

ORIGINAL

Decision No. 2886

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application)  
of F. W. Gompf, Agent, for per- )  
mission to Increase Rates on )  
Petroleum Road Oil. )

APPLICATION NO. 6780.

E.W.Camp, for Applicant,  
James S. Moore, Jr. for Western Pacific Railroad Co.,  
G.H.Baker, for Atchison, Topeka & Santa Fe Railway Co.,  
B.E.Carmichael and Stuart M. Salisbury, for A.F.Gilmore  
Company, California Petroleum Exchange, and others,  
Ray C. Wakefield, for County of Fresno,  
F.M.Hill, for Fresno Traffic Association for the City  
and County of Fresno,  
E.W.Hollingsworth, for Oakland Chamber of Commerce,  
Frank Karr, for Pacific Electric Railway Company,  
E.H.Gogarty, for Southern Pacific Company,  
F.P.Gregson, for Associated Jobbers of Los Angeles,  
George S. Strait, for County of Los Angeles,  
R.W.Stewart, for City of Los Angeles,  
A.C.Fulmor, for County of Riverside,  
F.W.Slabough, Colonel Finley and M.C.Wolff, for Orange Co.,  
Mr.Buchanan, for City of Orange,  
R.V.Orbison, for City of South Pasadena,  
J.K.Macomber, for Tulare County,  
F.E.Foster, for Santa Maria Oil Fields, Incorporated,  
G.F.Hyatt, for City of Coronado,  
M.E.Clayson, for City of Corona,  
L.R.Lothrop, for San Bernardino City,  
J.M.Cole and J.W.Cole, for San Bernardino County,  
A.S.Halsted, for Los Angeles & Salt Lake Railroad,  
Roscoe R. Hess, for City of Pasadena,  
Grant M. Lorrain, for City of Alhambra,  
Alfred See, for City of Ontario,  
Mr. Hinkley, for City of Redlands,  
Mr. Boswell, for City of Long Beach.

LOVELAND, COMMISSIONER:

## O P I N I O N

F. W. Gompf, Agent, in the name and on behalf of all carriers parties to the tariffs named in Exhibit 2, attached to and made a part of the application in this proceeding, petitions the Railroad Commission, under Section 63 of the Public Utilities Act, for an order granting permission to establish increased rates on Petroleum Road Oil by eliminating that commodity from the items and commodity description for Crude Oil grouping in tariffs referred to in said application, and to add Petroleum Road Oil to the Asphaltum grouping, thus applying the Asphaltum rate to Petroleum Road Oil.

Hearings were held in San Francisco and Los Angeles, final briefs were submitted on November 12, 1921 and the matter is now ready for opinion and order.

What the applicant desires to do in this proceeding can best be understood by quoting Exhibit No. 1, attached to and made a part of the application, and which sets forth the justification for the increases proposed:

"Prior to June 25, 1918 Pacific Coast Tariffs generally provided the same carload rate for Petroleum Road Oil as was provided for Petroleum Crude Oil, Petroleum Gas Oil and Petroleum Fuel Oil, viz.: Refinery Residuum.

"Effective June 25, 1918 rates on all of the commodities before mentioned were increased 25% but under Freight Rate Authority No. 96 of the Director, Division of Traffic, United States Railroad Administration, this increase on Petroleum Products, classified Fifth Class in Western Classification, was modified to 4½ cents per 100 lbs. As Road Oil was not classified Fifth Class in Western Classification, the flat 4½ cent increase did not apply thereto, leaving the 25% increase applicable. However, Petroleum Crude Oil, Petroleum Fuel Oil and Petroleum Gas Oil were classified Fifth Class and, as a consequence, instead of the 25% increase the 4½ cent flat increase applied. This left a discrepancy in a great many instances between the rates provided for Petroleum Road Oil on the one hand and Petroleum Crude Oil, Petroleum Gas Oil and Petroleum Fuel Oil viz.: Refinery Residuum, on the other hand.

"In the case of long hauls, the result was that Road Oil was subjected generally to higher rates than that provided for the other commodities mentioned, but for short hauls Petroleum Road Oil was subjected to a lower rate than for the other oils.

"An exception to the Western Classification is carrier in Pacific Freight Tariff Bureau Exception Sheet and in some local tariffs on the Pacific Coast, providing an estimated weight of 7 $\frac{1}{2}$  lbs. per gallon to apply on shipments of Petroleum Crude Oil, Petroleum Gas Oil, Petroleum Road Oil, also Petroleum Fuel Oil, viz.: Refinery Residuum, when shipped in tank cars.

"Originally, on the Pacific Coast, Petroleum and Petroleum Products were divided into two groups, one consisting of Crude and Fuel Oil, and the other group consisting of Petroleum and Petroleum Products other than Crude and Fuel Oil. At that time both Crude and Fuel Oil were used for road making purposes. Later on the refiners developed a product which they called "Road Oil" and another called "Gas Oil". These two additional products were included in the Crude and Fuel Group for the reason that both the Road and Gas Oil came into commercial competition with Crude, Crude Oil being used extensively for road making purposes and also for the same purpose as was Gas Oil. So that there was a commercial relationship between all four commodities known as Petroleum Crude Oil, Gas Oil, Fuel Oil and Road Oil. As a consequence, the four products of Petroleum were generally given the same rating and were moved at the same estimated weight, the result being that the transportation charges were relatively the same for all four products when shipped in tank cars.

"Later, the refiners improved, for road making purposes, the product known as Road Oil, and as this improvement advanced from time to time, Crude Oil was used less extensively on roads. At the present time it is safe to say that there is no Crude Oil or Fuel Oil used for road making purposes, the only product of Petroleum which is now used for that purpose being Petroleum Road Oil and Petroleum Asphalt.

"Therefore, the commercial relationship which formerly existed as between Petroleum Road Oil and the other products in the group has now been entirely eliminated, and the reasons for according to Road Oil the same rate and estimated weight as for the other products do not now exist.

"Along with the improvement, for road making purposes, of the product known as Road Oil in recent years, the refiners have been marketing another product known as "Petroleum Liquid Asphalt", which is also shipped in tank cars. The Liquid Asphalt proved to be a more superior article for road making purposes than Petroleum Road Oil, and as a consequence, the quality of Road Oil has been improved to such an extent that even an expert cannot distinguish the difference between Petroleum Road Oil and Petroleum Liquid Asphalt.

"The market value of the commodity ordinarily shipped as Petroleum Road Oil today is practically the same as that of Petroleum Liquid Asphaltum. Because of the similarity of the two commodities, as to inherent nature, uses and market value, exactly the same reasons for according to these two commodities (Road Oil and Asphaltum) the same rate and estimated weight for transportation purposes now exist as

formerly caused the same rate and estimated weight to be accorded to Crude Oil, Fuel Oil, Gas Oil and Road Oil. It follows that since there is now no commercial relationship between Road Oil on the one hand and Petroleum Crude Oil, Fuel Oil and Gas Oil on the other hand, and that since there is a close relationship as between Petroleum Road Oil and Petroleum Liquid Asphalt, that Petroleum Road Oil should now be eliminated from the group 'Crude, Fuel, Gas and Road Oil' and instead thereof given the same weight and rate as is provided for Petroleum Liquid Asphalt, when shipped in tank cars.

"Because of their similarity as to the inherent nature, value, weight per gallon and use for which they are manufactured, the service performed in transporting a tank car of Road Oil is exactly the same as for transporting a tank car of Petroleum Liquid Asphalt, and as a consequence, the freight charges should be the same for both commodities."

Petroleum Road Oil is classified in the Consolidated Classification as Class D, either in barrels, with a carload minimum of 30,000 pounds, or in tank cars subject to Rule 35, which refers to gallonage capacity of the tanks.

Petroleum Crude Oil, Gas Oil, Fuel Oil, Refinery Residuum, are classified 5th Class either in packages or in tank cars. It will thus be seen that Petroleum Road Oil is classified at a lower class than the Petroleum Crude Oil, Gas Oil, Fuel Oil, Refinery Residuum, and it is thereby evidenced that the Classification Committee considered Road Oil generally entitled to a less rate than the other commodities named above.

Prior to June 25, 1918 Pacific Coast tariffs generally provided the same carload rating for Petroleum Road Oil as was applied to Crude Oil, Gas Oil, Fuel Oil, viz.; Refinery Residuum, and it was contended that Petroleum Road Oil became disassociated with the Crude Oil grouping through application of Freight Rate Authority No. 96 of the Director Division of Traffic, U. S. Railroad Administration and the 25 per cent increase by Ex Parte No. 74. Applicant gave as a reason for the grouping of Road Oil with

Crude, Gas and Fuel Oils that in the beginning both Crude and Fuel Oils were used for road-making purposes and that later on refiners developed a product which they called Road Oil, and with the improvement of that product Crude Oil was used less extensively on roads until "at the present time it is safe to say that there is no Crude or Fuel Oil used for road-making purposes, the only product of Petroleum now used for that purpose being Petroleum Road Oil and Petroleum Asphalt" (Trans. page 5).

For the reason stated above it was contended that the commercial relationship which formerly existed between Petroleum Road Oil and the other products in the group has been entirely eliminated, while the evidence shows that large quantities of Crude Oil are used on roads either as Crude Oil comes directly from the earth in its natural state or after a simple dehydrating or topping process has been undergone and the residue may be a good fuel oil as well as a road oil. Therefore, it would seem there is still a very close relationship between all four commodities known as Petroleum Crude Oil, Fuel Oil, Refinery Residuum and Road Oil.

It was further evidenced that at one time it was the impression that anything that was Petroleum was equally good for road purposes. The applicant sets forth in his application that refiners have improved for road-making purposes the product known as Road Oil, but in answer to the question of whether or not the commodity now generally used as Road Oil is a higher class product than was previously used a expert chemical engineer stated:

"A: It is a selected class, yes; it is a higher class for that purpose.

"Q: More expensive?

"A: Well, not necessarily more expensive, only it is selected."

Thus it will be seen that instead of using all kinds of Petroleum Oil as Road Oil, as previously done, at the present time only selected oils are used for road-making purposes, some of which are purely natural products, while others are processed either for the purpose of producing a Road Oil, or are the residue from refineries, and such Road Oil is not necessarily more expensive.

The application further sets forth that along with the improvement of Road Oil, refiners have been marketing another product known as Petroleum Liquid Asphalt and that not even an expert can distinguish the difference between Petroleum Road Oil and Petroleum Liquid Asphalt. One of the applicant's witnesses, (Trans. page 18) answered \* \* \* "your Liquid Asphaltum or your Road Oil solidifies at air temperatures. It's ~~to~~ got to be put in the car hot, you cannot get it in in any other way, it has to be applied to the roads hot too."

"Q: Do you know anything about the comparative value of Liquid Asphalt with Solid Asphalt?"

"A: Liquid Asphalt and Solid Asphalt, Petroleum Asphalt, I suppose that is what you have reference to, is one and the same thing, there isn't any such thing - there isn't any difference between the Liquid Asphalt and the Solid Asphalt. The Liquid Asphalt is merely the solid Asphalt hot. Sometimes they ship it in cars, tank cars, and sometimes they ship the same thing in barrels.

"Q: It is your information that this product that is described as Road Oil solidifies when it cools off?"

"A: Yes sir."

"The Witness: Now understand me, in saying that, I do not mean what I described a while ago as Road Oil, or as the oil they use on dirt roads. That stuff is not Liquid Asphalt, it is not - it is, properly it is either Crude Oil or else it is a refinery residuum and not refined down to create the same percentage of Asphalt. It is just as easily describable as Fuel Oil. It is the same thing that is burned sometimes as Fuel Oil, that stuff does not solidify."

The application also sets forth "That even an expert cannot distinguish the difference between Petroleum Road Oil and Petroleum Liquid Asphalt".

The evidence quoted above, offered by the witness for applicant, indicates that Petroleum Liquid Asphalt and Petroleum Asphalt are one and the same commodity and solidify at air temperature. The protestants, through an expert chemical engineer, defining Road Oil, stated it is

"A product of Petroleum, either naturally or artificially prepared, and it will vary all the way from Crude, depending on the use for which it is intended, up to a rather heavy product. If it has, say 70% of Asphalt in it, it will be very liquid, practically the same as a great many crude oils. In fact, Crude Oil may be a Road Oil and a good one and much better than artificially prepared Road Oil, but if you want to use it for a little heavier work you require somewhat heavier Road Oil, and for still heavier work you require it still somewhat heavier".

The same witness defined Asphalt as follows:

"Asphalt is a non-oxidized bituminous hydrocarbon, which may be solid or semi-solid and it may be either artificial or natural and its use, its consistency, depends on the use to which it is to be put. For paving purposes we usually have an Asphalt of 40 or 60 penetration, it depends on the penetration, you see; then other requirements are that it must be soluble in the various solvents used, such as carbon, bi-sulphite and petroleum naphtha, to separate the petroleum and asphaltene; it must have limits of fixed carbon and it must be ductile, must be adhesive and must be a petroleum product or natural asphalt".

An oil producer, operating in Cat Canyon Oil Fields near Santa Maria, testified that they ship approximately 10,000 barrels of Road Oil per month, a great part of which is absolutely the natural product, containing 68 to 75 per cent Asphalt as it comes from the earth and when a Road Oil of greater asphalt content is

ordered they use the Trumble process in dehydrating and topping to bring the oil up to specifications.

Witness for Tulare County testified they used, last year, approximately 20,000 barrels of Road Oil and the year before approximately 40,000 barrels of Road Oil, nearly all of which was the light type.

Witness from Orange County testified they used over 15,000 barrels, last year, of Road Oil; Riverside County 2,500 barrels, and the City of Riverside 5,700 barrels, all of which was of the light quality and of comparatively small asphalt content.

It will thus be seen from the definition of Road Oil that there is actually a commodity commercially known as Road Oil and that that same Road Oil moves in large quantities. From the same source we conclude that Asphalt is solid or semi-solid and witnesses corroborated the statement that Asphalt can be liquid only when it is hot. It is therefore evidenced that the commodity known as Road Oil and used most extensively in certain territories is an entirely different product from Petroleum Liquid Asphalt, which is only a trade name for solid asphalt when it is hot, as it has been definitely shown that Road Oil is fluid when it is cold and Petroleum Liquid Asphalt is solid or semi-solid when it is cold.

On the other hand, there was no showing as to the volume of the movement, if there was any movement, of Petroleum Liquid Asphalt. Furthermore, if Liquid Asphalt is asphalt only when it is hot, it is inconsistent to use such a designation in transportation.

Oil containing 80 per cent Asphalt is fluid and a light Road Oil and that same oil can easily be used for Fuel Oil, but the



expert witness further stated that all fuel oils cannot be adapted for Road Oil and that he would not term a substance Asphalt, but would designate it Road Oil until it contained at least 99 per cent Asphalt of a penetration of from 40 to 60. The expert witness agreed (Trans. page 78) that all Road Oil he knew about would be either Crude or Fuel Oil or Refinery Residuum.

Corroborating the oil producer from Cat Canyon, a witness for protestants who was also an oil producer and refiner, testified he shipped, last year, to one customer, nearly 100,000 barrels of Road Oil, using the produce as it came from the earth without any process or manufacture.

Further testimony (Transcript page 109):

"Q: Can you state whether or not Crude Oil has a higher or lesser value than Road Oil?"

"A: Well, Crude Oil, some Crude Oil is much more valuable than a road oil, and then there is some Crude Oil which is much less valuable than Road Oil."

Here we have evidence that Road Oil may be more or less valuable than Crude Oil and still be a road oil.

It was further evidenced there is no difference in the rate of Crude Oils based upon their value. It was further testified that Crude Oil, such as is used as Road Oil, could not be distinguished from Road Oil, which is a by-product of the refinery, or Refinery Residuum without technical analytical test.

Upon the fact that the evidence showed conclusively that the four products referred to cannot be distinguished one from the other except by analytical test, it therefore does not appear to be practicable to give them separate ratings. I recommend that this application be denied.

O R D E R

IT IS HEREBY ORDERED that the application in this proceeding should be and the same is hereby denied.

The foregoing opinion and order are hereby approved and ordered filed as the opinion and order of the Railroad Commission of the State of California.

Dated at San Francisco, California, this 20<sup>th</sup> day of December, 1921.

H. B. Rounding  
H. W. Leonard  
J. W. Matson  
Chas. H. Howell

Commissioners.