

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 25 miles, costs \$2.75 per ton on contract.

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

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	Cre. short tons	Gold		Silver
		Fine oz.	Value	Fine oz.	Value						
1904	--	--	--	--	--	1	1,900	142.99	\$2,956	35	\$20
1905	--	--	--	--	--	--	--	--	--	--	--
1906	--	--	--	--	--	--	--	--	--	--	--
1907	--	--	--	--	--	2	35	25.54	528	3	6
1908	1	47.99	\$992	7	\$4	1	64	45.96	350	8	4
1909	--	--	--	--	--	4	1,815	481.62	9,256	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	9	405	238.83	4,937	13,211	6,698
1916	2	23.31	482	4	3	8	377	27.09	560	56,439	37,137
1917	2	3.50	72	2	1	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	92	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)
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)	8	319	460.70	16,101	256	165
1935	(2)	(2)	(2)	(2)	(2)	9	432	697.62	24,417	11,507	8,271
Total 2/	154.52	\$3,331	30	\$17	\$3,348	33,412	4,700.43	\$114,605	909,710	\$534,646	

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

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)

Lode (Continued)

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

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

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,^{10/} 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.

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