The Clipper group of five unpatented claims owned by C. W. Jackson of Denio is on the west slope of the Pueblo Range 5 miles southwest of Denio. In June 1937 this property was being prospected by three men employing hand methods of mining. No production has been made.

Development comprises two adits each about 110 feet long and a shaft 50 feet deep. Free gold occurs in quartz stringers in the highly altered formation, probably granodiorite.

WINNEMUCCA DISTRICT

The Winnemucca district is at the south end of the Bloody Run Range on Winnemucca Mountain 4 miles northwest of the town of Winnemucca on the Southern Pacific Railroad and Western Pacific Railroad. The Barrett Springs section, 12 miles northwest of Winnemucca, is generally considered a part of the Winnemucca district. The first discovery on Winnemucca Mountain was made in 1863 by an Indian named Winnemucca, after which prospecting was carried on for a number of years. In 1872 the Humboldt Reduction Works erected a 10-stamp mill and a roasting furnace at Winnemucca for the treatment of custom ores. Due to the base character of the ore, the treatment charges were unusually high; the company paid 80 percent of the assay values of gold and silver on ores assaying less than $400 per ton and 82 percent on ores assaying over $400 per ton. The treatment charge was $25 per ton for lots of 10 or more tons, $30 per ton for lots of more than 1 but less than 10 tons, and $35 per ton for anything less than 1 ton. The process employed consisted of a chloridizing roast followed by pan amalgamation. No attempt was made to save either lead or copper. The most important mine in the district in the early days was the Pride of the West, which is credited with a production of about $1,000,000.

The first locations in the vicinity of Barrett Springs were made in the spring of 1906, but there was very little activity until 1910, when C. E. Carpenter discovered high-grade gold ore in this area. This discovery created considerable excitement, and the camp soon had a population of several hundred people. In 1911 it was found that the principal claims were on patented railroad land and mining activity came to a standstill until the land was purchased from the railroad.

A number of small companies have been organized from time to time in the Winnemucca district, but the principal production has been made by lessees. According to incomplete statistics in the reports on the metal production of Nevada in annual volumes of Mineral Resources of the United States, the production of the district from 1910 to 1935 was 3,123 tons of ore having a value of $132,453, an average of $42.32 per ton. Values are chiefly in gold and silver, with small amounts of copper and lead.
Nevada Consolidated Mines Co.

The Nevada Consolidated Mines Co., organized in 1929, comprises nine unpatented claims and 30 acres of patented railroad ground near Barrett Springs. In 1937 the company was involved in litigation and the property was idle.

Development includes a shaft 255 feet deep and other workings totaling several thousand feet. Equipment includes a gasoline hoist, small amalgamation concentration mill, and camp accommodations for 10 men. Mill equipment includes a small Blake-type jaw crushe, Huntington mill, amalgamation plates, and concentrating table.

Ore occurs in quartz fissure veins in shale. The general strike of the veins is about north and south with an easterly dip of 65° to 70°. The width varies from a few inches to 5 feet. Values are in gold and silver associated with a little lead.

Pansy Lee Group

The Pansy Lee group of five unpatented claims adjoining the Nevada Consolidated Mines Co.; this ground is owned by L. E. Case and Erling Prout of Winnemucca, Nev. In 1937 the property was under bond and lease to H. A. Dart and Edward C. Uren, who were developing the property with a crew of four men. In former years this property is said to have produced $60,000 in shipping ore.

Development comprises several adits, a shaft 180 feet deep, and other workings totaling about 1,600 feet. Equipment includes a 1-drill portable compressor and camp accommodations for a crew of six men.

Ore is present in a quartz fissure vein in shale. The average width of the vein is about 17 inches. The smelter returns on a carload of ore shipped by H. A. Dart to the International Smelting and Refining Co. on June 19, 1937, furnished the following data:

<table>
<thead>
<tr>
<th>Metal quotations:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Au</td>
<td>$35.00 per oz.</td>
</tr>
<tr>
<td>Ag</td>
<td>0.77 per oz.</td>
</tr>
<tr>
<td>Pb</td>
<td>.05 per lb.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Settlement assay:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag</td>
<td>36.25 oz.</td>
</tr>
<tr>
<td>Au</td>
<td>.525 oz.</td>
</tr>
<tr>
<td>Cu</td>
<td>.05 percent</td>
</tr>
<tr>
<td>Pb</td>
<td>3.25 &quot;</td>
</tr>
<tr>
<td>Zn</td>
<td>nil</td>
</tr>
<tr>
<td>Insoi</td>
<td>74.0 &quot;</td>
</tr>
<tr>
<td>Fe</td>
<td>5.5 &quot;</td>
</tr>
<tr>
<td>S</td>
<td>.6 &quot;</td>
</tr>
<tr>
<td>CaO</td>
<td>.5 &quot;</td>
</tr>
<tr>
<td>Mn</td>
<td>4.2 &quot;</td>
</tr>
</tbody>
</table>

6213 - 52 -
Metal payment:
Ag 95\% at $0.77  $25,517
Au 91\% at 35.00  16,721
Pb 50\% at .025  101.5
Less treatment  5,560
Net value per ton  38,551

Treatment charge:
Base rate  $3.00
10\% charge metal payment over $17.50  2.50 (max.)

Total weight  90,030 pounds
Less 1.5\% moisture  1,351
88,729 "  , or 44.3645 tons at $38.551  $1,710.30

Deductions: Freight $7.60 (railroad value $37.52)  $207.18
Assaying  4.00
211.18  211.18

Net proceeds  .......................  1,499.12

Hauling charge to Winnemucca, a distance of 10 miles, is $1.50 per ton on contract.

Golden West Group

The Golden West group of three unpatented claims owned by Joseph F. Springer of Winnemucca, Nev., and associates is on the west slope of Winnemucca Mountain 4 miles northwest of the town of Winnemucca. These claims were located by Springer in March 1937 in an area that had previously been staked but in which very little prospecting had been done. When the writer visited the property in June 1937, prospecting and sampling operations were being carried on by a crew of four men.

Property has been sampled by churn drilling and trenching. Equipment for this work consisted of a Schramm 1-drill-capacity portable compressor, jackhammer, and a 30-horsepower Caterpillar tractor with a 1-yard-capacity Kilfor rotary scraper. The churn drilling was done on contract at a rate of $2 per foot. In sampling operations the soil and detrital material is removed to a depth of several feet by means of the tractor and scraper, after which trenches about 5 feet wide and 3 feet deep are dug at irregular intervals across the deposit.

Gold is distributed in a shale formation over an area about 1,000 feet long and several hundred feet wide. In places the shale is covered with a thin capping of andesite. The shale is highly altered and traversed by seams of quartz and calcite. There are no pronounced structural features to the deposit. According to Springer, the sampling results in 800 feet of surface trenching and in six churn drill holes, spaced 50 feet apart and each 50 feet deep, indicate a large tonnage of low-grade ore.
Water for milling is available from the Humboldt River about 2 miles south of the property.

**Gold Hill Group**

The Gold Hill group of 11 unpatented claims is on the south slope of Winnemucca Mountain at an elevation of 5,800 feet, and about 4 miles northwest of Winnemucca, Nev. At the time of the writer's visit the property was under bond and lease to Gus Rogers and associates of Winnemucca, who were prospecting the ground with a crew of three men. According to Rogers, the only production has been several thousand tons of ore shipped to smelters. This ore had a high iron content and low values in gold and silver and it was shipped primarily for use of flux.

Development consists of an adit, several open cuts, and other workings, totaling several hundred feet. There is little equipment on the property. Values in free gold associated with a little silver occur in an irregular body of iron-stained material striking about north 50° west and dipping 60° southwest. Formation is principally shale. The gangue is composed almost entirely of iron oxides with small amount of quartz.