was mined and used at the ranch.

Development: ^{So far as could be determined,} There has been no development work beyond the various wells mentioned above (most of them drilled, so that no accurate data could be obtained), the old work (#7) which could not be found, and the various open cuts on the Vasek property (#1-4). (Thayer, 38)

Geology: The entire area is underlain by coarse to medium grained yellow tuffaceous sandstones, either well-bedded or massive, which contains the coal seams. These are ~~xxxxxx~~ correlated to ~~the~~ Mehama Volcanics, lying a mile to the north. The sandy tuffs show gentle dips, mostly to the west, at the Vasek place. The Mehama anticline should pass through just east of the four sections covered.

The Mehama volcanics are intruded in two ~~spots~~ ^{localities} (N.E. $\frac{1}{4}$ sec. 10 and S.W. $\frac{1}{4}$ sec. 4) by basalts. The ~~latter~~ ^{intrusives} may be ~~interbedded~~ ^{interbedded} or subjacent flows. At #1 a vesicular lava also appears on the west side of the cut near the mouth.

Capping the flat topped ridges, which lie about 250' above the streams, are more or less completely weathered gravels, from a few to fifty feet in thickness. These are correlated with Thayer's Terrace Gravels. Recent alluvium forms the lowland valleys. The profiles are composite, with youthfull uplands and mature stream-valleys ~~topography.~~



Description of localities:

#1-4. Three outcrops of coal appear in the bed of a small northwest-flowing tributary which enters Thomas creek near the center of section 8. With Greens Bridge, near the junction of Neal and Thomas creeks as a base level, they lie at elevations of 150 to 175 feet, the flat top of the ridge being at about 250 feet elevation. The main cut (#1)

now covered

but which is said to have

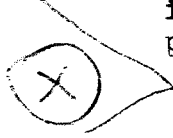
runs N.70°E. ~~in~~ from the creek bed for 90 feet into the hillside, with a face which if cleaned would be about 18 feet high. This cut ran in along the top of the coal, exposing it to a maximum observed thickness of 3 feet, due to caving, ~~and~~ a maximum ~~total~~ thickness of 6 feet near the face. It is said that post-holing near the face showed coal to a depth of 14 feet, no bottom reached. (Sp. ~~A~~ from west side of cut, across ~~xxxxx~~, 18 inches, at a point 30 feet ~~from~~ ⁱⁿ mouth.)

was taken

Two cuts (at #2) lie about 100 feet upstream, and expose from 6 inches to over 2 feet of coal (Sp. ~~B~~ across 2 feet). Attitude is horizontal, ~~is~~ dipping gently to the west.

In the bed of the creek (#4) another 100 feet upstream an outcrop of coal at least one foot thick lies under water ~~xxxxx~~ from which about one ton of coal has been mined. (St. C was taken from here, said to have been mined from this locality.)

About 100 feet to the north and east, two ~~xxxx~~ post-holes were dug to depths of 20 and 30 feet, said to be in coal throughout as soon as the heavy soil mantle had been penetrated. *and were*



#5. In bed of Bilyeu Creek, near center of S.E. $\frac{1}{4}$ of Section 9. Thin (less than 3") seams of nearly horizontal coal in north bank.

#6. In bed of Neal Creek, in the S.W. corner of the S.E. $\frac{1}{4}$ of section 10. Said to be seam of coal (underwater when visited) up to 6 inches thick.

#7. In face of bluff overlooking Thomas creek, N.E. $\frac{1}{4}$ of section 4. Said to be old workings, or good seam which was mined 30 years ago for blacksmithing. Gravels and sand nearly 50 feet thick in this bluff. An hours search could not find any trace of the workings nor any coal.

#8. Thin seam (not over 3") in massive tuffaceous sandstone just below spring and water trough, and 200 feet north of the road near the center of the N.E. $\frac{1}{4}$ of section 9.

#9. Carbonized log in cut made by logging road, in S. $\frac{1}{2}$ of N.E. $\frac{1}{4}$ of S.E. $\frac{1}{4}$ of section 12.

#10. Well just behind Parish house, just north of center of section 9. Drilled by R. Sneed, of Salem. Said to show :

"soapstone" (decomposed gravels)	43 feet
"blue stone"	57 feet
"blue shale"	17 feet
coal	1 foot

total 118

47 feet of pipe, caved below pipe.

#11. Coal said to be exposed in bed of Thomas creek near section corner between 1,2,11,12. Not seen on accounh of high water.

#12. Coal said to be struck in well at 28 feet depth, Burton Ranch, center of N. $\frac{1}{2}$ of S.E. $\frac{1}{4}$ of section 16.

#13. Other wells in T. 9 S. ~~at the~~ Mike Fink Place, ~~the~~ well located 50 feet above Thomas creek, 14 feet deep, 2 feet of coal in the bottom ~~and at the~~ Daugherty Place, Section 33, T. 9 S. ~~well~~ 10 feet deep, coal for last three feet, bottomed ~~at~~ had showings of coal as follows:

Summary: 1. Coal is of lignite, low grade, with interbeds of clayey carbonaceous material. Maximum seen thickness of 3 feet, maximum ~~extent~~ extent of any one bed not over 200 feet to be mapped.

2. The elevation of the various coal horizons vary greatly and no correlation can be made from them. Apparently the deposits consist of separate small lenticular lenses, rather than any one continuous horizon

3. The well logs which suggest a continuous underlying coal stratum cannot be relied upon, as they were in large part drilled ~~with~~ wells, which are self-salting.

Conclusions and recommendations: The coal deposits of the Jordan area were not sufficiently well developed to make a final and positive statement concerning them, but from the evidence at hand, it seems that they are of too low grade and too small size and discontinuous character to be economically developed except upon a small scale for more or less local consumption .

It was suggested that further development work be done on the Vasek locality #1, by means of a shaft which would determine the thickness of the coal at that point, the most favorable seen in the short survey. If this showing should prove favorable, and the coal could be easily sorted to shipping grade, a Salem market might be developed for its use.

March 4, 1940
John Eliot Allen
Field Geologist
Oregon State Department of
Geology and Mineral Industries

~~Improvement of the above conclusions~~

Any unusual demand for coal might justify a modification of these unfavorable conclusions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

A

Test No. _____ G. COAL-ANALYSIS REPORT Lab. No. _____

Sample of Lignite coal Can No. Glass

Operator James Vasek, owner Mine Not known

State Oregon County Linn Bed 18" of a 5' bed

Town _____ N.E. 1/4 Sec. 8, T. 10 S., R. 1 E., W. M.

Location in mine _____

Method of sampling _____ Gross weight, lbs. _____ Net weight, grams 1356

Date of sampling About Mar. 1, 1940 Date of Lab. sampling 3-25-40 Date of analysis 3-28-40

B. of M. or U. S. G. S. section Oregon Dept. G. M. 16 Collector John Eliot Allen

AIR-DRY LOSS <u>26.3</u>		COAL (Air dried)	COAL (As received)	COAL (Moisture free)	COAL (Moisture and ash free)
Prox. Analysis	Moisture	<u>19.3</u>	<u>40.5</u>		
	Volatile matter	<u>18.1</u>	<u>13.4</u>	<u>22.4</u>	<u>59.9</u>
	Fixed carbon	<u>12.1</u>	<u>8.9</u>	<u>15.0</u>	<u>40.1</u>
	Ash	<u>50.5</u>	<u>37.2</u>	<u>62.6</u>	
		<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Ultimate Analysis	Hydrogen				
	Carbon				
	Nitrogen				
	Oxygen				
	Sulphur	<u>0.6</u>	<u>0.4</u>	<u>0.7</u>	<u>2.0</u>
	Ash				
Calorific value	Calories				
	British thermal units				

Softening temperature of ash _____ ° C. _____ ° F.

Date 4-4-40 (Signed) A. D. Centenero

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

B

Test No. _____ G COAL-ANALYSIS REPORT Lab. No. _____

Sample of Lignite coal Can No. GlassOperator James Vasek, owner Mine Not knownState Oregon County Linn Bed 12" of a 5' bedTown N.E. 1/4 Sec. 8, T. 10 S., R. 1 E, W. M.

Location in mine _____

Method of sampling _____ Gross weight, lbs. _____ Net weight, grams 1642Date of sampling About Mar. 1, 1940 Date of Lab. sampling 3-25-40 Date of analysis 3-28-40B. of M. or U. S. G. S. section Oregon Dept. G.M.I. Collector John Elict Allen

AIR-DRY LOSS <u>26.7</u>		COAL (Air dried)	COAL (As received)	COAL (Moisture free)	COAL (Moisture and ash free)
Proxin Analysis	Moisture	<u>15.3</u>	<u>37.9</u>	<u>----</u>	<u>----</u>
	Volatile matter	<u>21.6</u>	<u>15.8</u>	<u>25.5</u>	<u>60.2</u>
	Fixed carbon	<u>14.3</u>	<u>10.5</u>	<u>16.9</u>	<u>39.8</u>
	Ash	<u>48.8</u>	<u>35.8</u>	<u>57.6</u>	<u>----</u>
		<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Ultimate Analysis	Hydrogen				
	Carbon				
	Nitrogen				
	Oxygen				
	Sulphur	<u>2.2</u>	<u>1.6</u>	<u>2.6</u>	<u>6.1</u>
	Ash				
Calorific value	Calories				
	British thermal units				

Softening temperature of ash _____ ° C. _____ ° F.

Date 4-4-40 (Signed) A. D. Centenero

Chemist.

C

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Test No. _____ G—COAL-ANALYSIS REPORT Lab. No. _____

Sample of Coal of unknown rank, stored 6 mo. under shed Can No. Glass

Operator James Vasek, owner Mine Not known

State Oregon County Linn Bed Not known

Town N.E. 1/4 Sec. 8, T. 10 S., R. 1 E., W. M.

Location in mine _____

Method of sampling _____ Gross weight, lbs. _____ Net weight, grams 678

Date of sampling Summer 1939 Date of Lab. sampling 3-25-40 Date of analysis 3-28-40

B. of M. or U. S. G. S. section Oregon Dept., G.M.I. Collector John Eliot Allen

AIR-DRY LOSS		COAL (Air dried)	COAL (As received)	COAL (Moisture free)	COAL (Moisture and ash free)
16.5					
Prox e Analysis	Moisture	9.0	24.0	----	----
	Volatile matter	41.8	34.9	45.9	53.7
	Fixed carbon	36.1	30.2	39.7	46.3
	Ash	13.1	10.9	14.4	----
		100.0	100.0	100.0	100.0
Ultimate Analysis	Hydrogen				
	Carbon				
	Nitrogen				
	Oxygen				
	Sulphur	4.0	3.3	4.4	5.1
	Ash				
Calorific value	Calories				
	British thermal units	9,830	8,210	10,800	12,620

Softening temperature of ash _____ ° C. _____ ° F.

Date 4-4-40 (Signed) A. D. Centenero
Chemist.

Reconnaissance of Coal Prospects in the Scio Area

At the request of a committee of land owners in the area around St. Benedict's Abbey of Mount Angel, the Department made a short reconnaissance of the coal prospects in this area, and a survey of the geologic features which would affect the value of the coal. Three samples were taken and analyzed by the Bureau of Mines.

The results of this survey are as follows:

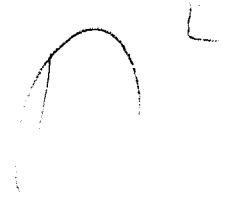
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Recommendations:

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Benedict



Maset Ranch.

(1)

(4) Creek at riverbed slump. An. 125'
1' plus. coal. horiz. Took out ton
for road. In bed of creek.

S. 20° W. - 125' To

(6) Corner of cabin (NE). An. 180'
(NE Cor. beam S. 12° E. F.T.P.)
N 45° W - 120'
N 5° E - 100'
N 65° E - 35' To

(2) Coal in creek bed at An. 160' 10' cut.
About 14" solid and white clay
matrix. Strike N-S 10° W (C)
N 45° W - 25' To

(2a) Coal 6' + in ck here also. 10' cut shows
one layer 2' ± Horizontal.
N 70° W - 100' To

(1) at creek mouth of cut. An. 150'
FTP cut N 70° E - 90', face in back
18' high. Mostly slumped. Cut in on
top of coal, which at mouth is
~~no~~ not exposed for more than 3'. (Sp. #7)

Said that a 5' face in end of
cut, drilled for 14' no bottom.

2

From above face of well (An. 180)
N 50°W - 85' to fence line
S 60°W - 150' to fence corner

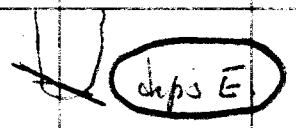


① S 82°E - 145' to drill hole ③

③ S 40°W - 80' An. 185'
S 70°W - 30' to #2 An. 175'

S 72°E - 15' drill hole #4. An. 190'

On E. side #1 did not show except
in bottom, so W. side measured up
to 5'



Dangholly place: An. 160' 2 pm. Sec 33
Well 10' deep, 3' ~~d~~ thick, T 9 S
went there.

State of Oregon
Department of Geology & Mineral Industries
Portland, Oregon
Earl K. Nixon, Director

Sec. _____ T. _____ R. _____

Date _____

Name of Survey _____

County _____

Quadrangle _____

Notebook Page No. _____

Scale: 2000 ft. 1 inch

Basalt bedrock at dam at Jordan
Old Jordan Coal mine not located,

