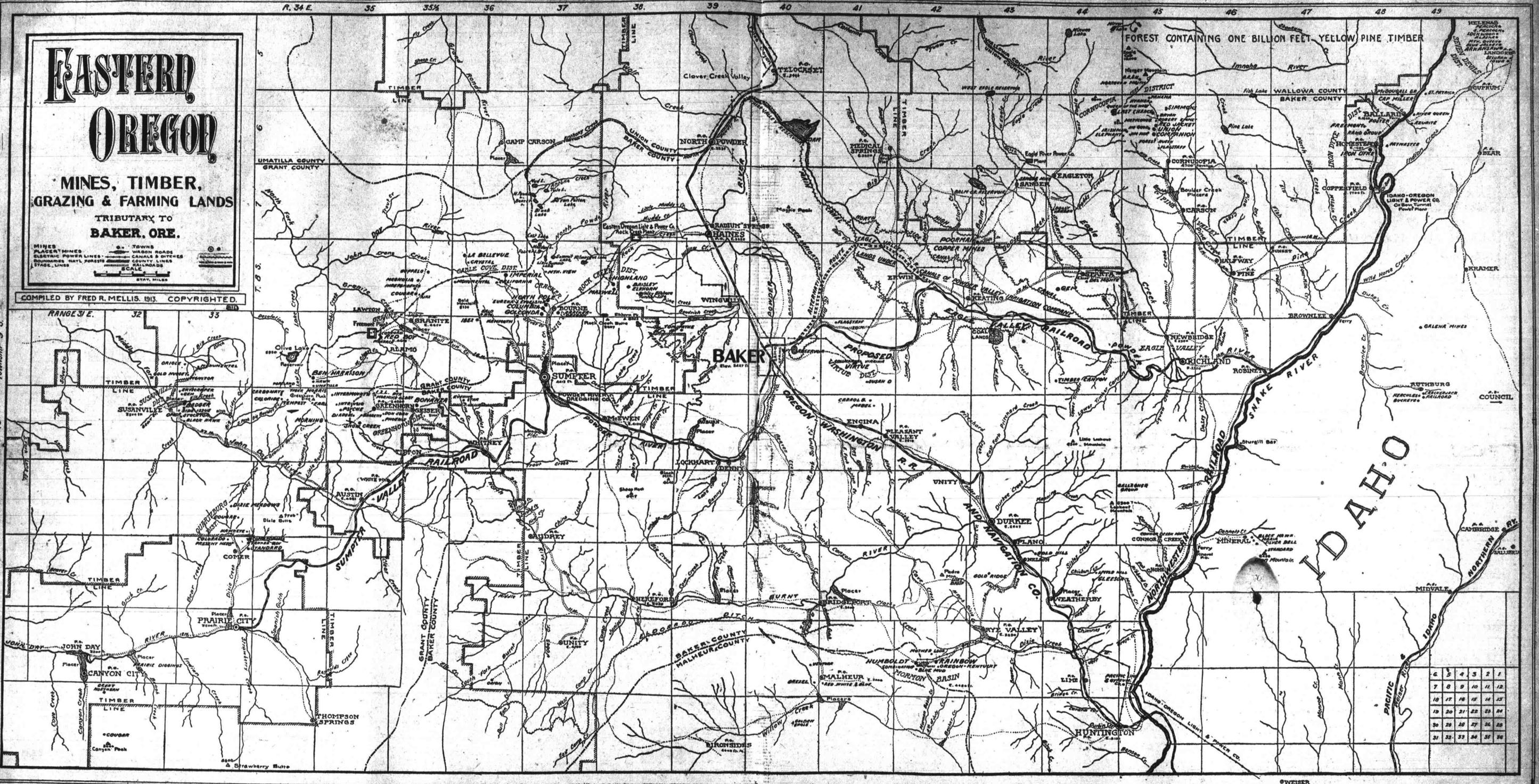


# GOLD MINES OF EASTERN OREGON, NOW IN OPERATION, YIELD LARGEST PRODUCTION IN HISTORY OF THAT RICH DISTRICT



Map of Eastern Oregon District Showing in Detail the Locations of the Several Mining Properties in Baker and Adjoining Counties, the Towns, Railroads, Wagon Roads, Stage Routes, Lines for the Transmission of Electric Power, Etc.

**Written for The Journal by Fred R. Mellis.**

**E**ASTERN OREGON mining is coming into its own. For years the mining industry of this district was hampered by illegitimate manipulations, during which time it was the foothold of mining sharks and irresponsible stock brokers, whose only object was to get the money by speculation, and spend as little of it as they possibly could in actual mining development. In spite of these adverse conditions, the legitimate miner retained his belief in the merit of eastern Oregon mines, and it is largely due to his unshaken faith and patient toil that some of the properties that have been developed have finally reached a stage of development where all methods of work have been dispensed. Added to this is the introduction of modern methods of mining and extraction of precious metals, which has wonderfully advanced the value of low grade ore bodies that cover thousands of acres in this district. From 20 per cent to 30 per cent was formerly considered a reasonable saving, and only

high grade ore could be treated profitably. The adoption of improved scientific principles and installation of modern machinery makes it now possible to effect a saving of from 85 per cent to 97 per cent of the value, assuring big returns, where formerly failure was the rule. Many capitalists are becoming interested in this district, but are only making investments after approved examination by competent mining engineers. The best obtainable mining talent is then placed in charge of the property. Among the important producers and promising mining properties are the following:

**Bainbow.** In the class of Oregon's big mines, the Bainbow is entitled to rank among the foremost. The Bainbow group consists of twelve patented claims in the Morning Basin district, Baker county, 15 miles southwest of Durkee, the nearest railroad. The geology is a contact deposit of a large basalt dike, which intrudes between the granite and lime. The mine is opened up by four levels

to a depth of 100 feet, and is operated through a double compartment propeller shaft. In the upper levels, the values occur in free gold, but considerable quantities of arsenical pyrites are found in depth. The ore bodies contained in this mine are abnormally large, and in the first level the pay ore averages seven feet in thickness, assaying 116.75 feet per ton. In the same level another ore body has been developed for a distance of 185 feet, that averages 10 feet 2 inches in width, assaying 133.10 per ton in free gold. According to Howard A. Lee, superintendent, the ore that is being milled has an average value of from \$15 to \$25 per ton, and an extraction of 37 per cent of the values is made. Between 7 and 20 tons are being milled daily. The mill is of the latest type, and the process consists of grinding the ore after it is crushed by the stamps, until after it it will pass a 200 mesh screen. The estimated production of the Rainbow is between \$20,000 and \$40,000 per month. The property is operated in the electric power. A. F. Anderson is general manager and H. Lee is in charge of the mine.

**Columbia.** The Columbia Gold Mining company operates the Columbia mine, located six miles north from Sunnyside on the Crocker Creek vein. Its holdings consist of six patented claims, water power and about 500 acres of timber land. The development includes 45,000 lineal feet of work, which has produced about 200,000 tons of ore milled and 100,000 tons of bluestone. The property is improved with a 20-stamp mill, cyanide plant, hoisting plant and otherwise fully equipped to produce 200 tons per 24 hours. It is operated by electric and water power. The Columbia has been operated continuously since 1910, and has produced \$1,000,000. Its annual estimated production is \$150,000. The property was purchased in 1909 from Fred Cabell, the original discoverer, for the sum of \$45,000, and has ever since been in the personal charge of Frank R. Ballie, general manager.

**Powder River Dredging Company.** On January 7 of this year, the Tubbs construction company turned over to the Powder River Gold Dredging company, the large Powder River dredge, No. 1, and the dredges have been in continuous operation since that date. The dredging capacity of the boat is 500 cubic feet of gravel per day, and the gold producers of the state. Originally the property was owned by John C. Beatty, but has recently come into possession of Benjamin Lawrence and associates, of New York. In place of a head line to hold the boat up to the bank when digging, two "spuds" are used at the stern of the boat. These are made of steel and weigh 11,000 pounds each. Everything on the boat is operated by electric power, the current being furnished by the Eastern Oregon Light & Power company. Power is transmitted to the boat through a heavy armored cable. G. W. Darby is general manager of the Powder River Gold Dredging company. The production is variously estimated at from \$20,000 to \$40,000 per month, and the company expects to operate several dredges in the district and from 20 to 25 men are regularly employed.

**See Marston.** There are 19 quartz claims in the Ben Harrison group, located four miles southwest of Grants, Grant county. The owners are Lina, Ohio, capitalists, headed by Arthur L. White, president of the Lima, Ohio, locomotive works. The Humboldt property is located in the Morning Basin, Malheur county, 20 miles southwest from Durkee, Or., the nearest railroad point. The Morning Basin, to its early history, was the largest placer gold producer in the state, but not until within the last few years was any systematic attempt made to develop quartz gold mines in the district. The Humboldt group is composed of five quartz claims, and the company owns 300 acres of timber land. About one-fourth of the ore is developed to a depth of 400 feet. In the vein, which is 60 feet wide, the ore occurs in a normal contact fissure, between trachyte and diorite, and is composed of clean quartz and sulfide. Practically one cent of the values being saved. The ore is a massive sulfide, assaying from \$10 to \$15 per ton, and contains from four to six into one. Sixty thousand tons of ore are blocked out and available for the mill. The mine was developed by the Humboldt group, and the mill is equipped with 10 Rindon Iron Works stamps and six Johnston concentrating tables. There is enough ore developed for several years' milling, and the company is now ordering additional machinery so as to largely increase the output, which last month was about \$10,000. C. J. Loomis is superintendent, and John Arthur general manager.

**At the Highland mine in the Rock Creek district, 14 miles from Burns, a 95 ton daily capacity plant was put in commission on June 1 of last year, by John Arthur, its local manager. The plant consists of rolls, jig, Dorr tables, Cullow screens and a flare-lime mill for regrounding the tailings. An average of 10 tons of concentrates are made daily. The mill is operated entirely by electricity, and the extraction is ideal, from 80 per cent to 84 per cent of the values being saved. W. A. Baker and James McNutt are in charge of the plant. It is claimed that this company manufactures the purest lime in the United States.**

**The Ibeet property, consisting of six patented claims, is situated in the Bainbow district, Baker county, about 10 miles from Sunnyside, the nearest railroad point. Much development work has been accomplished in this group, and the tunnel in the third level, known as the Pyrites tunnel, is now 230 feet long, with one level averaging six feet in width. One of these ore lenses is 20 feet wide, the work including cross cuts, drifts and raises in the three levels, aggregates over 12,000 feet, and over 100,000 tons of commercial ore has been blocked out.**

**The Boulder creek property, better known as the Underwood thores, is located on Pine creek, near Cornucopia, Baker county. It has recently gone into the hands of a Portland and Walla Walla syndicate, and a large quantity of hydraulic pipe and electric machinery has been covered to the mine.**

**The gold recovered is of a very coarse quality, and from two to three feet were filled to the brim with it are brought to Baker during the season. With the new equipment it is expected to increase the production materially. When taken from the bedrock**

**a single panfull of the dirt will yield all the way from \$1 to \$10 per pan.**

**The Mammoth is one of the oldest gold producers in eastern Oregon. It is located about three miles northeast of the Bainbow, and is equipped with a ten ton capacity mill, which is now being enlarged. Considerable specimen gold is found in this mine, and when this is added and polished, the face presents the appearance of Egyptian hieroglyphics. A Bostonian is in charge.**

**North York thores.** The North York mines are located nine miles from Grants, Grant county, and the controlling interest is owned by C. D. Boyer & Son of Pomona, Idaho, and it is operated with hydraulic power. The company owns about 300 acres of placer grounds, and the nose of the bank that is now being worked is 100 feet of 18 inch pipe, and two streets that throw 54 inch in taken under pressure of 300 feet.

**The water for the pipe line is taken from the North Fork and Lake creek through what is known as the R. P.**

**Grant ditch. The results for this season have been very satisfactory.**

**The Virtus mine, eight miles east of Baker, has been undergoing development for the past three years. This mine was closed down several years ago on account of the fact that a heavy flow of water was encountered, and the**

**Vigorous development work is being done on the three quartz claims owned by the Marflower company. The property is located a little south of the Golden rule, six miles from Sunnyside, a distance of about 25 miles. With its own power, the Virtus should be able to produce very profitably for a great many years.**

**The Gem mine, located 25 miles east of Baker, near the old town of Grants, is operated to a depth of 450 feet. It is now building an electric transmission line from the river to the property, a distance of about 25 miles. With its own power, the Virtus should be able to produce very profitably for a great many years.**

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13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30