LINCOLN COUNTY

Mine                Location                   Ownership

176 Lincoln Mines  Sec. 36, T. 3S., R. 56E.   Wah Chang Mining Corp.

176 North Tem Plute Sec. 1, T. 4S., R. 56E.   Mr. Schofield

S. of 177 Bruson    Sec. 19, T. 11S., R. 69E.   R. M. Wilson

174 Devlin         Sec. 26, T. 9N., R. 64E.   J. L. Devlin

174 Walker         Sec. 32, 33, T. 9N., R. 65E.   Owen Walker

S. 36, 35, 54E       Lincoln Mines

The property of the Lincoln mines (1) consist of 28 lode claims situated on the northwest flank of the Timpahute Range, about 90 miles northwest of Caliente, the supply and shipping point, and 50 miles northwest of Hiko, a small settlement in the north end of the Pahranagat Valley.

The Millick brothers first discovered scheelite in the district in 1916, but did not extensively explore the deposits. Wesley Koyan and the Thiriot brothers located 18 claims in 1936 and 1937. A small milling plant was built at Black Rock 15 miles west of the mine and about 250 tons of ore was milled.

In early 1938 the property was leased to the Fegley Construction Co., who built a 40 ton mill and commenced operations in 1940. The capacity of the mill was increased to 75 tons in 1941.

The Atolia Mining Co. acquired the property in June 1945 and in 1946 rehabilitated the mining and milling plants. Mining and milling operations were again started in February 1947.

USBM Unpubl. data, 1947
In the early 1950's the property was acquired by the Wah Chang Mining Corp., who increased the milling capacity to 1,000 tons per day and actively worked the property till the shut down in the fall of 1956.

Following the shut-down, the surface plant, including camp houses, the mill and mine equipment was sold at auction.

The north end of the Tem Plute Range consists of folded and faulted Paleozoic limestone, hornfels, and quartzite invaded by 2 small granite stocks and several narrow short basalt dikes. The granite contacts adjacent to the sediments have been partly altered by contact-metamorphism to thick bodies of tactite which are parallel to the bedding. Near the intrusive contacts, the silicated rocks are cut by numerous small faults having small displacements. These faults cut across the sedimentary rocks, including some tactite, and are in places mineralized with seams of scheelite, fluorite, and sphalerite. They appear to have been important controls for mineralization as shown in figure 4.

FIGURE 4. - Geologic and Topographic Map, Tem Plute Deposits.
Lincoln County, Nev.

The principal ore deposits occur in bands and isolated pods of tactite adjacent to the granite along the north and west sides of the granitic stocks. The ore shoots which vary from 5 to 25 feet in width and up to 200 feet in length are of 3 types, locally referred to as iron-sulfide, garnet, and calcite-fluorite-chlorite types.
The iron-sulfide type ore is a hard, dense ore in which the iron sulfides, pyrrhotite and pyrite predominate. The ore occurs along the granite contact in thicknesses of 20 to 35 feet. The grade is usually low, but high-grade bands up to 5 feet thick are sometimes encountered which vary from 0.56 to 1.33 percent WO₃.

The garnet-type ore lies above the iron-sulfide zone, and comprises the principal type of ore in the district. This ore is a dense, hard crystalline tactite consisting principally of garnet, with lesser amounts of quartz, calcite, fluorite, and pyrite. In this zone, the scheelite occurs unevenly distributed, and the grade varies from 0.3 to 1.0 percent WO₃.

The calcite-fluorite-chlorite type ore occurs along the hanging wall in places where remnants of marbleized limestones are found. Marbleized limestone forms the hanging wall and garnet forms the footwall of these ore shoots. The ore is generally soft and composed of calcite, fluorite, and chlorite with minor amounts of quartz, garnet, and pyrite. Scheelite occurs in fairly large crystals and the grade varies from 0.5 to 2.5 percent WO₃. Shoots of this type of ore vary from 4 to 20 feet in width, with an average stope width of about 10 feet. Usually this type of ore carries 3.0 to 3.9 percent zinc.

Development openings on the North Tem Pluto Mining and Development Co. property consist of shallow surface workings and a drift adit from which chinkage stopes have been extended.
The mine workings on the Lincoln mine property [16] consist of a surface pit, 2 parallel drift adits, a 2,700-foot crosscut adit and a shaft 625 feet deep. From these workings, 6 levels have been extended along the zone for a distance of about 1,000 feet. The 2,700-foot crosscut adit, present haulage level, connects with the 600-foot level near the shaft as shown in figure 5.

FIGURE 5. - Looking Eastward at Vertical, Longitudinal Section of Lincoln Mine, Lincoln County, Nev.

Underground, the rocks are hard and firm. No timber was used for support except in the raises and shaft. The shrinkage method of stoping was almost exclusively used. Production was at the rate of about 1,000 tons per day.

Mechanically, the mine was well equipped. Storage battery locomotives were used for haulage on the 100-foot level, and a diesel locomotive was used in the long crosscut adit to deliver the ore to the mill bins.

North Tem Flute

The North Tem Flute Mining and Development Company's property comprises 40 unpatented lode claims situated on the west side of the Timpahute Range, about 90 miles west and north of Caliente, Nevada and 50 miles northwest of Hiko, a small settlement in the north end of the Pahranagat Valley. This property adjoins the Lincoln mine on the south.
Lincoln Mines, Sec. 36, T3S, R56E Owned by Wah Chang Mining Corp.

The property of the Lincoln mines consist of 28 lode claims situated on the northwest flank of the Timpanahute Range, about 90 miles northwest of Caliente, the supply and shipping point, and 50 miles northwest of Miko, a small settlement in the north end of the Pahranagat Valley.

The Millick brothers first discovered scheelite in the district in 1916, but did not extensively explore the deposits. Wesley Koyan and the Thiriot brothers located 18 claims in 1936 and 1937. A small milling plant was built at Black Rock 15 miles west of the mine and about 250 tons of ore was milled.

In early 1938 the property was leased to the Fegles Construction Co., who built a 40 ton mill and commenced operations in 1940. The capacity of the mill was increased to 75 tons in 1941.

The Atolia Mining Co. acquired the property in June 1945 and in 1946 rehabilitated the mining and milling plants. Mining and milling operations were again started in February 1947.
In the early 1950's the property was acquired by the Wah Chang Mining Corp., who increased the milling capacity to 1,000 tons per day and actively worked the property till the shut down in the fall of 1956.

Following the shut-down, the surface plant, including camp houses, the mill and mine equipment was sold at auction.

The north end of the Tem Plute Range consists of folded and faulted Paleozoic limestone, hornfels, and quartzite invaded by 2 small granite stocks and several narrow short basalt dikes. The granite contacts adjacent to the sedimentary rocks have been partly altered by contact-metamorphism to thick bodies of tactite which are parallel to the bedding. Near the intrusive contacts, the silicified rocks are cut by numerous small faults having small displacements. These faults cut across the sedimentary rocks, including some tactite, and are in places mineralized with seams of scheelite, fluorite, and sphalerite. They appear to have been important controls for mineralization as shown in figure 4.

FIGURE 4. - Geologic and Topographic Map, Tem Plute Deposits, Lincoln County, Nev.

The principal ore deposits occur in bands and isolated pods of tactite adjacent to the granite along the north and west sides of the granitic stocks. The ore shoots which vary from 5 to 25 feet in width and up to 200 feet in length are of 3 types, locally referred to as iron-sulfide, garnet, and calcite-fluorite-chlorite types.
The iron-sulfide type ore is a hard, dense ore in which the iron sulfides, pyrrhotite and pyrite predominate. The ore occurs along the granite contact in thicknesses of 20 to 25 feet. The grade is usually low, but high-grade bands up to 5 feet thick are sometimes encountered which vary from 0.36 to 1.33 percent WO₃.

The garnet-type ore lies above the iron-sulfide zone, and comprises the principal type of ore in the district. This ore is a dense, hard crystalline tactite consisting principally of garnet, with lesser amounts of quartz, calcite, fluorite, and pyrite. In this zone, the schoolite occurs unevenly distributed, and the grade varies from 0.3 to 1.0 percent WO₃.

The calcite-fluorite-chlorite type ore occurs along the hanging wall in places where remnants of marbelized limestones are found. Marbelized limestone forms the hanging wall and garnet forms the footwall of these ore shoots. The ore is generally soft and composed of calcite, fluorite, and chlorite with minor amounts of quartz, garnet, and pyrite. Schoolite occurs in fairly large crystals and the grade varies from 0.5 to 2.5 percent WO₃. Shoots of this type of ore vary from 4 to 20 feet in width, with an average stoping width of about 10 feet. Usually this type of ore carries 3.0 to 3.0 percent zinc.

Development openings on the North Tenn. Plate Mining and Development Co. property consist of shallow surface workings and a drift adit from which shrinkage stopes have been extended.
The mine workings on the Lincoln mine property (16) consist of a surface pit, 2 parallel drift adits, a 2,700-foot crosscut adit and a shaft 625 feet deep. From these workings, 6 levels have been extended along the zone for a distance of about 1,000 feet. The 2,700-foot crosscut adit, present haulage level, connects with the 600-foot level near the shaft as shown in figure 5.

FIGURE 5. -Looking Eastward at Vertical, Longitudinal Section of Lincoln Mine, Lincoln County, Nev.

Underground, the rocks are hard and firm. No timber was used for support except in the raises and shaft. The shrinkage method of stoping was almost exclusively used. Production was at the rate of about 1,000 tons per day.

Mechanically, the mine was well equipped. Storage battery locomotives were used for haulage on the 100-foot level, and a diesel locomotive was used in the long crosscut adit to deliver the ore to the mill bins.