

Mining equipment includes a Chicago Pneumatic two-drill compressor and a Fairbanks-Morse gear hoist, both powered by gasoline engines. Hoisting is done with bucket and crosshead.

In 1936 that portion of the mine above the 600-foot level was under lease to Lloyd Wilson, of Hawthorne, and associates. The lessees had produced about \$18,000 of shipping ore in about one year. The royalty payments based on the gross value of the ore are 20 percent on ore having a value of less than \$100 per ton and 25 percent over \$100 per ton. The haul to Mina, a distance of 23 miles, costs \$2.75 per ton on contract.

Veins range in width from 3 inches to 3 feet and contain silver, gold, and lead.

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HAWTHORNE DISTRICT

The Hawthorne district includes a large area tributary to the town of Hawthorne, which is at the south end of Walker Lane 7 miles southwest of Thorne, a station on the Mina-Hazen branch of the Southern Pacific R.R. It is sometimes divided into the Lucky Boy section and the Pamlico section, 6 and 10 miles, respectively, southeast of Hawthorne.

The Pamlico and La Panta mines in the Pamlico Range were the most important early-day producers. Other early-day mines of less importance in the Pamlico section were the Good Hope, War Eagle, New York Central, and Gold Bug. In later years, the Lucky Boy has been the principal property in the Hawthorne area. In recent years there has been little mining activity.

Production of the Hawthorne District from 1910 to 1934 is shown in table 4.

Lucky Boy Consolidated Mines Co.

The Lucky Boy Consolidated Mines Co., J. H. Miller, of Hawthorne, president and principal owner, owns 14 patented claims on the east slope of the Wassuk Range. The Lucky Boy mine was discovered in 1906 by Guy E. Pritchard while working on the road over the Lucky Boy Pass.

In 1936 the property was under option to eastern interests, and several men were employed in cleaning out the Miller tunnel. This work was done primarily to hold the option.

The Lucky Boy mine is developed by the Hubbard two-compartment shaft 950 feet deep, inclined 70°, the Miller tunnel 6,400 feet long, and approximately 2 miles of subsidiary workings.

Mining equipment includes a Sullivan compressor, 50-horsepower electric hoist, electric haulage locomotive, and other mining machinery.

A 125-ton flotation mill was erected in 1926 near the portal of the Miller tunnel. Milling equipment includes a 10- by 12-inch Blake crusher, 2 1/2- by 8-foot Hardinge ball mill, Dorr Duplex classifier, three K & K flotation units, a Deister table, and an Oliver filter.



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TABLE 4. - Gold, silver, copper, and lead production from Hawthorne District, Mineral County, Nev., 1904-35,  
in terms of recovered metals

(Compiled by Charles White Merrill, Mineral Production and Economics Division, U. S. Bureau of Mines)

Year	Placer						Lode					
	No. of mines	Gold		Silver		Total value	No. of mines	Ore, short tons	Gold		Silver	
		Fine oz.	Value	Fine oz.	Value				Fine oz.	Value	Fine oz.	Value
1904	---	---	---	---	---	---	1	1,900	142.99	\$2,956	35	\$20
1905	---	---	---	---	---	---	---	---	---	---	---	---
1906	---	---	---	---	---	---	---	---	---	---	---	---
1907	---	---	---	---	---	---	2	35	25.54	528	9	6
1908	1	47.99	\$992	7	\$4	\$996	1	64	45.96	950	8	4
1909	---	---	---	---	---	---	4	1,815	481.62	9,956	408	212
1910	---	---	---	---	---	---	15	4,090	864.05	17,861	421,384	227,547
1911	---	---	---	---	---	---	9	1,323	152.68	3,156	100,859	53,455
1912	---	---	---	---	---	---	15	1,358	177.86	3,677	120,854	74,325
1913	---	---	---	---	---	---	9	452	115.87	2,395	1,132	684
1914	---	---	---	---	---	---	8	305	219.95	4,547	1,098	607
1915	2	70.13	1,450	15	8	1,458	9	405	238.83	4,937	13,211	6,698
1916	2	23.31	482	4	3	485	8	377	27.09	560	56,439	37,137
1917	2	3.50	72	2	1	73	15	535	66.54	1,376	17,445	14,375
1918	---	---	---	---	---	---	8	105	41.28	853	10,019	10,019
1919	---	---	---	---	---	---	8	59	11.50	238	3,211	3,596
1920	---	---	---	---	---	---	2	256	43.00	889	15	16
1921	---	---	---	---	---	---	2	22	23.29	481	9	9
1922	---	---	---	---	---	---	6	102	31.14	644	11,110	11,110
1923	---	---	---	---	---	---	8	99	250.63	5,181	2,237	1,834
1924	---	---	---	---	---	---	4	46	151.82	3,138	200	134
1925	---	---	---	---	---	---	3	31	68.89	1,424	3,311	2,298
1926	---	---	---	---	---	---	4	18,549	27.10	560	103,473	64,567
1927	---	---	---	---	---	---	3	219	17.30	358	17,424	9,879
1928	---	---	---	---	---	---	4	210	9.32	192	11,854	6,935
1929	---	---	---	---	---	---	5	104	36.48	754	471	251
1930	---	---	---	---	---	---	(2)	(2)	(2)	(2)	(2)	(2)
1931	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
1932	---	---	---	---	---	---	3	52	84.40	1,745	1,538	434
1933	---	---	---	---	---	---	5	84	176.98	4,524	148	52
1934	(2)	(2)	(2)	(2)	(2)	(2)	8	319	460.70	16,101	256	165
1935	(2)	(2)	(2)	(2)	(2)	(2)	9	432	697.62	24,417	11,507	8,271
Total <sup>2/</sup>	---	154.52	\$3,331	30	\$17	\$3,348	---	33,412	4,700.43	\$114,605	909,710	\$534,646

<sup>2/</sup> Bureau not at liberty to publish figures but disclosed figures included in totals.

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Continued ---



Electric power is available at the property.

Water for milling is available from Summit Springs and from the mine. Water from the springs is brought to the millsite by gravity pipeline 4 miles long and 3 to 4 inches in diameter.

According to Hill,<sup>10/</sup> the formations at the Lucky Boy mine are granodiorite intrusive into limestone. The ore deposit is a complex contact vein. The ore occurs as lenses and shoots with a steep west pitch. The main vein occurs in an irregular fracture. The fracture took place after the intrusion and cuts the limestone, granodiorite, and contact, although in general it follows the contact rather closely. The width of the vein varies from 1 to 8 feet and has a dip of from 70° to 80°. The ore minerals are argentiferous tetrahedrite, galena, argentite, horn silver, and a little sphalerite and gold.

#### La Panta Mine

The La Panta property comprises four claims controlled by E. H. Daugherty of Carson City, Nev. It is 12 miles southeast of Hawthorne, and is reported to have produced about \$300,000, principally in gold. In 1936 the property was idle.

Development work includes a number of shafts, the deepest of which is 300 feet. Total workings comprise about 5,000 feet. Some of the mine dumps have been screened and shipped in former years. All equipment has been removed from the property.

The ore deposits are irregular replacement bodies in limestone near a basic dike, probably basalt. The values are mainly free gold in a gangue composed principally of iron oxides. Several samples panned by the writer carried values estimated at \$6 to \$10 per ton.

#### Pamlico Mine

The Pamlico mine 10 miles southeast of Hawthorne, comprises eight claims controlled by E. H. Daugherty of Carson City, Nev.

In the seventies and eighties this mine is reported to have produced several hundred thousand dollars. In later years the mine has been worked intermittently by various lessees. In 1936 the property was idle.

The Pamlico vein is developed by shafts, drifts, raises, and crosscuts aggregating several miles in length.

Equipment includes the remains of a 20-stamp mill. All the mill equipment has been removed, with the exception of the stamps (1,050 pounds each) and a Gates No. 3 gyratory crusher.

In former years water for milling was piped from Cottonwood Creek, which heads near Buller Mountain in the Wassuk Range, 10 miles southwest of the mine.

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<sup>10/</sup> Hill, J. M., Some Mining Districts in Northeastern California and Northwestern Nevada: U. S. Geol. Survey Bull. 594, 1915, pp. 153-154.



TABLE 4. - Gold, silver, copper, and lead production from Hawthorne District, Mineral County, Nev., 1904-35,  
in terms of recovered metals (Continued)

(Compiled by Charles White Merrill, Mineral Production and Economics Division, U. S. Bureau of Mines)

Year	Copper		Lead		Total value	Average recoverable value of ore per ton <sup>1/</sup>	Total value, lode and placer
	Pounds	Value	Pounds	Value			
1904	---	---	---	---	\$2,976	\$1.57	\$2,976
1905	---	---	---	---	---	---	---
1906	---	---	---	---	---	---	---
1907	---	---	---	---	534	15.26	534
1908	---	---	---	---	954	14.91	1,950
1909	---	---	---	---	10,168	5.60	10,168
1910	42,966	\$5,457	671,860	\$29,562	280,427	68.56	280,427
1911	1,709	214	126,787	5,704	62,529	47.26	62,529
1912	52,317	8,632	185,284	8,338	94,972	69.94	94,972
1913	38,131	5,910	---	---	8,989	19.89	8,989
1914	5	1	6,169	241	5,396	17.69	5,396
1915	1,594	279	14,298	672	12,586	31.08	14,044
1916	18,537	4,560	70,000	4,830	47,087	124.89	47,572
1917	35,558	9,707	28,828	2,479	27,937	52.22	28,010
1918	474	117	18,592	1,320	12,309	117.23	12,309
1919	3,133	583	2,631	139	4,556	77.22	4,556
1920	---	---	---	---	905	3.54	905
1921	---	---	---	---	490	22.27	490
1922	38	5	17,681	972	12,731	124.81	12,731
1923	263	39	6,557	459	7,513	75.89	7,513
1924	1,604	210	3,330	266	3,748	81.48	3,748
1925	---	---	5,750	500	4,222	136.19	4,222
1926	7,958	1,114	142,195	11,375	77,616	4.18	77,616
1927	1,212	159	21,978	1,385	11,781	53.79	11,781
1928	802	115	18,106	1,050	8,292	39.49	8,292
1929	5,888	1,036	---	---	2,041	19.62	2,041
1930	(2)	(2)	(2)	(2)	(2)	(2)	(2)
1931	(2)	(2)	(2)	(2)	(2)	(2)	(2)
1932	119	7	12,086	375	2,561	49.25	2,561
1933	---	---	---	---	4,576	54.48	4,576
1934	310	25	750	28	16,319	51.16	16,319
1935	1,386	115	8,088	324	33,127	76.68	33,127
Total <sup>2/</sup>	214,004	\$38,285	1,362,550	\$70,098	\$757,634	\$22.68	\$760,982

<sup>1/</sup> Not to be confused with average assay value of ore. <sup>2/</sup> Bureau not at liberty to publish figures but disclosed figures included in totals.



The tailings pile below the mill is roughly estimated to contain 1,500 tons. These tailings have been sampled but their average value could not be learned.

The Pamlico vein is said to be in rhyolite. The ore consists of iron-stained quartz that carries free gold as nuggets and wires and some argentiferous galena.

#### Placer Gold

Placer gold has been found in the Canyon below the Pamlico mine. About \$8,000 in placer gold is said to have been mined here about 1912. The gravels are deep; one shaft was sunk 170 feet before bedrock was encountered.

#### Barite

Barite occurs in a range of low hills 13 miles east of Hawthorne. Considerable barite was shipped from this locality from 1916 to 1919 to consumers on the Pacific coast. Most of the production was made from the Crystal claim, patented in 1926, by the D. V. O. Products, Inc. The nearest shipping point is Kinkaid Siding, 1.3 miles from the property.

Development work on the Crystal claims includes three shallow shafts and several hundred feet of lateral workings. In 1936, the property was idle and all mining equipment except a small geared gasoline hoist and 1-ton skip had been removed.

The barite is in a nearly vertical vein. On the surface the vein is exposed by trenches and open-cuts for a length of about 800 feet. The width of the barite varies from 1/2 to 8 feet. At the northerly end of the vein the barite is associated with copper minerals.

#### KING DISTRICT

The King mining district is in northeast Mineral County 14 miles east of Rawhide and west of Mount Anna, a prominent landmark. It is accessible by automobile either from Fallon 50 miles to the northwest or from Hawthorne via Ryan Canyon about the same distance to the south. This district was prospected to some extent many years ago and abandoned until 1926, when a small stringer of rich gold ore was found at a depth of about 10 feet in an old shaft. This strike attracted attention, and in 1926 and 1927 up to 100 men prospected in the area. The only production was one carload of shipping ore reported to average about \$40 per ton in gold.

#### Donnelly Group

The principal property is the Donnelly group of nine claims and two fractions of unpatented ground owned by B. H. Donnelly and R. L. Mundell of Hawthorne, Nev. Total development work on this ground is about 800 feet and consists of a crosscut tunnel 550 feet long, a shaft 100 feet deep, and several shallower shafts and a number of open-cuts along the