Mr. David Eccles,
War Industries Board
Capitol Building,
Salem, Oregon

Dear Mr. Eccles:

At last the coal sample from the Black Bear mine near Medford, Oregon, arrived and we have had a float-and-sink determination made of it, and the results are not at all encouraging.

When I first examined the sample, after it arrived here at the Bureau of Mines Station in Seattle, I was tempted to hot have a float-and-sink test made because of the great amount of shale there was mixed in with a small amount of coal. However, I requested Dr. Yancey to make the report, with the following results;

**BLACK BEAR MINE**
Medford, Oreg.
Sampled by Ray Treasher
O.S.D.G. & M.I.

**Weight for float-and sink, 63 lbs.**

|    | 
|----|---|
| Float | 1.70 | 44,644 | 45.6 percent |
| Sink  | 1.70 | 15,067  | 56.4 percent |

|    | 38,711 |

Float 45.6% of 33.4% ash material
Sink 56.4% of 71.2% ash material
100% carrying 54.7% ash

If the 1 ft. section of "bone" that was excluded in sampling, had been included in the sample, the percent of float at 1.70 sp.gr. would probably have been reduced to about 36%.

Float coarser than sink.

It will be seen from this float-and-sink determination that probably 36 percent of the material will float, and even this will have 33.4 percent ash, assuming that the entire bed has been included in the sample, as was originally requested.
By referring to page 33 of Bulletin no. 20 of the Oregon State Department of Geology & Mineral Industries you will observe float-and-sink results obtained from a sample taken from the Black Bear mine and determined by the Bureau of Mines at the Seattle Station. In this test of everything through a 3-inch screen, on 33 percent of the material on a gravity of 1.53 the ash content was 26.4.

I have not had an opportunity to study the alleged coal bed on the ground and must draw my conclusions from the float-and-sink determinations made both in 1938 and in 1942, and my reaction to the problem is that unless some portion of the Black Bear bed can be found that contains a great deal more coal than has been shown in these two samples, then the thought of developing the Black Bear bed for a profitable commercial mine should be abandoned. However, if at some future time they do find a zone of this bed with more coal than the two points that have been sampled, then it will be well to bring our attention to the subject.

Very truly yours,

/s/ George Watkin Evans

George Watkin Evans,
Consulting Mining Engineer.
MR. W. A. WESTINGTON (2)

Referring to your mailgrams of June 16th and 20th, 1942, File 2- GI - 11700 coal:

Mr. Sielaff never made a report on these coal deposits.

On Jan. 15, 1937, we wrote to Mr. H. W. Klein at Portland in reply to his letter of Jan. 9, 1937 as follows:

"Refer to your file D-12350-Misc., letter dated Jan. 9th, addressed to Mr. G. J. Sielaff, regarding coal mine near Medford:

"Mr. Sielaff reports as follows: 'The old geological department records of this mine which was prospected under the direction of Mr. E. T. Dumble from Dec. 1901 to about May 1902 were destroyed in the fire of 1906. There are a few old letters regarding the mine and the work done at that time but in none of these is the mine named or is its location by section, township and range given. The only references say it is 4 miles east of Medford, Oregon. From the fragmentary reports I am led to believe that the work was done in the S 2 NW 1 sec. 36, T. 37 S., R. 1 W.W.M. I will continue searching for information regarding the old mine and will advise you if anything develops."

The prospecting by SP Co. under Mr. Dumble's direction was done between 1898 and 1902, and again, a small amount of work in 1905. No work is recorded as having been done since 1905. We have no complete report on the coal deposits.

The vein on which the SP Co. worked is reported to have been 11 feet thick and a vein 175 feet above was reported to be 14 feet thick. The coal in both veins is similar in quality.

Analyses of coal given in letters of Nov. 15, 1901, and June 6, 1902, addressed to Mr. E. T. Dumble from J. Kruttschnitt on the subject of coal at Medford gave the following analyses:

<table>
<thead>
<tr>
<th>No. of Sample</th>
<th>No. 1</th>
<th>No. 2</th>
<th>No. 3</th>
<th>No. 4</th>
<th>No. 5</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>6.30%</td>
<td>7.2%</td>
<td>3.7%</td>
<td>5.6%</td>
<td>6.9%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Volatile Comb.</td>
<td>31.19</td>
<td>29.7%</td>
<td>20.1%</td>
<td>22.3%</td>
<td>32.9%</td>
<td>27.24%</td>
</tr>
<tr>
<td>Fixed Carbon</td>
<td>40.6%</td>
<td>34.8%</td>
<td>30.3%</td>
<td>35.7%</td>
<td>42.9%</td>
<td>38.86%</td>
</tr>
<tr>
<td>Ash</td>
<td>21.2%</td>
<td>28.3%</td>
<td>45.9%</td>
<td>36.4%</td>
<td>17.3%</td>
<td>29.82%</td>
</tr>
</tbody>
</table>

Sulfur determination separately from average of above five sample was 0.76%. No definite location given.

On Oct. 23, 1918 Mr. E. T. Dumble wrote to Mr. Paul Shoup:
"Returning Mr. Carnahan's letter in regard to coal lands near Medford, Oregon.

"Our investigations of the coal at Medford included the running of a slope 500 feet in length to prove the actual character of the coal. We found that while the vein was of considerable thickness, it was so interbedded with clay that it was of no value to us for locomotive fuel. Our work was therefore stopped.

"Later, local parties opened up a vein above the one that we operated but which was of exactly the same character, and it was this vein from which the coal sold in Medford was taken.

"Our last examination was in January, 1907, and the report made to Mr. O'Brien on it states that while it may be used for domestic uses or under stationary boilers or furnaces where heavy firing is not needed, it will answer as fuel. It is also suggested that it could be used as a basis for producer gas for copper smelting or other metallurgical operations.

"I know of no test of washing the coal as Mr. Carnahan suggests.

"In any event, under present conditions, a project of this kind would not interest the Company."


Attached hereto is a copy of the Ore. Bureau of Mines description of the coal properties near Medford.

We have no reports on the coal in NW 1/4 sec. 25, T. 37 S., R. 1 W.W.M., or of the Coker Butte Area.

T. McALLASTER

GJS-R
Enc 1.
Mr. G. W. Martin, General Superintendent of the plant, can give you the address of Mr. Gillin, mining engineer of Los Angeles, California, who recommended the change in fuel for economic reasons. The major reason this body of coal has not been developed in the past is the crude methods used for separation of the coal from shale and other foreign material. We feel the new sink and float system just developed by DuPont engineers is the one perfect separation method system at a minimum cost, and it is our intention to install this equipment, and we are now in communication with DuPont and are waiting specifications for a 250-ton plant.

We wish you to know that we will need, and be very grateful for the same constructive advice and criticism you have been able to give us in the past, and with to remain

Yours very respectfully,

CRATER COAL COMPANY

by W. M. Aurbrey, President
November 4, 1938

Mr. J. E. Morrison
State Geologist
Grants Pass, Oregon

Dear Sir:

The following information is submitted with the intent of keeping you well informed as to our intentions as well as past and present operations. As you know, our mining efforts have disclosed a horizontal vein extending North and South with the depth of fourteen feet from foot to hanging wall, at present explored for a distance of several hundred feet in an Easterly direction; and in the opinion of the writer carries about 70% sub-bituminous coal of a very good grade which can be mined under very favorable conditions and placed on the market at a very low figure.

To say there is a market for this coal is stating it mildly, as it is impossible for us to supply the present demand, due largely to our crude methods of mining and sorting. To overcome this, the Crater Coal Company was organized and incorporated, and the Corporation Commissioner is to be asked for a permit to sell 600 shares of stock, par value $50.00 to the public for a total sum of $30,000.00. The writer and associates believe this sum sufficient to develop the property to a point that will justify the Portland Beaver Cement Company, of Gold Hill, Oregon in changing from oil to this coal as a fuel, which I have been informed they are not only willing, but anxious to do, as the saving will be very large. They inform me they have tested the coal and find it suited to their method of processing their materials and are willing to pay $3.00 per ton at the mine for assorted, washed coal not over 12% shale. We will be able to produce, with proper equipment, at a cost of not to exceed $1.00 per ton; their present operating period of 4 months per year would require ten thousand tons, should the saving made in this change in fuel result in a larger field of distribution, then the period of production would be lengthened, and the result would be more coal consumed.