

A meeting of the State Lands Commission was held in the office of the Department of Finance, State Building, San Francisco, at 9 a.m., on September 26, 1938.

Present were:

A. E. Stockburger, Chairman
George J. Hatfield, Member
Harry B. Riley, Member

The Executive Officer presented the report of Dr. E. K. Soper, Consulting Geologist and Petroleum Engineer of the Commission, respecting bids received pursuant to notice of intention of the State Lands Commission to enter into agreement or agreements for extraction of oil, gas and other hydrocarbons from certain tidelands and submerged lands of the State in Orange County, California, and westerly of 23rd Street of the City of Huntington Beach.

Upon motion of Mr. Riley, seconded by Mr. Hatfield, and unanimously carried, it was ordered that the report of Dr. E. K. Soper be set forth in full in the minutes. The report is in words and figures as follows:

TECHNICAL ANALYSIS OF BIDS RECEIVED SEPTEMBER 1, 1938,
FOR DEVELOPMENT OF THE WESTERN PORTION OF THE
HUNTINGTON BEACH TIDELANDS OIL FIELD

Pursuant to the published advertisement for bids for the development of that portion of the Huntington Beach State tidelands oil pool lying westerly of the foot of 23rd Street only three bids were received. The area was divided into five approximately equal parcels. Each parcel was approximately one mile long by 1378 feet wide and each contained approximately 167 acres. The five parcels embraced a total of approximately 835 acres. These parcels were designated from east to west as Parcel A, B, C, D, and E.

Bids were called for any one or more separate parcels or for the entire area.

The names of the three bidders and the parcels bid upon are as follows:

1. Southwest Exploration Co.
Bid upon the entire area.
2. United States Refining Co., Ltd.
Bid upon Parcels A, C, C.
x
3. West Central Oil Co., Ltd.
Bid upon Parcels A, B, C.

No bids were received for Parcels D and E except as such parcels were included in the bid of the Southwest Exploration Co. for the entire area.

In the agreements prepared by the State and included in the bid form, all development requirements such as offset drilling, number of wells required to be drilled, completion depths, etc., were definitely prescribed; and minimum royalties on oil, gas and natural gasoline were specified. The bid forms specify that the oil royalty which the grantee shall pay to the State shall be according to the following formula:

$$R = \frac{P - 36.67}{2.5 - .016667P} \times \text{factor}$$

where R is the royalty rate in per cent applicable to the total value of the production of oil from each well during the month, and
P is the average daily production of the well, determined by dividing the total production for the month by the total number of production days of twenty-four hours each;

provided, however, the Grantee shall pay at all times a minimum royalty of twelve and one-half (12½) per cent upon such average daily production. The factor of the above equation was inserted by the bidder to establish the oil royalty which the bidder shall pay to the State.

The bid form specified that the royalty on gas and natural gasoline shall be payable to the State of California at the times and in the manner specified for the payment of royalty on oil and that the royalty on all dry gas and natural gasoline shall be 15% of the market value at Huntington Beach, California, of such dry gas and natural gasoline.

In view of the fact that the terms of the agreements imposed identical requirements upon all prospective bidders as to drilling offset wells; intensity of drilling (at least one well to ten acres); minimum royalties, etc., the evaluation of the technical features of the various bids is reduced to a consideration of the following three points:

1. Comparison of the exact amounts of the royalty on oil (as expressed by the formula) to be paid to the State by the various bidders for wells of various productive capacities.
2. Comparison of the exact amounts of the royalties on gas and natural gasoline to be paid to the State by the various bidders.
3. The measure of protection afforded by the terms of the various bids against drainage of oil and gas from the State tidelands by wells located on and producing from the adjacent uplands.

COMPARISON OF OIL ROYALTIES OFFERED
UNDER THE VARIOUS BIDS

Average daily production of well Barrels per day	Per Cent Royalty Bid of Southwest Exploration Company	Per Cent Royalty Bid of United States Refining Company, Ltd.	Per Cent Royalty Bid of West Central Oil Co., Ltd.
80.29	12.50 (min.)	12.50	12.50
82.55	13.02	12.50 (min.)	12.50
85.37	13.65	13.10	12.50 (min.)
100	16.71	16.05	15.28
125	21.21	20.35	19.37
150	24.94	23.94	22.78
175	28.08	26.97	25.67
200	30.79	29.57	28.14
225	33.15	31.82	30.28
250	35.20	33.79	32.16
275	37.02	35.53	33.82
300	38.62	37.08	35.29
325	40.06	38.46	36.60
350	41.36	39.71	37.79
375	42.54	40.84	38.86
400	43.60	41.86	39.84
425	44.57	42.79	40.72
450	45.46	43.64	41.54
475	46.29	44.44	42.29
500	47.05	45.17	42.98
750	52.31	50.21	47.79
1000	55.27	53.07	50.51
1500	58.53	56.19	53.48
2000	60.27	57.86	55.06
2500	61.35	58.89	56.05
3000	62.08	59.60	56.72
4000	63.03	60.51	57.59
5000	63.60	61.06	58.11
7500	64.38	61.81	58.82

COMPARISON OF THE ROYALTIES BID ON
DRY GAS AND NATURAL GASOLINE

The royalty offered on dry gas and natural gasoline was the same on all three bids, i.e., 15% of the market value of all dry gas produced and 15% of the market value of all the natural gasoline and other products extracted and saved from the gas produced. This is equal to the minimum royalty on dry gas and natural gasoline specified in the agreements.

ANALYSIS OF BIDS FROM STANDPOINT OF PROTECTION
OF THE STATE LANDS AGAINST DRAINAGE
OF OIL AND GAS

At the present time the area for which bids were called is subject to drainage of oil and gas from 14 Standard Oil Company of California wells located along the shore line from the foot of 23rd Street westward to a point near the western city limits of Huntington Beach. These wells in order of location from east to west are known as Standard Oil Co. Pacific Electric wells Nos. 18, 7, 17, 16, 19, 20, 21, 22, 26, 23, 24, 25, and 2; and Standard Oil Co. Bolsa No. 31 (at the extreme western end of the area). It is probable that some of the Standard Oil Co. wells along the north edge of Ocean Avenue in the so-called "Barley Patch" area also have contributed to the drainage of oil and gas from the State lands.

In addition to the direct drainage due to the Standard Oil Company wells along the shore enumerated above, there is another source of loss to the State which, indirectly, has the same effect as drainage, due to ten State tideland wells bottomed beneath the ocean in the extreme eastern portion of the area under consideration, which are paying considerably smaller royalties to the State than would be paid by the present bidders on the oil and gas production which they may secure. Nine of these existing State royalty wells at the east end of the area are bottomed in Parcel A and one is bottomed in Parcel B. These ten wells are drawing oil and gas from the undrilled portions of Parcels A and B and lowering the reservoir pressure. While it is true that the State receives royalty on all oil and gas produced from these ten wells, the royalty rates are much less than those offered by the present bidders. Thus the granting of easements with higher royalty rates to present bidders requiring the drilling of additional wells on Parcels A and B will result in increasing the State's revenue from the oil and gas in this portion of the pool.

Referring again to the wells of the Standard Oil Company of California located along the shore on the uplands and known as the Pacific Electric wells, 5 of these wells are opposite Parcel A; 5 are opposite Parcel B, and 3 are opposite Parcel C. There are no upland wells opposite Parcel D. The Standard Oil Company Bolsa #31 well is the only well opposite Parcel E. The oil and gas drainage being suffered by the State which is due to the 13 Standard Oil Co. Pacific Electric wells opposite Parcels A, B, and C will be stopped under the terms of each of the bids received since the agreements all require the immediate drilling of offset wells to prevent such drainage. But any drainage which may be due to Standard Oil Co. Bolsa #31, opposite Parcel E would continue under the bids of the United States Refining Company, Ltd. and the West Central Oil Co., Ltd., since these bids cover only Parcels A, B, and C. The Southwest Exploration Company which bid on the entire area would be required to drill an

offset well against Standard's Bolsa #31 well in addition to 10 offset wells against Standard Pacific Electric wells. No offsets are required under the agreement for Standard's Pacific Electric wells Nos. 18 and 7 since these are already offset by the existing State royalty wells producing from Parcel A above referred to at the extreme east end of the area.

If the Standard Oil Company should in the future drill additional productive upland wells along the Pacific Electric right-of-way or along Ocean Avenue opposite Parcels D and E, the bid of the Southwest Exploration Company provides for the immediate offsetting of such wells, but if the bid of the United States Refining Co., Ltd., or the West Central Oil Co., Ltd. is accepted, covering only Parcels A, B, and C, no drainage protection would be secured against future upland wells opposite Parcels D and E.

The oil and gas possibilities of the west end of the area under consideration, embraced within Parcels D and E, are at present of doubtful value since this part of the area may be beyond the commercially productive limits of the geological structure. No bids were tendered on these two parcels separately, and it is doubtful whether the State could get a bid on either of these two parcels until further development demonstrates their prospective worth. The Southwest Exploration Company bid provides for the drilling of an offset well on Parcel E which would presumably determine the oil potentialities of this part of the area. The bids of the other two bidders would not accomplish this.

It may be argued that if the bid is awarded to the Southwest Exploration Company, the company may elect to quitclaim a portion of the area in Parcel E and thus avoid drilling a well there to offset Standard Oil Company's Bolsa #31 well. Since there are at present no offset requirements on Parcel D, it may be argued that by quitclaiming a ten acre offset area in Parcel E, the Southwest Exploration Company could thus hold the balance of Parcel E and all of Parcel D without drilling upon these parts of the area. It should be clearly understood that in such an event, there would be no drainage loss to the State since there are no upland wells opposite Parcel D and the Standard's Bolsa #31 well opposite Parcel E is producing only a few barrels per day and has never produced oil in profitable quantities. The agreement provides that if a commercially profitable well should at any time be drilled on the adjacent uplands opposite Parcels D and E, the permittee must immediately drill an offset to such well or quitclaim the offset tract. If the permittee should elect to quitclaim in lieu of drilling, then the quitclaimed area would be available to other bidders.

Furthermore, the bid agreement provides that "The State shall have the right to restrict by appropriate rules and regulations the spacing of wells and the rate of drilling and production of such wells to prevent the waste of

oil and gas and promote the maximum economic recovery of oil and gas from, and the conservation of reservoir energy in each zone or separate underground source of supply of oil or gas covered in whole or in part by this agreement, and further that the State may issue rules and regulations which may be amended from time to time to effectuate the purpose of this subsection ---." It is my opinion that under these provisions the State may, if necessary or desirable, require the permittee to drill an exploratory well on Parcel D or E if the permittee should neglect to do so. It is, therefore, not true that under the easement the permittee could "tie up" the western portion of the area without drilling any wells thereon.

It may be further argued that it would be to the State's advantage to grant permits only upon Parcels A, B, and C at the present time and offer Parcels D and E for bids at some future time in the hope that such future bids, if any, would offer higher royalty rates than those contained in the bid of the Southwest Exploration Company. In my opinion any royalty offers to the State on Parcels D or E, together or separately, would be less than the royalty rates offered in the present bid of the Southwest Exploration Company, because as previously stated the geological conditions and the results obtained in Standard's Bolsa well #31 indicate that the area is of doubtful value for oil and gas production. If the State should hold Parcels D and E intact and not offer them for bidding until future developments may demonstrate their prospective worth, and if such future developments should indicate that these parcels will be highly productive, it is my opinion that the State could not expect to receive royalty bids on Parcels D and E materially better than those now offered by the Southwest Exploration Company. If the State should follow the course of deferring the offering of Parcels D and E to bidders until future developments demonstrate their oil possibilities, it might easily follow that such developments, if unfavorable, would prevent the State from ever getting these two parcels tested for oil.

A comparison of the number of acres per well required to be drilled under the terms of the bid of the Southwest Exploration Company with the number of acres per well which would be required under the terms of the so-called Olson and O'Donnell Bills is as follows:

Bid of Southwest Exploration	10 acres per well
Olson Bill	12 acres " "
O'Donnell Bill	24 " " "

From this comparison it is apparent that the present bids are more favorable to the State as to the number of wells required than would be the case under the proposed Olson and O'Donnell oil leasing bills.

RECOMMENDATION

It is my opinion that the bid of the Southwest Exploration Company offers the most profitable and advantageous terms to the State for the following reasons:

1. The bid offers the highest royalty on oil for wells of all capacities above that at which the minimum royalty of $12\frac{1}{2}$ per cent applies.
2. The bid offers the same royalty for dry gas and natural gasoline as offered by the other two bidders.
3. The bid offers the best means of immediately protecting all parts of the tideland area against drainage.
4. The bid is the only one of the three received which fulfills the requirement set forth; i.e., that documentary evidence must be shown that the bidder has secured all necessary rights-of-way and easements through the uplands from all upland owners.

September 3, 1938.

(SIGNED) E. K. SOPER
Consulting Geologist and Engineer

Mr. Riley: I move that resolution be put as follows:

RECITAL

Pursuant to notice of intention of the State Lands Commission to enter into agreement or agreements for the extraction of oil, gas and other hydrocarbons, from certain tidelands and submerged lands of the State situate in Orange County, California, published in accordance with law, bids were received from United States Refining Company, Ltd., a corporation, West Central Oil Company, Ltd., a corporation, and Southwest Exploration Company, a corporation, which bids were opened at a meeting of the State Lands Commission held September 19, 1938, in Room 301, State Building, Los Angeles, California.

It appears that the bids of the United States Refining Company, Ltd., a corporation, and West Central Oil Company, Ltd., a corporation, do not qualify in accordance with Section 89 of the "State Lands Act of 1938" and the said notice of the Commission, on account of inability to furnish all necessary sites and rights of way, and, therefore, should be rejected.

It further appears that the Southwest Exploration Company, a corporation, has the qualifications set forth in the "State Lands Act of 1938," and has met all the requirements of the "State Lands Act of 1938" and said notice of this Commission, and that the Southwest Exploration Company, a corporation, is the highest qualified bidder, and the bid thereof has received the approval of the Attorney General as to form.

NOW THEREFORE BE IT RESOLVED That the bids of the United States Refining Company, Ltd., a corporation, and West Central Oil Company, a corporation, be and each of them is hereby rejected; and

BE IT FURTHER RESOLVED That the bid of the Southwest Exploration Company, a corporation, be accepted as submitted,

The roll was called and the resolution was adopted by the following vote:

Ayes - George J. Hatfield
Harry B. Riley
Arlin E. Stockburger

Noes - None

Mr. Riley: I move that resolution be put as follows:

BE IT RESOLVED That the Attorney for the Division of State Lands be, and he is, hereby, authorized, empowered and directed, to execute upon behalf of the State Lands Commission that certain Agreement for Easement No. 392, Huntington Beach, constituting the bid of the Southwest Exploration Company, a corporation; and

BE IT FURTHER RESOLVED That the Attorney be, and he is, hereby, authorized, empowered and directed, to do any and all things necessary to effectuate the intents and purposes of this resolution and the "State Lands Act of 1938" insofar as applicable thereto.

The roll was called and the resolution was adopted by the following vote:

Ayes - George J. Hatfield
Harry B. Riley
Arlin E. Stockburger

Noes - None

Mr. Hatfield: I move the resolution be put as follows:

BE IT RESOLVED That Standard Oil Company of California, a corporation, the Huntington Beach Company, a corporation, Pacific Electric Land Company, a corporation, Pacific Electric Railway Company, a corporation, be required to enter into an agreement with the State of California to grant nominees of the State Lands Commission permits to drill, maintain and operate wells through and across lands of the permitter, described as follows, to wit:

In the City of Huntington Beach, California, extending from the oceanward projection of the easterly side of 10th Street to the oceanward projection of the westerly side of 23rd Street between the northerly side of Ocean Avenue and the ordinary high water mark of the Pacific Ocean, which said well and the course of said well must be east of the westerly line of the projection of said 23rd Street.

BE IT FURTHER RESOLVED That the Attorney of the Division of State Lands be instructed and directed not to execute or deliver Agreement for Easement No. 392, Huntington Beach, with Southwest Exploration Company, a corporation, until said Southwest Exploration Company, a corporation, has delivered or caused to be delivered to State Lands Commission an agreement with Standard Oil Company, a corporation, Huntington Beach Company, a corporation, Pacific Electric Company, a corporation, Pacific Electric Land Company, a corporation, Pacific Electric Railway Company, a corporation, and State Lands Commission, substantially in words and figures heretofore read.

The roll was called and the resolution was adopted by the following vote:

Ayes - George J. Hatfield
Harry B. Riley
Arlin E. Stockburger

Noes - None

Upon motion of Mr. Riley, seconded by Mr. Hatfield, and unanimously carried, salary of A. P. Ireland, Supervising Land Title Abstractor, was advanced \$10 effective July 1, 1938.

Upon motion of Mr. Riley, seconded by Mr. Hatfield, and unanimously carried, the Executive Officer was authorized and directed to institute a proceeding for appointment of an administrator in the matter of the estate of Frederick T. Zitt, deceased, trustor under deed of trust of certain lands at Delhi State Land Settlement.

There being no further business to come before the Commission the meeting was adjourned.