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QUIPMENT ON PROPERTY					

RAND-McCARTHY PROPERTY (gold, silver, copper)

HOMESTEAD AREA

BAKER COUNTY

Report by D. F. McCarthy filed in intentory elect.

RAND MCCARTHY PROPERTY

Homeslead area

SITUATION:

Consists of 25 unpatented mining claims, situated in Iron Dyke Mining District, Baker County, Oregon, Sections 9, 10, 16, 21 and 15, T. 6 S., R. 48 E.W.M.

It is adjacent to the town of Homestead. Branch Line of the Oregon Short line railway built 60 miles down the Snake River from Huntington, Oregon, serves it.

Mineral belt in which this and many other gold, silver, copper properties are located; has a strike easterly and westerly; about 60 miles in length by five miles wide; extends from the Blue Mountains of Oregon to the Seven Devils Mountains in Idaho.

OTHER PROPERTIES IN THE MINERAL BELT:

On the West end of this belt is located the extensive holdings of the Oregon Copper Company and other properties, which are under successful development. Power is supplied by an electric line 20 miles in length, recently completed. On the east end and in other places along this belt, the Idaho Copper Company has many mining properties, mill and smelter sites.

The best known of these are the South Peacock, Red Ledge and Iron Dyke mines. By regular mining and diamond drill work in these properties, the ore bodies located are said to have a value in gold, silver and copper of \$150,000,000.

THE IRON DYKE DISTRICT FORMATIONS AND LOCATIONS:

The Iron Dyke District is situated about midway of the mineral belt, on the west side of Snake River, elevation 1770 feet.

The formation consists of Greenstone and various sedimentaries, intruded by rhyolite, andesite-porphyry, diabase and other igneous dykes. Conglomerates, breccias, tuffs, quartzite and jasper are of frequent occurrence. There has been much weathering and alteration of surface rock, accompanied by leaching and migration of metallic minerals from the upper part of the veins, to again be redeposited at shallow depth, as has been observed in different workings of the district.

CLAIMS AND PROPERTIES OF THE DISTRICT:

There are many claims and properties in the district in various stages of development. Some of these are the Iron Dyke, Baker and Irwin, Beckham, Cox, Cole, Ballard, McDougal, Carnahan, Geo. McCarthy, Inca, Lime Peak, Rand-McCarthy and various other claims and properties deserving mention.

VEINS AND MINERALS OF THE IRON DYKE DISTRICT:

There are many quartz veins in the district, of great length and width, with an easterly and westerly strike; dip N. 72 degrees to vertical, bearing gold, silver, copper and iron.

Two quartz veins in the district distinguish themselves by persistently remaining on either side of a mineral zone in which so far as disclosed, the majority of the massive copper ores occur in dark siliceous rocks. Specimen samples of this ore in gold, silver and copper assayed more than \$1000 per ton.

IRON DYKE MINES OWNED AND OPERATED BY IDAHO COPPER CO:

On the surface this property is opened by a series of adit tunnels and a shaft 970 feet deep, the bottom resting in commercial ore. Drill holes have disclosed this to be a substantial body. Development has shown increasing gold values, with depth; also increased amounts of chalcocite and bornite. The average for all ore mined is stated to be gold, \$5.00; silver 5 oz; copper 4.85%; total recovery from all ore mined, more than four million dollars.

RAND MCCARTHY PROPERTY:

Is situated between Hermann and Homestead, where the hills between rise rather abruptly from Snake River to form a ridge 1100 feet high, then gradually slope back to a height of 3500, to end in the divide between Snake River and North Pine Creek.

It adjoins the Iron Dyke mine on the South; the veins from the Iron Dyke mine pass into and through the adjoining claims of this property. The results had from exploiting these veins in the Iron Dyke mine indicate that at least equally good ore will be found when the same veins are being explored in the Rand-McCarthy property; surface indications, geology and mineralogy being alike.

TUNNEL SITE AND LOCATION:

The Snake River Monarch claim is the east location of the group. The east end of this claim borders on Snake River. Passing through it are stringers of quartz in size from a few inches to six feet in width, carrying tetrehedrite and chalcopyrite; no commercial bodies have been disclosed. Located in this claim, 500 feet northwest and 200 feet higher than the river, is the portal of the main working tunnel, now driven 200 feet, so directed that all veins in its course will be cut in reaching its objectives, 7000 feet distant in the White Metal claim, most westerly vein of the group, and at depth ranging from 300 feet to 1640 feet vertically below the largest and most promising outcrops, of 13 veins or mineral zones showing at the surface. The railway survey passes through this claim. The end of the railroad track is but 400 feet distant from center of claim and is paralleled by the main highway, from which a wagon road, 1000 feet in length, on an 8% grade is built to portal of tunnel. A site for treatment plant is at portal of the tunnel. Railway easily extended to receive output of plant and mine. For the mill, water can be pumped from Snake River or led to it from the tunnel separate from the main drainage, if found suitable for mill purposes. Water for fire protection for the buildings, built in the flat below, also could be had from the tunnel. Spring water for domestic use is on the ground. Timbers and lumber may be shipped in over the railway or hauled from Cuprum, 12 miles distant. Telegraphic and telephone communication is established. Auto roads are maintained, train service is tri-weekly; may be had daily upon application. Winters are short and mild, rarely to any extent interfering with outside work. Electric power line is 1800 feet from portal of tunnel. Miners and other help secured from outside points on short notice. Aid to development, if thought advisable, could be had by drift tunnels driven on many of the various veins, sloping into both Hermann and Homestead Creeks, that would shorten raises and supply air; also giving necessary additional exits from the mine.

NAMES OF VEINS AND ZONES ENCOUNTERED IN WORK TUNNEL:

Within 600 feet from portal of tunnel is expected to be cut footwall vein of the Iron Dyke zone, in which occurs the massive chalcopyrite ores of that mine. On the surface in this vein is seen quartz, gosson, iron pyrite, carrying small values in gold and silver, also copper. Viewed as a whole, the surface focks covering the vein to the west are of a reddish and brownish gray color.

The Homestead Wonder and Roosevelt claims to the east, cover this vein in length 3000 feet by 600 feet wide; vertical distance to tunnel level 300 feet from discovery. Development consists of surface cuts and trenches. The middle vein, 600 feet to center of zone, is covered by the Legal Tender, Summit, Banner and Poor Man Claims, for a total distance of 6000 feet; wertical depth to tunnel level 700 feet. What may be termed the foot wall of this vein is a very siliceous, hard, gray dyke; width 6 to 8 feet. In places where this dyke has been checked, the open seams have been cemented with bornite ore. On the upper side of the dyke, in contact with a belt of weathered laminated and otherwise highly altered lime rock, small amounts of bornite occur, either pure or in association with quartz; also occurs within this lime rock, bunches and stringers of quartz bearing iron pyrite, chalcopyrite and bornite, with varied values in gold, silver and copper.

DEVELOPMENT, SURFACE CUTS AND TRENCHES:

At a further distance of 600 feet is the west vein of the Iron Dyke zone, located in the Great New England, Grand Union and Clipper claims - in all 4500 feet in length. A tunnel, 100 feet in length is driven on the west end of this vein. In a crosscut at the end of this tunnel a sample of ore taken from picked pieces assayed, gold, \$12; Silver, 7 oz; copper 1%, but for occasional pieces, the entire vein was leached of pay ore. The vein where prospecting was mostly done is 300 feet wide. Where exposed by weathering, bunches and veins of quartz in places containing minute veinlets and clouded with specks of chalcocite. This work was done 1000 feet east of tunnel course, and west to the Iron Dyke mine ore body 1500 feet. Work tunnel crosses this wein at a depth of 900 feet, 300 feet lower than the work just mentioned. Viewed as a whole, the three veins just alluded to comprise a block of mineralized ground, wherein many ore bodies are indicated at the surface. A vein of iron pyrite 12 feet thick, on the hanging wall deserves notice; with its varicolored rocks, where exposed by weathering and erosion, suggests a replacement deposit.

The next vein to be encountered is at a further distance of 600 feet from the discovery cut made in this vein; 12 feet in width; from a sample taken \$10 was obtained in gold, silver and copper values.

COPPER DYKE ZONE:

These claims are located South 75 degrees West, 4500 feet in length; dip North 65 degrees to vertical. Claims are located three in length, two in width, with end and side lines common to claims adjoining.

CLAIMS LOCATED UPON THIS ZONE:

The Copper, Copper Dyke, Posepny, the Gold, the Gold Dyke, Herman Foss. Between walls at the surface appears quartz, massive gosson, including broken, shattered and sheared portions of various rocks, and included at time of main fissuring; mineralized from gasses, vapors and arising solutions, containing iron, gold, silver, copper andother minerals. This occurrence lies between Homestead Creek on the west and Hermann Creek on

the east, forming a pronounced depression in the divide, between these two creeks. This depression is probably due to weathering and erosion of the shattered outcrop and migration of metallic minerals to be rearranged in ore bodies below.

On the east side of the west fork of Hermann Creek, below the ridge, was started in brown quartz, a tunnel on the vein, the Copper Dyke vein, bearing iron pyrite, chalcopyrite, gold and silver, with vugholes and stringers of malachonite. This tunnel for a distance of 170 feet is continuously in mineralized ground. It is cut off by a basalt dyke; strike S. 28 degrees E; dip 65 degrees West. Following the course of the vein, the ore was again encountered on the west side, the rock being uplifted and seams opened, with but slight shattering, in contrast to the extensive movement and shattering on east side of vein. Samples taken at contact of dyke and ore assayed in copper from 8% to 22%; gold 80% to \$3.40; silver 5 to 7 oz. Native copper in moss shaped sheets, together with cuprite, was frequently found in the open seams and crevices. Fifty feet east of the basalt dyke, a crosscut driven through the vein for a distance of 45 feet, 14 feet of which was in high grade ore.

Tunnel No. Two. Portal vertically lower than No. 1 167 feet; 35 feet from portal, this tunnel encounters a vein of quartz carrying iron pyrite, chalcopyrite, gold and silver, copper 1.6%, gold \$3.20, silver 7 oz.

The next body of ore to be encountered sixty feet in width, heavy iron pyrites, carrying a small amount of gold and silver and traces of copper. The next ore body is 14 feet in width, carrying values in gold and silver in stringers and disseminated coppyr. Distance from portal of tunnel 320 feet, S. 75 degrees W., thence a crosscut 65 feet in length, driven N. 35 degrees W., bearing disseminated chalcopyrites; thence S. 65 degrees W., 155 feet, where the middle vein is encountered. Where this vein is struck, a vein four feet in width, carrying 3% copper, \$2.85 in gold, 5 oz. in silver; from here the crosscut is driven N. 28 degrees W., 135 feet, through a body of ore with chalcopyrite disseminated throughout. This body of ore will average 1.3% copper; gold, \$1.60; silver 4 ox. Specimens found in crossing this body of ore had a thin coat of chalcocite and covolite. The end of crosscut was in disseminated iron and chalcopyrite. Small bunches of higher grade ore, similar in character to that in No. One tunnel was met with. A drift driven a short ways from this crosscut S. 75 W., commenced to show oxidization and crushing of rock.

To the east of the portal of the tunnel, on the ridge is found exposed along it, a good showing of copper ore. And further referring to the outcrop on the ridge between Homestead and Hermann Creek, quartz bodies occurring in the exposed outcrops were in width more than 100 feet, carrying iron pyrites, chalcopyrites, with small amounts of gold and silver.

THE MCCARTHY GROUP, CONSOLIDATED WITH THE RAND-MCCARTHY:

The southern most claim of this group, the Red Boy, adjoins the Gold Dyke and Hermann Foss claims of the Rand-McCarthy. The vein on which this claim is located, has for a hanging wall a much weathered andesite. The vein has gold, silver and copper, in appreciable amounts, and varies in width from one to six feet.

The two adjoining parallel claims, to the North are the Sulphide and Malachite.

The Sulphide claim has three parallel quartz veins, four to ten feet thick, spaced from thirty to forty feet apart; bearing gold, silver and chalcopyrite, total value \$7.00.

The Peerless and Packwood are the adjoining parallel claims to the west. The vein is more than 60 feet in width and where exposed at the surface, shows mineralization throughout the length of the two claims. A crosscut driven through this vein for a distance of sixty feet in a grayish vein filling, containing grains of iron pyrite and quartz. A boulder of bornite ore was found, copper 45%, silver 48 ez. gold \$18. This was the only bunch of any considerable size of this ore, the small bundles and particles were found, in driving the crosscut.

The two adjoining parallel claims are the Villa and the Oregon Copper.

The first quartz claim encountered is 75 feet wide, heavily impregnated with iron pyrites, carrying small amounts of gold and silver. Paralleling this vein, 60 feet west, is a brown quartz vein, 40 feet wide, hearing gold and silver. This vein extends westerly into the Oregon Copper claim, where at the surface in the last named vein, in the discovery cut, gold, \$2.60; silver 8 oz; copper, 6% is found in various cuts and trenches. To the west of this work, is again exposed copper stain and iron pyrite for a width of from 10 to 150 feet. The conditions are such as to create the belief that comparatively little work will bare merchantable copper.

The next and final claims to the northwest are the White Metal and Tetrahedrite. Values in copper, 4%, gold \$14; silver 48 oz. form highest assays at the surface, taken from vein $2\frac{1}{2}$ feet thick, partly decomposed and leached.

Based on personal and otherwise acquired knowledge, we, twenty-five or more years ago, believed that there could be copper mines developed in the Iron Dyke District. Time gave opportunity to select, locate and acquire and assemble a group of claims, which we could not and did not ourselves think of making into mines. What we did believe was, that we could by baring to the eyes of others such surface proofs of ore bodies below, that they would take the remaining slight gamble of proving our ear marks for indicated ore bodies false or true.

(Sd.) D. F. McCarthy, Homestead, Oregon.

MCCARTHY PROPERTY

WALLOWA McCarthy Claims.—The McCarthy property, situated about one-

half mile northwest from Homestead, has chalcopyrite in a small shear zone, but development work has been interfered with by a basalt dike which has obscured the deposit and interrupted its development.