OSCEOLA DISTRICT

Is situated seven miles south of Sacramento District, on the eastern slope of the Snake range of mountains, and ten miles north of Jeff. Davis Peak. It was discovered in August, eighteen hundred and seventy-two, by Messrs. Matteson and Heck. The formation in which the veins are found is quartzite—gold predominates in them all. The chief locations are the Western Slope, Exchange, Pilot, and Osceola. An incline has been sunk on the Western Slope one hundred feet, and a drift run on the vein, from the bottom, forty feet. An incline has also been sunk on the Pilot seventy feet. This vein is four feet in width, course east and west, and dips forty-five degrees north. There is an abundance of wood in this district, and a good supply of water is obtained, for all purposes, from three springs.

OSCEOLA DISTRICT.

Through the courtesy of Mr. George G. Blair we are able to summarize the workings of this district during the last two years, as follows: The Cumberland mine, owned by the above gentleman, was located in October, eighteen hundred and seventy-four. At a depth of forty feet it shows a ledge six feet in width, which carries a very fair grade of free gold and gold-bearing sulphuret ore, which works sixty-five dollars per ton. The ledge runs east-northeast by west-southwest, and stands almost perpendicular. The formation is quartzite.

The Osceola ledge, also located and owned by Mr. Blair, has been worked by an incline to a depth of thirty feet, and shows a ledge sixteen inches in thickness. Some of the ore is of an excellent character. The footwall is quartzite, and the hanging wall is slate. The course is east and west, the pitch being south at an angle of seventy degrees.

The Golden Eagle ledge, owned by James S. Matson, stands almost perpendicular, and is worked by a shaft one hundred feet in depth and a drift from the bottom running fifty feet east. The ledge is shown to be thirty-three inches in thickness. Also, one runs fifteen feet to the west, which shows the ledge twenty inches in thickness. The ore of this averages, according to various estimates, from twenty to fifty dollars per ton in gold, there being free gold and gold-bearing sulphurets in most all portions of the ledge.

The Credit ledge, owned and worked by W. A. McDonald & Co., lies almost on the summit of the Snake range, and runs northwest by southeast, the pitch being southwest at an angle of forty-five degrees. The work is carried on by a tunnel in the mountain upon the ledge, which is eighteen inches in thickness, and produces some very fine ore.

There are other claims in the district which show fair prospects, but which have not yet had much work done upon them. There is but little silver produced, the bullion from the arastra process being worth about sixteen dollars per ounce. There is certainly enough ore here in these mines already opened to warrant the erection of more extensive reduction works for reducing the ore on a larger scale than can be done by the old-fashioned Mexican arastra. But the locators and owners of these mines are men of limited means, and are obliged to use the appliances at their command. Here is a good field for the investment of capital, and it is hoped the attractions at Ward will turn some of it hitherward.
The mines in this district were discovered by Mr. James Matteson in August, 1872. The Exchange was the first location made. Since then about one hundred locations have been made on quartz veins. These veins are small, varying from one to three feet in width. The ores carry chiefly gold, and contain from ten to twenty dollars per ton. The veins run generally north-east by south-west. The Eagle is owned by Matteson & Co., the vein being about four feet in width. It is worked through a shaft and levels from different stations. More work has been done on this vein than on any other in the district. The Crescent is from two to three feet in width. Free gold and gold-bearing sulphur-oxides are found in all the veins in the district, no attention being paid to the saving of the silver. Near the summit of the Snake range of mountains is found the Credit ledge. The vein is eighteen inches in width, and the work is done through a tunnel. During the past summer, a small mill was erected in the district, which has produced a good deal of gold bullion, worth about eighteen dollars per ounce.

Placer mines are also worked in the district. They were discovered in June, 1877, by Mr. John Versan, in two gulches which run nearly parallel with each other. One is called Dry Gulch and the other Wet Gulch, and as indicated by their names, in one is found water and in the other none. Dry Gulch has the greatest sweep from the mountain, and in it are located most of the claims. The richest diggings are found near the point where the two gulches come together. These claims have been located in twenty-acre lots, eighty rods in length by twenty rods in width. About three hundred claims in all have been located in both gulches.

A large nugget which weighed twenty-four pounds was found last summer in one of Mr. Versan's claims, worth about twenty-six hundred dollars. The finder hid it for a month or more, and then carried it to Ward and had it melted in small bars. The thief repented of his crime and returned the bullion to the owner.

The great drawback in working these placer claims is the scarcity of water. About one inch of water has been obtained by running a tunnel into Wet Gulch, and this is the only supply which has yet been made available. This is used chiefly in rockers. Whenever sufficient water can be brought here for operating sluices, the product of gold will be greatly increased, for many of the claims which are idle now can then be profitably worked.
Osceola.—At Osceola, in the extreme southeastern part of White Pine County, near the Utah line, placer and quartz mines were discovered during the year, and a small town sprang up. The country is well wooded, but water is not obtainable for mining purposes in any quantity, and during the summer the miners in the placer mines used rockers, and waited for the melting snow of the winter to work over the gravel more thoroughly. The largest nugget found is said to have weighed 25 pounds, and of pure gold. The ore is white quartz.

The Osceola Mining Company commenced hauling ore to the mill, 3 miles distant, in December. Thirty tons of ore were taken out daily, and there were 1,500 tons of ore on the dumps when the mill was started.

On the Bond Holder mine a shaft-house was built, and preparations made to begin work.

The Verdi mine is 3 miles south of Osceola. The shaft has been sunk 60 feet, and drifts and cross-cuts of 400 feet on the ledge showed free gold quartz all of the way.

The Mazeppa mine is a ledge of free gold quartz running north and south, and is 600 yards northeast of the Verdi mine.

The Virginia Rose mine is 500 yards east of the Verdi mine, and the Durango mine is 350 yards west of the Verdi mine. The Durango ledge is of free gold quartz running east and west, and the shaft has been sunk 80 feet through a continuous ore body.

The Sperango mine, situated 700 yards southeast of the Verdi mine, is a well-defined ledge, with shaft sunk 40 feet, and a drift run on the ledge for 20 feet. The ore assays from a trace to $100 per ton.

At Monroe City, 4 miles from Osceola, quartz mining has also been commenced.

The placer fields of Osceola district cover an area of 10 by 7 miles, including several canons. Miners in the gulches average $2.50 to $5 per day, and dust and nuggets pass current in trade. Want of water has retarded work in the placers, but negotiations are on foot for a water system which will convey it by a ditch, 18 miles, from Snake Valley. Great interest has been manifested in this new field.
The writer recognized this fault, and 4 or 5 miles north of it a parallel fault, which seems also to have been downthrown to the south.

Mr. Weeks states that about 10 miles northeast of Osceola, in the central part of the range, the Cambrian limestones are broken by numerous faults which strike northwest and southeast. The massive blue limestones which form the upper part of the series are repeated several times by small faults of 200 to 300 feet throw. The general dip of the Cambrian series is to the north-northwest, and the dip of the Ordovician to the east-northeast. There appears to have been an upthrust of the Cambrian which has brought the successive limestone beds of the series in juxtaposition with the Ordovician. The existence of a heavy fault between the Cambrian and Ordovician is clearly seen in the southern portion of the Snake Range.

On the north side of the Kern Mountains a belt of quartz veins and siliceous granitic dike rocks, running northwest along the base of the mountains, appears to be along a fault zone. On the north side is the crystalline nearly black Cambrian limestone, while on the south side come schists which represent the top of the underlying Cambrian quartzite. The vertical separation of the fault is probably at least several hundred feet.

At Osceola, just north of Wheeler Peak, the Cambrian quartzites and slates carry gold. Considerable placer and some vein gold has been taken from this district.

On the east side of the range there are small mines and prospects in a number of places. In some localities the coincidence of mineralization with the presence of a spring flowing in a box canyon leads to the hypothesis that it was these same waters which formerly brought about the ore deposition. Along the walls of such canyons, high above the present bed, ancient water channels in the limestone rock show that the spring has existed since near the time when the erosion of the canyon began.

The Osceola (Centennial district) quartz mines report no production for 1905, and only one placer mine, the White Rock Gold Mining Company, was operated in 1905.
At Osceola both the Gold Placer Mining Company and the Stalwart mine extracted considerable gold by drifting in the bed of an ancient river. Several small placers added a small amount to the gold production from this district.

**Osceola district.**—The total output of this district in 1908 was valued at $5,137, of which the placers produced $4,073 in gold and $19 in silver, a total of $4,092. Only 143 tons of ore were produced during the year, yielding $1,041 in gold and $4 in silver. The quartz producers were the Boston Nevada Mining Company, the Black and the Weeks mines, and the Pilot Knob Mining and Milling Company. The last has a small prospecting mill with a concentrator. The placers are all drift mines and are those of the Gold Bar Placer Mining Company, the Osceola, the Blue Gravel Placer Company, and the Osceola Leasing Company.

**Osceola district.**—Two lode mines and 4 placers yielded $5,977 in gold and $44 in silver. The placer product was valued at $2,565, and represented the results of sampling and prospect work by individuals. At the Black Horse mine a few tons of ore were treated in an arrastre. Ore from the Gem group was treated in a 5-stamp amalgamation mill.

**Osceola district.**—The 2 lode mines at Black Horse yielded gold and silver ore, which was treated at the amalgamation mill in 1910. In 1909 there were 2 lode mines and 7 placers producing, which yielded $5,977 in gold and $5,845 in silver.

**Osceola district.**—From the treatment of 332 tons of ore at gold and silver mills, there was produced 233.42 ounces of gold, 104 ounces of silver, and 3 tons of concentrates, containing gold and a small quantity of lead and copper.

**Osceola district.**—A small quantity of gold and silver ore was shipped from the Cumberland property.

**Osceola district.**—A small quantity of ore, containing gold and silver, is said to have been produced from the Serpent claim, taken out in doing assessment work.

**Osceola district.**—A small quantity of gold-silver ore was shipped from another property in the district. Some placer bullion was produced also.

**Osceola district.**—The Piermont and the Pea Ridge were the only producers of ore in 1916. The latter property is equipped with a 2-stamp amalgamation and concentration mill, from which tungsten concentrates were also produced.

**Osceola district.**—The output of 3 placers consisted of $1,212 in gold and 10 ounces of silver obtained from sluicing the gravel in the Osceola town gulch.
OSCEOLA

Placer Gold, Gold, Silver, Lead, Tungsten, (Phosphate Rock)

Location. The Osceola District is situated at Osceola on the W. flank of the Snake Range. Ely, which is on the N. N. R. R., is 40 m. W. N. W. Osceola is 6,800 ft. above sea-level and the mountains to the E. rise to an altitude of 9,600 ft. The Sacramento District adjoins the Osceola District on the N., and the Black Horse District adjoins it on the N.E., and is sometimes considered as a section of the Osceola District.

History. The gold lodes were discovered by Matteson and Heck in 1872, and the placer mines by John Versan in 1877. The gold ore was first worked by arrastras, but a 5-stamp mill was erected in 1878. The most important placers were operated by the Osceola Co. from the early eighties to 1900. Both placers and lodes have been operated irregularly and intermittently down to the present time. Tungsten was discovered in the district in 1916, and the Pilot Knob group erected a 20-stamp mill. Phosphate rock was discovered in 1917, and lead ore shipped in 1918. In 1921, the Sunrise property operated a 2-stamp mill and the American Group a 10-stamp mill, producing gold bullion with a little silver content.

Production. According to Weeks, the production of the Osceola District up to 1907 may be safely estimated at $2,000,000; of which about one-tenth came from quartz mines, the remainder being from placers. Stuart states that estimates range from $3,000,000 to $5,000,000.

Geology. Cambrian conglomerate, argillite, quartzite, and limestone have been intruded by granite porphyry, according to Weeks. The country rock of the auriferous lodes is quartzite and the ore occurs in regular zones of fracturing or sheeting and in irregularly shattered masses of quartzite adjacent to these zones of fracture. The gold commonly occurs in flakes and finely disseminated in quartz seams and veinlets, but in the Cumberland Mine it is present in vugs lined with fluorite and other minerals. At the Pilot Knob group, scheelite occurs in quartz veins in limestone, while the Lucky Boy Mine has silver-lead ore, according to Mines Handbook.

Bibliography. SMN1873-4 78 MR1909 I 430 MR1916 I 498
SMN1875-6 170-1 MR1910 I 525 MR1917 I 296
SMN1877-8 157-8 MR1911 I 700 II 12 Phosphate Rock.
MR1904 200 MR1912 I 816
MR1905 274 MR1913 I 841
MR1907 I 383 MR1914 I 712
MR1908 I 305 MR1915 I 653
MR1921 I 396

Stuart NMR 98-100. Thompson & West 662.
Weed MH 1244 Lucky Boy M. Co. 1305 Pilot Knob Group.
Osceola district.—Small quantities of gold bullion and one lot of lead ore shipped to the smelter were reported from three properties in the district.

Osceola district.—The results from placer mining and some ore shipped by one producer amounted to $523.

Osceola district.—From the Sunrise group several tons of ore were milled which produced bullion by amalgamation.

Osceola district.—Two operators of quartz mines in the Osceola district treated 113 tons of ore, producing gold bullion which contained a little silver. A 10-stamp amalgamation mill was operated on ore from the American group, and a 2-stamp amalgamation mill treated ore from the Sunrise property, which is 8 miles from the mill.

Osceola district.—A large quantity of gold bullion was recovered from ore mined from the Dry Gulch and Fifth Decade properties and small lots from operators of unknown claims.

Osceola district.—Placer mining on property operated by Tildford Brothers resulted in the production of bullion having a fineness of 0.850 in gold and 0.145 in silver.

Osceola district.—Gold bullion was reported recovered from ore mined in the Crescent and other properties in the Osceola district. Placer gold was reported recovered from gravels in the district.

Osceola district.—The Sun Rise claim yielded a sample lot of ore that was amalgamated, but placers yielded most of the output of gold and silver, which was valued at $305.

Osceola district.—Placer gold was recovered from claims near Osceola. At the Crescent group the Woodman Mining Co., which owns a five-stamp mill, did 1,000 feet of development. At the American property a tunnel was driven 875 feet.

1927—Review by districts

Osceola district.—A 10-stamp Straub mill, equipped for amalgamation and treating 8 tons of ore a day, was operated on the Lassie Jean mine of the Nickelson Mining & Milling Co., producing gold bullion. The property is opened by an inclined shaft sunk 130 feet on a vein dipping about 45°. This property is 42 miles from the nearest railroad station at East Ely. The placer output of gold and silver came from the Hard Pickings and Osceola Fraction claims. The Osceola fraction, on the west side of Mount Wheeler, was worked by dry washing and dry washing or by sluicing when there was enough water. The method of reaching the gravel is by shaft sunk 30 or 40 feet to bedrock. Hoisting of the gravel is by gasoline engine and removing the waste rock by a combination of blower and riffles. The material caught in the riffles is panned.

Osceola district.—During development of the Woodman mine the Nicholson Mining & Milling Co. treated 38 tons of free gold ore in an amalgamation mill and reported bullion amounting to $2,195 in gold and silver. The gravel from the Osceola drift placer was worked by dry washing. About 10 ounces of gold was recovered between April and October.

Osceola district.—Five placers and one lode mine in the Osceola district produced gold and silver bullion valued at $6,302. According to the Nevada Mining Press of January 24, 1930, a mill run of 38 tons of ore from the Woodman mine of the Nicholson Mining & Milling Co. yielded $2,195.89 in gold and silver recovered by amalgamation in an 8-ton Straub mill. The company is prospecting a gold-bearing fissure in a shale series beneath the productive quartzite. Small lots of placer gold were reported by various lessees.
Osceola district.—Five placer operations and two lode mines in the Osceola district reported 18 tons of ore, $6,604 in gold, and 67 ounces of silver, valued together at $6,623. More than half the gold was reported from placer operations, much from unknown sources. The Stalwart and Home placers were producers of a little gold.

Placer gold was recovered in the Osceola district, but due to water shortage the yield was small.

Osceola district.—Numerous lode mines and placers were reported in this district. The Osceola Gold Mining Corporation spent a large amount of money for construction work, including the installation of a power shovel on its placer ground; however, no ore was produced in 1935.

Osceola district.—The production in 1936 of considerable placer gold was reported from the Osceola district.

Osceola district.—A large number of small operations in 1937, both lode and placer, were reported in the Osceola district.

Osceola district.—The Nevada Tex Mining Co. shipped smelting ore from the Gilded Age and Woodman mines during 1938. The Placers Recovery Co., operator of the Hampton hydraulic placer mine, was the leading producer of placer gold in the Osceola district.

Osceola district.—The Gilded Age Mining Co. shipped gold ore from the Golden Eagle mine to a smelter. Venture Gold Syndicate carried on a development campaign at the Lassie Jean mine and built a 15-ton amalgamation-concentration mill during the year. Placers Recovery Co. hydraulicked gravel at the Ghost Walk and Transit mines.

Osceola district.—The Gilded Age Mining Co. operated the Gilded Age mine throughout 1940; gold ore was shipped to a smelter. Operators of the Golden Eagle mine also shipped gold ore to a smelter. W. M. Stout worked the Sunshine mine from July 15 to October 10; 300 tons of ore containing 344 ounces of gold and 120 ounces of silver were shipped to a smelter.

Osceola district.—The Gilded Age Mining Co. worked the Gilded Age mine from January 1 to October 15, 1942; 3,388 tons of ore containing 3,359 ounces of gold and 1,220 ounces of silver were shipped to a smelter.

Osceola district.—The Gilded Age Mining Co. worked the Gilded Age mine the latter half of 1945 and shipped gold ore to a smelter.

Osceola District.—The Gilded Age Mining Co. operated the Gilded Age mine throughout 1946 and shipped gold ore to a smelter.

Osceola District.—The Gilded Age Mining Co. worked the Gilded Age mine throughout 1947; gold ore (485 tons containing 281 ounces of gold and 135 ounces of silver) was shipped to a smelter.

Osceola District.—The Gilded Age Mining Co. shipped from the Gilded Age mine 2,802 tons of gold ore containing 1,264 ounces of gold and 686 ounces of silver to a smelter during 1948.

Osceola District.—The Kenison-Alverson Lease shipped 255 tons of ore with a gross metal content of 5 ounces of gold, 696 ounces of silver, 50,950 pounds of lead, and 14,070 pounds of zinc to a custom mill for concentration.

Osceola District.—R. H. States & Hazel Green worked the Mary Ann placer drift mine throughout 1950; 110 cubic yards of gravel yielded 36 ounces of gold and 6 ounces of silver. Graham Development Corp. shipped 518 tons of ore containing (gross) 584 ounces of gold and 257 ounces of silver to a smelter from the Golden Eagle mine.
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Left on this road to BAKER (gasoline), 1.6 m.; R. (straight ahead) here 3 m. on a Forest Service road to small STELLA LAKE, in a deep round basin. Cars are parked here near a marked trail that circles R. around the lake and climbs steeply for about 8 m. (4 hrs.) to the summit of MOUNT WHEELER (13,058 ft.), whose bare rocky top is the second highest point in the State. The trail to the summit rises rapidly through three life zones of plant and animal life. In summer sections of the trail are almost obscured by Indian paint brush, lupines, and other bright blooms.

At Baker the main side road turns R. to LEHMAN CAVES NATIONAL MONUMENT (lunchroom, cabins, camp sites), 7.7 m., under jurisdiction of the National Park Service since 1922. The caverns, amid pine, spruce, fir, juniper, and mountain mahogany, are in limestone, among high peaks and deep glaciated canyons of the Snake Range. A large variety of birds nest near the streams and fishing and game hunting are popular sports in the region for which this is a base.

The caves, all deep underground were discovered about 1878 when a horse driven by Abe Lehman, who was hauling logs down the mountainside, broke through the earth's crust, revealing the cavity. In some degree Lehman explored the chambers, though they were not fully known until much later. The caverns extend 1,400 feet from the entrance, go down 200 feet, and have no natural entrance.

The chambers and galleries contain innumerable stalactites and stalagmites of remarkable color and beauty, and are exceptionally clean, as bats have never inhabited them. Some of the stalactites meet stalagmites built up from the floor, forming columns 15 to 60 feet high. No two formations are alike. Often the limestone drippings have taken the shape of strange figures, of ribbons, of folded draperies. Begun in the pre-ice age, this gradual transformation continues still, wet and dry cycles influencing the development. It is estimated that stalactites and stalagmites here increase no more than an inch in 1000 years.

Tiny needle crystals adorn the labyrinth of corridors, which are lined with fluted columns. Small winding tunnels connect chambers of chocolate, cream and buff. Some formations have been named, the more prominent being the Pearly Gates, St. Peter, the Little Church Around the Corner, the Angel's Wing, Cathedral Spires, the Parachute, and Peter Pan. Exquisite is the interior of the Grand Palace with its multitude of pendulous "icicles" resembling an inverted garden. Below them, heaped on the floor, are terraced stalagmites, countless filaments resembling cascades of Spanish comb. Some of the columns when struck give off deep musical tones. At the tips of many stalactites hang transparent, jeweled drops of water. The Hall of Music, with high arched ceiling splashed with color, is one of the most beautiful rooms.

The road to the caves continues northward to a junction with the Forest Service road up Mount Wheeler (see above).

US 6 turns northwest to a junction at 19 m.

Left here to OSCEOLA, 6 m. (6,800 ft.), where gold lodes were discovered in 1872 and placer mines in 1877. The ore was first worked in the primitive arrastras, but a small stamp mill was built in 1878. This is one of the few places in Nevada where hydraulic mining was done, with extensive operations beginning in 1880 and lasting for 20 years. No exact figures on the value of production are available, but estimates range from two to five million, most of it from the placers. There have been several revivals of activity in the district, and some tungsten was mined after 1916.

US 6 continues between divisions of the Nevada National Forest and crosses SACRAMENTO PASS (7,163 ft.), which affords an impressive sweep of mountain and plateau. Broad flanks are mantled with evergreen and threaded by clear mountain streams, country unlike any other crossed in Nevada by this route. The road descends
Osceola District.—Activity was confined to a small shipment of direct smelting lead ore from the Hannah mine and some development work at the Paystreak and Mary Ann gold-placer mines.

Osceola District.—Hemet Milling & Processing Co. shipped dump material containing gold and silver from the Gilded Age mine to a smelter for flux.

Osceola District.—Hemet Milling & Processing Co. shipped dump material from the Gilded Age mine to the McGill smelter for flux. The material contained some gold and silver. Edward V. Abbott worked gravels from the Gold Nugget and North Star by drifting, and produced gold and silver. Mrs. Bonita Tilford worked the Three Sisters tungsten placer and shipped concentrate to an ore buyer. L. T. Tilford shipped a small quantity of tungsten ore from the Shipper underground mine to a custom mill, and R. D. Tilford developed tungsten ore at the Big Foot claim in 1954.

Several smaller companies [than Cherry Creek] in the Osceola district yielded gold and silver from deposits mined several years ago.

Operations in the Osceola districts produced ore containing recoverable gold and silver.

Scheelite in granite — p. 175

"Douglas" Cr. W. slope Mt. Wheeler
Willard Cr. ? = 8 mi. To Xat Queen
Williams Canyon ?? = 12 mi. "" ""

See also White Pine