

BRIEF OF THE PLAINTIFF, NEVADA CONSOLIDATED,  
AT THE TERMINATION OF THE NEVADA CONSOLIDATED  
AND THE CONSOLIDATED COPPERMINES SUIT.

The Nevada Consolidated is forced to bring suit to enjoin the Coppermines from its persistent threats of undermining and wrecking the Westerly portion of the Nev. Con. Liberty pit and the Wedge shaft due to the Coppermines insisting on mining at the contract plane and insisting that Nev. Con. mine Coppermines ore on the Ora claim and the Wedge shaft. Nev. Con. stated that the pit was the result of 20 years careful planning and that the Wedge shaft had cost \$1,000,000.

The Coppermines insisted that it has the right to mine Nevada Con. shovel ore on the Nevada Con. Champion and Liberty claims by caving methods.

By 1917 the Eureka and the Liberty pits were joined and the company, according to Boyd, has mined and removed 80,000,000 tons of ore from the pit.

The Ora claim of the Coppermines, projects into the Nev. Con. pit area at its West end.

In 1917, Nev. Con. entered into a contract to mine Coppermines ore on the Ora claim in order to get its own adjacent ore. The Coppermines terminated this contract in 1925. The Nev. Con. by condemnation suit, obtained a consent decree to mine the Ora and sink the Wedge shaft.

A new contract was entered into on June 23, 1926, in this new contract, since the Western extension of the Champion and Liberty claims of the Nev. Con. project into the Coppermines holdings, the Coppermines was given the right to mine 5,350,000 tons of "underground" ore West of a plane extending from the Southeast corner of the Emma Nevada, to the Northeast corner of the Westphalia, which plane was designated as "contract plane". This provision was made to give the Nev. Con. Copper 5,000,000 more tons of mineable ore to add to their own 5 or 6 million tons to justify the sinking of the Emma Nevada shaft and equipping the same.

The Coppermines was to be paid for mining this Nevada Con. ore, its cost price plus 16¢.

In turn the Nevada Con. was to mine Coppermines ore on the Ora and Emma Nevada claims by the shovel method for a flat price of 40¢ a ton, which was to include all necessary stripping and underground the ore by caving method at its cost price plus 16¢.

The Nevada Con. maintains it has mined a larger total tonnage of shovel ore on these claims than the contract called for, and mining more would jeopardize the safety of the Wedge shaft (Coppermines maintains that the Nev. Con. has failed to mine some of its ores, giving preference to Nev. Con. ores.)

The Coppermines claims that the Wedge shaft has already been injured and damaged beyond mining use, while President Smith of the Coppermines maintains that the Nevada Con. could produce 8000 tons a day by underground mining through the Wedge shaft.

The Nevada Con. claims that the Coppermines has no right under the contract to mine at the contract plane until the Nevada Con. completes its open-pit work including all possible shovel ore on the Champion and Liberty claims.

The Nevada Con. claims that the agreement gave the Nevada Con. such a right in the words "the Nevada Con. now proposes to complete its open-pit mining operations as soon as practicable."

The pit was at the 8th level at the time the contract was signed, with the 10th level already planned out, with the possibility of a still deeper level the mining of which would be included in the term "as soon as practicable".

The Coppermines believed the agreement was to start in 5 years to mine "all the ore" on the Liberty and Champion claims at the annual rate of 550,000 tons a year. The Nevada Con. maintained that the meaning of "all the ore" was that all of the ore would be mined by underground methods after the shovel ore was removed, and that Lakenan testified he had 5 to 7 years in mind to continue shovel mining.

Many definitions of the word "all" were provided by the Nevada Con.

The Nevada Con. maintained that the history of the negotiations and circumstances under which the agreement was made clearly shows that Nevada Con.'s prior right to mine all ore possible by shovel in the Liberty and Champion claims (the Coppermines maintained that all such ore was to be mined by their company). Nevada Con. maintained that the purpose of the contract was to make possible the continuation of shovel mining in the west end of the pit by the mining of Coppermines ores and that the Coppermines shaft was to go 6000 ft. deep and to mine certain Nevada Con. ores but excluding any below elevation 6600 ft. of said Liberty pit operations. Nevada Con. maintains that the Coppermines right to mine along the contact plane is subordinate to the completion of the pit shovel mining and is also contrary to good engineering practice as was maintained by the Nevada Con. witnesses. There follows a comparison of experience and standing of the witnesses with those offered by Coppermines.

Nevada Con.'s witnesses were: Boyd, with 25 years experience; Lakenan, 20 years; Kinnear 19 years, being in 1922 assistant to the General Manager, in 1928 the Manager and in 1929 the General Manager; Larsh, 14 years with Nevada Con.; Meyer 9 1/2 years in the engineering department; Oates with 20 years in porphyry copper mines; and Probert who since 1921 has watched and made special study of ground subsidence.

In comparison Nevada Con. stated that the Coppermines witnesses were as follows: Richards with 8 years at Latouche and 6 years at Coppermines; Haffner with 7 years at Ray as assistant engineer and foreman under Boyd and 3 years as the General Manager of the Coppermines; Pennabaker since April 1928 Geologist of the Coppermines; Fulton with no practical experience in copper porphyry nor with underground caving or shovel operations; Ware, 5 1/2 years with Miami in underground caving and 5 years in shallow shovel mining in Chile nitrates; Gow with no underground caving or shovel experience and President Smith of the Coppermines who visited Ely in 1912, becoming President in 1922, has had no practical experience.

The Nevada Con. produced the General Manager of the Latouche Mine who testified that Richards did not have anything to do with the cost or direct underground work in that mine and that the cost was \$1.19 a ton, where Richards had testified that it was but 60¢ and the Nevada Con. maintained that Richards' testimony was so utterly inaccurate and contradictory as to be of no value. The Coppermines witnesses agreed that the slopes of the caved hole would approximate 60° but Boyd with many years of caving experience stated that it would creep over a wide area that it would approximate 30° and that the Wedge shaft was affected by a very flat angle due to the soft ground of the pit and that Pennabaker admitted that the ore body is underlain by a system of generally flat faulting and shearing.

Kinnear testified that there was 5 1/2 million tons of shovel ore in the westerly bank of the Liberty pit in the strip ratio of one to one and maintained

that shovel mining can mine much more selective than underground mining which has the dilution that always accompanies underground mining.

"Ping Pong" ore in the pit is an area with an alternation of ore and waste in the shovel banks, this ore Kinnear testified could best be mined by shovel. Were testified that the blasting in the pit would mix the ore with the waste in this Ping Pong ore while the Nevada Con. testified that the ore was not thrown out and mixed by the blasting but merely raised and shattered.

The Nevada Con. maintained that the Coppermines mining starting at the contact plane would result in ore covered with waste rolling down into the pit on the clean stripped ore, giving continuous dilution.

Nevada Con. maintained that the Coppermines theory of surface subsidence was contrary to all mining experience. This theory was that the broken cap rock would occupy a 50% increase of volume uniformly over the caved area and should ~~this~~ 50% increase in volume, equal to the volume of solid ore, be removed, that there would be practically no subsidence of the solid cap rock above the broken cap rock. Nevada Con. testified that the strongest possible refutation of the Coppermines theory occurred just before the trial started, in an area in which the above conditions were, what is known as the "Miranda Hole" suddenly appeared on the surface, at first with vertical sides followed by side caving until it had reached in size 300 ft. by 150 ft. by 100 ft. deep. Professor Probert testified that whenever extensive underground mining is carried on a surface disturbance results regardless of thickness of the ore or cap or ratio of the ore to the capping. Thomas testified that the 40 million tons mined in the Ray mine by underground methods that there is no area regardless of the thickness of ore or capping that has not held through. Professor Probert testified that Professor Fulton's  $1\frac{1}{2}$  to 1 ratio does not apply to practical conditions because greatest of top rock causes a packing or reconsolidation and therefore no such increase in volume is found as Fulton's "testube experiment" could suggest.

The Nevada Con. maintains that the Coppermines witnesses ignore the fact that the overlying capping often settles in large blocks (Kinnear in ~~his~~ testimony called the Miranda Hole "Fulton's Folly").

The Nevada Con. maintains that the Coppermines should commence mining in the west limits and mine easterly to the pit in order to avoid caving, waste from the overburden, not on the ore that is causing undue dilution. Nevada Con. maintains that the Coppermines is proposing to mine ore from the 6470 ft. level with a deliberate plan to exact tribute from Nevada Con. and to force it to share with them the Nevada Con. ore reserves, treatment facilities, power plant and water supply. Nevada Con. maintained that it has mined the Ore ore of the Coppermines down to the 10th level and that material left on the claim is not "open pit merchantable ore", and that to remove more of the ore would destroy the Wedge shaft.