

TYRRELL MANGANESE

LAKE CREEK DISTRICT

JACKSON COUNTY

February 19, 1940

Dr. J. von Gal-Scale  
421 Union League Building  
Los Angeles, California

Dear Sir:

Your letter of February 14th, addressed to the Oregon State Mining Board, Corvallis, has been referred to this Department.

The district to which you refer is called the Lake Creek District east of Medford. The most complete report on the district was written by J. T. Pardee of the United States Geological Survey and published in U.S.G.S. Bulletin 725-C.

There are numerous outcrops of manganese oxides in a volcanic tuff which is usually both overlain and underlain by basalt. The tuff in places may have a thickness up to 100 feet, but manganiferous material is generally confined to a layer of red tuff varying from a few feet in thickness up to 10 feet. In most places where the material is exposed at the surface, the manganiferous material is estimated to contain from 5/10 to 3 percent manganese, but at the Tyrrell Mine, which has had the most work done and which shipped manganese concentrates during the last World's War, irregular masses of several tons in size are known to contain from 10 to 20 percent manganese. Pardee states that the crude ore treated at the mill during the period in which shipments were made was reported to have averaged about 20% manganese. The material was selected from the lower 10 feet of the manganiferous layer. A sample obtained by Mr. Parks, then director of the Oregon Bureau of Mines and Geology, representing a section 12 feet in thickness at one place in the main open cut, contained 14.86% manganese. Other samples, mostly representing the upper part of the layer as exposed in smaller cuts, contained less, the minimum reported by Mr. Parks being 2.13%.

Samples of two car-lots of concentrate, reported by Manganese Metals Company (operators of the property in 1918), carried 47.5 and 48.5 percent manganese. Other samples of concentrate contain from 46.5 to 52.8 percent manganese, 11.1-14.5% silica, 1.4-0.9% iron, 0.09-0.207% phosphorous, 0.08-0.16 oz. gold to the ton.

I believe that in the neighborhood of 200 tons of concentrates were shipped during that period of that mill operation. After the war, the plant was

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shut down and very little, if any, work has been done since. The mill is wrecked.

If there is any further information I can give you, I will be glad to give it.

Very truly yours,

FWL:vm

F. W. Libbey, Mining Engineer