

SUMMARY OF OPERATIONS

# California Oil Fields

QUARTERLY CHAPTER. TWENTIETH ANNUAL REPORT

OF THE

STATE OIL AND GAS SUPERVISOR

ISSUED BY

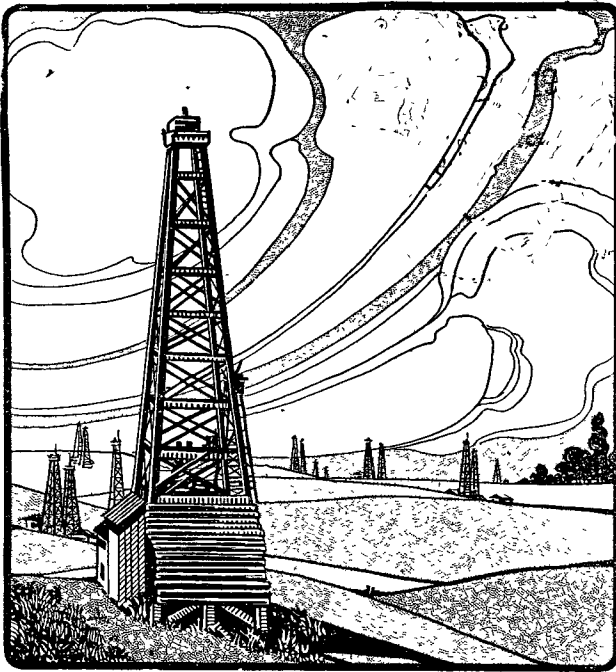
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

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SPECIAL ARTICLE

Newhall Oil Field

**STATE OF CALIFORNIA**  
**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF OIL AND GAS**

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## PREFACE

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Publication of the report of the State Oil and Gas Supervisor in monthly installments commenced with April 1, 1919. Publication of the report in quarterly installments commenced with Vol. 15, No. 1 (July-August-September, 1929).

The report carries a digest of all decisions made by the Supervisor, during the quarter (by months), in response to notices filed by operators. Notices of all proposed well operations are required by law.

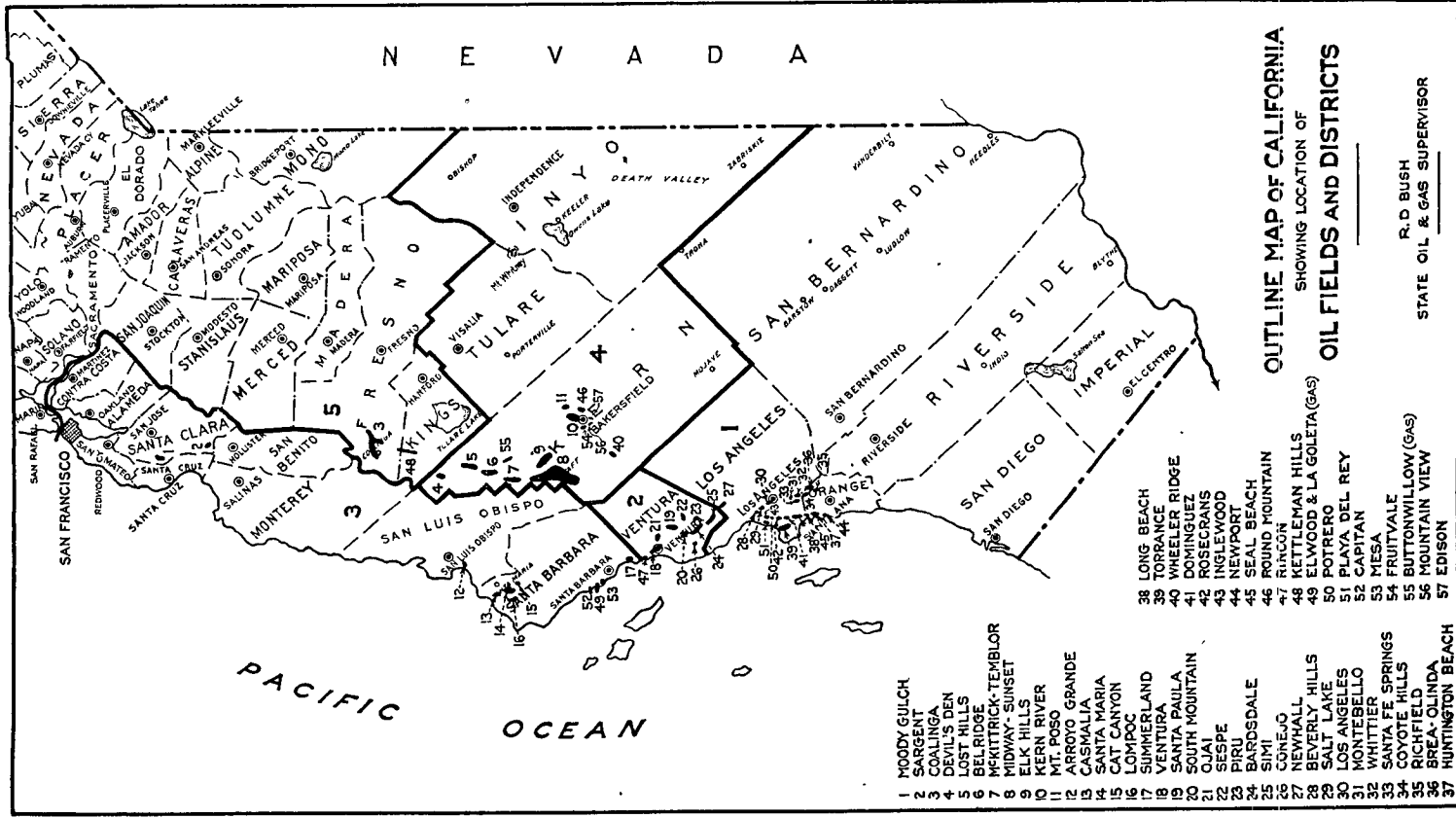
Special articles dealing with the various phases of oil field operations also appear in the report. These articles present the results of observations of engineers of the Division of Oil and Gas. Short articles of a suitable nature, written by operators or outside engineers, are also accepted for publication. A complete list of all special articles published to date is given in each number of the "Summary of Operations," and an alphabetical index of these articles is given in No. 12 (June) of Vol. 11 to 14, inclusive, and thereafter in No. 4 of each volume.

Prospecting operations in unproved areas, or for undeveloped formations within proved areas, will not be reported in full until after completion of the work if the operator so requests. The law provides for such procedure in that certain wells may be designated by the State Supervisor as "prospect wells."

The Division of Oil and Gas aims to serve the oil operators of California by furnishing them with the best information obtainable by state-wide scientific observation. The purpose is to have all wells drilled and maintained in accordance with the most approved methods. The desired end can only be attained by careful study and attention to many details.

Branch Offices of the Division, maintained in the various oil fields, afford the oil operators an opportunity promptly and informally to avail themselves of the service which is at their disposal.

Errors appearing in this publication will be corrected as soon as brought to the attention of the Supervisor. All readers are invited to assist the Division by calling attention to errors and also by giving suggestions which might add to the usefulness of the "Summary of Operations."



## REPORT ON NEWHALL OIL FIELD

By R. W. WALLING <sup>a</sup>

### INTRODUCTION

The area comprising the Newhall oil field lies in the northwestern part of Los Angeles County, California. This area is shown on the Santa Susana and Fernando quadrangles of the United States Geological Survey and on the later Newhall, Pico and Sylmar quadrangles of Los Angeles County. It extends from just east of the Los Angeles-Ventura County line, on the west, to the western base of the San Gabriel Mountains in San Fernando Pass, on the east, and from Santa Clara River Valley, on the north, to the summit of the Santa Susana Mountains, on the south.

The town of Newhall, in the eastern portion of the area and from which the area derives its name, is thirty miles northwest of the city of Los Angeles.

The Newhall oil field, in the sense of the present concept of what constitutes an oil field, is rather a misnomer applied to a large rough topographic area in which are eight relatively small producing areas, each of which might properly be considered a separate field. Four of these producing areas are on the Pico anticlinal uplift, that constitutes a portion of the Santa Susana Mountains, and development has tended to show that each area is an independent accumulation with no connection with any other. The other four areas are on monoclinical structures that overlap the basement complex and granites of the San Gabriel Mountains at their western base. A fault, trending northwest-southeast, passes through the junction of Newhall and Elsmere Creeks and divides this area into two major blocks. The block lying to the southwest of the fault has an average dip of from 15 to 30 degrees southwest, whereas the block to the northeast of the fault has an average dip of 12 to 15 degrees to the northwest. Each block contains two producing areas with the possibility of stratigraphic continuity, as well as the possibility of continuity of production, from one to the other.

The four producing and two nonproducing areas on the Pico anticlinal uplift, constituting what is commonly referred to as the Pico anticline district, are known as Pico Canyon area, De Witt (or Moore) Canyon area, Towsley Canyon area, Wiley Canyon area, Rice Canyon area, and East Canyon area.

The four producing areas and one nonproducing area in the monoclinical province, constituting what is commonly referred to as the Newhall district, are known as Tunnel area, Elsmere area, Whitney (or Mud Springs) Canyon area, Placerita Canyon area, and Schist area.

Reports have been written on the Pico Canyon area by Henry De Groot,<sup>1</sup> Edward North,<sup>2</sup> and Paul W. Prutzman,<sup>3</sup> while general data on

<sup>a</sup> Walling, R. W., Petroleum Engineer, District No 1.

<sup>1</sup> De Groot, Henry, History of Petroleum in California. Fourth Annual Report of State Mineralogist, pp. 293-302, 1884.

<sup>2</sup> North, Edward, The Pico Canyon Oil Field. Tenth Annual Report of State Mineralogist, pp. 283-299, 1890.

<sup>3</sup> Prutzman, Paul W., Petroleum in Southern California. Calif. St. Min. Bur. Bull. 63, pp. 156-194, 1913.

this area and the other areas of the Newhall oil field may be found in various state reports and bulletins (see bibliography). The last and most comprehensive report is in United States Geological Survey Bulletin 753, by W. S. W. Kew.<sup>1</sup> Since the publication of Bulletin 753, Mr. Kew has done additional detailed work in the Elsmere district and his revised report on the geology of the Newhall field will appear in a subsequent issue of Summary of Operations—California Oil Fields.

The purpose of this report is to summarize previously published data and to bring the history of development to date. The development of the Newhall oil field was practically completed prior to 1915, when the petroleum and gas law was enacted which requires that complete well records be filed with the Division of Oil and Gas. The well records available are, therefore, very meager in subsurface detail necessary to an engineering report. This report will deal with the history of development rather than with the subsurface detail commonly considered necessary to such a report. Free use has been made of United States Geological Survey Bulletin 753 and the revised report on the Newhall field by W. S. W. Kew for the geology contained in this report.

The writer is indebted to the operators in the Newhall oil field for their cooperation and release of data for this report and acknowledgment is hereby made of their assistance and of the special assistance given by the following: Mr. Victor H. York, York Oil Company; Mr. D. V. Nelson, Southern California Drilling Company; Messrs. Henry Maddren and Umberto Young, Republic Petroleum Company, Ltd.; Messrs. Walton Young, Vic Johnson and Robert B. Moran. Mr. W. S. W. Kew has aided materially with suggestions on subsurface correlations.

The following plates accompany this report:

- Plate I. Map of Newhall oil field, showing producing areas, well locations, and well-defined faults.
- Plate II. Cross-sections A-A and B-B, Pico Canyon area.
- Plate III. Cross-sections C-C and D-D, Wiley Canyon and Tunnel areas.
- Plate IV. Cross-sections E-E, G-G, H-H, and I-I, Elsmere, Whitney Canyon and Placerita Canyon areas.

The following tables list the wells drilled in the various areas of the Newhall oil field and such data as are available:

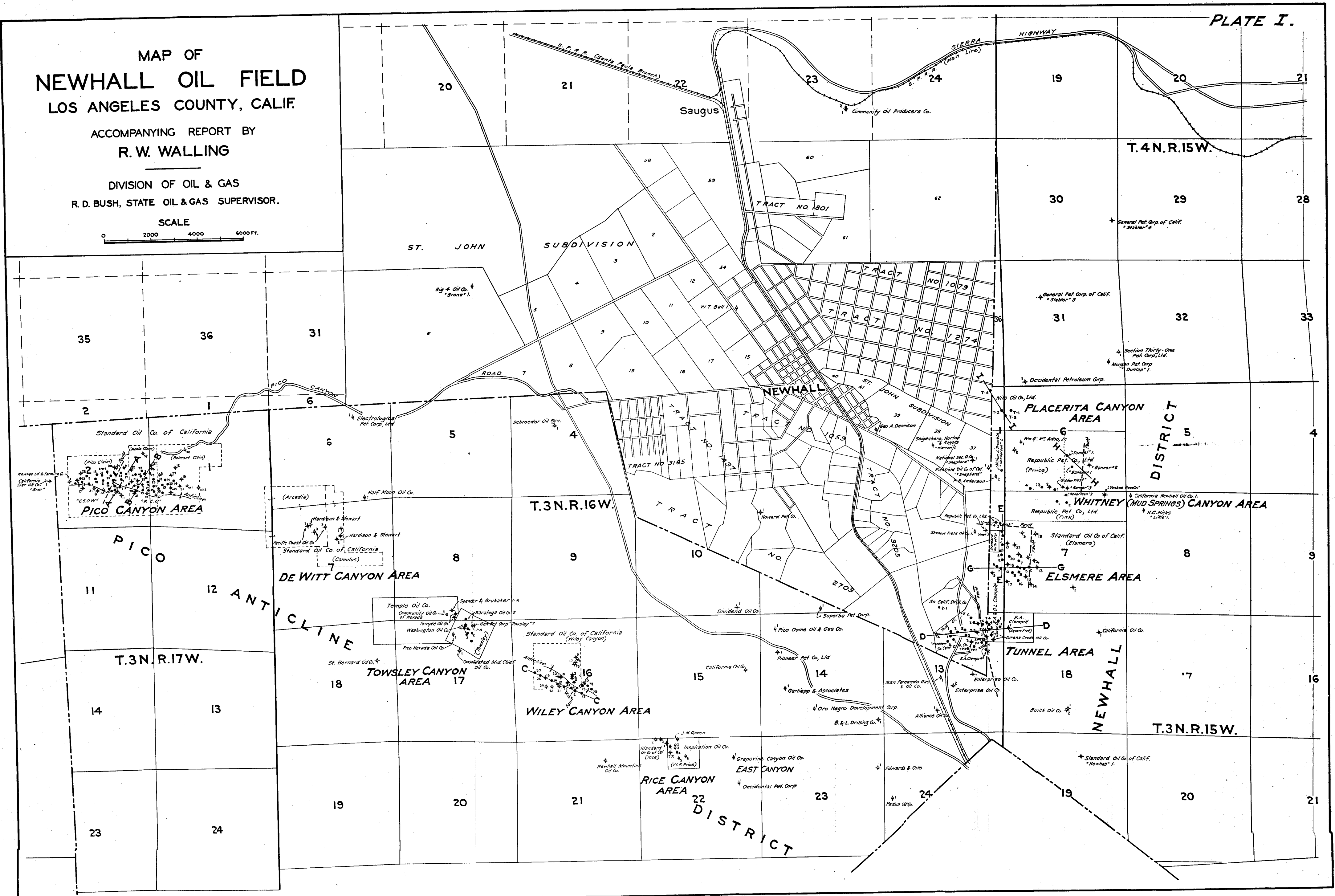
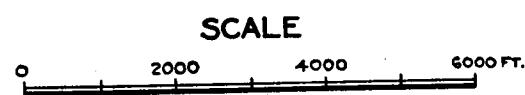
- Table I. Pico Canyon area wells.
- Table II. De Witt Canyon area wells.
- Table III. Towsley Canyon area wells.
- Table IV. Wiley Canyon area wells.
- Table V. Rice and East Canyon area wells.
- Table VI. Tunnel area wells.
- Table VII. Elsmere area wells.
- Table VIII. Whitney Canyon area wells.
- Table IX. Placerita Canyon area wells.
- Table X. Schist area wells.
- Table XI. Wildcat wells.

<sup>1</sup>Kew, W. S. W., Geology and Oil Resources of a part of Los Angeles and Ventura Counties, California: U. S. G. S. Bull. 753, pp 144-160, 1924.

# MAP OF NEWHALL OIL FIELD LOS ANGELES COUNTY, CALIF.

ACCOMPANYING REPORT BY  
**R. W. WALLING**

DIVISION OF OIL & GAS  
R. D. BUSH, STATE OIL & GAS SUPERVISOR.



## HISTORY OF DEVELOPMENT

The Pico Canyon area of the Newhall oil field is said to have been the first in California to yield oil for commercial purposes. Prutzman<sup>1</sup> states that in 1850 Andreas Pico collected oil from the natural seeps in Pico Canyon and distilled it by means of a copper still and worm, the resulting "burning-oil" being used at the San Fernando Mission for illuminating purposes.

Francisco Lopez, steward of San Buenaventura Mission and superintendent of the gold placers, is reported<sup>2</sup> to have told W. W. Jenkins, W. C. Wiley, and Sanford Lyon, of the existence of seepage oil in Pico Canyon, which they visited in 1857.

The next recorded "discovery" of the oil seeps in Pico Canyon was that of Ramon Perea<sup>3</sup> who, while hunting deer in the Newhall district in 1865, found the seepages, and filling his canteen with oil carried it to San Fernando. Here a Doctor Gelsich, formerly a resident of an oil district in Pennsylvania, identified it and immediately formed a company which staked out placer claims on the seepages.

In 1868, a Mr. Davis leased oil seeps in Wiley Canyon, known then as Wiley Springs, and collected seepage oil for about a year, selling it to Metropolitan Gas Works in San Francisco.

The birth of California's oil industry took place in 1875 with the completion of a spring-pole hole in Pico Canyon by C. C. Mentry and the subsequent organization of California Star Oil Works Company by Ex-mayor Bryant of San Francisco and D. G. Scofield. C. C. Mentry assigned his interests to the newly formed company and took charge of development work as superintendent.

In 1876, the first refinery<sup>4</sup> was constructed by D. C. Scott and a Mr. Wood at Newhall for California Star Oil Works Company. The refinery had a daily capacity of twenty barrels and oil was hauled to it in wooden barrels from Pico Canyon.

Drilling with steam-driven equipment was first successfully undertaken in the Newhall field in 1877, when a steam engine was installed on well No. "Pico" 4 and used in deepening the well from 370 to 610 feet.

In 1878, extensive alterations were made in the refinery at Newhall and its capacity was increased.

Pacific Coast Oil Company was incorporated September 10, 1879, by Mr. McPherson and C. M. Felton. The company started drilling in Pico Canyon and soon took over the holdings of California Star Oil Works Company. A 2-inch gravity pipe line, the first in California, was then laid from Pico Canyon to the refinery at Newhall.

W. L. Hardison and Lyman Stewart, oil men from Pennsylvania, whose operations later laid the foundation for the present Union Oil Company of California, began drilling in the Newhall field in 1882. They drilled three wells in Pico Canyon and three in De Witt Canyon. Of these, one well in Pico Canyon was successfully completed, produc-

<sup>1</sup> Prutzman, Paul W., *Petroleum in Southern California*: Calif. St. Mining Bur., Bull. 63, p. 159, 1912.

<sup>2</sup> De Groot, Henry, *History of Petroleum in California*: Fourth Annual Report of State Mineralogist, p. 294, 1884.

<sup>3</sup> *The Birth of an Industry*: Standard Oil Bull. (Calif.), Aug., 1918.

<sup>4</sup> Orcutt, W. W., *Early Oil Development in California*: Amer. Assoc. of Pet Geologists, Bull. 8, pp. 61-72, 1924.



ing only about five barrels of oil per day, and one well in De Witt Canyon for only one barrel of oil per day.

Drilling began in the Wiley Canyon area some time prior to 1883. The first account of work done, found in the records of Pacific Coast Oil Company well No. "Wiley" 4, shows that on December 15, 1883, this well was being drilled at a depth of 1020 feet.

The refinery at Newhall was shut down in 1883<sup>1</sup> and oil from the Newhall field shipped by rail in tank cars to the refinery of Pacific Coast Oil Company at Alameda, near San Francisco.

During 1884 and 1885, Mission Transfer Company laid a combination 2-inch and 3-inch pipe line from Pico Canyon to a refinery at Santa Paula. This line was extended to tidewater at Ventura a short time afterward, the extension being a 4-inch line. Flow through the entire system was by gravity. The head was approximately 1900 feet and the greatest undulation was 200 feet. It was reported<sup>2</sup> to have discharged twenty-five barrels per hour of 41.5-degree Baume gravity oil at 65 degrees Fahrenheit. The original pipe was shipped around Cape Horn, and portions of the pipe line were still in use in 1926.<sup>3</sup> When taken up in about 1930,<sup>4</sup> a large quantity of the pipe was in such good condition that it has been used in other places.

Oil was shipped by rail to the Alameda refinery at a cost of \$1 00 per barrel. Desiring to reduce this excessive cost, Pacific Coast Oil Company constructed two steamers, the "W. L. Hardison" and the "Geo. Loomis," each with a capacity of 6500<sup>5</sup> barrels, the equivalent of two full trains of tank cars. They were put into service between Ventura and Alameda in 1888, with the result that shipping costs were reduced to \$0.50 per barrel and all rail shipments ceased.

The first drilling, leading to oil production in the Newhall district of the Newhall oil field, was begun in 1889 by Pacific Coast Oil Company with the spudding of its well No. "Elsmere" 1 in one of the tributary canyons to Elsmere Canyon. No production was secured, but sufficient oil showings were found in the well to lead to further drilling, which developed commercial production.

In 1893, Banner Oil Company entered Whitney (or Mud Springs) Canyon area and secured production in its well No. "Banner" 1. In 1894, Golden West Oil Company completed its well No. 1, offsetting well No. "Banner" 1 on the west.

By 1902, the Newhall district had been prospected and some production secured in the Whitney Canyon, Elsmere and Tunnel areas. Several new companies had been organized and were operating, namely: Alpine Oil Company, Santa Ana Oil Company, Squaw Flats Oil Company, Pearl Oil Company, Enterprise Oil Company, Eureka Crude Oil Company, Zenith Oil Company, D. A. Connell, an individual, and Nettleton & Kellerman Oil Company.

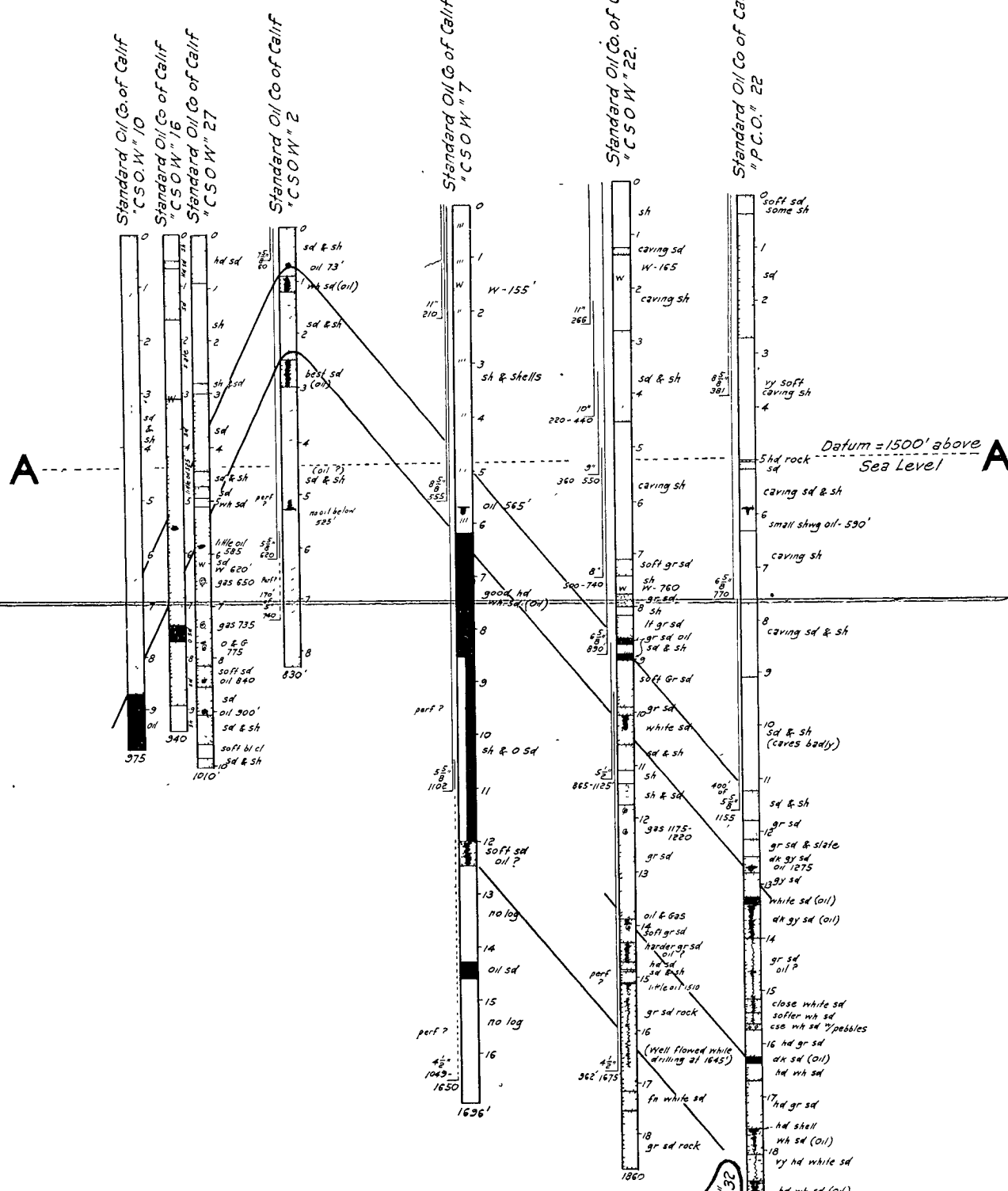
<sup>1</sup> Waring, C. A., Petroleum Industry of California: Calif. St. Min. Bur. Bull. 69, p. 109, 1914.

<sup>2</sup> Watts, W. L., Oil and Gas Yielding Formations of California: Calif. St. Min. Bur. Bull. 19, p. 168, 1901.

<sup>3</sup> Bly, E. P., Oil Pipe Lines in California: Oil Bulletin, pp. 849-856, 879-881, Aug., 1926.

<sup>4</sup> Union Oil Bull., Oct., 1935, p. 32, Yarns of Yesterday.

<sup>5</sup> Orcutt, W. W., Early Oil Development in California: Amer. Assoc. of Pet. Geologists, Bull. 8, pp. 61-72, 1924.

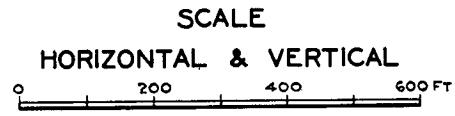


See text of Report  
This well is projected in to  
show relation of lower portion  
& relation to upper Zones

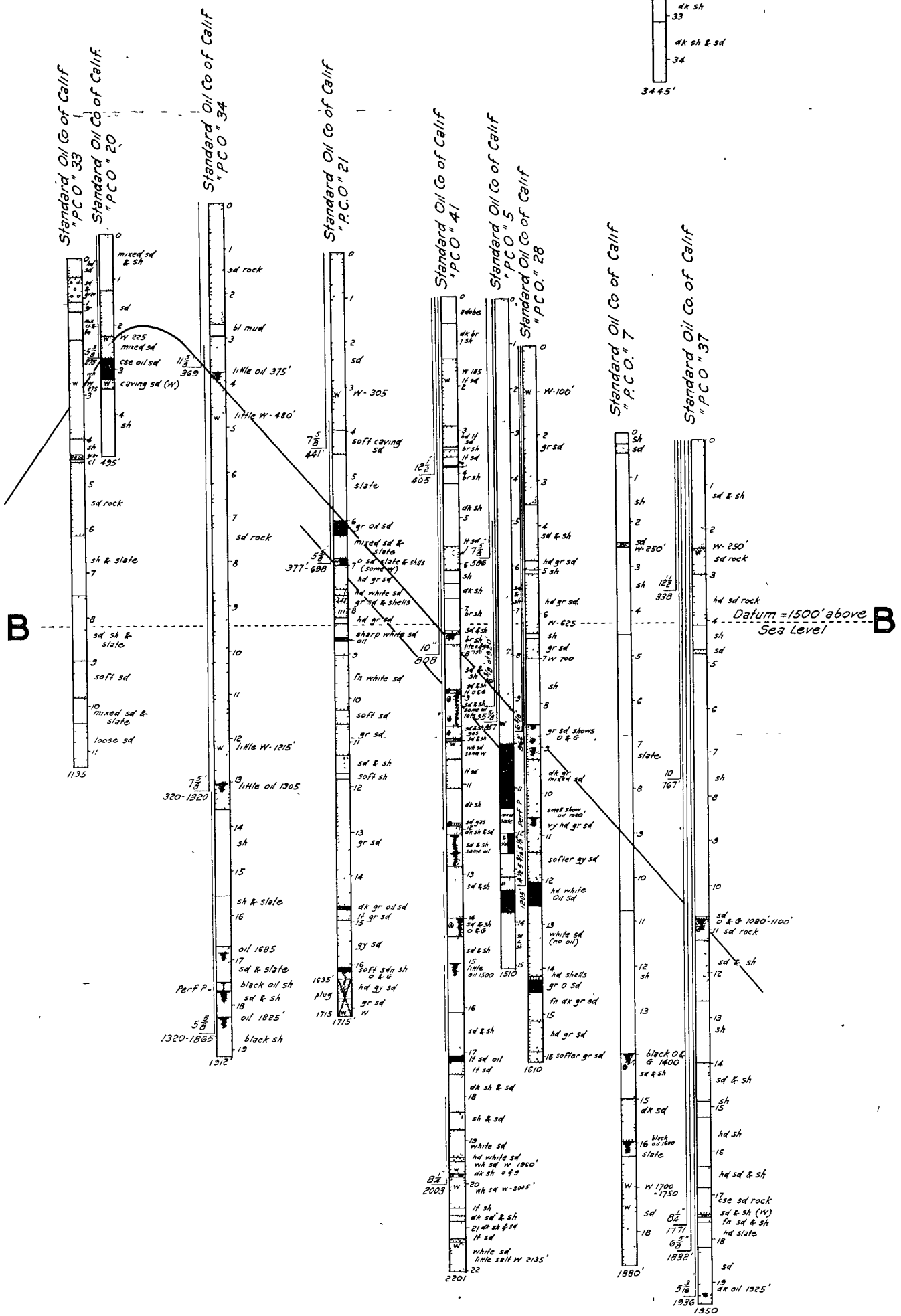
**CROSS SECTIONS A-A AND B-B  
PICO CANYON AREA  
NEWHALL OIL FIELD**

ACCOMPANYING REPORT BY  
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DIVISION OF OIL & GAS  
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See Plate I for location



### PICO CANYON AREA

The Pico Canyon area, in Sec. 1 and 2, T. 3 N., R. 17 W., S. B. B. and M., is the most westerly of the producing areas along the Pico anticline. The structure is very tightly folded here, dips ranging from 65 to 77 degrees on the south flank and from 50 to 68 degrees on the north flank. Well elevations are from 1900 to 2500 feet above sea level.

A fault cuts across the structure at a right angle to the anticlinal axis near the center of the east half of Sec. 2. Pico Canyon, carrying the drainage from the synclinal area on the south, follows this fault across the structure and has cut deeply, exposing the contorted and broken shales at the axis.

Production has been secured from the upper part of the Modelo formation (Miocene) which here forms the surface exposures. It is probable that in some of the deeper wells in the Pico Canyon area some of the production has been obtained from the shale member of the Modelo, which is exposed in a narrow strip at the crest of the structure in De Witt Canyon about one mile to the east.

Development started near oil seepages in the broken shales in the canyon bottom and gradually spread with successive well completions. These broken shales were referred to in the early reports as the "break" and were soon taken to mark the southern limit of production. Twelve wells were drilled south of the axis or "break," only six of which obtained oil in commercial quantities. Their initial productions were small and most of these wells soon were abandoned. Trouble was experienced with caving formations and crooked holes in the drilling of all wells on the south flank.

The present productive area closely approximates the maximum proved area of 95 acres and lies in a strip, 4300 feet long by 1000 feet wide, adjacent to and paralleling the anticlinal axis on the north.

Approximately eighty wells have been drilled in the Pico Canyon area. Thirty-seven wells are now producing a daily average per well of 1.8 barrels of 38.2-degree A. P. I. gravity oil. (See Table I.)

#### History of Development

Seepage oil is reported to have been collected in Pico Canyon in 1850<sup>1</sup> and utilized at San Fernando Mission for illuminating purposes.

In 1865, a Doctor Gelsich, formerly a resident of an oil producing district in Pennsylvania, staked out placer mining claims on these oil seeps.<sup>2</sup>

A search of the maps and records of the Registrar, United States Land Office, Los Angeles, shows that five placer claims were staked out in the Pico Canyon area and that three were finally patented. They are:

Pico Oil Spring Mine, lot 39, Sec. 2, T. 3 N., R. 17 W., S. B. B. and M., patented April 19, 1880, to Robert F. Baker and E. F. Beale.

Menlo Oil Mine, lot 40, Sec. 1 and 2, T. 3 N., R. 17 W., S. B. B. and M., patented October 8, 1890, to Occidental Asphalt Company.

Belmont Oil Mine, lot 41, Sec. 1, T. 3 N., R. 17 W., S. B. B. and M., patented October 8, 1890, to Occidental Asphalt Company.

<sup>1</sup> Prutzman, Paul W., *Petroleum in Southern California*. Calif. St. Min. Bur. Bull. 63, p. 159, 1913

<sup>2</sup> *The Birth of an Industry*. Standard Oil Bull. (Calif.), Aug., 1918

TABLE I

## PICO CANYON WELLS, STANDARD OIL COMPANY OF CALIFORNIA—T. 3 N., R. 17 W., S. B. B. &amp; M.

Present well No	Drilled by	Original well No.	Sec.	Elevation (ft)	Year drilled	Original total depth (ft)	Maximum depth (ft)	Depth of water shut-off (ft)	Present status	Initial production (bbl. per day)	Remarks
"C. S. O. W." 1	California Star Oil Works Co.	"Pico" 1	2	1,917	1875	120	735	Surface	Abandoned	10-12	At 250' flowed 25 bbl. per day.
"C. S. O. W." 2	California Star Oil Works Co.	"Pico" 2	2	1,944	1875	140	830	60	Abandoned	13	No oil below 525'.
"C. S. O. W." 3	California Star Oil Works Co.	"Pico" 3	2	?	1875	170	170	?	Abandoned	11	No record of production.
"C. S. O. W." 4	California Star Oil Works Co.	"Pico" 4	2	1,901	1876	370	1,400	?	Producing	25	At 560' flowed 70 bbl. per day.
"C. S. O. W." 5	California Star Oil Works Co.	"Pico" 5	2	1,886	1880	1,106	1,450	?	Producing	?	Pumped 25 bbl. per day, 1887.
"C. S. O. W." 6	California Star Oil Works Co.	"Pico" 6	2	2,121	1880	1,050	1,605	?	Producing	?	Pumped 25 bbl. per day, 1887.
"C. S. O. W." 7	California Star Oil Works Co.	"Pico" 7	2	1,983	1881-82	850	1,696	210	Producing	?	Flowed 40 bbl. per day, 1887.
"C. S. O. W." 8	California Star Oil Works Co.	"Pico" 8	2	2,012	1883-84	1,090	1,090	?	Abandoned	10	3 holes drilled, see report.
"C. S. O. W." 9	California Star Oil Works Co.	"Pico" 9	2	1,865	1882	1,555	1,565	360	Abandoned	?	Well flowed on completion; pumped 35 bbl. per day, 1887.
"C. S. O. W." 10	California Star Oil Works Co.	"Pico" 10	2	1,937	1882-83	975	975	?	Abandoned	-----	Junked with tools.
"C. S. O. W." 11	California Star Oil Works Co.	"Pico" 11	2	1,944	1882-83	1,450	1,450	None	Abandoned	-----	Pumped 150-200 bbl. per day of water
"C. S. O. W." 12	California Star Oil Works Co.	"Pico" 12	2	-----	1883	1,110	1,400	595?	Producing	?	Pumped 85 bbl first 24 hrs
"C. S. O. W." 13	California Star Oil Works Co.	"Pico" 13	2	2,211	1883-84	1,500	1,759	555?	Producing	80	Pumped 40 bbl. per day, 1887.
"C. S. O. W." 14	California Star Oil Works Co.	"Pico" 14	2	2,245	1883-84	1,500	1,500	?	Abandoned	-----	Abandoned while drilling.
"C. S. O. W." 15	California Star Oil Works Co.	"Pico" 15	2	2,377	1888	1,590	1,850	?	Idle	?	No record of production.
"C. S. O. W." 16	California Star Oil Works Co.	"Pico" 16	2	1,937	1888-89	840	940	?	Abandoned	-----	Never produced.
"C. S. O. W." 17	California Star Oil Works Co.	"Pico" 17	2	2,303	1889	830	830	830	Abandoned	-----	Junked and abandoned; S. of axis.
"C. S. O. W." 18	California Star Oil Works Co.	"Pico" 18	2	2,190	1889	1,128	1,545	471	Producing	?	April, 1917, 3 bbl per day.
"C. S. O. W." 19	California Star Oil Works Co.	"Pico" 19	2	2,042	1889-90	890	890	?	Producing	20	Diamond drill hole.
"C. S. O. W." 20	California Star Oil Works Co.	"Pico" 20	2	1,934	1891-92	1,465	1,465	680	Abandoned	-----	Junked, edge well.
"C. S. O. W." 20A	California Star Oil Works Co.	"Pico" 20A	2	1,940	1892-93	1,730	1,730	609	Abandoned	-----	Junked, edge well.
"C. S. O. W." 21	California Star Oil Works Co.	"Pico" 21	2	2,202	1892	1,525	1,730	?	Producing	33	Very little water encountered while drilling.
"C. S. O. W." 22	California Star Oil Works Co.	"Pico" 22	2	2,022	1892	1,490	1,860	890	Producing	58	April, 1917, 10 bbl. per day.
"C. S. O. W." 23	California Star Oil Works Co.	"Pico" 23	2	2,265	1892-94	1,525	1,525	1,053	Producing	16	April, 1917, 2 5/8 bbl. per day.
"C. S. O. W." 24	California Star Oil Works Co.	"Pico" 24	2	2,030	1896	1,605	2,045	535	Producing	?	April, 1917, 3 6 bbl per day.
"C. S. O. W." 25	California Star Oil Works Co.	"Pico" 25	2	2,206	1896-97	1,500	1,500	590	Producing	?	Pumped 70 bbl first 24 hrs.
"C. S. O. W." 26	California Star Oil Works Co.	"Pico" 26	2	2,312	1897-99	1,630	1,630	580	Abandoned	-----	Junked; edge well
"C. S. O. W." 27	California Star Oil Works Co.	"Pico" 27	2	1,937	1898	1,010	1,010	630	Abandoned	?	April, 1917, 1 bbl. per day.
"C. S. O. W." 28	California Star Oil Works Co.	"Pico" 28	2	1,935	1898	1,320	1,320	70	Producing	?	April, 1917, 2 bbl. per day.
"C. S. O. W." 29	California Star Oil Works Co.	"Pico" 29	2	2,059	1898-99	1,155	1,155	268	Producing	?	April, 1917, 1 bbl per day.
"C. S. O. W." 30	California Star Oil Works Co.	"Pico" 30	2	1,988	1899	1,060	1,060	-----	Abandoned	-----	Abandoned while drilling, S. of axis.
"C. S. O. W." 31	California Star Oil Works Co.	"Pico" 31	2	2,024	1899	1,240	1,240	-----	Abandoned	?	No record of any water while drilling;
"C. S. O. W." 32	Pacific Coast Oil Co -----	"Pico" 32	2	1,908	1903-05	3,090	3,445	804	Producing	?	S. of axis.
"Star" 1	Hardison & Stewart.	"Star" 1	2	2,085	1884-85	1,650	1,680	1,114	Idle	35	April, 1917, 10 bbl. per day.
"Smi" 1	California Star Oil Works Co	"Smi" 1	3	?	1883-84	1,300	1,300	-----	Abandoned	-----	Pumped 30 bbl. per day, 1887.
"Newhall Land & Farming Co." 1	Standard Oil Co. of California	-----	2	?	1907-08	1,750	1,750	-----	Abandoned	-----	Outpost well; abandoned while drilling.
"P. C. O." 1	Pacific Coast Oil Co -----	"San Fernando" 1	2	2,366	1881-82	1,176	1,695	?	Idle	?	Outpost well, abandoned while drilling.
"P. C. O." 2	Pacific Coast Oil Co -----	"San Fernando" 2	2	2,421	1882	1,280	1,280	?	Idle	?	Pumped 20 bbl per day, 1887.
											No oil sand below 975'; pumped 40 bbl. per day, 1887

"P. C. O." 3	Pacific Coast Oil Co.	"San Fernando"	3	1	2,428	1882-83	1,386	1,870	-----	Producing	?	No water found; pumped 25 bbl. per day, 1887.
"P. C. O." 4	Pacific Coast Oil Co.	"San Fernando"	4	2	2,129	1882-83	1,460	1,910	1,120	Producing	?	Pumped 18 bbl per day, 1887.
"P. C. O." 5	Pacific Coast Oil Co.	"San Fernando"	5	2	2,222	1882-83	1,510	1,510	957	Producing	?	Pumped 15 bbl per day, 1887.
"P. C. O." 6	Pacific Coast Oil Co.	"San Fernando"	6	1	2,272	1883-85	2,330	2,330	?	Abandoned	?	Pumped 10 bbl per day, 1887.
"P. C. O." 7	Pacific Coast Oil Co.	"San Fernando"	7	1	1,920	1882-83	1,980	1,880	?	Abandoned	?	Water below 1,700'; abandoned while drilling.
"P. C. O." 8	Pacific Coast Oil Co.	"San Fernando"	8	2	2,262	1886-87	1,345	1,408	535	Abandoned	?	Pumped 60 bbl. per day, 1887.
"P. C. O." 9	Pacific Coast Oil Co.	"San Fernando"	9	2	2,329	1887-88	1,065	1,330	563	Abandoned	?	No record of production.
"P. C. O." 10	Pacific Coast Oil Co.	"San Francisco Pet"	1	2	-----	-----	840	840	?	Abandoned	?	No records.
"P. C. O." 11	Pacific Coast Oil Co.	"San Francisco Pet"	2	1	2,372	1881	1,515	1,515	880	Producing	?	Pumped 5 bbl. per day, 1887.
"P. C. O." 12	Pacific Coast Oil Co.	"San Francisco Pet"	3	1	1,920	1882-83	1,360	1,360	?	Abandoned	-----	Abandoned while drilling.
"P. C. O." 13	Pacific Coast Oil Co.	"San Francisco Pet"	4	1	2,421	1883	1,545	1,700	778	Producing	?	Pumped 40 bbl. per day, 1887; produced 225 bbl. first day March, 1890, 15 bbl. per day. Could not shut off water.
"P. C. O." 14	Pacific Coast Oil Co.		14	1	2,100	1888	975	1,530	?	Producing	50	Never drilled.
"P. C. O." 15	Pacific Coast Oil Co.		15	1	2,354	1889	1,220	1,220	-----	Abandoned	-----	Never drilled.
"P. C. O." 16	Pacific Coast Oil Co.		16	2	2,498	1889-90	840	1,523	486	Producing	?	April, 1917, 1 6 bbl. per day.
"P. C. O." 17	Pacific Coast Oil Co.		17	2	2,389	1890	1,200	1,770	824	Producing	50	June, 1893, 8 5 bbl. per day.
"P. C. O." 18	Pacific Coast Oil Co.		18	1	2,427	1890	640	1,325	420	Producing	?	April, 1917, 2 bbl. per day.
"P. C. O." 19	Pacific Coast Oil Co.		19	2	2,371	1890	495	495	275	Abandoned	?	No record of production.
"P. C. O." 20	Pacific Coast Oil Co.		20	2	2,328	1890	1,055	1,715	441	Abandoned	?	No record of production.
"P. C. O." 21	Pacific Coast Oil Co.		21	2	1,995	1890	1,575	1,935	770	Abandoned	?	No record of production.
"P. C. O." 22	Pacific Coast Oil Co.		22	2	2,215	1896-97	1,810	1,810	858	Producing	?	April, 1917, 6 bbl per day
"P. C. O." 23	Pacific Coast Oil Co.		23	2	2,273	1890-91	1,050	1,550	525	Producing	?	April, 1917, 3 bbl. per day.
"P. C. O." 24	Pacific Coast Oil Co.		24	1	2,240	1891	1,195	1,610	940	Producing	60	July, 1893, 14 5 bbl per day.
"P. C. O." 25	Pacific Coast Oil Co.		25	1	2,335	1891	943	943	-----	Abandoned	-----	Could not shut off water.
"P. C. O." 26	Pacific Coast Oil Co.		26	1	-----	-----	-----	-----	-----	Abandoned	-----	No records.
"P. C. O." 27	Pacific Coast Oil Co.		27	2	2,114	1892-93	1,610	1,610	862	Producing	88	July, 1893, pumped 32 bbl. per day.
"P. C. O." 28	Pacific Coast Oil Co.		28	2	2,279	1892	1,555	1,555	455	Producing	?	April, 1917, 4 7 bbl. per day.
"P. C. O." 29	Pacific Coast Oil Co.		29	1	1,762	1895	1,165	1,165	-----	Abandoned	-----	Could not shut off water.
"P. C. O." 30	Pacific Coast Oil Co.		30	1	2,215	1892-93	1,200	1,650	?	Abandoned	?	Lots of water below 1,500'.
"P. C. O." 31	Pacific Coast Oil Co.		31	1	2,515	1894-95	1,600	1,600	-----	Abandoned	-----	Lots of water.
"P. C. O." 32	Pacific Coast Oil Co.		32	2	2,315	1899	1,135	1,135	-----	Abandoned	-----	Loose sands; abandoned while drilling.
"P. C. O." 33	Pacific Coast Oil Co.		33	2	2,440	1899-1900	1,912	1,912	369	Producing	?	April, 1917, 3 bbl. per day
"P. C. O." 34	Pacific Coast Oil Co.		34	2	2,431	1900-01	1,190	1,190	?	Producing	?	April, 1917, 3 bbl. per day.
"P. C. O." 35	Pacific Coast Oil Co.		35	1	2,481	1901-02	1,419	1,419	586	Producing	?	April, 1917, 1 6 bbl. per day.
"P. C. O." 36	Pacific Coast Oil Co.		36	1	1,903	1907	1,950	1,950	767	Abandoned	?	No record of production.
"P. C. O." 37	Standard Oil Co of Calif. (?)		37	1	-----	-----	-----	-----	1,832	-----	-----	No record of production.
"P. C. O." 38	Standard Oil Co of Calif. (?)		38	2	?	-----	-----	-----	-----	-----	-----	No records.
"P. C. O." 39	Standard Oil Co. of Calif. (?)		39	2	2,267	1909-10	1,425	1,580	881	Producing	?	April, 1917, 4 5 bbl. per day.
"P. C. O." 40	Standard Oil Co. of Calif. (?)		40	2	?	1909	1,128	1,128	726	Abandoned	-----	Abandoned while drilling, location not known.
"P. C. O." 41	Standard Oil Co. of Calif	"Pico"	41	2	2,230	1916	2,201	2,201	808	Producing	?	April, 1917, 16 5 bbl per day.
"Hill" 1	Hardison & Stewart	"Hill"	1	1	2,526	1882-83	1,850	1,850	-----	Abandoned	-----	No oil showings reported, lost tools and abandoned.
"Hill" 2	Hardison & Stewart	"Hill"	2	1	2,555	1883-84	1,050	1,050	-----	Abandoned	-----	Water never shut off; lost tools and abandoned.
"Hill" 3	Hardison & Stewart	"Hill"	3	1	2,290	1884	1,550	1,550	?	Abandoned	5	Water broke in December, 1887, killing production.

During 1869 and 1870, Sanford Lyon drilled a spring-pole hole near the oil seeps, at the anticlinal axis, to a depth of 140 feet, where tools were lost in the hole and drilling suspended. The hole is reported to have flowed from 70 to 75 barrels<sup>1</sup> of oil per day while being drilled. No further drilling was done in Pico Canyon until 1875, but during this time seepage oil was collected and sold to the Polhemus refinery in Los Angeles and the Metropolitan Gas Works in San Francisco.

Actual development in Pico Canyon began in 1875 with the completion of a spring-hole by C. C. Mentry. Ex-mayor Bryant, of San Francisco, and D. G. Scofield then organized California Star Oil Works Company. C. C. Mentry assigned his claims to the newly formed company and was appointed superintendent. Two more wells were drilled and completed during 1875. These first three wells, No. "C. S. O. W." ("Pico") 1, "C. S. O. W." ("Pico") 2, and "C. S. O. W." ("Pico") 3, were completed at depths of 120, 140 and 170 feet, respectively, and for initial productions of from 11 to 13 barrels of oil per day. That overproduction was a vital problem even at the time is shown in the following comment from the records of well No. "C. S. O. W." 2: "There was not sufficient market for the oil, so well was permitted to flow for about a year."

Well No. "C. S. O. W." ("Pico") 4, at the site<sup>1</sup> of the spring-pole hole drilled by Sanford Lyon in 1869-70, was completed at a depth of 370 feet September 26, 1876, producing 25 barrels of oil per day. In 1877, well No. "C. S. O. W." 4 was deepened from 370 to 610 feet, using steam for power. This successful use of steam power ended the spring-pole method of drilling in the Newhall field.

Pacific Coast Oil Company was incorporated September 10, 1879, and immediately began development work on the Menlo and Belmont claims (see Plate I). Shortly after incorporating, Pacific Coast Oil Company absorbed California Star Oil Works Company but continued its operations as a subsidiary company under its own name.

The first wells drilled by Pacific Coast Oil Company were designated either "San Fernando" or "San Francisco Petroleum." Later, presumably when all the properties in Pico Canyon were taken over by Standard Oil Company (California) in 1902, the designation of the wells on the Pico claim was changed from "Pico" to "C. S. O. W." and on the Menlo and Belmont claims was changed to "P. C. O." In this latter change, "San Fernando" wells No. 1 to 9, inclusive, retained their original numbers, while "San Francisco Petroleum" wells No. 1, 2, 3 and 4 were changed to No. "P. C. O." 10, "P. C. O." 11, "P. C. O." 12 and "P. C. O." 13, respectively.

In 1880, wells No. "C. S. O. W." 5 and "C. S. O. W." 6 were completed and placed on production for 47 and 40 barrels of oil per day, respectively. Well No. "P. C. O." 10 ("San Francisco Petroleum" 1) was drilled to 840 feet and abandoned as a dry hole. Well No. "P. C. O." 11 ("San Francisco Petroleum" 2) was completed at a depth of 1515 feet during 1881, but no record of its initial production is available.

During 1882, wells No. "C. S. O. W." 7, "C. S. O. W." 9, "P. C. O." ("San Fernando") 1, and "P. C. O." 2 were completed. The

<sup>1</sup>The Birth of an Industry: Standard Oil Bull. (Calif.), Aug., 1918.

completion of well No. "C. S. O. W." 9, at a depth of 1555 feet, marked the northern limit of production.

Twelve wells were drilled during 1883. Six of these wells were drilled by Pacific Coast Oil Company, three by California Star Oil Works Company, and three by Hardison & Stewart.

Hardison & Stewart wells No. "Hill" 1, "Hill" 2 and "Hill" 3, drilled on a sublease from Pacific Coast Oil Company, are of special interest because their drilling resulted in the establishment of the eastern limit of production. Well No. "Hill" 1 (see Plate I) was drilled to 1850 feet without finding oil showings. At this depth, the hole was junked with lost tools and abandoned. Well No. "Hill" 2, about 475 feet east of well No. "Hill" 1, was drilled to 1050 feet without finding oil showings. Tools were lost in the hole at this depth and the well abandoned. Well No. "Hill" 3 was spudded about 700 feet west of well No. "Hill" 1 and completed at a depth of 1550 feet, producing only about five barrels of oil per day.

The southern limit of production was established with the drilling of well No. "C. S. O. W." 11 during 1882 and 1883 and well No. "C. S. O. W." 8 in 1884. Well No. "C. S. O. W." 11, about 400 feet south of the anticlinal axis, was spudded July 27, 1882. Many fishing jobs, caused by caving formation, and excessive water delayed drilling, and it was not until October, 1883, that a depth of 1450 feet was reached. The well was placed on the pump for three days and produced from 150 to 200 barrels of water per day. It was then abandoned.

Three holes were drilled under No. "C. S. O. W." ("Pico") 8. The first hole, spudded early in 1883, was drilled to 1090 feet after finding the first oil at 800 feet. When placed on the pump, the well produced only ten barrels of oil per day. In attempting to deepen, the hole was plugged with lost tools and was abandoned. The rig was then skidded 20 feet north, where it burned shortly after the second hole was spudded. A new rig was built 40 feet south of the first location, and the third hole drilled to 1510 feet. The oil sand found in the first hole at 800 feet was found in the third hole at 850 feet. As the well elevations were approximately the same, this would indicate an increase of 50 feet in depth for a 40-foot horizontal difference in location. No further information is available on the third hole, but the record states that the original hole continued to flow four or five barrels of oil weekly for some time.

By the end of 1884, 27 wells had been drilled. Of these, 11 had been abandoned, and 16 were producing a daily average of 560 barrels of oil. During 1884, Hardison & Stewart subleased a portion of the Pico claim and started drilling well No. "Star" 1. The well was drilled to 1675 feet and completed March 28, 1885, producing 35 barrels of oil per day on the pump. The records state that while drilling at about 1630 feet the well flowed from 45 to 50 barrels of oil daily. This completion marked the northern limit of production on the west side of the fault that extends down Pico Canyon (see Plate I).

During 1883-1884, California Star Oil Works Company, in an effort to extend the western limits of the area, drilled well No. "Simi" 1, Sec. 3, T 3 N., R. 17 W., to a depth of 1300 feet. The well was

abandoned without showings of oil being reported. Well No. "C. S. O. W." 14, about 1200 feet east of No. "Simi" 1, was spudded September 5, 1883, and drilled to 1500 feet, encountering caving formations and experiencing a great deal of trouble with crooked hole throughout the drilling. The only showing was a small amount of light oil reported by one of the drillers at 1150 feet. Drilling was completed and work suspended August 23, 1884.

The drilling of wells No. "C. S. O. W." 20 and "C. S. O. W." 20-A, between 1891 and 1893, demonstrated edge conditions and ended development to the north. These wells were junked with lost tools at depths of 1465 feet and 1730 feet, respectively, and abandoned.

The drilling of well No. "P. C. O." 31, during 1892-1893, extended the eastern limit of production about 400 feet beyond well No. "Hill" 3 and established the existence of edge conditions here. The well was drilled to 1650 feet, finding high head waters below 1500 feet, and was plugged back to 1200 feet and placed on production. No records are available on the production from this well.

The western limit of production was established by the drilling of well No. "C. S. O. W." 23, about 130 feet to the northeast of No. "C. S. O. W." 14. The well was spudded December 20, 1892, and, after a great deal of trouble with fishing jobs, was drilled to 1525 feet. While drilling between 955 and 965 feet, 56-degree Baume oil was reported to have filled the hole 275 feet in twenty-four hours and to have ultimately filled to within 400 feet of the surface. The record states that the supply of this oil was exhausted in a few days by bailing. The well was placed on production June 25, 1894, pumping 16 barrels of oil per day. There is no record of the gravity of the initial production, but the well is now producing 38-degree A. P. I. gravity oil.

With the exception of a few edge wells, subsequent drilling in the Pico Canyon area has been confined to locations within the limits delineated by the end of 1884. By the end of 1887, 31 wells had been drilled. Of these, 11 had been abandoned, while 1 flowing and 19 pumping wells were producing an average daily total of 491 barrels of oil. Most of the oil was shipped to the Alameda refinery of Pacific Coast Oil Company.

Standard Oil Company (of California) was incorporated in 1902 and acquired, as its first properties in California, the holdings of Pacific Coast Oil Company in the Newhall field. Between 1902 and 1916, Standard Oil Company (of California) drilled six wells in Pico Canyon. The last well drilled, No. "P. C. O." 41, was completed at 2201 feet on October 4, 1916. The first record of production from this well was during April, 1917, when it produced a daily average of 16 5 barrels of oil.

#### Oil and Water Horizons

Cross-sections A-A and B-B, Plate II, illustrate the general subsurface conditions in the Pico Canyon area. Only the top of the productive formations has been indicated on the sections as correlations between wells as indefinite. Most of the well records are incomplete, few of them containing information as to the perforated casing or differentiating between the productive and nonproductive formations.



The inability to correlate may be explained partly by the incompleteness of the records, partly by the evident lenticularity of the beds, and partly by the fact that difficulty was experienced with crooked holes in the drilling of most of the wells. It is probable that a great deal of the trouble with crooked holes was due to the tendency of the holes to drift down the north dip. This may account for the absence of the shale body shown in well No. "P. C. O." 34 (Section B-B), below 1360 feet in the other wells in the section. Fault F-F (Plate I) mapped by W. S. W. Kew, shows a horizontal displacement of approximately 500 feet in the anticlinal axis. Correlation through wells No. "C. S. O. W." 24, "C. S. O. W." 5, "C. S. O. W." 20-A and "C. S. O. W." 9, on the basis of the top of the productive formations, would indicate that this fault has a vertical displacement of 300 feet with well No. "C. S. O. W." 9 on the upthrow side.

*Top zone.* Oil production was obtained from the fractured shales, exposed along the axis, in the first shallow wells drilled. This shallow production was confined to a narrow strip on the apex of the structure. These first shallow wells were completed at depths ranging from 120 to 170 feet.

*Central zone.* Practically all the wells were either deepened to or completed in the central zone. Completion depths ranged from about 500 feet to a little over 2000 feet, depending upon the structural position. Although some wells drilled on the north flank reported oil in shales and slates, it is probable that this oil did not contribute greatly to the production from these wells and that most of the production came from sandstones.

*Lower zone.* Only four wells were drilled to depths greater than 2000 feet. One of these wells, No. "C. S. O. W." 32, was drilled to 3445 feet and completed during March, 1905, producing from between 2588 and 3000 feet. This lower zone has not been penetrated by any other well in this area. No records of the initial production of well No. "C. S. O. W." 32 are available but during 30 days in April, 1917, it produced a daily average of 12 barrels of 33.6-degree Baume gravity oil, cutting 69 per cent water. On Section A-A, the lower part of well No. "C. S. O. W." 32 has been projected into the section for the purpose of showing graphically the productive formations penetrated by this well and their stratigraphic relation to the other productive formations.

It has been impossible to correlate waters in the Pico Canyon area. In general, it may be said that wells drilled south of the axis found a great deal of water and very little oil.

North of the axis and within the productive limits of the area, the well records indicate that surface waters were easily excluded by means of formation shut-offs. Some of the surface waters are corrosive and have eaten through the casing in a few of the wells. The records of well No. "P. C. O." 28, state that on August 30, 1895, the corroded 6 $\frac{3}{8}$ -inch water string collapsed above 845 feet, permitting water to enter the well and flood the oil sand. A string of 4 $\frac{1}{2}$ -inch casing, with a seed-bag packer on bottom, was run into the hole and the packer set at 845 feet, successfully excluding the water.

The well records indicate that, with the exception of a few edge wells, intermediate and edgewater were given little attention during the development of the area and that, where found, they were successfully excluded by means of seed-bag or rope packers on casing, or both, or by means of formation shut-offs.

Bottom water was successfully plugged off by means of a seed-bag packer. In well No. "P. C. O." 21, while drilling at 1675 feet, the well record states that 1500 feet of oil was standing in the hole. Between 1700 and 1715 feet, a water sand was struck and the water "seemed to force the oil back into the rock, as in a day or two there was no oil in the well, but the hole was full of water." A seed-bag packer on 55 feet of 2-inch pipe was landed on bottom and 25 feet of sand placed on top of the packer. The well was then pumped for two weeks, during which the oil came back slowly, gradually increasing until it averaged 29 barrels per day at the end of the period.

The last definite information as to water conditions in the oil zone is found in the records of well No. "P. C. O." 41, about 650 feet north of the axis and completed October 4, 1916. Water was reported during the drilling at 999, 1040, 1960, 2005 and 2135 feet. When the well was placed on production this water amounted to only four barrels per day and was produced with the oil.

At the present time the water production in the Pico Canyon area is approximately 46 per cent of the total fluid produced. There are no records of corrective work having been done recently and it is not known whether this large cut is due to corrosion and failure of water strings or to the encroachment of edgewater.

#### Production

The oil produced in the Pico Canyon area varies in gravity from 33 to 42 degrees A. P. I. and averages about 38.2 degrees. A small amount of 56-degree oil was reported during the drilling of wells No. "C. S. O. W." 12 and "C. S. O. W." 23. The following tabulation gives some of the gravity determinations made during the drilling of Pico Canyon wells:

Well No.	Gravity (degrees)	Depth (feet)	Remarks
"P. C. O." 31	36	940	
"P. C. O." 31	37	1165	
"P. C. O." 6	38	1550	
"P. C. O." 29	39	645-660	
"P. C. O." 1	40	1534	
"P. C. O." 1	39	1600	Black oil
"C. S. O. W." 12	56	640-700	Flowed while drilling
"C. S. O. W." 12	43	875-1000	
"C. S. O. W." 23	56	955-965	Exhausted in few days
"C. S. O. W." 23	40	1320	
"P. C. O." 36	37	1250	
"P. C. O." 7	?	1400 and 1600	Black oil

Black oil has been reported during the drilling of some of the wells, but most of the oil is green. In well No. "C. S. O. W." 13, North<sup>1</sup> reported that enough paraffin was contained in the oil to seri-

<sup>1</sup>North, Edward, The Pico Canyon Oil Field: Tenth Annual Report of State Mineralogist, p. 283, 1890.

ously interfere with pumping. The tubing and rods became so clogged and coated that they could not function and had to be cleaned with steam. In other respects, he states, the oil from this well did not differ from that of the other wells.

A partial analysis by Standard Oil Company of California of a Pico Canyon oil is given, as follows:

Gravity of crude sample, degrees, A. P. I.-----	36.3
Gasoline content, 390 E. P., per cent-----	44.6
Gasoline content, 437 E. P., per cent-----	51.5
Kerosene distillate content after 390 E. P., per cent-----	14.8
Fuel oil residue after kerosene, per cent-----	40.1

The highest recorded initial productions are found in the records of wells No. "P. C. O." 28 and "C. S. O. W." 12. Well No. "P. C. O." 28, about 1000 feet north of the axis, spudded April 12, 1892, was completed at 1610 feet January 11, 1893, producing a daily average of 88 barrels of oil during the first week. Well No. "C. S. O. W." 12, about 100 feet north of the axis and to the west of the Pico Canyon fault (see Plate I), spudded June 14, 1883, was completed at 1400 feet December 13, 1883, producing 85 barrels of oil during the first twenty-four hours.

Two examples of sustained production, showing a slow decline, are found in the records of wells No. "C. S. O. W." 13 and "P. C. O." 24. Well No. "C. S. O. W." 13, 400 feet north of the axis and west of the Pico Canyon fault, spudded July 19, 1883, was completed at 1500 feet April 19, 1884, producing 80 barrels of oil per day. During March, 1891, it produced a daily average of 16 barrels of oil per day. The well was cleaned out from 1453 to 1500 feet during April and placed on the pump May 2, 1891, producing a daily average of 24 barrels of oil during the rest of the month. During July, 1893, the production averaged 15 barrels of oil per day. Well No. "P. C. O." 24, 600 feet north of the axis and east of the Pico Canyon fault, was originally completed at 1050 feet on February 7, 1891, no initial production being given in the records. Between August 28 and September 28, 1893, the hole was cleaned out and deepened from 1050 to 1550 feet and the well recompleted, pumping a daily average of 71 barrels of oil during the first seven days. During October, 1895, it produced an average of 31<sup>1</sup> barrels per day, October, 1898, 19<sup>1</sup> barrels per day, and during October, 1918, 3 barrels of oil per day. The well is still producing, and averaged 0.7 barrels of oil and 0.5 barrels of water during December, 1934.

At the present time the wells are pumped by means of jack-lines powered by gas engines, enough gas being produced with the oil to supply the fuel requirements and a small surplus.

During July, 1935, 37 wells produced a daily average per well of 1.8 barrels of 38.2-degree A. P. I. gravity oil and 1.6 barrels of water.

#### DE WITT CANYON AREA

The De Witt Canyon area lies about two miles east of Pico Canyon, along the Pico anticline, in the north half of Sec. 7, T. 3 N.,

<sup>1</sup>Data from production decline curve, courtesy of Robert B. Moran.

R. 16 W. The Modelo shale is exposed at the crest of the structure in a narrow strip approximately 600 feet wide and probably furnished the small amount of oil that was produced in this area.

Three wells are reported to have been drilled in the east fork of the canyon on the Camulos claim and four in the west fork of the canyon on the Arcadia claim. The records and maps of the Registrar, United States Land Office, Los Angeles, show that these placer mining claims were patented as follows:

Arcadia Oil Mine, lot 42, Sec. 6 and 7, T. 3 N., R. 16 W., to Occidental Asphalt Company, October 8, 1890.

Camulos Oil Mine, lot 43, Sec. 6 and 7, T. 3 N., R. 16 W., to Occidental Asphalt Company, October 8, 1890.

The first two wells were drilled on the Camulos claim during 1882 and 1883 by Hardison & Stewart. Well No. 1 was located close to the anticlinal axis on the south flank and is reported to have been completed at a depth of 1000 feet, producing only one barrel per day of black 24.1-degree Baume gravity oil. Well No. 2, about 200 feet north of well No. 1 and on the north flank, was abandoned at a depth of 200 feet without production. No information is available on the third well, drilled in the east fork. Hardison & Stewart are reported to have drilled a third well during 1887 on the Arcadia claim in the west fork of the canyon. The well was located near the axis and drilled to 1600 feet, finding some oil, but no information as to possible production is available.

Pacific Coast Oil Company drilled wells No. "Moore" 1, "Moore" 2 and "Moore" 3, on the Arcadia claim during 1896 and 1897. Well No. "Moore" 1 was located near the anticlinal axis on the south flank and was probably drilled late in 1896 or early in 1897. Incomplete well records indicate that, although drilled to 1320 feet, no oil showings were found below 515 feet. Tools were lost on bottom and, after fishing for these unsuccessfully, the hole was plugged back to 550 feet and the well placed on production, producing eight barrels of oil the first day. Well No. "Moore" 2, on the north flank about 750 feet east of well No. "Moore" 1, spudded March 11, 1897, was drilled to 925 feet. No oil is reported in the records, but the following comment, "struck the sand rock at 745 feet," probably refers to oil sand. It is evident that satisfactory production was not obtained, as the last report shows that beginning April 29, 1897, the casing was pulled from the hole. Well No. "Moore" 3, on the south flank about 350 feet southeast of well No. "Moore" 1, spudded May 7, 1897, was drilled to 1360 feet, the only showings reported being a small amount of oil at 830 feet and gas at 1310 feet. While drilling at 1360 feet in caving formation, the 4-inch casing collapsed. The casing was then pulled and the hole abandoned.

No records are available showing that oil was ever produced commercially in De Witt Canyon. At present only a few traces remain of the original activity. A list of the wells is given in Table II.

#### TOWSLEY CANYON AREA

The Towsley Canyon area lies about three miles southeast of the Pico Canyon area on the Pico anticline in the north half of Sec. 17 and the south half of Sec. 8, T. 3 N., R. 16 W. Towsley Canyon

TABLE II

## DE WITT CANYON WELLS, STANDARD OIL COMPANY OF CALIFORNIA—Sec. 7, T. 3 N., R. 16 W., S. B. B. &amp; M.

Present well No.	Drilled by	Sec.	Elevation (ft.)	Year drilled	Total depth (ft.)	Depth of water shut-off (ft)	Initial production (bbl per day)	Present status	Remarks
1	Hardison & Stewart	7	?	1882-83	1,000±	?	1	Abandoned	24° Baume, black oil; no other records available.
2	Hardison & Stewart	7	?	1882-83	200±	?	?	Abandoned	No other records available.
3	Hardison & Stewart	7	?	1883?	1,600±	?	?	Abandoned	Some oil reported; no other records available.
"Moore" 1	Pacific Coast Oil Co.	7	1,875	1896	1,320 (Pg'd 550)	?	8	Abandoned	No oil reported below 515'.
"Moore" 2	Pacific Coast Oil Co.	7	2,040	1897	925	?	?	Abandoned	No records available on possible production.
"Moore" 3	Pacific Coast Oil Co.	7	2,080	1897	1,360	?	?	Abandoned	Hole abandoned while drilling.
?	Unknown	7	?	?	?	?	?	Abandoned	In E Fork of canyon, no information available.

carries the drainage from a portion of the synclinal area south of the Pico anticline and cuts across the anticline almost at a right angle to the anticlinal axis.

The anticlinal structure in this area is very sharply folded, the south flank dipping about 55 degrees and the north flank dipping from 65 to 70 degrees. The Modelo shale, exposed in a narrow strip approximately 800 feet wide along the apex of the structure, is badly fractured and distorted. Numerous oil seeps occur in these shales on the sides and in the bottom of the canyon. The productive area consists of approximately 15 acres, all within Sec. 17.

The maps and records of the Registrar, United States Land Office, Los Angeles, show that several placer claims were filed on in the Towsley Canyon area. The two principal claims are:

Temple Oil Claim, lot 50, Sec. 7, 8, 17 and 18, T. 3 N., R. 16. W., S. B. B. and M., no patents shown, probably purchased in fee.

Towsley Petroleum Mine, lot 40, Sec. 8 and 17, T. 3 N., R. 16 W., S. B. B. and M., patented to S. B. Casewell et al., August 20, 1879.

Although about eighteen wells are reported to have been drilled in this area, fewer records are available than in any other area in the Newhall oil field. The wells can be located by old casing projecting above the surface, but many of them can not be identified. Most of the wells are closely grouped, however, and their positive identification is not important. Scout reports and estimates, dating from 1913 to 1934, inclusive, indicate that the only production throughout this period was about 4000 barrels from January, 1923, to January, 1927, inclusive, and about 5000 barrels from September, 1932, to December, 1934, inclusive.

#### History of Development

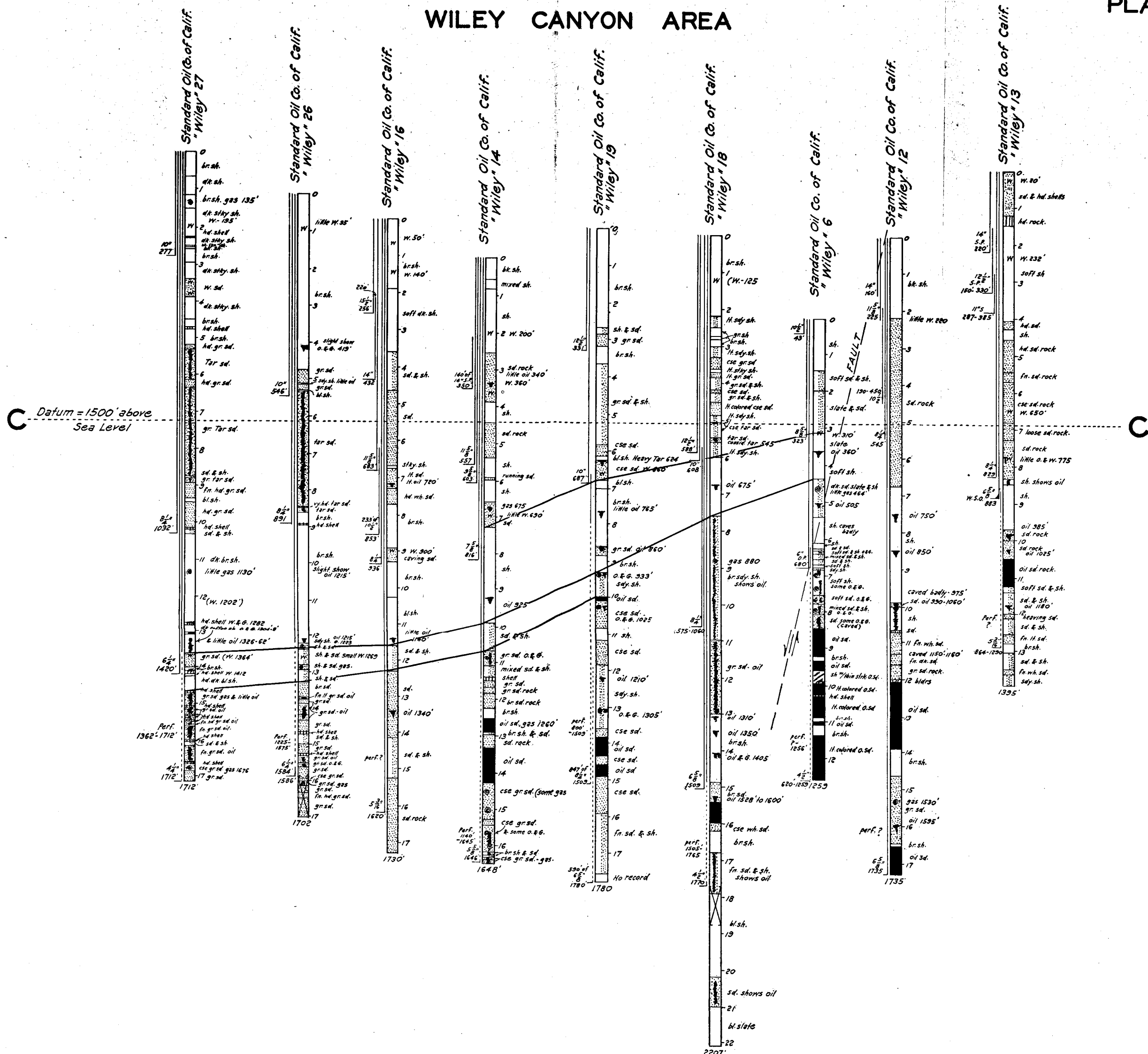
Two wells are reported to have been drilled by Temple Oil Company on the Temple claim, in the southeast corner of the SW $\frac{1}{4}$  of Sec. 8, prior to 1893. During 1893 and 1894, Washington Oil Company drilled three wells near the anticlinal axis in the canyon bottom on the Towsley claim in Sec 17. Wells No. 1 and 2 were drilled to 200 feet and 400 feet, respectively, and each is said to have produced a small amount of heavy black oil. Well No. 3 is reported to have been drilled to about 1000 feet and to have secured a showing of green 30-degree Baume gravity oil at 600 feet. Well No. 3 probably never produced, as Prutzman<sup>1</sup> states that the rig burned and the company was forced into bankruptcy at this point.

General Petroleum Corporation acquired the Towsley claim in 1920 and drilled well No. "Towsley" 7 to 1293 feet, finding tar sands between 60 and 80 feet and between 121 and 127 feet. No other oil showings were found, and the well was abandoned during May, 1921.

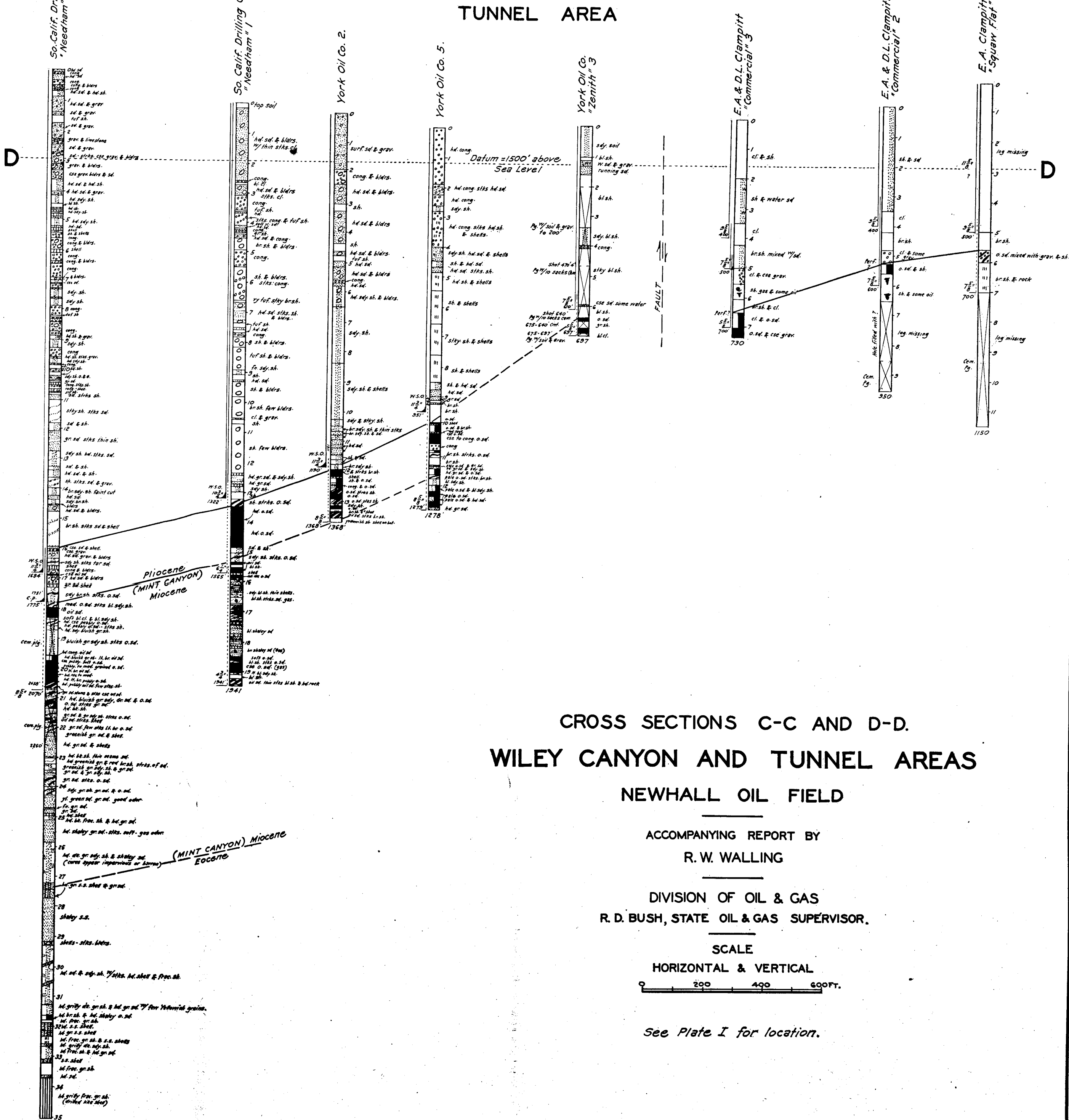
Community Oil Company of Nevada well No. 1, on the Temple claim in Sec. 8, is the deep test well for this area. The well was spudded November 1, 1929, by Consolidated Oil Company and, after several transfers of ownership, was drilled to 3270 feet when operations were suspended August 15, 1931. The log shows that showings of oil were found between 215 and 340 feet, 861 and 872 feet, 1147 and 1178

<sup>1</sup>Prutzman, Paul W., Petroleum in Southern California: Calif. St. Min. Bur. Bull. 63, p. 167, 1913.

WILEY CANYON AREA



TUNNEL AREA



CROSS SECTIONS C-C AND D-D.  
 WILEY CANYON AND TUNNEL AREAS  
 NEWHALL OIL FIELD

ACCOMPANYING REPORT BY  
 R. W. WALLING

DIVISION OF OIL & GAS  
 R. D. BUSH, STATE OIL & GAS SUPERVISOR.

SCALE  
 HORIZONTAL & VERTICAL



See Plate I for location.

feet, 2183 and 2208 feet, and 2555 and 2610 feet. Attempts to produce from the oil sands encountered below 1147 feet were unsuccessful, and the well is now standing idle.

Saratoga Oil Company well No. 2, near the bottom of the canyon on the Towsley claim in Sec. 17, was spudded October 24, 1930, by Guaranty Oil Company, Ltd. The hole was drilled to 674 feet and 6 $\frac{1}{2}$ -inch casing, perforated between 90 and 120 feet and between 400 and 500 feet, hung at 615 feet, and the well completed December 23, 1930, pumping 20 barrels per day of 21-degree A. P. I. gravity oil, cutting 5.0 per cent water. There is no other casing in the hole.

Saratoga Oil Company well No. 6 was drilled to 552 feet after shutting off water with 6 $\frac{1}{2}$ -inch casing landed in formation at 385 feet. The well was completed March 24, 1935, pumping 3 barrels per day of 21-degree A. P. I. gravity oil, cutting 15 per cent water.

Saratoga Oil Company has cleaned out several of the old holes on the Towsley claim and is producing some oil from them. During July, 1935, 5 wells produced a daily average per well of 1.9 barrels of 20.5-degree A. P. I. gravity oil and 2.2 barrels of water.

Table III lists wells drilled in this area.

#### WILEY CANYON AREA

The Wiley Canyon area lies about one mile east of the Towsley Canyon area, along the Pico anticline in Sec. 16, T. 3 N., R. 16 W. Wiley Canyon, from which the area derives its name, cuts across the anticlinal axis at approximately a right angle. The anticlinal structure is less sharply folded here than in the areas to the west, south flank dips ranging from 40 to 60 degrees, and north flank dips from 60 to 85 degrees. The Modelo shale, exposed along the apex of the structure, attains a width of about 1200 feet, measured along the canyon bottom, and gradually broadens eastward along the structure. At and near the anticlinal axis these shales are badly fractured and contorted and many oil seeps occur in these fractured shales in the bottom of the canyon.

The original development started near these oil seeps, the first wells being drilled near the axis and in the bottom of the canyon. The productive area consists of about 28 acres lying in a narrow strip, approximately 2700 feet long and 700 feet wide, adjacent and parallel to the axis on the south flank. Production has been secured on the north flank from several wells drilled within 200 feet of the axis. Repeated efforts were made from the first to extend north flank production, but these were unsuccessful and ended only after well No. "Wiley" 25, drilled to a depth of 3835 feet, was abandoned as a dry hole in October, 1912.

Placer mining claims were originally staked out and filed on in the Wiley Canyon area, but the records of the Registrar, United States Land Office, Los Angeles, show that these were purchased in fee before patenting.

Of 29 wells drilled in the Wiley Canyon area, only 8 are now producing. During December, 1934, these wells produced a daily average per well of 1.7 barrels of 28.2-degree A. P. I. gravity oil and 3.7 barrels of water.



TABLE III  
TOWSLEY CANYON WELLS, T. 3 N., R. 18 W., S. B. B. & M.

Present well No.	Present operator or owner	Drilled by	Sec.	Elevation (ft)	Year drilled	Total depth (ft)	Depth of water shut-off (ft)	Present status	Initial production (bbls. per day)	Remarks
"Temple" 1		Temple Oil Co.....	8	?	Prior to 1893	?	?	Abandoned		No records available.
"Temple" 2		Temple Oil Co.....	8	?	Prior to 1893	?	?	Abandoned		No records available
1		Washington Oil Co.....	17	?	1893-94	200		Abandoned		Some heavy black oil produced.
2		Washington Oil Co.....	17	?	1893-94	400		Abandoned		Some heavy black oil produced.
3		Washington Oil Co.....	17	?	1893-94	1,000±		Idle		
1		Clark-Sherman & Co.....	17	?	1896	900±		Idle		No records available.
1		Boyle & Thompson.....	17	?	1897	1,035±		Idle		
1		Unknown.....	17	?	1898	1,320		Abandoned		No records available.
1		Towsley Canyon Oil Co.....	8	2,000±	1902	?		Abandoned		
1		Consolidated Midway Chief Oil Co.....	17	?	1912	600		Abandoned		
1		Towsley Canyon Oil Co.....	17	?	1915	1,000±		Abandoned		No records available.
"Towsley" 7		General Petroleum Corp. of Calif.....	17	1,822	1920	1,293		Abandoned		A few tar showings above 127'.
8	Ed Mayhew et al.....	Andrews Petroleum Corp.....	17	1,788	1922	135		Abandoned		Crooked hole.
1	Pico-Nevada Oil Co.....	Ed Mayhew et al.....	17	?	1925	556	504	Idle		Cement never drilled out of casing.
1	Community Oil Co. of Nevada.....	Consolidated Oil Co.....	8	1,790	1929-31	3,270	2,183	Idle		
6	Saratoga Oil Co.....		17	1,650	1933-34	584+	137	Drilling	?	Now drilling?
2	Saratoga Oil Co.....	Guaranty Oil Co.....	17	1,600±	1930?	674	None	Producing	20	21° A. F. I. gravity. Drilled?
1-A	Spencer & Brubaker.....		8	1,770±	1932?					

### History of Development

Oil development began in Wiley Canyon with the leasing in 1868 of Wiley Springs by a Mr. Davis, who for about a year collected seepage oil and shipped it to Metropolitan Gas Works in San Francisco. At an unknown date two tunnels are reported to have been started near the bottom of the canyon and driven into the side hill in a southerly direction for the purpose of intersecting possible oil sands and increasing the seepage production. The tunnels are reported to have been driven distances of 300 and 400 feet without securing enough production to pay for the cost of collecting the oil.

A spring-pole hole is reported to have been drilled here as early as 1869. The next account of work done is found in the meager records of Standard Oil Company of California well No. "Wiley" 4, drilled by Pacific Coast Oil Company. The first report of this well was on December 15, 1883, and shows that while drilling at 1020 feet "more salt water" was encountered. Successive production tests were made down to 1275 feet, at which depth the well was placed on production May 31, 1884, pumping two barrels per day of 30-degree Baume gravity oil. No casing records are available.

No records are available on wells No. "Wiley" 1, "Wiley" 2 or "Wiley" 3, but early maps indicate that wells No. "Wiley" 1 and "Wiley" 2 were drilled at the same location. At present the only surface evidence of one or both of these wells is casing projecting above the surface from which a small amount of water and a seum of green oil flows.

Wells No. "Wiley" 3, "Wiley" 4 and "Wiley" 5 were all drilled within 100 feet of each other on the north flank and close to the axis. Considerable trouble was experienced in the drilling of well No. "Wiley" 5 down to 810 feet, and green oil was found at 840 feet and 900 feet. There is no record of the casing in this well, which was completed at 1408 feet and placed on production September 6, 1888, pumping about six barrels of oil per day. The well was on steady production between October 10, 1888, and February 5, 1890, when it ceased producing oil. When pulled, the casing was found to have been eaten through by surface waters.

Well No. "Wiley" 6, in the bottom of the canyon about 150 feet south of the axis, was spudded by Pacific Coast Oil Company October 13, 1888. The record states that while drilling at 360 feet there was 270 feet of oil in the hole and that the well was originally completed at 435 feet, but never produced an average of more than one barrel of oil per day. The original completion date is not given but the well produced from March, 1889, until in June, of the same year, when the oil gave out and the well was allowed to stand idle until June 9, 1890, when drilling was resumed. The well was deepened to 680 feet by September 9, 1890. Trouble with caving formation and water necessitated the landing of casing on bottom, the casing later being perforated opposite the oil sands. The records state that the well produced "over 800 barrels in less than four months, which is better than any well heretofore in Wiley Canyon."

In 1889, wells No. "Wiley" 7 and "Wiley" 9 were drilled in an effort to secure production from the north flank. Well No. "Wiley" 7, approximately 1000 feet north of the axis, spudded January 17, 1889,

was junked with lost tools at 1200 feet and abandoned May 1, 1889, after finding small showings of oil and gas in the first 450 feet and gas at 1155 feet. The rig was then skidded about 80 feet north and down structure to the site of well No. "Wiley" 9, which the record states was "on the edge of sand outcroppings which show on surface, an angle of about 85 degrees, and are 100 feet thick. Ran out of this sand at 350 feet; had the angle remained the same, should not have got out of it before reaching 1060 feet to 1075 feet." The well, spudded May 28, 1889, was drilled to 1650 feet, where the hole was junked with lost tools and abandoned November 9, 1889. Small oil and gas showings were found throughout the surface sand body to 350 feet, a small gas showing was found at 1200 feet, and black oil with gas was found at 1575 feet.

Edge conditions were found in the drilling of well No. "Wiley" 8, about 500 feet south of the axis. The well was spudded October 28, 1890, and after drilling to 150 feet, the rig was skidded because of crooked hole. Trouble with crooked hole was experienced in the first 250 feet of this second well, but drilling continued to 745 feet, where water and some showings of oil and gas were shut off with a packer on 6½-inch casing. The hole was drilled ahead to 1000 feet, where further progress was impossible because of the large volume of water found below 970 feet. The casing was pulled and the well abandoned August 26, 1891.

By 1891, ten wells had been drilled. The highest initial production was that of well No. "Wiley" 6, which upon recompletion produced a daily average slightly in excess of seven barrels for a period of four months. Between 1891 and 1902 only three additional wells, No. "Wiley" 11, "Wiley" 12 and "Wiley" 13, were drilled by Pacific Coast Oil Company. Very meager data, other than formation logs, are available on these wells.

In 1902, this property was acquired by Standard Oil Company (of California). Since 1902, there have been two periods of development. The first period was from 1909 to 1911, inclusive, during which the new owners deepened wells No. "Wiley" 6, "Wiley" 13, "Wiley" 14 and "Wiley" 16, and drilled wells No. "Wiley" 17 to "Wiley" 25, inclusive.

Wells No. "Wiley" 17 and "Wiley" 25 were drilled approximately 900 feet north of the axis and their abandonment ended attempts to extend the north flank production. Well No. "Wiley" 17, spudded May 2, 1909, was drilled to 1111 feet after passing through water sands above 960 feet. The well records do not contain any account of possible oil showings and give no reason for the suspension of drilling on December 30, 1909. All the casing was pulled from the hole and the rig skidded about 60 feet southwest and slightly up-structure to the site of well No. "Wiley" 25. Well No. "Wiley" 25, spudded January 12, 1910, was drilled to 3835 feet. A little gas and much water was found in the first 930 feet, a showing of oil and gas was found at 1115 feet, and a final showing of oil and gas at 3580 feet. Water, amounting to about 40 barrels per day, was reported at 1468 feet. Considerable trouble was experienced with caving formation and running sand during the drilling. At a depth of 3835 feet the well was placed on the pump and produced about 250 barrels of water per day. The casing was pulled and the well abandoned October 3, 1912.

Well No. "Wiley" 20, approximately on the axis about 120 feet northwest of well No. "Wiley" 10, spudded February 10, 1910, was drilled to 2600 feet. Here a flowing water was struck which necessitated the abandonment of the well during the early part of January, 1911.

Wells No. "Wiley" 18 and "Wiley" 19, drilled about 200 feet south of the axis, were completed at depths of 1528 feet and 1509 feet, respectively, and were the first wells in Wiley Canyon to produce oil in satisfactory quantities. Well No. "Wiley" 18, spudded November 15, 1909, is reported to have flowed as much as 30 barrels of oil per day while drilling between 1060 and 1528 feet. The well was placed on production June 12, 1910, pumping a daily average of 83 barrels of oil during the first eight days. This well was deepened to 2118 feet during 1913 and recompleted July 24, 1913, pumping 89 barrels of 29-degree Baume gravity oil per day. Well No. "Wiley" 19, spudded January 6, 1910, was completed April 20, 1910, pumping 128 barrels of oil and 32 barrels of water the first day. By April 25 the production had settled to 97 barrels of clean oil per day.

Well No. "Wiley" 22, approximately on the axis and to the east of the Wiley Canyon fault (see Plate I), spudded April 27, 1910, was drilled to a depth of 2280 feet. Small amounts of water were reported down to 900 feet and oil was reported from 125 to 336 feet, oil and gas at 1458 feet, and oil at 1492 feet. Upon reaching a depth of 1706 feet, the well was placed on the pump and produced 120 barrels of water and only 2 barrels of oil per day. It was then deepened to 2280 feet and placed on production June 22, 1911, pumping 168 barrels of water and 31 barrels of oil per day. The hole was then plugged back to 390 feet, 6½-inch perforated casing hung at 355 feet, and the well placed on production August 19, 1911, pumping a daily average of 12 barrels of oil and 14 barrels of water.

This period of development ended with the drilling of wells No. "Wiley" 21, "Wiley" 23 and "Wiley" 24, south of the axis, to depths of 2320, 2171 and 1500 feet, respectively. All three of these wells were abandoned without producing.

The second and last period of development conducted by Standard Oil Company (of California) was during the last half of 1916 and during 1917 when wells No "Wiley" 26 to "Wiley" 30, inclusive, were drilled. Well No. "Wiley" 26, spudded July 9, 1916, was drilled to 1702 feet after shutting off water with 8¼-inch casing landed in formation at 891 feet. A production test showed excessive water, so the hole was plugged with shells of cement and lathe cuttings from 1610 to 1586 feet. A string of 6¼-inch casing, perforated from 891 to 1584 feet, was then landed on top of the cement plug and the well placed on production November 23, 1916. After eight days the well produced a daily average of 40 barrels of oil and 10 barrels of water. Well No. "Wiley" 27, spudded March 15, 1917, was drilled to 1712 feet. Water was shut off with 6¼-inch casing landed in formation at 1420 feet. A string of 4¼-inch casing, perforated from 1302 to 1712 feet, was landed on bottom, and the well completed June 9, 1917, pumping 21 barrels of 28.3-degree Baume gravity oil and 11 barrels of water per day. The successful completion of this well extended the western limit of production and ended drilling in this direction.

Wells No. "Wiley" 28, "Wiley" 29 and "Wiley" 30 were all close to the axis on the north flank and east of the Wiley Canyon fault (see Plate I). Because of the barren conditions found below 400 feet in well No. "Wiley" 22, these three wells were completed at the shallow depths of 420, 420 and 400 feet, respectively, producing from two to four barrels of oil per day. Their completion ended drilling in the Wiley Canyon area.

Table IV lists the wells in Wiley Canyon.

#### Oil Zones

Longitudinal Section C-C, Plate III, illustrates the subsurface conditions found on the south flank of the Pico anticline in Wiley Canyon. Due to the evident lenticularity of the sands in the Modelo it has been impossible to correlate with any certainty. The bottom of a persistent shale body has been taken as the basis of correlation to the west of the Wiley Canyon fault. To the east of the fault the sand body, found in well No. "Wiley" 12 from 220 to 675 feet, checks closely with the sand found in well No. "Wiley" 13 from 405 to 832 feet, while in the lower portions of these holes correlation is impossible. W. S. W. Kew has shown a horizontal displacement of from 75 to 100 feet in the anticlinal axis along the Wiley Canyon fault. The shallow producing formations in wells No. "Wiley" 22, "Wiley" 28, "Wiley" 29 and "Wiley" 30 (not shown on Section C-C), probably correlate with the formation originally open to production in well No. "Wiley" 6. In Section C-C, the shale body shown above 220 feet in well No. "Wiley" 12 probably correlates with the shale body shown in well No. "Wiley" 6 between 312 and 435 feet and would indicate a vertical displacement of about 400 feet with well No. "Wiley" 6 on the downthrown side of the fault. This large vertical displacement could be accomplished by a relatively small horizontal movement when the strata stand in the steep attitudes that are found here.

#### Water Conditions

Flowing or high head waters necessitated the abandonment while drilling of at least five of the wells. At present the water production in the Wiley Canyon area amounts to about 70 per cent of the fluid produced. This is due in part to the narrow limits of the oil accumulation on the south flank and the consequent rapid encroachment of edgewaters. Part of it is undoubtedly due to the failure of casing by the corrosive action of hot waters.

#### Production

The oil produced in Wiley Canyon varies from 25 to 31 degrees A. P. I. gravity and averages 28.2 degrees.

A partial analysis by Standard Oil Company of California of a Wiley Canyon oil is as follows:

Gravity of crude sample, degrees A. P. I.-----	31.1
Gasoline content, 390 E. P., per cent-----	29.5
Gasoline content, 437 E. P., per cent-----	35.5
Kerosene distillate content after 390 E. P., per cent-----	14.1
Fuel oil residue after kerosene, per cent-----	55.9

TABLE IV  
**WILEY CANYON WELLS, STANDARD OIL COMPANY OF CALIFORNIA, T. 3 N., R. 16 W., S. B. B. & M.**

Present well No.	Drilled by	Sec.	Elevation (ft.)	Year drilled	Original total depth (ft)	Maximum Depth (ft)	Depth of water shut-off (ft.)	Present status	Initial production (bbl. per day)	Remarks
"Wiley" 1	Unknown.....	16	1,787					Abandoned		
"Wiley" 2	Pacific Coast Oil Co. (?)	16	1,787					Abandoned		
"Wiley" 3	Pacific Coast Oil Co. (?)	16	1,805					Abandoned		
"Wiley" 4	Pacific Coast Oil Co.	16	1,805	1883-84	1,275		?	Abandoned	2	30° Baume oil.
"Wiley" 5	Pacific Coast Oil Co.	16	1,808	1888	1,408		?	Abandoned	5	Troubled with water down to 810'.
"Wiley" 6	Pacific Coast Oil Co.	16	1,817	1888	435±	1,258	?	Idle	1	April, 1917, 1 bbl. per day, 29.5°, 33% cut.
"Wiley" 7	Pacific Coast Oil Co.	16	1,661	1889	1,200		692	Abandoned		Hole junked with tools and abandoned.
"Wiley" 8	Pacific Coast Oil Co.	16	1,840	1890-91	1,000			Abandoned		Excessive water.
"Wiley" 9	Pacific Coast Oil Co.	16	1,662	1889	1,650			Abandoned		Junked with lost tools.
"Wiley" 10	Pacific Coast Oil Co.	16	1,896	1891-92	860		?	Abandoned	1 5	Pumped 3 days, averaged 1.5 bbl. oil, 15 bbl. water.
"Wiley" 11	Pacific Coast Oil Co.	16	1,826	1898	Pgd. 800	1,325		Abandoned	?	Water below 800'.
"Wiley" 12	Pacific Coast Oil Co.	16	2,009	1898-99	1,030	1,735	545	Abandoned	?	Flowed 30 bbl per day for 2 weeks while drilling at 900'.
"Wiley" 13	Pacific Coast Oil Co.	16	2,189	1899	1,125	1,395	828	Idle	?	April, 1917, 3 bbl. per day, 31.7°; no water.
"Wiley" 14	Pacific Coast Oil Co.	16	1,949	1899-1901	1,165	1,648	?	Producing	?	April, 1917, 7 bbl. per day, 29.6°, 80% cut.
"Wiley" 15	Pacific Coast Oil Co.	16								Never drilled.
"Wiley" 16	Pacific Coast Oil Co.	16	2,056	1901-02	1,296	1,730	930	Abandoned	?	April, 1917, 6 bbl. per day, 28.8°, 75% cut.
"Wiley" 17	Standard Oil Co. of California	16	1,681	1909	1,111			Abandoned		No production, abandoned while drilling.
"Wiley" 18	Standard Oil Co. of California	16	1,983	1909-10	1,528	2,207	608	Producing	83	Well flowed while drilling between 1,000'-1,528'.
"Wiley" 19	Standard Oil Co. of California	16	1,990	1910	1,509	1,784	687	Producing	109	April, 1917, 6 bbl per day, 28.2°, 60% cut.
"Wiley" 20	Standard Oil Co. of California	16	1,896	1910-11	2,600			Abandoned		Flowing water at 2,600'.
"Wiley" 21	Standard Oil Co. of California	16	2,033	1910-11	2,412			Abandoned		Unable to shut off water; junked and abandoned.
"Wiley" 22	Standard Oil Co. of California	16	2,002	1910-11	Pgd. 390	2,280	?	Producing	9	Excessive water below 500'; plugged back to 390'.
"Wiley" 23	Standard Oil Co. of California	16	2,042	1910-11		2,181		Abandoned		Excessive water and running sand
"Wiley" 24	Standard Oil Co. of California	16	2,042	1910-11		1,500		Abandoned		Flowing water 845'-860'; abandoned while drilling.
"Wiley" 25	Standard Oil Co. of California	16	1,681	1910-12		3,835		Abandoned.		Excessive water.
"Wiley" 26	Standard Oil Co. of California	16	2,120	1916	Pgd 1,586	1,702	891	Producing	60	29.7°, 66% cut
"Wiley" 27	Standard Oil Co. of California	16	2,232	1917	1,712		1,420	Producing	21	28.3°, 33% cut.
"Wiley" 28	Standard Oil Co. of California	16	2,024	1917	420		194	Producing	4	24.8°, 20% cut.
"Wiley" 29	Standard Oil Co. of California	16	2,200	1917	420		210	Producing	2	25.0°, 50% cut.
"Wiley" 30	Standard Oil Co. of California	16	1,954	1917	400		231	Idle	3	22.6°, 25% cut.

Only three wells were completed with initial production in excess of 50 barrels per day, the remainder of the wells being completed for initial productions ranging from 2 to 40 barrels per day.

At present the wells are pumped either with gas engines or by jack lines powered by gas engines, enough gas being produced with the oil to meet all fuel requirements on the lease. The wells are pumped only three days each week.

During 31 days in July, 1935, eight wells produced a daily average per well of 1.7 barrels of 28.2-degree A. P. I. gravity oil and 3.5 barrels of water.

#### RICE CANYON AREA

The Rice Canyon area lies about one mile southeast of the Wiley Canyon area, along the Pico anticline, in the north half of the NW.  $\frac{1}{4}$  of Sec. 22, T. 3 N., R. 16 W. The entire prospecting of this area has been confined to about 25 acres, and the portion from which production has been obtained consists of about 10 acres. The structure is symmetrical here, dips on the north and south flanks ranging from 50 to 55 degrees.

The Modelo shale, exposed along the apex of the structure, attains a width of about 2500 feet in this area. Rice Canyon, from which the area obtains its name, cuts across the structure at a right angle to the axis, exposing several oil seeps from the shales near the axis in the canyon bottom.

Eleven wells have been drilled in this area, three on the property of Standard Oil Company of California in the NW.  $\frac{1}{4}$  of the NW.  $\frac{1}{4}$  and eight on the Inspiration Oil Company lease in the NE.  $\frac{1}{4}$  of the NW.  $\frac{1}{4}$ . All the wells were drilled on the north flank in the shales and interbedded sandstones of the Modelo formation.

The three wells on the property of Standard Oil Company of California were drilled during 1899 and 1900 by Pacific Coast Oil Company. Well No. "Rice" 1, in the bottom of the canyon approximately 350 feet south of the axis, spudded July 20, 1899, was drilled to 550 feet. Waters found in the first 300 feet were shut off with 11 $\frac{1}{2}$ -inch casing landed in formation at 343 feet; bottom water found at 490 feet was plugged off with a seed-bag packer at 445 feet; 81 feet of 10 $\frac{1}{2}$ -inch casing was landed at 405 feet and 56 feet of 8 $\frac{1}{2}$ -inch casing was landed at 431 feet. The records do not state, but it is assumed, that these last two strings of casing were perforated and served as liners. The well was placed on the pump November 4, 1899. No record of the initial production is available but W. L. Watts<sup>1</sup> states that the production in 1900 was three barrels of oil per day.

Well No. "Rice" 2, well up the west side of Rice Canyon and approximately 300 feet south of the axis, was spudded December 17, 1899. The hole was drilled to 800 feet, experiencing a great deal of trouble with water. A little oil and gas was found at 625 feet and a showing of oil at 705 feet, but inability to exclude the water necessitated the abandonment of the well on June 30, 1900.

Well No. "Rice" 3, spudded August 2, 1900, was drilled about 200 feet east of well No. "Rice" 2 and about 200 feet south of the

<sup>1</sup> Watts, W. L., Oil and Gas Yielding Formations of California: Calif. St. Min. Bur. Bull 19, p. 76, 1900.

axis. Top waters were excluded with 11 $\frac{5}{8}$ -inch and 9 $\frac{5}{8}$ -inch casings landed in formation at 173 feet and 462 feet, respectively. More water was found between 620 and 635 feet. At 635 feet oil and gas were struck and, quoting from the well record, "the well filled up with mud, water and oil so that they could not make much headway, as it would run in as fast as they could clean out, so tubed and pumped well, and got out about 20 barrels of oil, with lots of mud and water." The mud and water referred to was probably due to the failure of the 9 $\frac{5}{8}$ -inch shut-off as the record states that most of the water was subsequently excluded with 6 $\frac{3}{8}$ -inch casing landed at 590 feet, using seed-bag packers at 525 and 575 feet. The well was then drilled to 684 feet and placed on production December 14, 1900. The records contain no information as to the amount of the production. Between February 11 and 20, 1902, the hole was cleaned out and deepened to 705 feet and returned to production.

Seven of the wells in the NE.  $\frac{1}{4}$  of the NW.  $\frac{1}{4}$ , Sec. 22, now being operated by Inspiration Oil Company, were drilled during 1900, 1901 and 1902 by Rice Canyon Oil Company. Well No. 1 was drilled near the west property line as an offset to Standard Oil Company (of California) well No. "Rice" 1. W. L. Watts<sup>1</sup> states that the well was drilled to 550 feet, where an oil sand was found, and when tested it produced three barrels of oil per day. His report states that the hole was then deepened to 700 feet and water encountered.

The following information on the wells drilled by Rice Canyon Oil Company was obtained from Mr. Vic Johnson, an employee of the company during the drilling of the wells: Well No. 1 produced about three barrels of oil per day and much water; wells No. 2 and 3 were each abandoned at about 300 feet because of heaving sands, the only oil showings being seepage oil penetrated while drilling; well No. 4 was placed on production at 800 feet for an initial production of ten barrels of oil per day, which declined rapidly to four barrels; in well No. 5 salt water was struck at 1000 feet with no oil showings; in well No. 6, while drilling at 900 feet, oil was found with sufficient gas to eject the fluid from the hole, which was drilled to 1580 feet, where 80 feet of 5 $\frac{3}{8}$ -inch casing was lost, junking the hole.

During 1929, J. M. Queen drilled his well No. 1 on the property of Rice Canyon Oil Company near the north property line and approximately on the axis. The well was drilled to 195 feet where operations were suspended.

Inspiration Oil Company has recently cleaned out and placed on production wells No. 6 and 5, changing their designation to wells No. 1 and 2, respectively. During July, 1935, these two wells were reported to have produced a daily average per well of 4.8 barrels of 25-degree A. P. I. gravity oil and 48 barrels of water.

Table V lists the wells in Rice Canyon and East Canyon areas.

#### EAST CANYON AREA

East Canyon, a tributary to Rice Canyon, cuts across the Pico anticline at a right angle to the axis about three-quarters of a mile

<sup>1</sup> Watts, W. L., Oil and Gas Yielding Formations of California: Calif. St. Min. Bur. Bull. 19, p. 76, 1900.



TABLE V  
RICE CANYON AND EAST CANYON WELLS

Present well No.	Present operator or owner	Drilled by	Original well No	S. B. B. & M.			Elevation (ft.)	Year drilled	Original depth (ft.)	Maximum depth (ft)	Depth of water shut-off (ft.)	Present status	Initial production (bbl per day)	Remarks
				Sec.	Twp. (N)	R. (W.)								
"Rice" 1	Standard Oil Co of California	Pacific Coast Oil Co.	"Rice" 1	22	3	16	1,655	1899	550	Pgd. 445	343	Abandoned	?	3 bbl. per day, 1900.
"Rice" 2	Standard Oil Co. of California	Pacific Coast Oil Co.	"Rice" 2	22	3	16	1,790	1899-1900	800			Abandoned		Could not shut off water.
"Rice" 3	Standard Oil Co. of California	Pacific Coast Oil Co.	"Rice" 3	22	3	16	1,775	1900	684	705	575	Abandoned	?	No records on production available.
2	Inspiration Oil Co.	Rice Canyon Oil Co.	5	22	3	16	?	1902?	1,000±			?		No oil reported during drilling, salt water at 1,000'.
1	Inspiration Oil Co.	Rice Canyon Oil Co.	6	22	3	16	?	1902?	1,580			Producing		Lost casing; junking hole; suspended operations.
		Rice Canyon Oil Co.	1	22	3	16	?	1900?	550	700		Idle	3	Deepened to 700'; struck water, no other records.
		Rice Canyon Oil Co.	2	22	3	16	?	1900?	300±			Abandoned		Heaving sand.
		Rice Canyon Oil Co.	3	22	3	16	?	1900?	300±			Abandoned		Heaving sand.
		Rice Canyon Oil Co.	4	22	3	16	?	1901?	800			Idle	10	No records available.
		Rice Canyon Oil Co.	7	22	3	16	?	1902?	?			Idle		No records available.
1	J. M. Queen			22	3	16	1,800±	1929	195			Idle		Suspended operations.
1	Occidental Petroleum Corp.	Bradshaw & Beville		22	3	16		1899?	800	876		Idle		Flowed salt water; capped and suspended.
1	Grapevine Canyon Oil Co			22	3	16		1901	1,300?			Idle		No records available.

east of Rice Canyon. The Modelo shale, exposed at the crest of the structure, attains a width of approximately 3000 feet in East Canyon.

Two prospect wells, neither of which obtained production, were drilled in the Modelo shale in East Canyon. The first well was drilled by Bradshaw and Beville, during 1899 or 1900, about 700 feet south of the axis in the NE.  $\frac{1}{4}$  of Sec. 22, T. 3 N., R. 16 W. The well is reported to have been drilled originally to about 800 feet and a good showing of 18-degree Baumé gravity oil found near bottom. No test of this showing was possible because of flowing water found immediately below the oil. Work was suspended and the well flowed water with traces of oil until entered by Occidental Petroleum Corporation in June, 1922. During a pumping test lasting more than sixty days the water level could not be lowered below 670 feet. Part of the old casing was then pulled and the hole redrilled and deepened from 650 to 876 feet, where the 6 $\frac{1}{4}$ -inch casing became stuck and could not be moved. The well was placed on the pump in that condition and produced continuously from February to June, 1923, averaging from 350 to 500 barrels of water with a maximum of two barrels of oil per day. Operations were then suspended.

The second well, drilled in 1901 by Grapevine Canyon Oil Company north of the Bradshaw and Beville well, is said to have been drilled approximately on the axis and to have had no oil showings. No accurate information in regard to the depth of the well is available, old reports indicating that the hole may have been drilled as deep as 1300 feet.

#### TUNNEL AREA

The Tunnel area consists of approximately 53 acres lying on both sides of the San Fernando-Newhall highway, in the NE.  $\frac{1}{4}$  of Sec. 13, T. 3 N., R. 16 W., and has been so designated because of its proximity to the north portal of the highway tunnel through San Fernando Pass. In this area the monoclinical beds of the Pico formation dip to the southwest at about 29 degrees. At least 31 wells have been drilled in this area and 13 of these are now producing approximately 50 per cent of the oil of the Newhall field. Production has been derived from the Pico (upper Pliocene) formation that here forms the surface rocks, and from the upper portion of the Mint Canyon (middle Miocene) formation that lies immediately below the Pico (see Plate III, Section D-D). This area has the only refinery in the Newhall field and is the scene of the last development in the field.

#### History of Development

Zenith Oil Company wells No. 1 to 5, inclusive, drilled on the flats along Newhall Creek during 1900, were the first wells in this area. The records are very meager, but give the following information:

Well No. 1, drilled to 668 feet, penetrated oil sand from 640 to 650 feet, and was placed on production, pumping about 7 barrels per day of 14-degree Baume gravity oil.

Well No. 2 was completed at about 645 feet.

Well No. 3 was drilled to 697 feet after finding water sands from 110 to 130 feet and oil sand at 600 feet. Water could not be shut off so the well was abandoned.

Well No. 4 was completed at 760 feet, producing from oil sands found below 665 feet.

Well No. 5 was completed at 740 feet.

Commercial Oil Company wells No. 1 and 2, east of the Zenith Oil Company wells, were drilled during 1901. The records of these wells are very meager, but give the following information:

Well No. 1 was drilled to 700 feet, where operations were suspended because of "casing trouble."

Well No. 2 was drilled to 950 feet and completed, producing some water with the oil.

In 1901, Eureka Crude Oil Company drilled its wells No. 1 and 2 on the east side of Newhall Creek just south of the Commercial Oil Company lease. No records are available on these wells but Prutzman<sup>1</sup> states they were drilled to depths of 800 feet and 850 feet, respectively, and produced oil for a short time, but sand trouble caused them to be shut down.

Pearl Oil Company well No. 1, about 200 feet south of Zenith Oil Company well No. 1, was drilled to 1040 feet during 1901. Oil sands were found below 980 feet and gas was reported in the last 40 feet. The record states only that the well produced some oil and gas.

Pearl Oil Company well No. 2, about 300 feet south of well No. 1, was drilled during 1901 and 1902 to 700 feet, penetrating oil sand and gravel from 650 to 685 feet. The well was placed on production, pumping twelve barrels of oil per day. After four years, production had declined to four barrels per day, when water broke in. All attempts to exclude the water failed, and the well was abandoned.

Pearl Oil Company well No. 3, about 600 feet due west of Zenith Oil Company well No. 1, was drilled to 2100 feet during 1903. Oil sands were penetrated from 650 to 675 feet, from 1300 to 1355 feet, and from 2050 to 2100 feet. The record states that the lower sand was mixed with gravel and contained a high gravity oil. No production records are available on this well, which was abandoned in 1921.

In 1907, E. A. Clampitt acquired the wells drilled by Pearl Oil Company and Zenith Oil Company, and E. A. & D. L. Clampitt acquired the wells of Commercial Oil Company.

E. A. & D. L. Clampitt drilled wells No. 3 and 4 on the Commercial lease during 1907 and did some work on wells No. 1 and 2. Well No. 1 was cleaned out to 650 feet and recompleted after shutting off water with a hemp packer on 4½-inch casing at about 500 feet. Well No. 2, originally completed at 950 feet, producing large quantities of water with the oil, was plugged back to 650 feet, excluding part of the water.

Well No. 3 was drilled to 730 feet after shutting off water with 9½-inch casing landed in formation at 400 feet, and completed producing from oil sands found below 650 feet.

Well No. 4 was drilled to 720 feet after shutting off water with 7½-inch casing landed in formation at 550 feet, and completed producing from oil sands and gravels found below 600 feet.

<sup>1</sup>Prutzman, Paul W., *Petroleum in Southern California*: Calif. St. Min. Bur. Bull. 63, p. 172, 1913.

Squaw Flats Oil Company well No. 1, about 300 feet east of E. A. & D. L. Clampitt well No. 2 on the Commercial lease, was drilled to a depth of 1150 feet during 1909. Oil sand, mixed with gravel and shale, was penetrated from 560 to 600 feet. Top water was excluded with 9 $\frac{3}{8}$ -inch casing landed in formation at 500 feet. The record states that this well was purchased by E. A. Clampitt in 1912 and at that time the well showed bottom water. The hole was plugged with cement from 1150 to 700 feet and the water excluded. The well produced until the rig burned during a forest fire in 1916. The rig was never replaced and the well has not produced since that time.

E. A. Clampitt well No. 2 was redrilled from 860 to 975 feet during 1919 and 5 $\frac{5}{8}$ -inch casing cemented at that depth. The hole was drilled ahead to 1065 feet and 4 $\frac{1}{2}$ -inch perforated liner landed at 1040 feet. When placed on production the well produced only one-half barrel of oil and a small amount of muddy water per day, and was then abandoned.

Three wells were drilled by Crawford Syndicated Oil Company on property now controlled by Southern California Drilling Company and designated No. "F. P." 1, "F. P." 2 and "F. P." 3. Well No. "F. P." 1, spudded April 15, 1922, was completed at 804 feet. Well No. "F. P." 2, spudded February 27, 1924, was completed at 842 feet on July 21, 1924, pumping 12 barrels per day of clean 18.6-degree Baume gravity oil. Well No. "F. P." 3, spudded December 9, 1924, was drilled to 1047 feet. The records show that the well was placed on the pump, producing water with the oil, and that late in April, 1925, was producing about 250 barrels of fluid per day with an oil content ranging from none to 125 barrels. Well No. "F. P." 4 was drilled to 640 feet in 1927 by McCoy and Anderson and drilling suspended at that depth.

The last period of development in the Tunnel area took place from 1929 to 1932, inclusive. Up to this time, all drilling in the Newhall field had been by the standard or cable-tool method. Beginning with this period of activity the rotary method of drilling was introduced in the field.

Southern California Drilling Company and York Oil Company drilled ten wells, during this period, west of the early producers, and successfully completed nine.

Southern California Drilling Company started the activity with the spudding of its well No. "Needham" 1 on July 4, 1929. The hole was drilled to 1384 feet and water shut off with 10 $\frac{3}{4}$ -inch casing cemented at 1322 feet. The well was cleaned out to bottom and placed on production for two weeks, averaging 70 barrels per day of 20-degree A. P. I. gravity clean oil. The hole was then deepened to 1410 feet and a 6 $\frac{1}{4}$ -inch perforated liner landed on bottom. During a twelve-day production test the well pumped a daily average of 30 barrels of 19-degree A. P. I. gravity clean oil. The liner was then recovered from 1366 feet and the hole redrilled and deepened to 1595 feet, where a string of 6 $\frac{1}{4}$ -inch casing with perforated on bottom was landed. The well was completed November 2, 1929, for an initial production of 200 barrels per day of 19.5-degree A. P. I. gravity oil, cutting 10 per cent water.

Southern California Drilling Company well No. "Needham" 2, spudded November 15, 1929, was drilled to 1505 feet after shutting off water with 10 $\frac{3}{4}$ -inch casing cemented at 1290 feet. A string of 6 $\frac{1}{4}$ -inch casing with perforated on bottom was landed at 1505 feet and the well completed December 24, 1929. Thirty days after completion the well produced 150 barrels per day of 22.3-degree A. P. I. gravity oil, cutting 3 per cent.

York Oil Company well No. 1, an offset to Southern California Drilling Company well No. "Needham" 1, spudded November 30, 1929, was drilled to 1490 feet. Water was shut off with 11 $\frac{3}{4}$ -inch casing cemented at 1287 feet. An 8 $\frac{3}{8}$ -inch perforated liner was landed at 1490 feet and the well completed January 6, 1930, producing 220 barrels of 21.6-degree A. P. I. gravity oil per day, cutting 3.2 per cent.

York Oil Company well No. 2 and Southern California Drilling Company well No. "Needham" 3 were the next wells to be completed (see Table VI), and were followed by the spudding of Southern California Drilling Company well No. "Needham" 4 on July 22, 1930. This well is about 600 feet west and down structure from well No. "Needham" 1. Although not successfully completed, the well is of special interest because of its penetration of the Mint Canyon (Miocene) and Eocene formations. The well was first drilled and cored to 1717 feet and 11 $\frac{3}{4}$ -inch casing cemented at 1684 feet over a few good oil sands cored below that depth. When the hole was cleaned out below the shoe to 1717 feet and the fluid bailed down for a water shut-off test, only salt water entered the hole. The shut-off was not approved, but permission was given to drill ahead because of the possibility of the water source being below the shoe of the casing. The hole was then drilled and cored to 3504 feet, finding the Pico-Mint Canyon contact at about 1780 feet and the Mint Canyon-Eocene contact at about 2747 feet. Sandy shales and oil sands were cored down to about 2400 feet and a hard shaley oil sand was cored at about 3175 feet (see Plate III, Section D-D). No indication of oil in commercial quantities was found below 2150 feet, so the hole was bridged with cement from 2260 to 2070 feet. An 8 $\frac{3}{8}$ -inch liner, perforated from 1775 to 2070 feet, was landed at 2070 feet and cemented through perforations at 1775 feet. In subsequent production tests, beginning about November 18, 1930, the well averaged approximately 50 barrels of salt water per day and no oil.

The last well drilled, Southern California Drilling Company well No. "Needham 2" 1, is about 1300 feet northwest of well No. "Needham" 1 and about 90 feet structurally lower than well No. "Needham" 4. It was spudded April 15, 1932, and drilled to 1761 feet. Water was shut off with 8 $\frac{5}{8}$ -inch casing cemented at 1485 feet and the well completed July 31, 1932, with a 6 $\frac{5}{8}$ -inch perforated liner landed at 1761 feet. Thirty days after completion the well pumped 50 barrels of 24-degree A. P. I. gravity clean oil per day. By July, 1933, the production had declined to six barrels of oil per day, cutting 5 per cent. The hole was deepened to 1905 feet and then plugged back to 1820 feet because of gray sands found below 1838 feet. The well was recompleted pumping 10 barrels of 25-degree A. P. I. gravity oil per day, cutting 6 per cent.

Table VI lists the wells in the Tunnel area, showing present ownerships and well designations.

#### Subsurface Conditions

Section D-D, Plate III, illustrates the monoclinial attitude of the beds and the subsurface conditions in the Tunnel area. Correlation has been possible due to the uniformity of dip and the fact that paleontological determinations were made on many of the cores taken in the drilling of the rotary holes.

To the east of the fault (see Section D-D and Plate I, Fault F-F), the meager records of the early shallow wells indicate that the oil accumulation extends through a maximum vertical range of about 100 feet, while to the west of the fault a maximum of 630 feet is open to production in Southern California Drilling Company well No. "Needham" 1. With the Pico-Mint Canyon contact definitely located in well No. "Needham" 4 at 1780 feet, it is probable, based upon correlation, that at least six of the wells to the west of the fault are deriving a part of their production from the Mint Canyon formation.

#### Production

The oil produced in the Tunnel area varies in gravity from 13.5 to 25 degrees A. P. I. at the present time. The older wells east of the fault produce oil averaging 14.2 degrees, while the average gravity for the remaining wells is 18.9 degrees.

Following are analyses made by Richfield Oil Company of California of oils from two wells of Southern California Drilling Company:

#### Well A

Gravity of crude sample, degrees A. P. I.-----	18.80
Gasoline content (392 E. P.) per cent.-----	14.07
Gasoline content (437 E. P.) per cent.-----	16.60
Gas Oil (below 437° F.) per cent.-----	9.43
Lube Oil (below Gas-Oil cut) per cent (cut No. 1)-----	10.00
Lube Oil (below Gas-Oil cut) per cent (cut No. 2)-----	7.50
Asphalt, per cent.-----	56.47

#### Well B

Gravity of crude sample, degrees A. P. I.-----	21.70
Gasoline content (392 E. P.) per cent.-----	18.85
Gasoline content (437 E. P.) per cent.-----	21.26
Gas Oil (below 437° F.) per cent.-----	9.04
Lube Oil (below Gas-Oil cut) per cent (cut No. 1)-----	10.00
Lube Oil (below Gas-Oil cut) per cent (cut No. 2)-----	10.00
Asphalt, per cent.-----	49.70

The highest recorded initial production was that of York Oil Company well No. 3, which produced at a daily rate of 340 barrels of 23.9-degree oil, cutting 2.2 per cent water, during the first 16 hours. Initial productions of the rotary drilled holes ranged from 50 to 340 barrels per day and averaged about 180 barrels per day.

Because of the low net oil production per well and the high percentage of water, the production from wells of E. A. & D. L. Clappitt in the Tunnel and Elsmere areas is pooled and no individual well gauges made. It is necessary, therefore, to estimate the proportion being produced in each of these areas.

TABLE VI

TUNNEL AREA WELLS—T. 3 N., R. 15 W., and T. 3 N., R. 16 W., S. B. B. &amp; M.

Present well No.	Present operator or owner	Drilled by	Original well No.	Sec.	Twp. (N.)	R (W)	Elevation (A*) (ft)	Year drilled	Original depth (ft.)	Maximum depth (ft.)	Depth of water shut-off (ft.)	Present status	Initial production (bbl. per day)	Remarks	
"Zenith" 1	E. A. Clampitt	Zenith Oil Co.	1	13	3	16	?	1900	668		610?	Abandoned	7	14°.	
"Zenith" 2	E. A. Clampitt	Zenith Oil Co.	2	13	3	16	?		645			?			
"Zenith" 3	E. A. Clampitt	Zenith Oil Co.	3	13	3	16	?	1902	697			Abandoned		Unable to shut off water.	
"Zenith" 4	E. A. Clampitt	Zenith Oil Co.	4	13	3	16	?		760			Abandoned			
"Zenith" 5	E. A. Clampitt	Zenith Oil Co.	5	13	3	16	?		740			Abandoned			
"Zenith" 6	E. A. Clampitt	Zenith Oil Co.	6	13	3	16	A-1,643	1921	710		618	Producing	5	14°, 20% cut.	
"Zenith" 2	E. A. Clampitt	Pearl Oil Co.	1	13	3	16	?	1901	1,040	1,065	975	Abandoned	?		
"Zenith" 3	E. A. Clampitt	Pearl Oil Co.	2	13	3	16	?	1902	700			Abandoned	12	1906, 4 bbl. per day; water broke in.	
"Zenith" 4	E. A. Clampitt	Pearl Oil Co.	3	13	3	16	?	1908	2,100			Abandoned	?		
"Zenith" 1	E. A. Clampitt	Squaw Flat Oil Co.	1	18	3	15	A-1,788	1909	1,150			Idle	?	Plugged to 700' in 1912	
"Zenith" 1	E. A. & D. L. Clampitt	Commercial Oil Co.	"Commercial" 1	13	3	16	A-1,707	1901	700			Producing			
"Zenith" 2	E. A. & D. L. Clampitt	Commercial Oil Co.	"Commercial" 2	13	3	16	A-1,704	1901	950	Pgd. 650		Producing			
"Zenith" 3	E. A. & D. L. Clampitt	Commercial Oil Co.	"Commercial" 3	13	3	16	A-1,658	1907	730		400	Producing			
"Zenith" 4	E. A. & D. L. Clampitt	Commercial Oil Co.	"Commercial" 4	13	3	16	A-1,657	1907	720		550	Producing			
"Zenith" 1	Eureka Crude Oil Co.			13	3	16	?	1900	800		450	Abandoned			
"Zenith" 2	Eureka Crude Oil Co.			13	3	16	?	1901?	850		600	Idle			
"F. P." 1	Southern California Drilling Co.	Crawford Syndicate Oil Co.		1	13	3	16	A-1,657	1922	804		727	Idle		
"F. P." 2	Southern California Drilling Co.	Crawford Syndicate Oil Co.		2	13	3	16	A-1,678	1924	842		675	Idle	12	18.6°, 0.4% cut.
"F. P." 3	Southern California Drilling Co.	Crawford Syndicate Oil Co.		3	13	3	16	?	1924	1,047		818?	Idle		
"F. P." 4	Southern California Drilling Co.	McCoy & Anderson		4	13	3	16	A-1,623	1927	640		405	Idle		Operations suspended. No records available.

"Needham" 1	Southern California Drilling Co.			13	3	16	A-1,677	1929	1,595	1,952	1,322	Producing	200	19 5°, 10% cut.
"Needham" 2	Southern California Drilling Co.			13	3	16	A-1,726	1929	1,505		1,290	Producing	150	22.3°, 3% cut.
"Needham" 3	Southern California Drilling Co.			13	3	16	A-1,744	1930	1,683		1,360	Producing	80	20°, 15% cut.
"Needham" 4	Southern California Drilling Co.			13	3	16	1,796	1930	3,504		1,684	Idle driller		
"Needham 2" 1	Southern California Drilling Co.			12	3	16	A-1,620	1932	1,761	1,905	1,485	Producing	50	25°, 0.5% cut.
1	York Oil Co.	York-Smullin Oil Co.		1	13	3	1,665	1929-30	1,490		1,285	Producing	220	21.6°, 3.2% cut.
2	York Oil Co.	York-Smullin Oil Co.		2	13	3	A-1,661	1930	1,368		1,190	Producing	158	22.3°, 2% cut.
3	York Oil Co.	York-Smullin Oil Co.		3	13	3	A-1,640	1930	1,300		1,005	Producing	150	22.7°, 2.5% cut.
5	York Oil Co.	York-Smullin Oil Co.		5	13	3	A-1,614	1930	1,279		951	Producing	149	19°, 5% cut.
6	York Oil Co.	York-Smullin Oil Co.		6	13	3	A-1,596	1931	1,184		941	Idle producer	76	15.2°, 6.4% cut.

\*A—Aneroid.



During July, 1935, it is estimated that the five wells belonging to E. A. & D. L. Clampitt in the Tunnel area produced a daily average per well of 2.1 barrels of 14.2-degree gravity oil, cutting 75 per cent water. The eight remaining wells pumped a daily average per well of 12.6 barrels of 18.9-degree gravity oil, cutting 26.3 per cent water.

#### ELSMERE AREA

The Elsmere area consists of approximately 60 acres in Elsmere Canyon and on Elsmere Ridge, in Sec. 12, T. 3 N., R. 16 W., and Sec. 7, T. 3 N., R. 15 W. The monoclinical beds of the Pico formation are crossed by numerous minor faults and dips vary greatly within short distances. Within the productive area, the average dip is to the southwest at angles ranging from 12 to 24 degrees.

Thirty-three wells, ten of which never produced, have been drilled in this area. With the exception of Republic Petroleum Company, Ltd., wells No. "Fink" 3 and "Fink" 4, which started drilling in the Saugus formation (upper Pliocene and Pleistocene), all the wells were started in the Pico (upper Pliocene) and derive their production from this formation. On the basis of correlation, wells No. "Fink" 3 and "Fink" 4 probably entered the Pico formation at from 700 to 800 feet.

#### History of Development

Pacific Coast Oil Company drilled twenty wells on its Elsmere property prior to the acquisition of this property in 1902 by Standard Oil Company (of California). Well No. "Elsmere" 1, near the northwest corner of the SW.  $\frac{1}{4}$  of the SE.  $\frac{1}{4}$ , Sec. 7, was the first well drilled in the Elsmere area. The well was drilled to 1376 feet during 1889, finding numerous small showings of black oil with some gas down to 940 feet. A showing of green oil was found at 1020 feet and a small amount of gas between 1020 and 1200 feet. Hard indurated sands were reported between 1200 and 1376 feet. The well was abandoned, but the meager records contain no account of possible production tests or the abandonment work.

Well No. "Elsmere" 2, about 2000 feet northwest of well No. "Elsmere" 1, spudded September 11, 1890, was drilled to 1226 feet. Only barren formations were found below 485 feet with water reported at 800 feet and salt water at 1050 and 1210 feet. The only available records state that the hole was bridged and plugged from 640 to 600 feet and placed on production March 24, 1891, pumping 229 barrels of oil during the first four days.

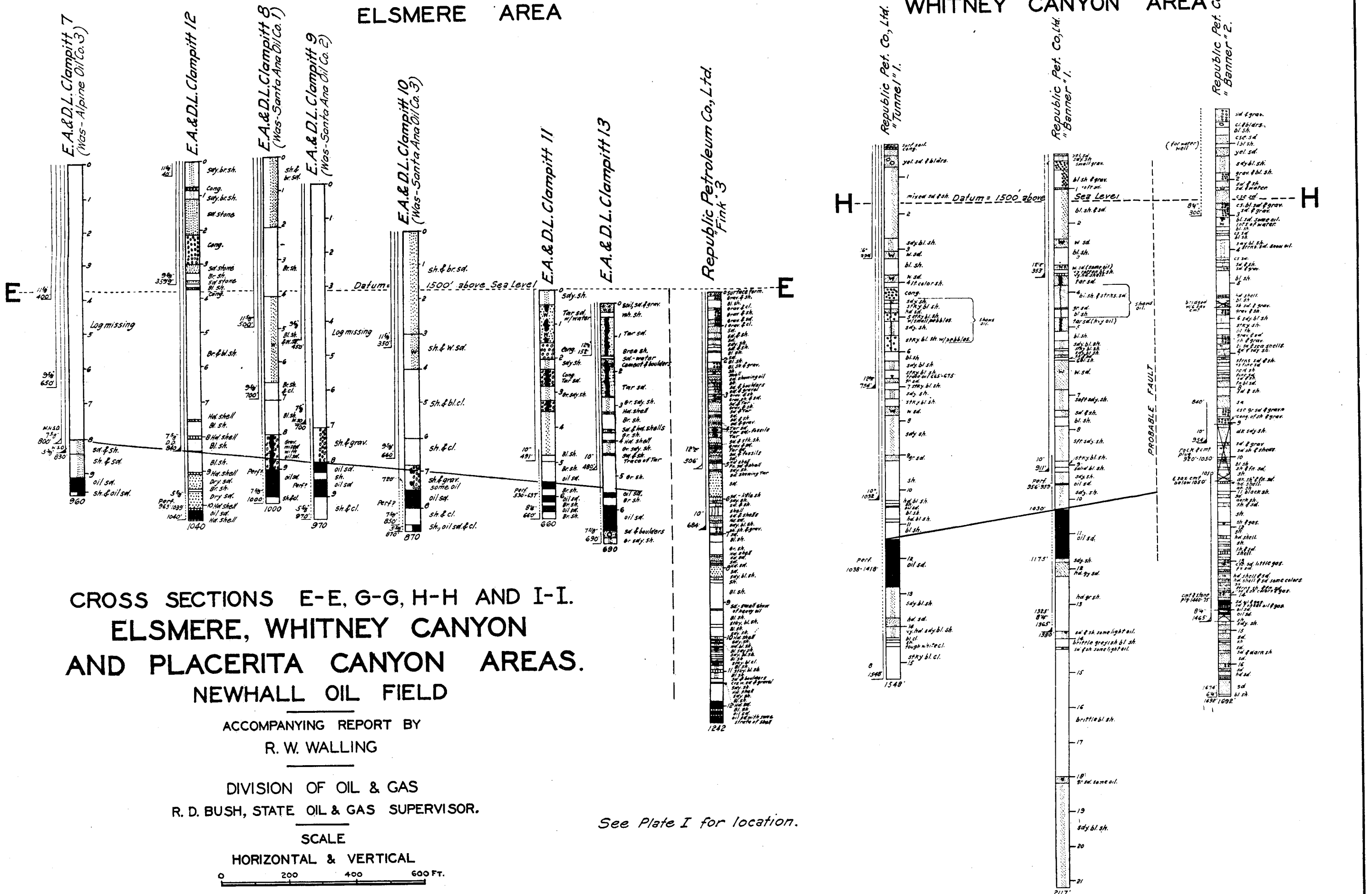
Wells No. "Elsmere" 3 and "Elsmere" 4 were drilled during 1891, but failed to produce. Well No. "Elsmere" 3, spudded March 30, 1891, was drilled to 555 feet through a series of loose sands, cobbles and conglomerates, finding only a few showings of oil and tar. Water found at 384 feet could not be excluded. Continued pumping failed to exhaust the water, so the well was abandoned.

Well No. "Elsmere" 4, spudded October 15, 1891, was drilled to 705 feet through soft, loose sands, finding only a few small showings of oil. The hole was junked with lost tools and abandoned.

No further drilling was done in the Elsmere area until August 1, 1898, when Pacific Coast Oil Company started a development program that ended early in 1901 and resulted in the drilling of wells No.

ELSMERE AREA

WHITNEY CANYON AREA



CROSS SECTIONS E-E, G-G, H-H AND I-I.  
 ELSMERE, WHITNEY CANYON  
 AND PLACERITA CANYON AREAS.  
 NEWHALL OIL FIELD

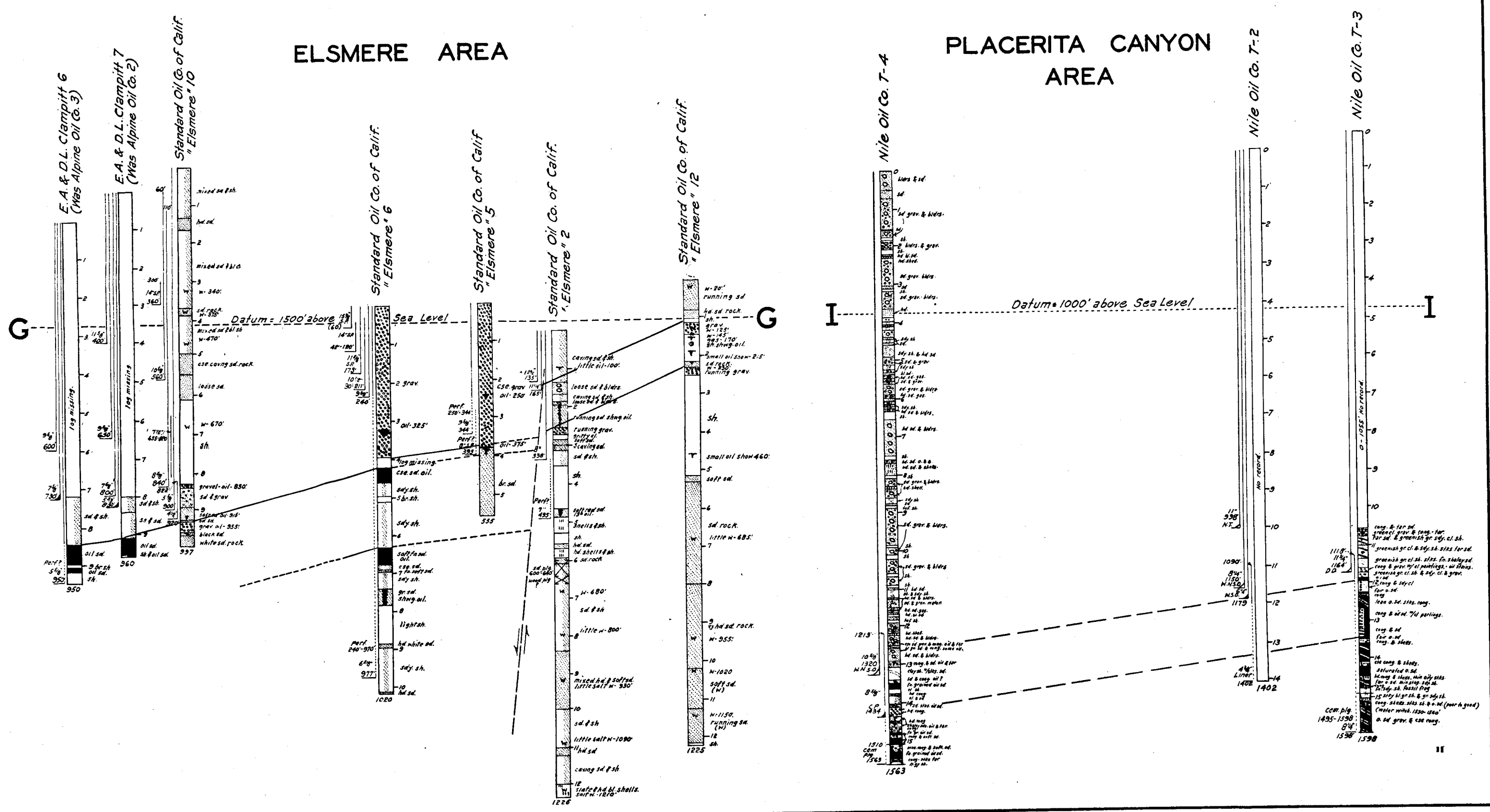
ACCOMPANYING REPORT BY  
 R. W. WALLING  
 DIVISION OF OIL & GAS  
 R. D. BUSH, STATE OIL & GAS SUPERVISOR.

SCALE  
 HORIZONTAL & VERTICAL  
 0 200 400 600 FT.

See Plate I for location.

ELSMERE AREA

PLACERITA CANYON AREA



“Elsmere” 5 to “Elsmere” 20, inclusive. Of these, wells No. “Elsmere” 8, “Elsmere” 11, “Elsmere” 12 and “Elsmere” 19 were abandoned because of inability to exclude water, well No. “Elsmere” 14 because of insufficient production, while no records are available on well No. “Elsmere” 17. The remaining wells were successfully completed, but production records are lacking.

Table VII lists the wells in the Elsmere area, together with available data.

Alpine Oil Company wells No. “Alpine” 1, “Alpine” 2 and “Alpine” 3 were drilled along the west line of Sec. 12, as offsets to the Elsmere property of Pacific Coast Oil Company, during 1900 and 1901. The records state that well No. “Alpine” 1 was drilled to 760 feet, where the casing was junked. Water found at about 250 feet was then pumped to supply the drilling needs of the later wells. Wells No. “Alpine” 2 and “Alpine” 3 were each completed at 850 feet and produced from oil sands found below 600 feet.

Santa Ana Oil Company wells No. 1, 2 and 3 were drilled along the east line of the SE.  $\frac{1}{4}$  of Sec. 12 during 1901 and 1902 and were completed at 1000, 970 and 870 feet, respectively. Records of their initial production are not available.

In 1907, E. A. & D. L. Clampitt acquired the properties of Alpine Oil Company and Santa Ana Oil Company. At this time the new owners changed the number of wells No. “Alpine” 1, “Alpine” 2 and “Alpine” 3 to No. 5, 6 and 7, respectively, and the numbers of Santa Ana Oil Company wells No. 1, 2 and 3 to No. 8, 9 and 10, respectively (see Table VII).

E. A. & D. L. Clampitt entered well No. 6 in 1907 and succeeded in excluding the water by cementing 7 $\frac{5}{8}$ -inch casing at 720 feet. The hole was then deepened to 950 feet through 5 $\frac{3}{8}$ -inch oil string carried to bottom. Well No. 7 produced until in 1913, when it was entered and water excluded with 5 $\frac{3}{8}$ -inch casing cemented at 830 feet in redrilled hole. The records state that the hole was redrilled and deepened to 980 feet and placed on production, but give no further details.

Standard Oil Company (of California) completed the development of its Elsmere property by drilling wells No. “Elsmere” 21 and “Elsmere” 22. Well No. “Elsmere” 21, offsetting E. A. & D. L. Clampitt well No. 10, spudded November 30, 1916, was drilled to 1611 feet. Only small showings of oil and gas were found below 783 feet. The 10-inch casing had been landed at 783 feet, so the hole was bridged at 830 feet and plugged back to 780 feet. The 10-inch casing was then perforated from 780 to 620 feet in two stages and the well placed on the pump for several days, producing a daily average of about 8 barrels of water and one barrel of 14-degree gravity oil. The well stood idle until abandoned in December, 1927.

Well No. “Elsmere” 22, about 300 feet east of well No. “Elsmere” 21, spudded August 6, 1917, was drilled to 619 feet after landing 8 $\frac{1}{4}$ -inch casing in formation at 470 feet. The hole was plugged with lathe cuttings and cement from 619 to 600 feet and 6 $\frac{3}{8}$ -inch perforated casing landed at that depth. The well was placed on the pump September 3, 1917, producing 6 barrels of oil and 45 barrels of water per day. The 6 $\frac{3}{8}$ -inch casing was then pulled and the 8 $\frac{1}{4}$ -inch casing

TABLE VII

ELSMERE AREA WELLS—T. 3 N., R. 15 W., and T. 3 N., R. 16 W., S. B. B. &amp; M.

Present well No.	Present operator or owner	Drilled by	Original well No.	Sec.	Twp. (N.)	R. (W.)	Elevation (A*) (ft)	Year drilled	Original depth (ft.)	Maximum depth (ft.)	Depth of water shut-off (ft)	Present status	Initial production (bbl per day)	Remarks
"Elsmere" 1	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,465	1889	1,376	-----	-----	Abandoned	-----	Abandoned while drilling
"Elsmere" 2	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,474	1890-91	Pgd 600	1,226	338?	Idle producer	27	1894, produced 6 bbl. per day.
"Elsmere" 3	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,457	1891	555	-----	-----	Abandoned	-----	Could not shut off water.
"Elsmere" 4	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,625	1891-92	705	-----	?	Abandoned	-----	Junked hole.
"Elsmere" 5	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,548	1898	555	-----	?	Idle producer	?	Completed Sept. 17, 1898
"Elsmere" 6	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,542	1898	420	1,020	240	Idle producer	?	Idle producer at 1,020', 21 bbl per day, 16 2° A P I., July 31, 1913
"Elsmere" 7	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,523	1898-99	435	1,140 Pgd 470	310?	Idle producer	?	8 bbl per day 15 0° A P I., Dec. 13, 1913.
"Elsmere" 8	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,555	1899	500	-----	-----	Abandoned	-----	Unable to shut off water.
"Elsmere" 9	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,633	1899	600	-----	210	Idle producer	?	Completed March 28, 1899.
"Elsmere" 10	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,913	1899	930	997	?	Idle producer	?	Completed Nov. 25, 1899
"Elsmere" 11	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,514	1899-1900	700	-----	-----	Abandoned	-----	Could not shut off water
"Elsmere" 12	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,604	1900	1,225	-----	-----	Abandoned	-----	Loose gravel and water; little oil shown
"Elsmere" 13	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,527	1899-1900	Pgd. 645	1,895	303	Abandoned	?	Completed March 13, 1900
"Elsmere" 14	Standard Oil Co. of California.....	Pacific Coast Oil Co.	-----	7	3	15	1,589	1900	490	-----	188	Abandoned	-----	Produced very little oil

"Elsmere" 15	Standard Oil Co. of California	Pacific Coast Oil Co.		7	3	15	1,960	1900	995		889	Abandoned	?	Completed July 29, 1900.	
"Elsmere" 16	Standard Oil Co. of California	Pacific Coast Oil Co.		7	3	15	1,617	1900	550		452	Idle producer	?	Completed July 1, 1900.	
"Elsmere" 17	Standard Oil Co. of California	Pacific Coast Oil Co.		7	3	15	1,960							No records available	
"Elsmere" 18	Standard Oil Co. of California	Pacific Coast Oil Co.		7	3	15	1,772	1900	675		533	Idle producer	?	Completed Aug. 16, 1900.	
"Elsmere" 19	Standard Oil Co. of California	Pacific Coast Oil Co.		7	3	15	1,596	1900-01	848			Abandoned		Could not shut off water, abandoned March 12, 1901.	
"Elsmere" 20	Standard Oil Co. of California	Pacific Coast Oil Co.		7	3	15	1,988	1900-01	1,013		880	Idle producer	?	Completed Feb 19, 1901.	
"Elsmere" 21	Standard Oil Co. of California	Standard Oil Co. of California		7	3	15	1,587	1916-17	Pgd. 787	1,611	783	Abandoned		Pumped very little oil and water.	
"Elsmere" 22	Standard Oil Co. of California	Standard Oil Co. of California		7	3	15	1,600	1917	Pgd. 600	619	470	Abandoned	6	6 bbl. oil and 45 bbl. water, unable to plug off water.	
5	E. A. & D. L. Clampitt	Alpine Oil Co.	"Alpine" 1	12	3	16	?	1900	760			Abandoned		Junked casing; made into water well	
6	E. A. & D. L. Clampitt	Alpine Oil Co.	"Alpine" 2	12	3	16	A-1,776	1901	850	950	720	?	?		
7	E. A. & D. L. Clampitt	Alpine Oil Co.	"Alpine" 3	12	3	16	A-1,854	1901	850	960	830	Producing	?		
8	E. A. & D. L. Clampitt	Santa Ana Oil Co.		1	12	3	16	A-1,889	1901-02	1,000	700	Producing	?		
9	E. A. & D. L. Clampitt	Santa Ana Oil Co.		2	12	3	16	A-1,782	1902	950	970	700	Producing	?	
10	E. A. & D. L. Clampitt	Santa Ana Oil Co.		3	12	3	16	A-1,676	1902-03	870		Producing	?		
11	E. A. & D. L. Clampitt			12	3	16	A-1,499	1919	660		491	Producing	15	13° Baume, no water.	
12	E. A. & D. L. Clampitt			12	3	16	A-1,891	1918	1,040		840	Producing	20	14° Baume; no water	
13	E. A. & D. L. Clampitt			12	3	16	A-1,444	1920	690		480	Idle		Produced heavy tar only.	
"Fink" 3	Republic Petroleum Co., Ltd.			12	3	16	A-1,470	1920	1,242		684	Idle	25	17° Baume, 13% cut	
"Fink" 4	Republic Petroleum Co., Ltd.			12	3	16	1,480	1921	1,383		655	Idle			

\*A—Aneroid.

loosened and cemented at 420 feet. The hole was cleaned out to 600 feet and plugged in stages and tested back to 486 feet without reducing the water production. After continuing the plug up to 473 feet, the hole was bailed dry and allowed to stand 22 hours, during which time  $1\frac{3}{4}$  barrels of water and  $\frac{1}{4}$  barrel of oil entered. The well was then abandoned.

E. A. & D. L. Clampitt well No. 12, spudded February 13, 1918, was drilled to 1040 feet after shutting off water with  $7\frac{5}{8}$ -inch casing cemented at 840 feet. A string of  $5\frac{7}{8}$ -inch casing, with perforated on bottom, was landed at 1040 feet, and the well placed on production August 8, 1918. Thirty days after completion the well produced a daily average of 20 barrels of 14-degree gravity clean oil.

E. A. & D. L. Clampitt well No. 11, spudded June 21, 1919, was drilled to 660 feet after shutting off water with 10-inch casing cemented at 491 feet. An  $8\frac{1}{4}$ -inch perforated liner was landed at 660 feet and the well completed November 15, 1919. Thirty days after completion the well produced a daily average of 15 barrels of 13-degree gravity clean oil.

E. A. & D. L. Clampitt well No. 13, spudded March 1, 1920, was drilled to 690 feet after shutting off water with 10-inch casing cemented at 480 feet. A string of  $7\frac{5}{8}$ -inch casing, with perforated on bottom, was landed at 690 feet. The hole filled with heavy oil so viscous that it could not be pumped. In attempting to produce the oil by bailing, it was found that the bailer filled so slowly that only two bailers full could be secured over-night. Work was suspended, and the well is now standing idle.

Republic Petroleum Company, Ltd., wells No. "Fink" 3 and "Fink" 4 were drilled as offsets to the north line of the E. A. & D. L. Clampitt property during 1920 and 1921. Well No. "Fink" 3, spudded May 11, 1920, was drilled to 1250 feet after shutting off water with 10-inch casing cemented at 684 feet. The well was completed about February 1, 1921, producing 25 barrels of 17-degree oil and 2.5 barrels of water per day. Well No. "Fink" 4, about 200 feet west of well No. "Fink" 3, spudded April 6, 1921, was drilled to 1383 feet. Twelve and one-half inch casing was cemented at 655 feet and 10-inch at 1170 feet. A few minor showings of oil and gas were reported below 1170 feet, but nothing of commercial value was found. Operations were suspended October 6, 1921, and the well is standing idle.

#### Subsurface Conditions

Sections E-E and G-G, Plate IV, illustrate the subsurface conditions in the Elsmere area. The area has been badly faulted but the displacement is small along most of these faults and only those of major proportions are shown on the sections.

Section E-E is taken through the E. A. & D. L. Clampitt wells that were drilled in the southwest dipping beds of the Pico formation. A slight deviation of the holes from the vertical would explain the lack of uniformity in the top of the oil sands. Tar sands found in the first 300 feet in wells No. 11 and 13 were undoubtedly present in the other wells, as nearly all the wells started drilling in tar outcrops. Republic Petroleum Company, Ltd., well No. "Fink" 3 was drilled on

the north side of Elsmere Creek and the northwest-southeast fault (see Plate I). Structurally, wells No. "Fink" 3 and "Fink" 4 should be included in the discussion on the Whitney Canyon area as they were started in the northwest dipping beds of the Saugus formations which overlie the Pico in that area. These wells probably drilled into the Pico formation at about 700 feet. The oil sands reported in well No. "Fink" 3 from 1180 to 1242 feet are probably in the Pico formation.

East-west Section G-G shows the location of the north-south fault along Elsmere Canyon. Wells No. "Elsmere" 4, "Elsmere" 12 and "Elsmere" 19 were all drilled east of this fault and failed to obtain commercial production. Well No. "Elsmere" 2 probably drilled through the fault at about 500 feet, finding only barren formations below that depth.

### Production

The oil produced in the Elsmere area varies from 14 to 16 degrees A. P. I. gravity and averages about 14.2 degrees.

The following analysis by H. N. Cooper is taken from California State Mining Bureau Bulletin 63, page 190:

#### *Standard Oil Company Well No. "Elsmere" 2*

Gravity of crude sample, degrees Baume -----	14.8
Gasoline, engine distillate and kerosene-----	none
Stove oil 33 degrees Baume, per cent-----	15.0
Middlings and lubricants 24 9 degrees Baume, per cent-----	59.8
Asphalt "D," per cent-----	24.5
Loss, per cent -----	0.7

The highest recorded initial production in the Elsmere area is that of Standard Oil Company of California well No. "Elsmere" 2, which was completed March 24, 1891, and produced a daily average of 57 barrels of oil during the first four days. The meager data available on early production indicates that the decline was very rapid, considering the low initial yield, generally decreasing as much as 80 per cent within the first 60 days.

The Elsmere property of Standard Oil Company of California has been shut in since April 20, 1929. During the first twenty days of April, 1929, the wells on this property produced a daily average per well of 2.3 barrels of 14.4-degree gravity oil and 17 barrels of water.

At the present time the only wells producing in the Elsmere area are those of E. A. & D. L. Clampitt. During July, 1935, seven wells produced an estimated daily average per well of 2.1 barrels of 14.2-degree gravity oil, cutting 75 per cent water.

### WHITNEY CANYON AREA

The Whitney Canyon area is in the S.  $\frac{1}{2}$  of Sec. 6 and the N.  $\frac{1}{2}$  of Sec. 7, T. 3 N., R. 15 W. The surface formations are the monoclinical beds of the Saugus, which dip to the northwest at an average of about 15 degrees. The present productive area consists of about 50 acres. Thirteen wells have been drilled in the Whitney Canyon area and all but three are credited with some oil production. Very little authentic

information is available about the nine wells drilled prior to 1916. The records of the four wells drilled since 1916 are quite complete.

#### History of Development

Banner Oil Company well No. 1, the first well drilled in this area, was completed at 850 feet during 1893. Water and quicksand were reported to have been found at 710 feet and the top of the oil sand at 750 feet. When placed on production the well is said to have produced a daily average of 100 barrels of oil for a short period, when water broke in, necessitating the abandonment of the well.

During 1894, Golden West Oil Company drilled its well No. 1 as an offset to Banner Oil Company well No. 1. The well was completed at 930 feet for an initial production of 250 barrels of oil per day. The production continued for only a few days when water broke in. The well was abandoned after attempts to exclude the water had failed.

Nettleton & Kellerman Oil Company drilled its wells No. 1 and 2 during 1899 and 1900. Well No. 1, about 700 feet southwest of Golden West Oil Company well No. 1, was drilled to 1100 feet and completed flowing a light green oil of about 40-degree Baume gravity. The initial yield is not known, but production declined rapidly until at the end of several months it was only two or three barrels of oil per day. The well was then deepened to 1450 feet without finding additional oil sands. Well No. 2, about 400 feet east of well No. 1, was drilled to a depth of 1000 feet and suspended without finding oil sand. This well was probably not drilled deep enough to find the oil sand produced in well No. 1. A third well, No. "Kellerman" 3 (see Plate I), is thought to have been drilled by Nettleton & Kellerman Oil Company. No information could be obtained about this well.

During 1900, Yankee Doodle Oil Company drilled its well No. 1, about 2000 feet east of Nettleton & Kellerman Oil Company well No. 1, to 705 feet and suspended operations without finding oil.

D. A. Connell drilled three wells to the west of Banner Oil Company well No. 1. Well No. 1 was drilled to 950 feet during 1908, finding a thin oil sand at 500 feet and the productive horizon correlative with that in the Banner Oil Company and Golden West Oil Company wells at 835 feet. The well was placed on production in the lower sand and produced a brownish-green oil of 17-degree Baume gravity. Well No. 2 was drilled to 1100 feet, finding a heavy oil sand at 600 feet and the second sand at slightly below 1000 feet. A bottom water was penetrated that could not be excluded, and the well was abandoned. Well No. 3 was drilled to a little over 600 feet and placed on production from a heavy oil sand which had also been found at 600 feet in well No. 2.

Tunnel Petroleum Company well No. 1, about 1400 feet due north of Banner Oil Company well No. 1, spudded July 6, 1916, was drilled to 1548 feet after shutting off water with 10-inch casing cemented at 1032 feet. The well was completed April 15, 1917, producing from oil sands found at about 1045 feet and between 1140 and 1280 feet. Thirty days after completion the well pumped a daily average of 25 barrels of 14-degree Baume gravity oil, cutting 83 per cent water.

Well No. 2, spudded October 24, 1917, was drilled to a depth of 2117 feet after cementing 10-inch and 8¼-inch water strings at 911 feet



and 1380 feet, respectively. Only a few showings of light oil were found between 1380 and 2117 feet. The 8 $\frac{1}{4}$ -inch casing was then perforated opposite oil sands cased off with water sands found below the shoe of the 10-inch casing (see Section H-H, Plate IV), and the well completed August 7, 1918. Production records show that thirty days after completion the well pumped a daily average of 25 barrels of 15-degree Baume gravity oil, cutting 50 per cent water.

Well No. 3 was spudded December 16, 1919, and drilled to about 955 feet, where 10-inch casing was cemented.

Republic Petroleum Company, Ltd., the present operator of all wells in the Whitney Canyon area, acquired these properties during the early part of 1920, and changed the well designations as shown in Table VIII. Drilling was continued in well No. "Banner" 2 to 1692 feet. An oil zone was found from 1388 to 1455 feet but no oil showings were found correlative with the oil zone producing in wells No. "Tunnel" 1 and "Banner" 1. Production tests failed to show oil in commercial quantities and the well was abandoned.

In 1921, Republic Petroleum Company, Ltd., redrilled and deepened well No. "Banner" 3 from 750 to 1185 feet, but failed to find the oil sands reported in the original hole at 750 feet. A string of 4 $\frac{1}{2}$ -inch casing, with perforated on bottom, was landed at 1020 feet and cemented through perforations above oil sands found between 895 and 950 feet. The well was placed on production about September 10, 1921. The well produced only 23 barrels of clean 33-degree gravity oil during the remainder of the month and thereafter was pumped at infrequent intervals.

Southern Production Company, Ltd., well No. 1, about 200 feet west of well No. "Price" 3 on land leased from Republic Petroleum Company, Ltd., was spudded during the first part of August, 1930. Rotary equipment was used and extensive coring was done between 1148 and 2842 feet, the total depth. Paleontological determinations made from the cores place the Pliocene (Pico)-Eocene contact at 1174 feet. After shutting off water with 11 $\frac{3}{4}$ -inch casing cemented at 1267 feet, the hole was drilled and cored to 1782 feet. Oil stained gray sands were cored between 1310 and 1477 feet and oil sands between 1662 and 1756 feet. The hole was then bailed dry to test these sands and, after standing a short time, two barrels of dark greenish-brown 29-degree gravity oil was bailed from the hole. Additional oil showings were found between 2460 and 2622 feet. After reaching a depth of 2841 feet, 6 $\frac{5}{8}$ -inch casing with perforated on bottom was landed at 2841 feet and the well placed on the pump. The well is reported to have sanded up repeatedly and to have produced a small amount of 31.8-degree gravity oil. Republic Petroleum Company, Ltd., acquired the well by quitclaim and took over its operation in June, 1933, changing its number to "Price" 4. The well was cleaned out and placed on production about August 1 of the same year. During 31 days in August, 1933, the well produced a daily average of 2 barrels of 26-degree gravity oil and 5 barrels of water.

#### Subsurface Conditions

Section H-H, Plate IV, illustrates the general subsurface conditions in the Whitney Canyon area. The heavy oil and tar sands found

above 600 feet in wells No. "Tunnel" 1 and "Banner" 1 are in the Saugus formation. Attempts to produce from these sands showed that they also contain water. The oil sands below 1000 feet, from which these two wells are producing, are probably in the Pico formation. A large amount of hole is open to production below the water shut-off in both wells and, in the absence of tests, it can not be said whether the water being produced with the oil in these wells is from the oil sand or from another source.

A fault probably exists between well No. "Banner" 2 and the other two wells shown on the section. Well No. "Banner" 2 failed to find the upper and lower sands found in the other wells.

Well No. "Price" 4, structurally on the strike with well No. "Tunnel" 1, found the Pliocene (Pico)-Eocene contact at 1174 feet. Based on correlation, the Pliocene-Eocene contact should have been found in well No. "Tunnel" 1 at 1366 feet.

#### Production

Republic Petroleum Company, Ltd., well No. "Price" 4, the only well in the Newhall field that is known to be producing from the Eocene formation, yields an oil of 27-degree A. P. I. gravity. All the other wells in this area produce oil averaging 18-degree A. P. I. gravity from the Pico formation.

During 31 days in July, 1935, four wells produced a daily average per well of 3.9 barrels of 20-degree oil, cutting 40 per cent water. In addition, well No. "Price" 4 produced a daily average of 3.7 barrels of 27-degree oil and 2.5 barrels of water during the same month.

The following commercial analyses were made by Prutzman:<sup>1</sup>

#### A "Price" Well

Gravity of crude sample, degrees Baume-----	17.2	
Stove oil, 33 degrees Baume, per cent-----	16.0	
Fuel distillate 24.9 degrees Baume, per cent---	24.5	}slop distillate 19.8 degrees—
Reduced stock—solid, per cent-----	43.5	
Asphalt "D," per cent-----	16.0	or 56.2 lb. per bbl.

100.0

#### Republic Petroleum Company, Ltd., well No. "Fink" 1:

(Light green oil found at about 1100 feet and credited by Prutzman to well No. "Fink" 2.)

Gravity of crude sample degrees Baume-----	30.6	
Engine distillate, 52 degrees Baume, per cent--	18.6	
Kerosene, 42 degrees Baume, per cent-----	10.0	
Stove oil, 33 degrees Baume, per cent-----	22.0	
Fuel distillate, 30.7 degrees Baume, per cent--	16.6	}slop distillate 23.1 degrees—
Reduced stock—solid, per cent-----	24.8	
Asphalt "D," per cent-----	8.0	or 28.1 lb. per bbl.

100.0

#### PLACERITA CANYON AREA

The Placerita Canyon area lies about two miles east of the town of Newhall in the NW.  $\frac{1}{4}$  of the NW.  $\frac{1}{4}$  of Sec. 6, T. 3 N., R. 15 W., and

<sup>1</sup> Prutzman, Paul W, Petroleum in Southern California: Calif. St. Min. Bur Bull. 63, p 192, analysis No. 2462, p. 194, analysis No. 4589, 1913

TABLE VIII  
WHITNEY CANYON WELLS—T. 3 N., R. 15 W., S. B. B. and M.

Present well No.	Present operator or owner	Drilled by	Original well No	Sec.	Twp (N.)	R. (W)	Elevation (A*) (ft)	Year drilled	Original depth (ft)	Maximum depth (ft)	Depth of water shut-off (ft.)	Present status	Initial production (bbl per day)	Remarks
"Banner" 1	Republic Petroleum Co., Ltd.	Tunnel Petroleum Co.	2	6	3	15	1,635	1917-18	2,117	-----	1,380	Producing	25	15°, 50% cut.
"Banner" 2	Republic Petroleum Co., Ltd.	Tunnel Petroleum Co.	3	6	3	15	1,756	1919-20	1,692	-----	1,465	Abandoned	-----	Never produced.
"Banner" 3	Republic Petroleum Co., Ltd.	Banner Oil Co.	1	6	3	15	1,523	1893	850	-----	?	Abandoned	100?	Water broken in, could not shut off.
"Golden West" 1	Republic Petroleum Co., Ltd.	Golden West Oil Co.	1	6	3	15	1,589	1894	930	-----	?	Abandoned	250?	Water broken in, could not shut off.
"Fink" 1	Republic Petroleum Co., Ltd.	Nettleton & Kellerman Oil Co.	1	7	3	15	1,464	1899-1900	1,100	1,450	?	Idle	-----	Light green 40° Baume oil; production declined rapidly.
"Fink" 2	Republic Petroleum Co., Ltd.	Nettleton & Kellerman Oil Co.	2	7	3	15	1,533	1900	1,000±	-----	?	Idle	-----	Never produced!
"Kellerman" 3	Republic Petroleum Co., Ltd.	Unknown	?	7	3	15	1,492	?	?	-----	-----	Abandoned	-----	No records available.
"Price" 1	Republic Petroleum Co., Ltd.	D. A. Connell	1	6	3	15	1,474	1908	950	-----	?	Idle	?	Produced brownish-green 17° oil from below 835'.
"Price" 2	Republic Petroleum Co., Ltd.	D. A. Connell	2	6	3	15	1,481	1908?	1,100	-----	?	Abandoned	-----	Could not shut off water.
"Price" 3	Republic Petroleum Co., Ltd.	D. A. Connell	3	6	3	15	1,484	1909?	650±	-----	?	Producing	?	
"Price" 4	Republic Petroleum Co., Ltd.	Southern Production Co., Ltd.	1	6	3	15	1,476	1930-33	2,842	-----	1,267	Producing	2	26° A P I (Pliocene-Eocene contact, 1174').
"Tunnel" 1	Republic Petroleum Co., Ltd.	Tunnel Petroleum Co.	1	6	3	15	1,668	1916-17	1,548	-----	1,032	Producing	25	14°, 83% cut.
"Yankee Doodle" 1	Republic Petroleum Co., Ltd.	Yankee Doodle Oil Co.	1	6	3	15	?	1900	705	-----	-----	Idle	-----	Some oil reported.

\* A—Aneroid.

the NE.  $\frac{1}{4}$  of the NE.  $\frac{1}{4}$  of Sec. 1, T. 3 N., R. 16 W. Four wells have been drilled in this area, all starting in and obtaining their production from the monoclinical beds of the Saugus formation which dip to the northwest.

#### History of Development

The first well to be drilled in this area was Equity Oil Company well No. "Daisy" 1, on the Nash & McDougal lease. The well was spudded January 1, 1920, and drilled to 975 feet after cementing 8 $\frac{1}{4}$ -inch casing at 853 feet. A string of 6 $\frac{1}{4}$ -inch casing with perforated on bottom was landed at 975 feet and the well pumped for six weeks. During this time the well produced a very heavy oil, almost too heavy to pump, and a large amount of water. Beginning in May, 1921, the 6 $\frac{1}{4}$ -inch casing was pulled and the hole deepened to 1332 feet. Solid 6 $\frac{1}{4}$ -inch casing was then cemented at 1228 feet and the hole drilled ahead to 1394 feet. A string of 4 $\frac{1}{2}$ -inch casing, with perforated on bottom, was landed at 1392 feet and the well placed on production. No information is available on the initial production, but during October, November and December, 1925, the well produced an estimated daily average of 6 barrels of 14-degree gravity oil, which was used for fuel.

Equity Oil Company well No. "Park" 1 was spudded October 10, 1924, and drilled to 1100 feet, after landing 12 $\frac{1}{2}$ -inch casing at an unrecorded depth and cementing 10-inch casing at 998 feet. The well passed through several ownerships during which 8 $\frac{1}{4}$ -inch casing was cemented at 1150 feet, 6 $\frac{1}{4}$ -inch casing cemented at 1179 feet, obtaining a water shut-off, and the well completed with a 4 $\frac{1}{2}$ -inch perforated liner landed at 1402 feet. No information is available as to the completion date or the amount of the initial production, but during 71 days in October, November and December, 1925, the well pumped a daily average of 10 barrels of 14-degree gravity oil, which was used for fuel.

Wilhoite & McCoy well No. "Nash" 2 was spudded during 1925 and drilled to 1050 feet, when work was suspended. The hole stood in this condition until entered in August, 1932, by Naval Reserve Oil Corporation. The new owner deepened the well, cementing 11 $\frac{3}{4}$ -inch casing at 1164 feet and landing 8 $\frac{3}{8}$ -inch perforated liner on bottom at 1598 feet. The well was placed on the pump, but produced mostly water. An electrical water locator was run and showed water entering the hole from formations between 1530 and 1540 feet. The 8 $\frac{3}{8}$ -inch liner was then pulled and the hole plugged with cement from 1598 to 1495 feet, the 8 $\frac{3}{8}$ -inch perforated liner was landed at 1495 feet, and the well placed on production. The first available production records show that this well produced 13 days during May, 1934, at a daily average rate of 14 barrels of 12-degree gravity oil and 2 barrels of water.

W. L. Alexander well No. "Alexander" 1 was spudded November 24, 1932, and drilled to 1563 feet, using rotary equipment. After drilling to 1366 feet, 10 $\frac{5}{8}$ -inch casing was cemented in shale at 1320 feet. Bailing tests of the shut-off indicated that water was entering the hole from below the point of shut-off. The hole was drilled ahead to 1563

**TABLE IX**  
**PLACERITA CANYON WELLS—T. 3 N., R. 15 W. and T. 3 N., R. 16 W., S. B. B. and M. ▼**

Present well No.	Present operator or owner	Drilled by	Original well No	Sec.	Twp (N.)	R (W)	Elevation (A*) (ft)	Year drilled	Original depth (ft)	Maximum depth (ft)	Depth of water shut-off (ft)	Present status	Initial production (bbl. per day)	Remarks
T-1	Nile Oil Co., Ltd.....	Equity Oil Co.....	"Daisy" 1	6	3	15	A-1,398	1920	975	1,394	853	Producing	?	
T-2	Nile Oil Co., Ltd.....	Equity Oil Co.....	"Park" 1	1	3	16	A-1,422	1921-25	1,402	-----	1,179	Producing	?	
T-3	Nile Oil Co., Ltd.....	G. S. Wilhoite and A. G. McCoy.....	"Nash" 2	6	3	15	A-1,474	1925-32	1,598	Pgd. 1,495	1,164	Producing	?	
T-4	Nile Oil Co., Ltd.....	W. L. Alexander.....	"Alexander" 1	1	3	16	A-1,378	1932-33	1,563	Pgd. 1,509	1,435	Producing	19	11% A. P. I., 5% cut.

\*A—Aneroid.

feet and an 8 $\frac{3}{8}$ -inch combination liner landed at 1563 feet and cemented through perforations at 1434 feet. After cleaning out to bottom, bailing tests indicated the presence of bottom water. Cement was pumped in through drill pipe and the hole plugged under pressure from 1563 to 1540 feet and bridged from 1523 to 1509 feet. The well was completed September 1, 1933, and averaged 19 barrels of 11-degree gravity oil and one barrel of water per day during the first 30 days.

Table IX lists the wells and shows the original and present ownership.

#### Subsurface Conditions

Section I-I, Plate IV, is a dip section and illustrates the general subsurface conditions found in the Placerita Canyon area. The wells are drilled into and secure their production from the cross-bedded poorly assorted sediments of the Saugus formation. Water sands are found in immediate contact with the oil sands and their identification and exclusion has been difficult.

#### Production

While producing an average of seventeen days during April, 1935, the four wells pumped at a daily average rate per well of 8.9 barrels of 11.8-degree A. P. I. gravity oil, cutting 18.8 per cent water.

#### SCHIST AREA

The Schist area lies about four and one-half miles east of the town of Newhall in Placerita Canyon. About twelve wells are reported to have been drilled in the NW.  $\frac{1}{4}$  of Sec. 3 and the NE.  $\frac{1}{4}$  of Sec. 4, T. 3 N., R. 15 W.

This area, while not productive, is of particular interest because of the occurrence in metamorphic rocks overlying the granite of the San Gabriel Mountains of a light gravity oil, variously reported as 43 and 50 degrees Baume. Commenting on this quality of the oil and its occurrence, Kew<sup>1</sup> states: "The low specific gravity of this oil, which is estimated to be close to 0.7777 (50 degrees Baume), its water-like appearance and odor of kerosene, and its unique occurrence in crystalline rocks have been of considerable interest ever since the wells were drilled. None of the wells was capable of producing over three barrels of oil a day. With this oil a great deal of water was pumped, and at present very little oil comes up with the water."

The wells that obtained oil showings in the schist were drilled just south of the Placerita Canyon fault<sup>2</sup> The oil is thought to have migrated<sup>2,3</sup> along the fault and into the metamorphic rocks from younger beds to the north of the fault.

Table X lists the wells drilled in this area, with such data as are available.

The Schist area and wells have not been shown on Plate I.

<sup>1</sup>Kew, W. S. W., *Geology and Oil Resources of a part of Los Angeles and Ventura Counties*: U. S. Geol. Survey Bull. 753, pp. 155-156, 1924.

<sup>2</sup>Brown, Arthur B., and W. S. W. Kew, *Occurrence of Oil in Metamorphic Rocks of San Gabriel Mountains, Los Angeles County, California*: Bull. of Am. Assoc. of Pet. Geologists, Vol. 16, No. 8, pp. 777-785, fig. 2, Aug., 1932.

<sup>3</sup>Eldridge, G. H., and Ralph Arnold, *The Santa Clara Valley, Puente Hills, and Los Angeles Basin Oil Districts, Southern California*: U. S. Geol. Survey Bull. 309, pp. 100-101, 1907.

## TECHNOLOGY AND PRODUCTION

## Drilling

The first wells in the Newhall oil field were drilled by the spring-pole method. Steam driven equipment was introduced into the field in 1877, and from that time until 1929 practically all the wells were drilled by the standard or cable-tool method.

In 1889, Western Prospecting Company, of Denver, contracted with Pacific Coast Oil Company to drill a well to a depth of 800 feet, using a diamond drill outfit. The contract price was \$3.50 per foot. On August 1, 1889, well No. "P. C. O." 17 was spudded in the Pico Canyon area. By August 17 the hole had been drilled only 60 feet and was suspended at that depth because of the inability of the diamond drill to penetrate the cobbles in the surface formation. This hole was subsequently completed by means of cable tools.

The diamond drill equipment was then moved to the present site of well No. "C. S. O. W." 19. The hole was spudded September 23, 1889, and completed at a depth of 800 feet on November 30, 1889. The well was not placed on production until January 9, 1890, due to the necessity of rigging up for pumping after removing the diamond drill equipment. The total production from January 9 to February 25, inclusive, was 260 barrels of oil, or a daily average of 5.5 barrels. Commenting on the small initial production, the well record contains the following and probably the first argument against rotary drilling: "Well did not produce as much oil as Mr. Mentry thought it should from the amount of oil sand penetrated. \* \* \* Difficulty seems to have been caused by shale drillings being forced by pressure of water used in drilling into the oil sand rock, cementing it up and preventing the oil from coming into the hole." Part of the casing was pulled and the hole redrilled with cable tools to 800 feet. The well was then placed on the pump, producing 20.5 barrels of oil per day.

The diamond drill equipment was next used in a fishing job in well No. "C. S. O. W." 17, but without success. In 1892 and 1893, this equipment was used successfully for straightening crooked holes in wells No. "C. S. O. W." 5 and "C. S. O. W." 21.

In the Wiley Canyon area the diamond drill equipment was used in well No. "Wiley" 10 to straighten the hole at about 800 feet, with the result that new hole was drilled from 690 to 715 feet. Cable tools were then used to complete the well.

Crooked holes were quite common in all the areas along the Pico anticline due to the steep attitudes of the beds. Shooting, bridging and redrilling were resorted to in the straightening of holes.

## Water Exclusion

The first recorded use of cement, in the Newhall field, as a means of excluding water, was in 1907, when E. A. & D. L. Clampitt shut off water in well No. 7 with 7½-inch casing cemented at 720 feet. Prior to that time water had been excluded by means of formation shut-offs, rope, and seed-bag packers on casing, and rope, rock, seed-bag and sand plugs.

## Casing

The following casing records are typical and illustrate the general types and sizes used in the various areas:

*Pico Canyon Area*

Drilled by California Star Oil Works Company

Date drilled: 1875

Well No. "C. S. O. W." 1—spring-pole and cable tools.

7 $\frac{3}{8}$ -inch lapweld .....	0 to 100 feet
5 $\frac{3}{8}$ -inch lapweld .....	0 to 460 feet
5 -inch bell muzzel .....	410 to 670 feet
4 $\frac{1}{2}$ -inch bell muzzel .....	660 to 735 feet

Drilled by California Star Oil Works Company

Date drilled: 1898-1899

Well No. "C. S. O. W." 29—cable tools

14 -inch stove pipe .....	0 to 268 feet
12 $\frac{1}{2}$ -inch stove pipe .....	220 to 405 feet
11 -inch stove pipe .....	385 to 560 feet
8 $\frac{3}{8}$ -inch screw joint .....	0 to 675 feet
7 $\frac{1}{2}$ -inch stove pipe .....	590 to 835 feet
6 $\frac{1}{2}$ -inch stove pipe .....	795 to 935 feet
5 $\frac{3}{8}$ -inch bell muzzel .....	900 to 1125 feet

*Wiley Canyon Area*

Drilled by Pacific Coast Oil Company

Date drilled: 1898-1899

Well No. "Wiley" 12—cable tools

14 -inch stove pipe .....	0 to 160 feet
11 $\frac{1}{8}$ -inch collar joint .....	0 to 225 feet
10 $\frac{1}{2}$ -inch stove pipe .....	190 to 450 feet
8 $\frac{1}{2}$ -inch collar joint .....	0 to 545 feet
6 $\frac{3}{8}$ -inch collar joint .....	0 to 1735 feet

*Tunnel Area*

Drilled by Southern California Drilling Company

Date drilled: 1930

Well No. "Needham" 3—rotary tools

10 $\frac{3}{4}$ -inch D. B. X. ....	0 to 1360 feet, cemented
8 $\frac{1}{2}$ -inch D. B. X. ....	1338 to 1648 feet, perforated liner

*Elsmere Area*

Drilled by Pacific Coast Oil Company

Date drilled: 1899-1900

Well No. "Elsmere" 13—cable tools

15 $\frac{1}{2}$ -inch stove pipe .....	0 to 79 feet
11 $\frac{1}{8}$ -inch casing joint .....	131 to 240 feet
10 $\frac{1}{2}$ -inch stove pipe .....	0 to 303 feet, perforated on bottom
8 $\frac{3}{8}$ -inch casing joint .....	526 to 655 feet, perforated

Drilled by E. A. & D. L. Clampitt

Date drilled: 1919

Well No. 11—cable tools

10 -inch National .....	0 to 491 feet, cemented
8 $\frac{1}{2}$ -inch National .....	460 to 660 feet, perforated



TABLE X

## SCHIST AREA WELLS—Sec. 3 and 4, T. 3 N., R. 15 W., S. B. B. and M.

Company	Well No.	Sec.	Twp (N.)	Range (W.)	Year drilled	Depth (ft.)	Remarks
Freeman & Nelson White Oil Co.....	1	4	3	15	1899	520	Average 2½ bbl. per day; used for fuel.
Freeman & Nelson White Oil Co.....	2	4	3	15	1900	1,030	Drilled by Clark & Sherman; traces of oil only.
Freeman & Nelson White Oil Co.....	3	4	3	15	?	457	Traces of oil only, abandoned.
New Century Oil Co.....	1	4	3	15	1900-01	720	"Several" barrels per day, 43° Baume; lasted only a few days.
New Century Oil Co.....	2	4	3	15	1900-01	700	Traces of oil at 700'.
New Century Oil Co.....	3	4	3	15	1901?	900	Dry hole
New Century Oil Co.....	4	4	3	15	1901?	1,000	Small showing of white oil.
Pioneer White Oil Co.....	1	3	3	15	1901	1,270	NE ¼ of SW. ¼, Sec 3; very little white oil, lots of water, and some gas; also known as Freeman & Elston well
San Miguel Oil & Development Co.....	1	3	3	15	1902	1,000	NE ¼ of NW. ¼ of Sec. 3, traces of white oil.
Harrison Well.....	1	3	3	15	1905	2,100	Dry hole; ½ mile E of San Miguel well.
Los Angeles & Kern Oil Mining Co.....	1	4	3	15	1912	450±	Drilling at 450' in 1912; results unknown

TABLE XI  
WILDCAT WELLS

Operator	Well No.	S. B. B. and M.			Elevation (ft)	Year drilled	Total depth (ft)	Remarks
		Sec.	Twp. (N.)	R. (W.)				
P. B. Anderson.....	"Shephard" 2	1	3	16	1,253	1929	1,248	Some oil sand reported, idle. Phocene-Eocene contact probably 1930±, oil sands reported between 850' and 1880'; abandoned
National Securities Oil Co.....	"Shephard" 1	1	3	16	1,360	1930-31	2,291	
Richfield Oil Co.....	"Shephard" 1	1	3	16	1,525	1921-23	1,600	Oil showings reported between 800' and 1,400', abandoned. Also known as Shalmar Oil Co. No "Warren" 1, idle
Seigenberg, Horton & Rogers.....	"Warren" 1	1	3	16	?	1930	1,148	
Milton J. Trumble.....	"Henderson" 1	1	3	16	1,500±	1921	1,205	Idle.
Geo. A. Denihson.....	"Henderson" 1	2	3	16	1,400±	1924	240	
Schroeder Oil Syn.....	"Overman" 1	4	3	16	1,321	1922-23	2,785	No oil or gas reported; abandoned.
Electrical Petroleum Corp., Ltd.....	"Overman" 1	6	3	16	1,400±	1931	-----	No records.
Half Moon Oil Co.....	"Overman" 1	6	3	16	1,450	1921	-----	No records.
Goodluck Oil Co.....	"Overman" 1	7	3	16	-----	-----	-----	Dry hole
Dividend Oil Co.....	"Overman" 1	10	3	16	-----	-----	700	
Howard Petroleum Co.....	"Overman" 1	11	3	16	1,000?	1921-22	665	No oil or gas reported; abandoned.
Superba Petroleum Corp.....	"Overman" 1	11	3	16	1,800±	1932	?	
H. Clay Needham.....	"San Miguel" 1	12	3	16	-----	-----	-----	Small show of oil reported by San Miguel Oil Co; now water well. Suspended
H. Clay Needham.....	"San Miguel" 1	12	3	16	?	1909	1,500±	
Republic Petroleum Corp., Ltd.....	"Amet" 1	12	3	16	1,494	1921	215	Small amount of heavy tar, abandoned.
Safe Oil Co.....	"Amet" 1	12	3	16	?	1901	1,000±	
Shallow Field Oil Co.....	"Amet" 1	12	3	16	1,400±	1921	1,140	Oil showings reported 1115'-1120'; idle
Enterprise Oil Co.....	"Amet" 1	13	3	16	?	1900?	1,050±	No records available
Enterprise Oil Co.....	"Amet" 2	13	3	16	?	1900	700	No oil or gas encountered, junked with tools and abandoned
San Fernando Oil & Gas Co.....	"Amet" 1	13	3	16	1,400±	1919-20	1,245	Oil sand reported at 1,240', could not exclude water.
Alliance Oil Co.....	"Amet" 1	13	3	16	?	1901	700±	Encountered some tar sands, abandoned.
Garliepp & Associates.....	"Amet" 1	14	3	16	2,300±	1933	1,220	No oil or gas reported, idle.
Oro Negro Development Corp.....	"Amet" 1	14	3	16	1,800	1932	700	No records.
Pico Dome Oil & Gas Co.....	"Amet" 1	14	3	16	1,600±	1929	918	No oil or gas reported; idle
B. & L. Drilling Co.....	"Amet" 1	14	3	16	?	1931	1,309	No oil or gas reported, abandoned.
Dividend Oil Co.....	"Amet" 1	14	3	16	-----	-----	-----	Dry hole.
California Oil Co.....	"Amet" 1	15	3	16	-----	-----	400	
Pioneer Petroleum Co., Ltd.....	"Amet" 1	14	3	16	1,550	1930	2,840	No oil or gas reported, abandoned.
St. Bernard Oil Co.....	"Amet" 1	18	3	16	?	1903	2,100	Abandoned; no records
Newhall Mountain Oil Co.....	"Amet" 1	21	3	16	?	?	1,800	Drilled in syncline in upper Rice Canyon, no oil showings reported, abandoned.
Edwards & Cole.....	"Amet" 1	23	3	16	-----	-----	-----	A little oil near surface; abandoned.
Padua Oil Co.....	"Amet" 1	24	3	16	?	1900	1,200	
Wm G. McAdoo, Jr.....	"Price" 1	6	3	15	1,497	1925	895±	Oil sands reported 710'-895'; could not shut off water; idle.
Occidental Petroleum Corp.....	"Price" 1	6	3	15	1,375	1922	605	Drilled with Okell; abandoned.
Republic Petroleum Co., Ltd.....	"Price" 5	6	3	15	1,475	1934-35	1,812	Oil showings reported between 650' and 1,100'; abandoned

Goodluck Oil Co.....		7	3	15	1900	675	Small oil show and lots of water; abandoned; exact location unknown.	
California Newhall Oil Co.....	"Lillie" 1	8	3	15	1,350±	1920-22	1,865	Some showings of light oil below 1,765', abandoned below 840'; idle.
H. C. Hicks.....		8	3	15	1,000±?	1930	?	No records.
California Oil Co.....		18	3	15		1900	1,200	Dry hole; started drilling in metamorphic rock; abandoned.
Graves Oil Co.....		17	3	15		1900	1,500	Dry hole; started drilling in metamorphic rock; abandoned.
Buick Oil Co.....		18	3	15	?	1918	1,126	Some tar and oil showings reported; excessive water; abandoned.
Buick Oil Co.....		2	3	15	?	1918-19	1,485	Hole junked with lost tools; abandoned.
Birch Oil Co.....		1	3	15				No data available.
Standard Oil Company of California.....	"Newhall" 1	19	3	15	?	1899-1900	700	Drilled by Pacific Coast Oil Co.; water, running sand and gravel in bottom; abandoned.
Mentoy Well.....		19	3	15		1875	417	Fresh water and gas; abandoned; no other data available.
Pacoima Oil Co.....		20	3	15				No data available.
General Petroleum Corp. of Calif.....	"Stabler" 4	30	4	15	1,605	1919-20	3,514	Small showings of gas and oil in shale at intervals between 700' and 3,500'; abandoned.
Section Thirty-one Petroleum Corp., Ltd.....	"Stabler" 1	31	4	15	1,475±	1930	2,008	No oil or gas reported, abandoned.
General Petroleum Corp. of California.....	"Stabler" 3	31	4	15	1,450	1919-20	2,640	Few showings of oil and gas reported between 1,800' and 2,100'; abandoned.
Morgan Petroleum Corp.....	"Dunlap" 1	31	4	15	1,550	1923-25	1,300	Few small showings of oil and gas reported between 600' and 970'; idle.
Portland Oil Co.....		31	4	15	?	1902	800	Dry hole; exact location unknown.
Community Oil Producers of California.....		1	4	16	1,214	1920	227	Water flowed over casing; made into water well.
Community Oil Producers of California.....		2	4	16	1,214	1920	255±	No further information available
Big 4 Oil Co.....	"Brona" 1	32	4	16	1,500	1932-33	2,170	Drilling; idle.
W T Ball.....		1	4	16	1,250	1932	3,629	Few oil and gas showings reported; idle.

**Production**

Prior to 1902 statistical compilations have grouped the production figures for the Newhall and Ventura County oil fields and no segregation has been possible. The following table gives a few approximate figures, gathered from various sources, for the years prior to 1902. Production figures from 1903 to 1933, inclusive, were furnished by Standard Oil Company of California. The figures for 1934 were compiled by the State Division of Oil and Gas.

**Crude Petroleum Production in the Newhall Oil Field, California**

(Figures in barrels per year)

<i>Year</i>	<i>Barrels</i>
1876.....	<sup>a</sup> 12,000
1877.....	<sup>a</sup> 13,000
1878 to 1884, inclusive.....	<sup>b</sup> 190,540
1895.....	<sup>c</sup> 150,000
1896.....	<sup>d</sup> 150,000
1903.....	144,037
1904.....	144,424
1905.....	104,354
1906.....	63,517
1907.....	86,554
1908.....	104,220
1909.....	110,618
1910.....	160,428
1911.....	146,110
1912.....	119,712
1913.....	119,979
1914.....	124,417
1915.....	110,680
1916.....	112,119
1917.....	129,525
1918.....	118,257
1919.....	118,315
1920.....	101,904
1921.....	101,223
1922.....	86,374
1923.....	62,806
1924.....	69,088
1925.....	73,338
1926.....	69,666
1927.....	66,143
1928.....	61,921
1929.....	62,719
1930.....	187,660
1931.....	130,608
1932.....	103,961
1933.....	89,925
1934.....	91,852

**CONCLUSION****Pico Anticline District**

The Pico anticline is tightly folded and the oil accumulation has been found to be confined to a very narrow strip along or adjacent to the crest of the structure. In the areas to the east and southeast of the

<sup>a</sup> Petroleum World: Annual Review, California Oil Industry, p. 10, 1933.

<sup>b</sup> Hanks, H. G., History of Petroleum in California: Fourth Annual Report of State Mineralogist, p. 301, 1884.

<sup>c</sup> Report of Committee on Petroleum, Calif State Council of Defense, p. 30, July 7, 1917.

<sup>d</sup> Watts, W. L., Oil and Gas Yielding Formations of Los Angeles, Ventura, and Santa Barbara Counties: Calif. St. Min. Bur. Bull. 11, p. 21, 1897.

Pico Canyon area, water is closely associated with the oil sands and its exclusion would prove difficult and costly. These facts preclude the possibility of much additional production being secured in this district.

#### Newhall District

Production in the Tunnel area is from the lower Pico and upper Mint Canyon formations. The productive zone is continuous across the Pico-Mint Canyon contact in the wells drilled by York Oil Company and Southern California Drilling Company. Production in the shallow wells drilled upstructure undoubtedly came from the Pico formation only.

Oil was found in Southern California Drilling Company well No. "Needham" 4 in the Eocene formation, but tests proved the accumulation noncommercial.

The oil sands are probably continuous between the Tunnel and Elsmere areas, but it is not thought that it would be profitable to develop them.

Production in the Elsmere and Whitney Canyon areas, with the exception of Republic Petroleum Company, Ltd., well No. "Price" 4 in Whitney Canyon, comes from the Pico formation. Well No. "Price" 4 produces about two barrels of 27-degree gravity oil per day from the Eocene formation. This is the only known Eocene production in the Newhall field.

In the Whitney Canyon area, heavy tar sands, intimately associated with water sands, are found in the Saugus formation that overlies the Pico. These sands have not been productive in this area.

Production in the Placerita Canyon is from the Saugus formation. Water is found intimately associated with these oil sands and, when located, has been successfully plugged off with cement.

The oil sands of the Saugus and Pico formations are probably continuous from the Whitney Canyon area to the Placerita Canyon area. Several wells have been drilled in the intervening territory and have found these oil sands but have not yet been successful in producing from them.

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## REPORTS ISSUED BY STATE OIL AND GAS SUPERVISOR DURING MONTHS OF OCTOBER, NOVEMBER, DECEMBER, 1934

The accompanying tables show the number and kind of reports issued by the State Oil and Gas Supervisor to oil operators in each field of the State of California during the month for which operations are here summarized. Briefs of the Supervisor's findings and recommendations, as set forth in each report, are summarized under oil districts and fields in the pages which follow.

Reports by the Supervisor are of two kinds, namely, those passing upon proposed operations and those passing upon work which has been inspected or tests which have been witnessed by a representative of the Supervisor during progress of the work or after completion.

Reports in reply to notices filed by the operator covering drilling, deepening, redrilling, or abandonment operations, and bearing the operator's proposed method of carrying out the work, are called P reports. Each P report has a serial number. For example, the abbreviation "P 1-6183" means report No. 6183 on a proposed operation in District No. 1. Reports giving the results of tests and inspections are called T reports, and are numbered in a similar manner.

The State is divided into five districts, as follows:

District No. 1, including the counties of Los Angeles, Riverside, Orange, San Diego, Imperial, and San Bernardino.

District No. 2, the county of Ventura.

District No. 3, including the counties of Santa Barbara, San Luis Obispo, Monterey, Santa Cruz, San Benito, Santa Clara, Contra Costa, San Mateo, Alameda, and San Francisco.

District No. 4, including the counties of Tulare, Inyo, and Kern.

District No. 5, including the counties of Fresno, Madera, Kings, Mono, Mariposa, Merced, and all other counties in California not included in any of said other districts.

Field offices are maintained in District No. 1 at Los Angeles, with branch field offices at Huntington Beach and Long Beach.

In Districts No. 2, No. 3 and No. 5, the field offices are at Santa Paula, Santa Barbara, and Coalinga, respectively.

In District No. 4 the main field office is at Taft, with a branch field office at Bakersfield.

## MONTH OF OCTOBER, 1934

Field or county <sup>1</sup>	Tests		Proposals					
	Rou- tine	Inspection	New wells		Deepen	Redrill	Abandon	
			Drill	Supple- men- tary			First	Supple- men- tary
Distr. 1—Brea-Ohnda			1					
Coyote Hills	1	1	1	1	1			
Dominguez	4	12	2	7	3	2	1	
Huntington Beach	4	8	1	2	1	14		1
Inglewood		2		2	3	1		
Lawdale		1						
Long Beach	9	25	6	3	3	12	1	
Los Angeles City		1						
Montebello		4	1			1		
Playa del Rey			1				1	
Potrero					1			
Richfield		3				4	1	
Rosecrans		1				5	2	
Santa Fe Springs	2	19	2		2	19	4	1
Seal Beach	1	3				3		1
Torrance		3				4		
Los Angeles County		1	1				1	
Totals	21	84	16	15	14	65	11	3
Distr. 2—Bardsdale				1				
Ojai		1		1				
Piru		3		1				
Rineon	3					1		
Simi	1							
Ventura	5	5	3	5				
Ventura County		1						
Totals	9	10	6	5		1		
Distr. 3—Capitan	2	2						
Cat Canyon		2					1	
Elwood	3			1				
La Goleta Gas	1			1				
Mesa	9	8	10	1			1	1
Monterey County							1	
Santa Barbara County		1						
Totals	15	13	10	3			3	1
Distr. 4—Belridge	1	4						
Devils Den	1			1				
Edison	2	8	6	3		1	3	1
Elk Hills						1		
Fruitvale	2	4	2	1		3	2	
Kern River	1	10	1	1				1
Lost Hills	1					1		
McKittrick	1							
Midway	2	7	2	1	1	4	2	3
Mt. Poso	4	1	5	1				
Mountain View	7	7	7	2		1		
Round Mountain	1					1		
Sunset		3				1	3	
Kern County			1	1				
Tulare County								1
Totals	23	44	24	11	1	13	13	3
Distr. 5—Coalinga		4	1	1		1	4	1
Kettleman North Dome	3	3	4	2				
Kings County							1	
Totals	3	7	5	3		1	5	1
Grand totals	71	158	61	37	15	80	32	8

<sup>1</sup> Wells not in proved oil fields are designated by county only.



## DISTRICT No. 1

## BREA-OLINDA FIELD

T. 3 S., R. 9 W., S. B. B. and M.

- Sec. 6—General Petroleum Corp. well No. "Tonner" 15. (Report No. P 1-27281.) Proposal to drill approved provisionally. Conditions: Well is 319.5' Easterly from angle point in Tonner S. Property line situated S. of well No. "Tonner" 1, thence 398.4' Northerly at right angles to property line. Estimate oil sand at 2000'. Proposed to cement 18" S. P. at 150', cement 11 $\frac{3}{4}$ " at 1300', and 8 $\frac{3}{8}$ " at 4000', including 2000' perforated. Decision: Proposal is approved provided that: (1) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (2) Enough cement is used to fill back of 11 $\frac{3}{4}$ " to reach to surface. (3) Division is notified to witness bailing test of 11 $\frac{3}{4}$ " shut-off.

## COYOTE HILLS FIELD

T. 3 S., R. 9 W., S. B. B. and M.

- Sec. 18—Graham-Loftus Oil Corp. well No. "Graham & Loftus" 18. (Report No. P 1-27338.) Proposal to deepen approved. Conditions: Depth 3332'; 10" cemented at 2746'; 236' of 8 $\frac{1}{4}$ " liner landed at 2863', including 122' perforated; junk 2966'-3332'. Proposed to clean out to bottom of 8 $\frac{1}{4}$ " liner; sidetrack junk, redrill and deepen to about 3360' with cable tools; and 6 $\frac{5}{8}$ " perforated liner 2800'-3360'.
- Sec. 19—Great American Petroleum Co. well No. "Tuffrey" 2 (Report No. T 1-27364.) Inspection of operations for demonstrating that 12 $\frac{3}{8}$ " surface casing is water-tight. Inspector noted well closed in under 430 lb. pressure; after  $\frac{3}{4}$  hr. pressure was 360 lb.; cement plug at 464' held weight of drill pipe. Casing test is approved.

T. 3 S., R. 10 W., S. B. B. and M.

- Sec. 13—Bardeen Petroleum Co., Ltd., well No. C-1. (Report No. P 1-27384.) Supplementary proposal to drill approved provisionally. Conditions: Depth 5200', cement plug 5200'-5025', cement bridge 4377'-4363'; 8 $\frac{3}{8}$ " cemented at 2906'-4415', perforated 3778'-3700', 3695'-3633' and 3592'-3563'; 6 $\frac{5}{8}$ " liner landed 4377'-5025', perforated 4405'-5025'. Proposed to perforate 8 $\frac{3}{8}$ " 4366'-4361', 4250'-4247' and 4237'-4228'. Decision: Proposal is approved provided division is advised of results of production test after perforating as proposed; additional requirements may be outlined at that time.
- Sec. 18—Standard Oil Co. well No. "Murphy-Coyote" 116. (Report No. T 1-27362.) Shut-off test approved. 8 $\frac{3}{8}$ " casing cemented at 5448'. Inspector noted that while tester valve open for 6 min. air flowed strongly from drill pipe followed by very strong gas flow, and fluid between drill pipe and 8 $\frac{3}{8}$ " casing remained stationary; when pulled, drill pipe contained 5 bbl. of oily gas-cut drilling fluid above tester; water filtered from fluid samples from 5440', 5402', 5315', 5226' and 5141' tested 34, 37, 34, 137 and 112 gr. salt per gal., respectively; sample from perforated nipple below tester was shale and sand. Shut-off is approved.
- Standard Oil Co. well No. "Murphy-Coyote" 120. (Report No. P 1-27379.) Proposal to drill approved. Conditions: Well is 236.70' N. and 779.76' E. of SW. section corner. Estimate oil sand at 3215'. Proposed to cement 20" S. P. at 300', 13 $\frac{3}{8}$ " at 3215', 10 $\frac{3}{4}$ " at 4450' and 8 $\frac{3}{8}$ " at 5225'; land 850' of 6 $\frac{5}{8}$ " liner at 6025'; notify division to witness pressure casing test after cementing 20" S. P., 13 $\frac{3}{8}$ " and 8 $\frac{3}{8}$ " shut-off tests, and mudding test before landing 10 $\frac{3}{4}$ "; cement 10 $\frac{3}{4}$ " at base of 99 zone to protect 99 and main zones from water below 99 zone.

## DOMINGUEZ FIELD

T. 3 S., R. 13 W., S. B. B. and M.

- Sec. 33—Shell Oil Co. well No. "Reyes" 1 (Report No. T 1-27406.) Bailing test not approved. 8 $\frac{3}{8}$ " casing recemented at 4240'. Hole swabbed to 2995' for test and stood 18 hr. Fluid level rose at rate of 23.2 bbl. in 24 hr. Shut-off is not approved.
- Shell Oil Co. well No. "Reyes" 1. (Report No. P 1-27331.) Supplementary proposal to redrill water string and deepen approved provisionally. Conditions: Depth 4250'; 8 $\frac{3}{8}$ " cemented at 4240', recemented twice; water source 4240'-4250'. Proposed to core 7 $\frac{5}{8}$ " hole 4250'-4365'; land 6 $\frac{5}{8}$ " at 4360' with suitable screen on bottom and cement through perforations at 4260'. Decision: Proposal is approved provided division is notified to witness production test 30 days after completing well.
- Shell Oil Co. well No. "Reyes" 1. (Report No. P 1-27332.) Supplementary proposal to redrill water string and deepen approved provisionally. New

- conditions: Depth 4365'; cores 4250'-4290' and at 4365' tasted salty. Proposed to plug 7 $\frac{1}{2}$ " hole 4365'-4350' with cement; land 6 $\frac{1}{2}$ " at 4347' with suitable screen on bottom and cement through perforations at 4303'; land tubing and swab for production. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4350' and production test 30 days after completing well.
- Shell Oil Co. well No. "Reyes" 7. (Report No. P 1-27328.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 4632', plugged to 4417'; 8 $\frac{1}{2}$ " cemented at 3907'; 6 $\frac{1}{2}$ " landed at 4626', cemented and recemented through perforations at 4365'; water witch showed major water source 4480'-4455', minor source 4555'-4626'. Proposed to plug to about 4200' with 35 sacks cement under pressure; perforate 6 $\frac{1}{2}$ " 4035'-4100' and 3915'-3925'; land tubing and swab for production. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4200'. Note: Attention is directed to fact that hole was plugged 4632'-4417' without notice to division.
- Shell Oil Co. well No. "Reyes" 7. (Report No. T 1-27428.) Inspection of cementing operations. Hole cleaned out to 4415' and 35 sacks cement pumped in through tubing; 1600 lb. pressure applied. Inspector noted bailer would not spud below 4212' and brought up sample of set cement. Location and hardness of cement plug at 4212' are approved.
- Union Oil Co. well No. "Callender" 16. (Report No. P 1-27370.) Proposal to redrill oil string and deepen approved provisionally. Conditions: Depth 4328'; 8 $\frac{1}{2}$ " landed 3897'-4328', including 410' perforated and adapter; 8 $\frac{1}{2}$ " landed at 3897' with packer, bad 3883'-3897'; liner rolled with 7 $\frac{1}{2}$ " roller 3892'-4328'. Proposed to pull 8 $\frac{1}{2}$ " protection string to 3897'; cut out 8 $\frac{1}{2}$ " liner below 10' shoe at 3928'; plug remainder of 8 $\frac{1}{2}$ " liner with cement and sidetrack to 4238'; drill and core ahead to finishing depth at about 5100'; complete with 4 $\frac{1}{2}$ " liner. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be side-tracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) 8 $\frac{1}{2}$ " is cemented in third Callender shale at about 4550'. (5) Enough cement is used to fill back of 8 $\frac{1}{2}$ " to extend back of 8 $\frac{1}{2}$ " to 10' shoe. (6) Division is notified to witness final mudding operations before cementing 8 $\frac{1}{2}$ " and bailing test of 8 $\frac{1}{2}$ " shut-off.
- Union Oil Co. well No. "Callender" 36. (Report No. T 1-27403.) Inspection of operations for demonstrating that 18 $\frac{1}{2}$ " casing is water-tight. Inspector noted 700 lb pressure applied inside 18 $\frac{1}{2}$ " casing for  $\frac{1}{2}$  hr. without pressure loss. Casing test is approved.
- Union Oil Co. well No. "Hellman" 30. (Report No. P 1-27295.) Supplementary proposal to drill approved provisionally. Conditions: Depth 5776'; 11 $\frac{1}{2}$ " cemented at 4385'; 8 $\frac{1}{2}$ " cemented at 5387'; 452' of 4 $\frac{1}{2}$ " landed at 5773', including 386' perforated; water entry 5455'-5620'. Proposed to wash over and recover 4 $\frac{1}{2}$ " liner to bottom; plug with cement 5776'-5450', having division witness location and hardness of plug at 5450'; run 4 $\frac{1}{2}$ " liner and test on production. Decision: Proposal is approved provided division is notified to witness production test 30 days after placing on production.
- Union Oil Co. well No. "Hellman" 30. (Report No. T 1-27386.) Inspection of cementing operations. 36 sacks cement pumped in through drill pipe hung at 5770' and closed in under 250 lb. final pressure, top of cement at 5536'; 69 sacks cement pumped in through drill pipe hung at 5530' and closed in under 250 lb. final pressure, top of cement at 5420'; set cement drilled out to 5445'. Inspector noted cement plug at reported depth of 5445' held part of weight of drill pipe. Location and hardness of cement plug at 5445' are approved.
- Union Oil Co. well No. "Hellman" 30. (Report No. P 1-27371.) Supplementary proposal to drill approved provisionally. New conditions: Plugged to 5445'; 96' of 4 $\frac{1}{2}$ " landed at 5443', including 59' perforated. well wet. Proposed to wash over and recover 4 $\frac{1}{2}$ " liner to bottom; drill out cement plug to 5776'; cement 590' of blank 4 $\frac{1}{2}$ " liner with 110 sacks cement by displacement method; let stand four days; perforate 5695'-5752' and test on production. Decision: Proposal is approved provided that: (1) Any unrecovered 4 $\frac{1}{2}$ " is plugged with cement. (2) Formations left back of 4 $\frac{1}{2}$ " liner are mudded by open circulation until mud loss is reduced to 2 bbl. per hr. (3) Division is notified to witness final mudding operations before cementing 4 $\frac{1}{2}$ " liner, bailing test after cleaning out cement to about 5200' to demonstrate that water does not enter between 4 $\frac{1}{2}$ " and 8 $\frac{1}{2}$ ", and production test within 30 days after placing on production.
- Union Oil Co. well No. "Hellman" 31. (Report No. P 1-27407.) Supplementary proposal to drill approved. Conditions: Depth 7393'; 11 $\frac{1}{2}$ " cemented at 3900'; 8 $\frac{1}{2}$ " cemented at 6170'. Proposed to land 6 $\frac{1}{2}$ " combination at 7350' and cement through perforations at 7250' with 150 sacks cement; notify division to witness mudding test before running casing.
- Union Oil Co. well No. "Hellman" 31. (Report No. T 1-27467.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 1 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to land 6 $\frac{1}{2}$ " at 7393' and cement through perforations at 7250'.
- Union Oil Co. well No. "Hellman" 33. (Report No. T 1-27387.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 3 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 11 $\frac{1}{2}$ " at 3960'.

Union Oil Co. well No. "Hellman" 33. (Report No. T 1-27402.) Bailing test approved. 11 $\frac{3}{4}$ " casing cemented at 3955'. Hole bailed to 2000' for test and stood 12 hr. Fluid level rose at rate of 1 bbl. in 24 hr.

Union Oil Co. well No. "Hellman" 33. (Report No. T 1-27424.) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of 3 bbl. per hr. Mudding operations are approved. Oral approved is hereby confirmed to cement 8 $\frac{3}{8}$ " at 5377'.

Union Oil Co. well No. "Hellman" 33. (Report No. T 1-27442.) Bailing test approved. 8 $\frac{3}{8}$ " casing cemented at 5377'. Hole swabbed to 2522' for test and stood 12 hr. Oil entered at rate of 15.7 bbl. in 24 hr. No water entered well. Water sample from 5387' tested 58 gr. salt per gal.

Sec. 34—Republic Petroleum Co., Ltd., well No. "Republic-Childs" 5. (Report No. P 1-27366.) Proposal to abandon approved provisionally. Conditions: Depth 2935', cement plug 1275'-1170'; 13 $\frac{3}{8}$ " cemented at 1046'. Junk: (1st hole) 9" 1242'-3968'; 7" 3824'-4096'; total depth 4632', cement plugs 4623'-3852' and 1242'-1203'. No commercial production obtained. Proposed to plug with cement 1066'-1026'; fill 13 $\frac{3}{8}$ " with heavy mud and weld cap over top. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 1026'.

Republic Petroleum Co., Ltd., well No. "Republic-Childs" 5. (Report No. T 1-27454.) Inspection of cementing operations. 40 sacks cement pumped in through drill pipe hung at 1066', filling to 992'. Inspector noted cement plug at 994' held weight of drill pipe; sample of set cement found on end of drill pipe. Location and hardness of cement plug at 994' are approved.

Shell Oil Co. well No. "Reyes" 56. (Report No. T 1-27361.) Inspection of cementing operations. Hole cleaned out to 5400', 25 sacks cement pumped in under 700 lb. pressure through tubing hung at 5400'. Inspector noted bailer would not spud below 5260' and brought up sample of set cement. Location and hardness of cement plug at 5260' are approved. Note: Above plugging work has not been covered in notice filed with division. Proper notices must be filed with division and approvals received before work is started involving plugging or perforating operations.

Shell Oil Co. well No. "Reyes" 56. (Report No. P 1-27300.) Supplementary proposal to drill approved provisionally. Conditions: Depth 5371'; plugged to 5260'; 8 $\frac{3}{8}$ " cemented at 4584'; 6 $\frac{3}{8}$ " landed at 5863', perforated 5453'-5655', 5712'-5863' and 5355'-5385', cemented through perforations at 5453'; perforated 5190'-5225'. Proposed to plug to about 5050' with 35 sacks cement, forcing away about 10 cu. ft. into formation; perforate 6 $\frac{3}{8}$ " 4840'-4825'; try for circulation; if obtained, cement through perforations with 25 sacks cement; if circulation not obtained, perforate 4790'-4800'; land Baker cement retainer at 4810', cement around blank interval with 20 sacks cement, forcing about 10 sacks into formation; notify division to witness top of cement; perforate 6 $\frac{3}{8}$ " 4725'-4765', 4690'-4705' and 4600'-4635'; land 2 $\frac{3}{8}$ " tubing and swab for production. Decision: Proposal is approved provided that: (1) Hole is plugged with cement 5245'-5050'. (2) Division is notified to witness production test 30 days after completing well.

Shell Oil Co. well No. "Reyes" 57. (Report No. P 1-27299.) Supplementary proposal to drill approved provisionally. Conditions: Depth 5408', plugged to 4948'; 8 $\frac{3}{8}$ " cemented at 4673'; 5 $\frac{3}{8}$ " perforated liner 4780'-5217', water witch showed water source 5050'-5125' and at about 4925'. Proposed to plug to 4730' with 48 sacks cement and allow to stand four days, notify division to witness top of plug; sidetrack 5 $\frac{3}{8}$ " by setting removable whipstock at 4730', drilling and coring to 4860'; land 4 $\frac{3}{8}$ " liner at 4855' with suitable perforations; land 2 $\frac{3}{8}$ " tubing and swab for production. Decision: Proposal is approved provided that: (1) Hole is plugged with cement 4730'-4948'. (2) Division is notified to witness production test within 30 days after completing well.

Shell Oil Co. well No. "Reyes" 57. (Report No. T 1-27404.) Inspection of cementing operations. Hole cleaned out to 4948'; 48 sacks cement pumped in through tubing hung at 4940'; tubing raised to 4725' and circulation reversed. Inspector noted bailer would not spud below 4727' and brought up sample of set cement. Location and hardness of cement plug at 4727' are approved.

Shell Oil Co. well No. "Reyes" 57. (Report No. P 1-27376.) Supplementary proposal to drill approved provisionally. New conditions: Present depth 4906', plugged to 4855'; 4 $\frac{3}{8}$ " landed 4852'-4616', top of perforations at 4681'; water witch showed water source about 4805'-4852'. Proposed to pull all 4 $\frac{3}{8}$ " liner; land 5 $\frac{3}{8}$ " liner at 4855' and cement solid to 8 $\frac{3}{8}$ " shoe, perforate 4680'-4720' and 4775'-4790'; land 2 $\frac{3}{8}$ " tubing and swab for production. Decision: Proposal is approved provided that: (1) Formations left back of 5 $\frac{3}{8}$ " liner are mudded by open circulation until loss is not more than 1 bbl. per hr. (2) Division is notified to witness final mudding operations before cementing 5 $\frac{3}{8}$ ", production test 30 days after completing well, and location and hardness of cement plug at 4855'.

Shell Oil Co. well No. "Reyes" 57. (Report No. T 1-27448.) Inspection of cementing operations. All 4 $\frac{3}{8}$ " liner pulled; 25 sacks cement pumped in through drill pipe hung at 4905'. Inspector noted cement plug at 4860' held part of weight of drill pipe. Location and hardness of cement plug at 4860' are approved.

Shell Oil Co. well No. "Reyes" 57. (Report No. P 1-27408.) Supplementary proposal to drill approved. New conditions: Plugged to 4860'; 5 $\frac{3}{8}$ " blank liner landed 4645'-4851' and cemented solid. Proposed to plug to about 4790'; perforate 5 $\frac{3}{8}$ " liner 4770'-4780'; land Baker cement retainer to 4765' and break circulation if possible; cement around blank liner; if circulation cannot be broken, force cement away under pressure; swab fluid to 3000' to test cement job.

- Shell Oil Co. well No. "Reyes" 59. (Report No. T 1-27388.) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of 9 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{4}$ " at 4610'.
- Shell Oil Co. well No. "Reyes" 59. (Report No. T 1-27429.) Bailing test. Decision deferred. 3 $\frac{3}{4}$ " casing cemented at 4620'. Hole swabbed to 3000' for test and stood 19 hr. Inspector noted top of fluid at about 870', could not be determined accurately due to fluid surging in tubing; gas issued from casing during test; fluid sample from 4630' was medium oily mud fluid which tasted fresh. Test indicates 8 $\frac{3}{4}$ " shut-off is probably effective but is not conclusive because of high fluid due to gas action. Decision is deferred pending receipt of production data after completing well.
- Shell Oil Co. well No. "Reyes" 61. (Report No. P 1-27302.) Proposal to drill approved provisionally. Conditions: Well is 130.53' S. and 3983.65' E. of NW. corner of Reyes Lease. Estimate oil sand at 3650'. Proposed to cement 13 $\frac{3}{4}$ " at 930'; cement 8 $\frac{3}{4}$ " at 4225'; land 6 $\frac{3}{4}$ " at 4470'. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{3}{4}$ " are mudded by open circulation until mud loss is not more than 5 bbl. per hr. (4) Enough cement is used to fill back of 8 $\frac{3}{4}$ " to reach at least 1000' above shoe. (5) Column of mud fluid back of 8 $\frac{3}{4}$ " is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness test of 13 $\frac{3}{4}$ " surface casing, final mudding operations before cementing 8 $\frac{3}{4}$ ", and bailing test of 8 $\frac{3}{4}$ " shut-off.
- Shell Oil Co. well No. "Reyes" 61. (Report No. T 1-27457.) Inspection of operations for demonstrating that 13 $\frac{3}{4}$ " surface casing is water-tight. Inspector noted 500 lb. pressure applied inside 13 $\frac{3}{4}$ " casing for  $\frac{3}{4}$  hr. without loss. Casing test is approved.
- Shell Oil Co. well No. "Reyes" 62. (Report No. P 1-27301.) Proposal to drill approved provisionally. Conditions: Well is 1321.49' S. and 4835.93' E. of NW. corner of Reyes Lease. Estimate oil sand at 3650'. Proposed to cement 13 $\frac{3}{4}$ " at 930'; cement 8 $\frac{3}{4}$ " at 4560'; land 6 $\frac{3}{4}$ " at 4920'. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{3}{4}$ " are mudded by open circulation until mud loss is not more than 5 bbl. per hr. (4) Enough cement is used to fill back of 8 $\frac{3}{4}$ " to reach at least 1200' above shoe. (5) Column of mud fluid back of 8 $\frac{3}{4}$ " is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness test of 13 $\frac{3}{4}$ " surface casing, final mudding operations before cementing 8 $\frac{3}{4}$ ", and bailing test of 8 $\frac{3}{4}$ " shut-off.
- Union Oil Co. well No. "Hellman" 32. (Report No. P 1-27377.) Proposal to plug approved provisionally. Conditions: Depth 4470'; 11 $\frac{1}{2}$ " cemented at 4312'; 6 $\frac{3}{4}$ " landed at 4468', including 169' perforated, packer at 4258'; water entry at 4460' and below. Proposed to clean out to bottom and plug to 4450' with cement, having division witness cement plug at this point; land tubing and swab on production. Decision: Proposal is approved provided cement plug 4450'-4470' is placed under 500 lb. pressure.

### HUNTINGTON BEACH FIELD

T. 5 S., R. 11 W., S. B. B. and M.

- Sec. 34—Reliance Oil Co. well No. 3. (Report No. P 1-27397.) Supplementary proposal to abandon approved provisionally. Conditions: Depth 4900', holes in pipe cemented 3888'-3883' and at 4010'; 22" S. P. cemented at 80'; 15 $\frac{3}{4}$ " cemented at 590'; 10" cemented at 3496', sidetracked 2462'-3496'; 8 $\frac{1}{2}$ " stuck at 3850', pulled from 3500'; 6 $\frac{1}{2}$ " cemented at 3877', pulled from 2484'; 4 $\frac{1}{2}$ " cemented at 4550'; 389' of 3" landed at 4900', including 347' perforated. Junk: 3" drill pipe 4005'-4619'; 4 $\frac{1}{2}$ " 3879'-3919', 10' 3" bailer. Proposed to clean out as far as possible in 4 $\frac{1}{2}$ " and 3", to 4900' if possible; cement under pressure 4900'-4500' and have witnessed; shoot and pull 2440' of 4 $\frac{1}{2}$ " and cap stub with 20' cement; shoot and pull 570' of 10" and cap stub with 20' cement, having plug witnessed; cap at surface and abandon. Decision: Proposal is approved provided that: (1) Hole is cleaned out to 4900' if possible and plugged with cement under 500 lb. pressure 4900'-4500'. (2) Cement plug is continued 4500'-3860'. (3) Cementing required in item 2 may be waived depending upon results of bailing test noted above. (4) Division is notified to witness bailing test with fluid lowered to 2500' after plugging to 4500', all cementing operations, all shooting or cementing operations for removal of casing, total clean-out depth before placing any cement in well, and location and hardness of cement plugs at 4500', 550' and 3860' if this last plug is placed.
- Standard Oil Co. well No. "Bolsa" 6. (Report No. P 1-27358.) Proposal to plug approved. Conditions: Depth 3595'; 8 $\frac{3}{4}$ " cemented at 3190', 6 $\frac{3}{4}$ " landed at 3594', perforated 3235'-3594', evidently has large hole at 3553' causing sand trouble. Proposed to install cable tools and determine condition of 6 $\frac{3}{4}$ " oil string; if hole found, plug with cement to above bad casing, notifying division to witness this plug; return to production; if production not O. K., file supplementary proposal.

- Union Oil Co. well No. "Brooks" 6 (Report No. P 1-27291.) Proposal to plug approved provisionally. Conditions: Depth 4825', plugged to 4201'; 8½" cemented and recemented at 3705'; 6½" landed at 4811', including 1125' perforated, cemented through perforations at 3687', water source located below 4134', and lower head water up to 4084'. Proposed to clean out to 4201' or as far as possible; plug with cement to about 4040', having division test plug; test on production; if wet, continue plug to 4000' and have division test, test on production. Decision: Proposal is approved provided division is notified to witness production test 30 days after recompleting well.
- Union Oil Co. well No. "Brooks" 6. (Report No. T 1-27464.) Inspection of cementing operations. Hole could not be cleaned out below 4141' due to bad place in 6½"; 23 sacks cement dumped, starting at 4141'; water was run in hole while cementing. Inspector noted bailer would not spud below 4034' and brought up sample of set cement. Location and hardness of cement plug at 4034' are approved.
- West American Oil Co. well No. "W. A." 7. (Report No. P 1-27373.) Supplementary proposal to drill approved provisionally. Conditions: Depth 4114'; 14" S. P. cemented at 526'. Proposed to land and cement 8½" at 4114', using enough cement to extend well above top of upper Ashton zone between hole and casing. Decision: Proposal is approved provided division is notified to witness final mudding operations before cementing 8½" and bailing test of 8½" shut-off.
- West American Oil Co. well No. "W. A." 7. (Report No. T 1-27432.) Inspection of mudding operations. During ½ hr. circulation test mud fluid was lost from pit at rate of 2 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 4114'.
- Sec. 35—Concord Oil Co. well No. 2. (Report No. T 1-27371.) Inspection of operations for demonstrating that 10½" surface casing is water-tight. Inspector noted mud fluid pumped into 10½" casing and 500 lb. pressure applied; after ¼ hr. pressure was 480 lb.; hole was open to 503'. Casing test is approved.
- Concord Oil Co. well No. 2. (Report No. T 1-27430.) Inspection of mudding operations. During ½ hr. circulation test mud fluid was lost from pit at rate of 5 bbl. per hr.; cement bridge at reported depth of 3428' held part of weight of drill pipe. Mudding operations are approved. Oral approval is hereby confirmed to cement 6½" at 3428'.
- P. C. C. Oil Co. well No. "Flavan One" 2. (Report No. T 1-27465.) Inspection of mudding operations. During ½ hr. circulation test mud fluid was lost from pit at rate of 5 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 7" at 3610'.
- T. 6 S., R. 11 W., S. B. B. and M.
- Sec. 2—A. W. Frazer well No. 4. (Report No. P 1-27372.) Supplementary proposal to alter casing approved. Conditions: Well sanded up; liner collapsed. Proposed to swage out liner; pull 3" liner and clean out.
- Garland Investment Co. well No. 4. (Report No. P 1-27294.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 2720'; 8½" cemented at 2273'; 6½" landed at 2720', perforated 2559'-2698'; cemented through perforations at 2556', bad at 2570'; drilled through at 2570', collapsed at 2500', landed on packer at 2300'; 5" liner 2543'-2667'; 4" liner landed at 2687', top unknown. Proposed to pull 6½" to about 2300'; make mud test, cement plug in 4" and 5" liners, cement plug in 6½" 40' above top of 5" liner if possible, cement squeeze job at 8" shoe, and water test; file supplementary report before starting redrilling operations. Decision: Proposal is approved provided that: (1) Hole is cleaned out to 2500' or below, if possible, and mudded under 300 lb. pressure. (2) 4" and 5" liners are capped with 20' cement if possible, or 20' cement plug 2500'-2480'. (4) Division is notified to witness mudding operations noted above, all cementing operations, bailing test of 8½" shut-off, and location and hardness of cement plug at 2480' or on 4" and 5" liner stubs. Note: Notice of intention to redrill oil string and \$5,000 surety bond must be filed before redrilling operations are started.
- The Petroleum Co. well No. "Wilson" 2. (Report No. P 1-27393.) Proposal to redrill oil string approved provisionally. Conditions: Depth 3790', plugged with lathe cuttings 3790'-3770'; 10" cemented at 2790'; 6½" cemented at 3485'; 4½" oil string at 3766'; bottom 174' perforated, pipe bad, bailer will not go below bottom of 6½" water string. Proposed to cut and pull 4½" from far enough below 6½" shoe to start sidetracking; redrill to 3783' and land 4½", including bottom 180' perforated; cement through perforations at about 3608'. Decision: Proposal is approved provided that: (1) 4½" oil string to be sidetracked is plugged with cement if possible. (2) Division is notified to witness production test within 10 days after placing on production.
- Venture Oil Co. well No. "Fee" 1. (Report No. P 1-27378.) Proposal to redrill oil string approved provisionally. Conditions: Depth 3282' with 12" heaving plug; 10" cemented at 2485'; 8½" cemented at 2895', perforated 2500'-2750', collapsed at 2535'; 6½" liner 2881'-3282', perforated 2886'-3282' and 2500'-2750'. Proposed to set and cement whipstock at 2510'; drill out through 8½" at 2510'; drill to about 2800' and set 5½" liner at depth determined by coring. Decision: Proposal is approved provided division is notified to witness production test 30 days after recompleting well.
- Sec. 3—Standard Oil Co. well No. "Huntington B" 69. (Report No. T 1-27396.) Bailing test approved. 9" casing recemented at 3525'. Hole bailed to

- 3511' for test and stood 12½ hr Fluid level rose at rate of 5 bbl. in 24 hr. Fluid sample from 3530' was muddy water which tasted very salty and tested 1200 gr. salt per gal Shut-off is approved.
- Standard Oil Co well No. "Huntington B" 69. (Report No P 1-27360.) Supplementary proposal to drill approved. Conditions: Depth 3705', 13½" cemented at 745'; 9" cemented and recemented three times at 3525', water witch showed salt water entering 3580'-3590'. Proposed to cement 6½" at 3650', notify division to witness 6½" water shut-off test, complete well as per proposal of June 22, 1934.
- Standard Oil Co. well No. "Huntington B" 69. (Report No. T 1-27466.) Shut-off test approved 6½" casing cemented at 3650'. Inspector noted while tester valve open for 45 min. considerable gas issued from drill pipe, and fluid between drill pipe and 6½" casing remained stationary, when pulled, drill pipe contained 14 bbl. of heavy oily mud and gas above tester; fluid from bottom of drill pipe tasted fresh. Shut-off is approved.
- Sec 4—Standard Oil Co. well No. "P E" 24 (Report No T 1-27452.) Inspection of mudding operations. During ½ hr. circulation test no mud fluid was lost from pit Mudding operations are approved. Oral approval is hereby confirmed to cement 9" at 3860'.
- Standard Oil Co well No. "P. E." 25. (Report No P 1-27286.) Proposal to drill approved Conditions Well is 3313' Northwesterly and 125' Southwesterly from centerlines of Ocean Ave and 23d St. Estimate oil sand at 2800'. Proposed to cement 20" S P. at 40'; cement 13½" at 750', cement 8½" at 3675', land 6½" liner at 4350', notify division to witness pressure test on 13½" casing, mudding test before cementing 8½", and test of shut-off on same, use enough cement behind 8½" to reach 2200', drill with rotary tools
- Sec 10—Macklin Oil Co. well No. "Macklin" 1. (Report No. P 1-27405.) Proposal to redrill water string approved provisionally Conditions: Original depth 3934', cement plugs 3934'-3894', 3870'-3770', 3538'-3517' and at 858', iron shavings and rosin plug hole 3894'-3870'; 9" cemented at 3793', pulled from 828'; 6½" landed at 3893', pulled from 3538', whipstock set at 3496' in 9", hole drilled in casing and redrilled formation to 3506'. Proposed to core 3506'-3850', cement 6½" combination string at depth determined by coring, notify division to witness mudding test and shut-off test in 6½" casing Decision. Proposal is approved provided that: (1) Solid string of casing is cemented instead of combination string proposed. (2) Formations left back of 6½" are mudded by open circulation until loss is not more than 1 bbl. per hr. (3) Enough cement is used to fill back of 6½" to reach at least 3400'. (4) Division is notified to witness final mudding operations before cementing 6½" and balling test of 6½" shut-off.
- The Petroleum Co. well No. "Huntington Beach Fee" 1. (Report No P 1-27326.) Proposal to deepen approved provisionally. Conditions: Depth 4718'; 8½" cemented at 3894'; 6½" liner 3769'-4663', bottom 814' perforated; 2½" upset tubing at 4640'. Proposed to kill well with heavy oil and remove tubing, drill through bottom of 6½" liner, clean out under liner to bottom of well, then core ahead as long as oil sand encountered, using heavy oil to drill with, set 43" perforated liner on bottom, top extending up into 8½" casing above top of 6½" liner; return to production. Decision: Proposal is approved provided that: (1) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement (3) Supplementary notice is filed before cementing additional casing or placing any cement plugs. (4) Division is notified to witness production test 30 days after recompleting well. Note: Approval of above proposed operations is issued subject to approval of Division of State Lands
- Western Oil & Refining Co well No. "H B." 25 (Report No T 1-27425 ) Inspection of cementing operations. Wood plug driven into 8½" to 2181'; hole bridged with crushed rock 2181'-2152', 8½" ripped 2140'-2150'; 5 sacks cement dumped at 2152', 8½" shot 2132'-2137', 5 sacks cement dumped at 2137', hole kept full of fluid while cementing Inspector noted bailer would not spud below 2127' and brought up sample of set cement Location and hardness of cement plug at 2127' are approved
- Wilshire Oil Co, Inc, well No. "H. B." 1 (Report No. P 1-27361.) Supplementary proposal to redrill water string approved provisionally Proposed to sidetrack from near surface casing at about 750', and redrill with about 1700' drift from mean high tide line in direction about S 86° 30' W, drill to about vertical depth of 4250'. Decision Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement (3) Formations left back of 8½" are mudded by open circulation until loss is not more than 5 bbl per hr (4) Enough cement is used back of 8½" to extend at least 200' above Jones zone (5) Column of mud fluid back of 8½" is maintained to surface for at least 30 days after cementing casing (6) 8½" water string is cemented in about 200' shale body immediately overlying deep producing zone (7) Division is notified to witness all cores taken, final mudding operations before cementing 8½", and balling test of 8½" shut-off
- Wilshire Oil Co, Inc., well No "H. B." 5. (Report No P 1-27362 ) Supplementary proposal to redrill water string approved provisionally. Proposed to sidetrack from near surface casing at about 750', and redrill with about 2070' drift from mean tide line in direction about S 83° 45' W.; drill to about vertical depth of 4250'. Decision: Proposal is approved provided

that. (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Enough cement is used back of 8 $\frac{1}{2}$ " to extend at least 200' above Jones zone. (5) Column of mud fluid back of 8 $\frac{1}{2}$ " is maintained to surface for at least 30 days after cementing casing. (6) 8 $\frac{1}{2}$ " water string is cemented in about 200' shale body immediately overlying deep producing zone. (7) Division is notified to witness all cores taken, final mudding operations before cementing 8 $\frac{1}{2}$ ", and bailing test of 8 $\frac{1}{2}$ " shut-off.

Wilshire Oil Co., Inc. well No. "H. B." 6-A. (Report No. P 1-27363.)

Supplementary proposal to redrill water string approved provisionally. Proposed to sidetrack from near surface casing at about 750', and redrill with about 1590' drift from mean high tide line in direction about N. 86° 15' W.; drill to about vertical depth of 4250'. Decision: Proposal is approved provided that. (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Enough cement is used back of 8 $\frac{1}{2}$ " to extend at least 200' above Jones zone. (5) Column of mud fluid back of 8 $\frac{1}{2}$ " is maintained to surface for at least 30 days after cementing casing. (6) 8 $\frac{1}{2}$ " water string is cemented in about 200' shale body immediately overlying deep producing zone. (7) Division is notified to witness all cores taken, final mudding operations before cementing 8 $\frac{1}{2}$ ", and bailing test of 8 $\frac{1}{2}$ " shut-off.

Sec. 11—Day Investment Co. well No. 2. (Report No. T 1-27426.) Inspection of operations for demonstrating that 13 $\frac{1}{2}$ " casing is water-tight. Inspector noted mud fluid pumped into 13 $\frac{1}{2}$ " and 500 lb. pressure applied; after  $\frac{3}{4}$  hr. pressure was 480 lb., hole was open to 689'. Casing test is approved.

E. H. Mathis well No. 3. (Report No. P 1-27324.) Proposal to redrill water string approved provisionally. Conditions: Depth 4165', 8 $\frac{1}{2}$ " cemented at 3693', 8 $\frac{1}{2}$ " liner 3641'-4155', perforated 3693'-4155', hole bad below 3596', plugged with 5 sacks cement above 3596' and drilled through 8 $\frac{1}{2}$ " water string at 3575'-3596'. Proposed to redrill to 3695'; make bailing test of 8 $\frac{1}{2}$ " shut-off; redrill 3695'-3850' and land 5 $\frac{1}{2}$ " liner at that depth; if shut-off test is not demonstrated, file supplementary notice outlining casing program below 3595'. Decision: Proposal is approved provided that: (1) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (2) Division is notified to witness bailing test of 8 $\frac{1}{2}$ " shut-off after drilling to depth not lower than 3695'. Note. Attention is directed to fact that hole was plugged with cement above 3596' and 8 $\frac{1}{2}$ " water string drilled through without notice to division. In future any work altering condition of well should first be covered in notice to division and approval received before starting such work.

E. H. Mathis well No. 3. (Report No. T 1-27431.) Bailing test approved. 8 $\frac{1}{2}$ " casing cemented at 3693'. Hole bailed to 2500' for test and stood 19 hr. Fluid level rose at rate of 2.7 bbl. in 24 hr. Small amount of gas issued from 8 $\frac{1}{2}$ " casing during test. Fluid sample from 3578' was heavy gas-cut mud which tasted fresh.

E. A. Rowe et al. well No. "Skirvin" 1. (Report No. P 1-27403.) Proposal to redrill oil string approved provisionally. Conditions: Depth 2801', 10" cemented at 2265', drilled through at 2100', 6 $\frac{3}{4}$ " cemented at 2681' instead of 2668' as previously reported, 4 $\frac{1}{2}$ " liner landed 2673'-2801', including 104' perforated, collapsed at about 2761'. Proposed to plug 4 $\frac{1}{2}$ " liner 2760'-2700' and pull from about 2700'; redrill to about 2800' and complete with suitable liner. Decision: Proposal is approved provided that: (1) Cementing operations in plugging 2760'-2700' are done under 500 lb. minimum pressure. (2) Division is notified to witness production test within 10 days after placing on production.

Sec. 14—Dome Oil Co. well No. "Newland-Borchard" 1. (Report No. T 1-27395.) Bailing test approved. 8 $\frac{1}{2}$ " casing cemented at 4100'. Hole bailed to 2500' for test and stood 22 hr. Fluid level rose at rate of 6 bbl in 24 hr. Fluid sample from 4107' was heavy mud which tasted fresh.

D. D. Dunlap Oil Co. well No. "Mills" 1. (Report No. P 1-27369.) Proposal to redrill water string approved provisionally. Conditions: Depth 4363', plugged with cement 4363'-4090' and 20' to surface; 11" cemented at 2622', pulled from 141', 8 $\frac{1}{2}$ " cemented at 4153', pulled from 2551', 257' of 6 $\frac{1}{2}$ " liner landed at 4363', including 138' perforated, re-perforated 4170'-4232'. Proposed to clean out cement; redrill to zone formerly produced by this well; file supplementary notice when exact conditions of well are known. Decision: Proposal is approved provided supplementary notice is also filed before landing or cementing any additional casing or before placing any cement plugs.

D. D. Dunlap Oil Co. well No. "Mills" 1. (Report No. P 1-27402.) Supplementary proposal to redrill water string approved provisionally. New conditions: Hole cleaned out to 4099' and 8 $\frac{1}{2}$ " cut and pulled from 2599'. Proposed to run 8 $\frac{1}{2}$ " to 2599' and tie on with packing overshot; cement 20' whipstock at 4099', test 8 $\frac{1}{2}$ " for leaks, notifying division to witness test; redrill to 4153'; test 8 $\frac{1}{2}$ " shut-off, notifying division to witness test; if shut-off O. K., redrill to 4363' and cement combination liner through perforations at about 4300'; if shut-off not O. K., run blank liner to about

4300' and use 4½" perforated liner to bottom. Decision: Proposal is approved provided that division is notified to witness test of 8½" casing, bailing test of 8½" shut-off after redrilling to 4153', casing test after drilling out cement in combination liner, or solid liner, to not lower than 20' above cementing point, bailing test of shut-off on solid liner if cemented as proposed, and production test within 10 days after placing on production if combination liner cemented as proposed.

### INGLEWOOD FIELD

T. 2 S, R. 14 W., S. B. B. and M

- Sec. 7—Associated Oil Co. well No. "Vickers" 28. (Report No. T 1-27365.) Inspection of cementing operations. Hole cleaned out to 2324' and filled with fluid, then bridged and 10 sacks cement dumped at 2224'. Inspector noted bailer would not spud below 2193' and brought up sample of set cement. Location and hardness of cement plug at 2193' are approved.
- Sec. 8—Pacific Western Oil Co. well No. "Cone" 16. (Report No. P 1-27290.) Proposal to deepen approved provisionally. Conditions: Depth 2945', 9" cemented at 2545', 434' of 6½" liner landed at 2945', including 399' perforated. Proposed to drill out through bottom of 6½" liner and deepen about 200'; core last 60'; use Schlumberger from 2945' to bottom; set 5" liner and put on production. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Division is notified to witness production test 30 days after recompleting well.
- Pacific Western Oil Co. well No. "Rubel" 16. (Report No. P 1-27395.) Proposal to deepen approved provisionally. Conditions: Depth 2900', 9" cemented at 2540'; 6½" liner landed at 2900', including 357' perforated. Proposed to drill out through bottom of 6½" liner and deepen about 250'; core last 60'; use Schlumberger 2900' to bottom; set 5" liner and put on production. Decision: Proposal is approved provided division is notified to witness production test within 10 days after placing on production.
- Shell Oil Co. well No. "Rindge" 1. (Report No. P 1-27392.) Proposal to alter casing approved provisionally. Conditions: Depth 2500', cemented up to 1500' by cement from well No. "Rindge" 16; 8½" landed at 2495', top of perforations at 1300', bad at 1545', 2050' and 2115'; 5½" landed at 2495', top of perforations at 1301'. Proposed to clean out cement and mud to 2103' with rotary; perforate 2020'-2050', 1950'-1980', 1865'-1885', 1835'-1845', 1775'-1785', 1485'-1520', 1405'-1415' and 11355'-11365'; bail thoroughly; tube and put to pumping. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 2103'.
- The Texas Co. well No. "Moynier" 1. (Report No. P 1-27297.) Proposal to deepen approved provisionally. Conditions: Depth 2570'; 12½" cemented at 1253'; 8½" landed at 2570', including 414' perforated, cemented through perforations at 2155'. Proposed to prospect ahead with core barrel to about 3200' and test by stages with Johnston formation tester; set casing when conditions warrant. Decision: Proposal is approved provided supplementary notice is filed before landing or cementing any casing below 8½" shoe at 2570'.
- Sec. 17—T. T. Nudson well No. 1. (Report No. P 1-27327.) Supplementary proposal to drill approved provisionally. Conditions: Depth 3020', plugged to 2373' with cement; 10½" cemented at 1690'; 8½" liner 1557'-2600', perforated 2580'-2300' and 1886'-1710'. Proposed to clean out cement to 2750' and drill new hole to about 3800'; cement water string at depth to be determined by coring and Schlumberger. Decision: Proposal is approved provided supplementary notice is filed before landing or cementing additional casing or before placing any cement plugs.
- Standard Oil Co. well No. "L. A. Investment Lease" 71. (Report No. P 1-27343.) Supplementary proposal to drill approved. Conditions: Depth 3250', cement plug 3200'-3250'; 10½" cemented at 2800'; 456' of 8½" liner landed at 3196', bottom 407' perforated. Proposed to kill well and try to wash liner loose with oil; if successful, clean out to about 3225' and replug open hole to 3165', notifying division to witness this plug take weight of drill pipe at about 3165'; land liner and return to production; notify division to witness production test, if unable to recover liner, clean out to about 3225'; re-perforate 8½" liner 3165'-3196', plug with cement 3225'-3165', and notify division to witness this plug, return to production; notify division to witness production test 30 days after returning to production.
- Standard Oil Co. well No. "L. A. Investment Lease" 71. (Report No. T 1-27455.) Inspection of cementing operations. Hole cleaned out to 3225' and 25 sacks cement dumped in stages; 4 sacks cement dumped at 3166'. Inspector noted bailer would not spud below 3161' and brought up sample of set cement. Location and hardness of cement plug at 3161' are approved.



## LAWDALE FIELD

T. 3 S, R 14 W, S R. B and M.

Sec 20—Trans-Oceanic Oil Corp well No. "Wallace-Peck" 1 (Report No T 1-27366) Inspection of cementing operations 6 sacks cement dumped at 5250'; 7 sacks cement dumped at 5220'. Inspector noted bailer would not spud below 5175' and brought up sample of set cement. Location and hardness of cement plug at 5175' are approved

## LONG BEACH FIELD

T. 4 S, R. 12-W., S. B. B and M.

Sec. 18—Rio Grande Oil Co. well No. "Derry" 6. (Report No T 1-27378) Inspection of cementing operations 30 sacks cement dumped at 6135', water was run in hole while cementing Inspector noted bailer would not spud below 5559' and brought up sample of set cement Location and hardness of cement plug at 5559' are approved.

Sec. 19—Axis Petroleum Co. well No "H. O B." 1. (Report No. P 1-27309) Supplementary proposal to plug and alter casing approved provisionally Conditions: Perforated 3600'-3460' and 3410'-3250'; no production; upper portion wet. Proposed to abandon present area by dumping cement 3600'-3460' and 3410'-3250', perforate 5" and 6½" 2943'-2969' or from bottom of 8½" shut-off to 2969'; if no oil in commercial quantities pull 5" from 2950' and test in stages back to 2821' Decision: Proposal is approved provided that: (1) Division is notified to witness location and hardness of cement plug at 3250'. (2) Division is kept informed of results after each stage of perforating and will designate any other operations to be witnessed.

Axis Petroleum Co. well No "H O B" 1 (Report No T 1-27414) Inspection of cementing operations. Hole cleaned out to 3603' and 38 sacks cement dumped; water was run in hole while cementing. Inspector noted bailer would not spud below 3228' and brought up sample of set cement

Axis Petroleum Co. well No "H O B" 1. (Report No. T 1-27414) Inspection of cementing operations Hole cleaned out to 3603' and 38 sacks cement dumped; water was run in hole while cementing. Inspector noted bailer would not spud below 3228' and brought up sample of set cement. Location and hardness of cement plug at 3228' are approved

Bernal Oil Co well No 1. (Report No. P 1-27321) Supplementary proposal to drill approved. Conditions: Depth 5576'; 12½" cemented at 795'; 7" cemented at 4303'. Proposed to land 4½" at 5576', perforated 5576'-5175', blank pipe 5175'-4200', and cement through perforations at 5175' with 75 sacks cement; test top of 4½" liner for water shut-off, place on production 5175'-5576'.

Bernal Oil Co. well No 1 (Report No T 1-27399) Inspection of mudding operations During ½ hr circulation test mud fluid was lost from pit at rate of 1 bbl. per hr. Mudding operations are approved Oral approval is hereby confirmed to land 4½" liner at 5576' and cement through perforations at 5175'.

Bernal Oil Co well No. 1. (Report No T 1-27421) Inspection of operations for demonstrating that water does not enter from between 4½" and 7" casings Inspector noted no fluid entered well while standing 10½ hr for test; hole was open to 5103'. Operations are approved as indicating water does not enter well in its present condition.

Bernal Oil Co well No 2 (Report No T 1-27420) Inspection of mudding operations During ½ hr circulation test mud fluid was lost from pit at rate of 2 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 7" at 4345'.

Dav-Mar Drilling Co., Inc, well No "Davis" 14. (Report No T 1-27413) Inspection of mudding operations. During ½ hr circulation test mud fluid was lost from pit at rate of 1 bbl per hr Mudding operations are approved. Oral approval is hereby confirmed to cement 6½" at 4307'

Dav-Mar Drilling Co, Inc., well No "Davis" 14. (Report No T 1-27433) Shut-off test approved 6½" casing cemented at 4307' Inspector noted wall packer set at reported depth of 4277'; while tester valve open for ½ hr considerable air issued from drill pipe, and fluid between drill pipe and 6½" casing remained stationary; when pulled, drill pipe contained 0.4 bbl. of medium heavy gas-cut mud above tester; fluid sample from bottom of drill pipe tasted fresh; sample from perforated nipple below tester was shale, sand and set cement. Shut-off is approved.

W O Dye well No. "Marine" 8. (Report No. P 1-27351) Proposal to redrill water string and deepen approved provisionally Conditions: Depth 3615', cement plugs 3480'-3410' and 2675'-2651'; 10" cemented at 3268'; 8½" cemented at 3518', pulled from 2675'. Proposed to clean out to 2640'; drill through 10" at 2640'; redrill and deepen to 4650'; cement 6½" at about 3950'; land 4½" liner at 4650'; core for exact depths Decision: Proposal is approved provided that: (1) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (2) Formations left back of 6½" are mudded by open circulation until loss is not more than 3 bbl per hr (3) Exact cementing depth for 6½" is determined by coring starting not lower than 3900'. (4) Enough cement is used to fill back of 6½" to reach at least 1000' above shoe. (5) Column of mud fluid back of 6½" is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness final mudding operations before cementing 6½" and bailing test of 6½" shut-off.

- R L Goetz well No "Goetz" 3 (Report No P 1-27368) Proposal to drill approved provisionally. Conditions Well is 169' S and 32' W of SW corner of 32d St and Atlantic Ave. Estimate oil sand at 3800'. Proposed to cement 12 1/2" at 580'; cement 7" at 4090'. Decision: Proposal is approved provided that (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) At least 600' of conductor casing is cemented in hole. (3) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (4) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl per hr. (5) Exact cementing depth for 7" is determined by coring starting not lower than 4075'. (6) Enough cement is used to fill back of 7" to reach at least 800' above shoe. (7) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (8) Division is notified to witness test of 12 1/2" surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.
- M & O Oil Co well No "M & O" 9 (Report No T 1-27427) Inspection of mudding operations. During 1/2 hr. circulation test mud fluid was lost from pit at rate of 3 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 7" at 3940'.
- M & O Oil Co well No "M & O" 9 (Report No T 1-27441) Bailing test approved. 7" casing cemented at 3940'. Hole bailed to 2807' for test and stood 12 hr. No fluid entered well. Fluid sample from 3944' was heavy mud which tasted fresh.
- Mines Oil Co well No 2 (Report No T 1-27450) Inspection of mudding operations. During 1/2 hr. circulation test mud fluid was lost from pit at rate of 2 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 6 5/8" on cement bridge at 4130'.
- Dan Sheppard well No 1 (Report No P 1-27383) Proposal to abandon approved provisionally. Conditions Depth 7012', cement plugs 6260'-6235' and 6139'-5784', 11 3/8" cemented at 3976', ripped 700'-740'; 8 5/8" cemented at 5790', perforated 5700'-5775', ripped 4025'-3976', pulled from 3201', 6 5/8" cemented at 7003', perforated 5700'-5775', 5800'-5875' and 6183'-7003', cemented through perforations at 6183', pulled from 4400'. Junk: cable tools 6139'-6196'; no production obtained after re-entering well. Proposed to cap 6 5/8" stub at 4400' with 20' cement; cap 8 5/8" stub at 3201' with 20' cement, cap hole at surface and abandon. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plugs on 6 5/8" and 8 5/8" stubs.
- Chester F. Yunker & Associates No 2 well No 2 (Report No P 1-27396) Proposal to drill approved provisionally. Conditions: Well is 115' S and 175' E of center lines of 28th St and Rose Ave. Estimate oil sand at 3900'. Proposed to cement 13" at 625'; cement 7" at 3900'; land 4 3/8" liner at 4600'. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 3800'. (5) Enough cement is used to fill back of 7" to reach at least 800' above shoe. (6) Division is notified to witness test of 13" surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.
- Chester F. Yunker & Associates No 2 well No 2 (Report No T 1-27460) Inspection of operations for demonstrating that 13" surface casing is water-tight. Inspector noted mud fluid pumped into 13" casing and 500 lb pressure applied; after 1/2 hr pressure was 480 lb; hole was open to 510'. Casing test is approved.
- Sec 20—P A Kingsland well No "P A Kingsland" 7 (Report No. T 1-27391) Inspection of mudding operations. During 1/2 hr. circulation test mud fluid was lost from pit at rate of 5 bbl per hr. cement bridge at reported depth of 3545' held part of weight of drill pipe. Mudding operations are approved. Oral approval is hereby confirmed to cement 7" at 3545'.
- P A Kingsland well No "P A Kingsland" 7 (Report No T 1-27409) Shut-off test approved. 7" casing cemented at 3537'. Inspector noted wall packer set at reported depth of 3514'; while tester valve open for 20 min very small amount of air issued from drill pipe, and fluid between drill pipe and 7" casing remained stationary; when pulled, drill pipe contained 0.5 bbl of medium mud fluid above tester; fluid sample from bottom of drill pipe tasted fresh. Shut-off is approved.
- Shell Oil Co well No "Mills" 1 (Report No P 1-27319) Proposal to plug approved provisionally. Conditions: Depth 4600'; 10" cemented at 3931', 6 3/8" cemented at 4323', 4 3/8" and 4" landed at 4600', liner top at 4320', 4" perforated 4340'-4600', bad at 4485'. Proposed to plug with cement 4485'-4435', using dump bailer. Decision: Proposal is approved provided that: (1) Hole is kept full of fluid during cementing operations. (2) Division is notified to witness location and hardness of cement plug at 4435'.
- Shell Oil Co well No. "Mills" 1 (Report No T 1-27434) Inspection of cementing operations. Hole cleaned out to 4490' and 12 sacks cement dumped; water was run in hole while cementing. Inspector noted bailer would not spud below 4382' and brought up sample of set cement. Location and hardness of cement plug at 4382' are approved.

Sec 28—Sespe Oil Co. well No "Horoco" 1. (Report No P 1-27406) Supplementary proposal to deepen approved provisionally. Conditions: Depth 4874', bridge at 4760'-4779'; 14" S. P cemented at 610'; 6½" cemented at 4760', well tested wet. Proposed to clean out to bottom; land 174' of 5½" liner at 4874', perforate 4874'-4796', and cement through perforations at 4796'. Decision: Proposal is approved provided that: (1) Bailing test is made after cleaning out cement inside 5½" liner to 4760' to demonstrate that no fluid enters between 6½" and 5½" casing. (2) Division is notified to witness bailing test noted above and production tests within 30 days after completing well.

Shell Oil Co. well No. "Alamitos" 19 (Report No P 1-27318.) Proposal to plug approved provisionally. Conditions: Depth 4800'; 8½" cemented at 4157'; 6½" landed at 4799', perforated 4143'-4799'; water witch showed water source 4410'-4470' and 4640'-4650'. Proposed to plug 4800'-4625' with cement placed through tubing, after re-perforating 6½" 4620'-4640' and 4390'-4410'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4625'.

Sec 29—Aztec Drilling Corp. well No "Aztec" 1. (Report No T 1-27389.) Inspection of operations for demonstrating that 10½" casing is water-tight. Inspector noted mud fluid pumped into hole and 525 lb pressure applied for ¼ hr without pressure loss; hole was open to 515'. Casing test is approved.

Hernul Oil Co. well No "Flower State" 1 (Report No. P 1-27330.) Proposal to redrill water string approved provisionally. Conditions: Depth 5303'; 8½" cemented at 4085', perforated 4065'-4040', collapsed at 3470', open to surface, 6½" 3633'-4813', perforated 4088'-4813', cemented through perforations at 4088'; 4½" 4300'-5303', all perforated, very bad, 4¾" 3780'-4300', perforated 4065'-4300'. Proposed to set whipstock in cement at 3470'; sidetrack 8½"; redrill to 4800', setting 6½" casing from 0' to about 4100' and 4¾" perforated liner 4100'-4800'. Decision: Proposal is approved provided that: (1) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (2) Formations left back of 6½" are mudded by open circulation until loss is not more than 2 bbl. per hr. (3) Exact cementing depth for 6½" is determined by coring starting not lower than 4050'. (4) Enough cement is used to fill back of 6½" to reach at least 1000' above shoe. (5) Column of mud fluid back of 6½" is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness final mudding operations before cementing 6½" and bailing test of 6½" shut-off.

Alfred D Mitchell well No 6 (Report No. T 1-27408) Inspection of cementing operations. 7" perforated 6086'-6175' and tested wet; 20 sacks cement dumped at 6180'; water run in hole while cementing. Inspector noted bailer would not spud below 6056' and brought up sample of set cement. Location and hardness of cement plug at 6056' are approved.

Samuel Ohenstein and George C. Withers well No "Baehr" 2-A. (Report No. T 1-27393.) Inspection of mudding operations. During ¾ hr. circulation test mud fluid was lost from pit at rate of 2 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 9" at 3774'.

Samuel Ohenstein and George C Withers well No "Baehr" 2-A (Report No T 1-27412.) Bailing test approved 9" casing cemented at 3770'. Hole bailed to 2505' for test and stood 12 hr. No fluid entered well. Fluid sample from 3777' was medium heavy slightly gas-cut mud which tasted fresh.

Richfield Oil Co well No "Denni" 6 (Report No P 1-27382) Proposal to plug and alter casing approved provisionally. Conditions: Depth 7401', plugged to 5285'; 8½" cemented at 4878', perforated 4550'-4850' and 3550'-4530', re-perforated 3550'-4502'; 5¾" landed at 7401', perforated 6150'-7401', 5400'-6100', 4900'-5360', 5490'-5760' and 4550'-4850', cemented through perforations at 5197', bad at 5920', 5760', 5320' and 5030', pulled from 4540'. Proposed to bridge with cement 3530'-3500', perforate 8½" in stages, possibly as high as 2500', cut and pull 8½" above 2470'. Decision: Proposal is approved provided present condition of hole below 3530' does not constitute permanent abandonment below that depth.

Richfield Oil Co. well No. "Denni" 9 (Report No. P 1-27329.) Supplementary report on proposal to drill approved provisionally. Conditions: Well is 66' W. from centerline of Junipero St and 77' southeasterly from centerline of Panorama Drive at right angles thereto. Estimate oil sand at 2775'. Proposed to cement 13½" at 700', cement 8½" at 2775'; land 5½" at 4900' and cement through perforations. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8½" and 5½" are mudded by open circulation until loss is not more than 4 and 2 bbl per hr, respectively. (4) Exact cementing depth for 8½" is determined by coring starting not lower than 2600'. (5) Enough cement is used to fill back of 8½" to reach at least 600' above 8½" shoe and behind 5½" to reach to 8½" shoe. (6) Column of mud fluid back of 8½" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness 13½" surface casing test, final mudding operations before cementing 8½" and 5½", and bailing test of 8½" shut-off. Note: This report supersedes and nullifies Report No P 1-25683 dated July 20, 1933, for reason that location and casing program have been changed.

- Richfield Oil Co well No. "Denni" 9. (Report No. T 1-27407.) Inspection of operations for demonstrating that 13 $\frac{3}{8}$ " casing is water-tight. Inspector noted 480 lb. pressure applied for  $\frac{3}{4}$  hr. without pressure loss; hole was open to 738'. Casing test is approved.
- Shell Oil Co. well No. "Alamitos" 12. (Report No. P 1-27317.) Proposal to plug approved provisionally. Conditions: Depth 4651', plugged to 4363'; 10" cemented at 3800'; 6 $\frac{1}{2}$ " cemented at 4049'; 4 $\frac{1}{2}$ " and 4 $\frac{1}{2}$ " landed 3995'-4647', perforated 4061'-4647'. Proposed to plug 4363'-4200' with cement placed through tubing, after perforating 4 $\frac{1}{2}$ " 4255'-4275', if possible. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4200'.
- Shell Oil Co. well No. "Alamitos" 20. (Report No. P 1-27316.) Proposal to plug approved provisionally. Conditions: Depth 4779', plugged to 4476'; 6 $\frac{1}{2}$ " cemented at 4064'; 4 $\frac{1}{2}$ " landed at 4764', perforated 4014'-4764'; water witch showed water source at 4700' and 4528'-4533'. Proposed to plug 4476'-4235' with cement placed through tubing, after perforating 4 $\frac{1}{2}$ " 4234'-4262', if possible. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4235'.
- Shell Oil Co. well No. "Alamitos" 21. (Report No. P 1-27315.) Proposal to plug approved provisionally. Conditions: Depth 4275'; 10" cemented at 4072'; 8 $\frac{1}{2}$ " landed at 4275', perforated 4075'-4255', cemented through perforations at 4075'; water witch showed water source 4125'-4240'. Proposed to plug 4275'-4110' with cement placed through tubing, after perforating 8 $\frac{1}{2}$ " 4125'-4145'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4110'.
- Shell Oil Co. well No. "Hamilton" 2. (Report No. T 1-27394.) Inspection of cementing operations. Hole cleaned out to 4133' and 170 sacks cement pumped in through drill pipe. Inspector noted bailer would not spud below 3458' and brought up sample of set cement. Location and hardness of cement plug at 3458' are approved.
- Shell Oil Co well No. "Horsch" 1. (Report No. T 1-27374.) Inspection of cementing operations. Hole cleaned out to 3217' where drill pipe twisted off; last two joints of drill pipe and bit 3160'-3217' could not be recovered; 15 sacks cement pumped in through tubing hung at 3160'; top of cement at 2910'; 4 $\frac{1}{2}$ " cut and pulled from 2454', 6 $\frac{1}{2}$ " from 2008', and 8 $\frac{1}{2}$ " from 1696'. Inspector noted 30, 20 and 25 sacks cement pumped into hole through drill pipe hung at 2698', 2050' and 1725', respectively. Operations are approved.
- Shell Oil Co. well No. "Wilbur Community" 5. (Report No. P 1-27314.) Proposal to plug approved provisionally. Conditions: Depth 6376', plugged to 5155'; 11 $\frac{3}{8}$ " cemented at 3482'; 8 $\frac{5}{8}$ " cemented at 5249', perforated 4900'-5219'; 5 $\frac{3}{8}$ " landed at 6315', perforated 5274'-6315', cemented through perforations at 5274', pulled from 5225'; water witch showed water source 5025'-5045' and 5125'-5155'. Proposed to plug 5155'-5000' with cement placed through tubing after reperforating 8 $\frac{5}{8}$ " 5000'-5020'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 5000'.
- Sec 30—Apex Petroleum Corp., Ltd., well No. "Brayton" 2. (Report No. T 1-27435.) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of 3 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 6 $\frac{5}{8}$ " at 4875'.
- Apex Petroleum Corp., Ltd., well No. "Brayton" 2. (Report No. T 1-27456.) Shut-off test approved. 6 $\frac{5}{8}$ " casing cemented at 4875'. Inspector noted while tester valve open for 35 min considerable air issued from drill pipe by heads, and fluid between drill pipe and 6 $\frac{5}{8}$ " casing remained stationary; when pulled, drill pipe contained 2 bbl. of oily gas-cut muddy water above tester; fluid sample from bottom of drill pipe tasted fresh, sample from perforated nipple below tester was sand. Shut-off is approved.
- J. H. Cochran well No. 9. (Report No. P 1-27367.) Proposal to drill approved provisionally. Conditions: Well is 55' S. and 63' E. of NW. corner of Lot 20, Burnett Villa Tract. Estimate oil sand at 4400'. Proposed to cement 12 $\frac{3}{8}$ " at 750'; cement 6 $\frac{5}{8}$ " at 4400'; land 4 $\frac{1}{2}$ " liner at 4900'. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6 $\frac{5}{8}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 6 $\frac{5}{8}$ " is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 6 $\frac{5}{8}$ " to reach at least 1000' above shoe. (6) Column of mud fluid back of 6 $\frac{5}{8}$ " is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness 12 $\frac{3}{8}$ " surface casing test, final mudding operations before cementing 6 $\frac{5}{8}$ ", and bailing test of 6 $\frac{5}{8}$ " shut-off.
- J. H. Cochran well No. 9. (Report No. T 1-27438.) Inspection of operations for demonstrating that 12 $\frac{3}{8}$ " casing is water-tight. Inspector noted mud fluid pumped into 12 $\frac{3}{8}$ " casing and 450 lb. pressure applied; after  $\frac{3}{4}$  hr. pressure was 435 lb.; hole was open to 730'. Casing test is approved.
- Congo Oil Co. Ltd. well No. "Congo" 1. (Report No. P 1-27284.) Proposal to drill approved provisionally. Conditions: Well is 20' S and 20' W. of NE. corner of Lot 16, La Reina Tract. Estimate oil sand at 4700'. Proposed to cement 12 $\frac{3}{8}$ " at 650'; cement 6 $\frac{5}{8}$ " at 4700'; land 4 $\frac{1}{2}$ " at 5100'; drill with rotary tools. Decision: Proposal is approved provided

- that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 6 $\frac{1}{2}$ " is determined by coring starting not lower than 4500'. (5) Enough cement is used to fill back of 6 $\frac{1}{2}$ " to reach at least 1200' above shoe. (6) Column of mud fluid back of 6 $\frac{1}{2}$ " is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 12 $\frac{1}{2}$ " surface casing, final mudding operations before cementing 6 $\frac{1}{2}$ ", and bailing test of 6 $\frac{1}{2}$ " shut-off.
- Deco Oil Co. well No. "Deco" 2. (Report No. T 1-27382.) Inspection of operations for demonstrating that 12 $\frac{1}{2}$ " casing is water-tight. Inspector noted mud fluid pumped into 12 $\frac{1}{2}$ " casing and 500 lb. pressure applied for  $\frac{1}{2}$  hr. without pressure loss; hole was open to 787'. Casing test is approved.
- W. O. Dye well No. "Dye" 1. (Report No. P 1-27308.) Proposal to plug approved provisionally. Conditions: Depth 4911', cement plug 4911'-4790'; 6 $\frac{1}{2}$ " cemented at 4530'; 5" landed 4389'-4911', perforated 4733'-4911', cemented through perforations at 4733'; water production is increasing. Proposed to clean out and replug to about 4790' with cement under pressure. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4790'.
- Huntington Investment Corp. well No. 1. (Report No. P 1-27387.) Proposal to drill approved provisionally. Conditions: Well is 315' N. and 135' E. of center lines of Gaviota Ave and Hill St. Estimate oil sand at 4500'. Proposed to cement 11 $\frac{1}{2}$ " at 800'; cement 7" at 4500'; land 4 $\frac{1}{2}$ " at 4900'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 7" to reach at least 1000' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 11 $\frac{1}{2}$ " surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.
- Huntington Investment Corp well No 1. (Report No. T 1-27462.) Inspection of operations for demonstrating that 11 $\frac{1}{2}$ " casing is water-tight. Inspector noted mud fluid pumped into hole and 550 lb pressure applied; after  $\frac{1}{2}$  hr. pressure was 500 lb.; hole was open to 750'. Casing test is approved.
- Indiana Drilling Co. well No "Indiana" 1. (Report No. T 1-27390.) Bailing test approved. 5 $\frac{1}{2}$ " casing cemented at 5505'. Hole bailed to 3020' for test and stood 12 hr. Fluid found 10' below reported bailing depth. Fluid sample from 5508' was muddy water which tasted fresh. Shut-off is approved.
- Ladden Oil Co. well No. "Ladden" 1. (Report No. T 1-27383.) Inspection of operations for demonstrating that water does not enter well between 4 $\frac{1}{2}$ " and 7" casings. Inspector noted top of fluid located at 2784'; no fluid entered well while standing 8 $\frac{1}{2}$  hr. for test; hole was open to 4690'. Operations are approved as indicating that water does not enter well in its present condition.
- Ladden Oil Co. well No "Ladden" 1. (Report No. T 1-27384.) Bailing test approved. 4 $\frac{1}{2}$ " casing cemented at 4730'. Hole bailed to 3000' for test and stood 12 hr. No fluid entered well. Fluid samples from 4734' was medium heavy mud which tasted fresh.
- Medal Oil Co. well No. 1. (Report No. P 1-27289.) Supplementary proposal to drill approved provisionally. Conditions: Sand mentioned in previous report did not show up satisfactorily under Schlumberger test. Proposed to drill to about 4750' to find deeper sand by coring; make Schlumberger test and set full string of 5" casing to bottom, cementing same from bottom up into 8 $\frac{1}{2}$ " water string and perforating where coring and Schlumberger test show saturated oil sand. Decision: Proposal is approved provided that: (1) Formations left back of 5" are mudded by open circulation until loss is not more than 2 bbl. per hr. (2) Division is notified to witness final mudding operations before cementing 5" and production test after completing well.
- Medal Oil Co. well No. 1. (Report No. T 1-27410.) Inspection of mudding operations. During  $\frac{1}{2}$  hr circulation test mud fluid was lost from pit at rate of 2 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 5" at 4850'.
- Medal Oil Co well No. 1. (Report No. T 1-27451.) Shut-off test approved. 5" casing cemented at 4684'. Inspector noted wall packer set at reported depth of 4672'; while tester valve open for  $\frac{1}{2}$  hr. air flowed slightly from drill pipe; when pulled, drill pipe contained 2.5 bbl. of slightly gas-cut medium mud fluid above tester; fluid sample from bottom of drill pipe tasted fresh; sample from perforated nipple below tester was sand. Shut-off is approved.
- E. L. Olmstead Oil Co. well No. "McKenzie" 2. (Report No. P 1-27375.) Proposal to drill approved provisionally. Conditions: Well is 15' N. and 44' E. of SW. corner of Lot 1, Tract 3593. Estimate oil sand at 4550'.

## DIVISION OF OIL AND GAS

Proposed to cement 11½" at 900', cement 7" at 4550'; land 4½" at 4950'; drill with rotary tools. Decision: Proposal is approved provided that (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 7" to reach at least 1000' above shoe (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 11½" surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off

Olmstead Petroleum Corp. well No "McKenzie" 1. (Report No. T 1-27392) Shut-off test approved 7" casing cemented at 4525' Inspector noted while tester valve open for 9 min. very large amount of gas reached surface within 2 min. and blew very hard, and fluid between drill pipe and 7" casing remained stationary; when pulled, drill pipe contained 2.7 bbl. of oil and very gas-cut mud above tester; fluid sample from bottom of drill pipe tasted fresh; sample from perforated nipple below tester was sand and set cement Shut-off is approved

The Texas Co well No "Shilling" 3. (Report No. T 1-27440) Inspection of cementing operations. Hole cleaned out to 4690' and 25 sacks cement pumped in through drill pipe; 700 lb. pressure applied. Inspector noted bailer would not spud below 4525' and brought up sample of set cement Location and hardness of cement plug at 4525' are approved.

Union Oil Co. well No "Long Beach Community" 14. (Report No. P 1-27354.) Proposal to plug and alter casing approved. Conditions: Depth 4140'; 10½" cemented at 2370', 6½" cemented at 3317', 902' of 4½" landed at 4137', including 836' perforated. Proposed to clean out to 3890' and plug with cement to 3317', having division test plug; continue plug to 3225'; perforate and test in succession, zones 3150'-3175', 2975'-3025' and 2775'-2800', if any zone is wet, plug to 20' above top of perforations and have division test.

## T 4 S, R 13 W, S B B. and M

Sec 24—Allied Petroleum Corp well No "Allied" 10 (Report No. P 1-27320) Proposal to redrill oil string and deepen approved provisionally. Conditions: Depth 5149', 6½" cemented at 4845'; 4½" liner landed 4818'-5149', perforated 4845'-5149'. Proposed to pull or sidetrack 4½" liner; redrill and deepen to about 6000', land and cement 4½" liner, coring for exact cementing point. Decision: Proposal is approved provided that (1) Any portion of 4½" liner not recovered is plugged with cement (2) Formations left back of 4½" are mudded by open circulation until loss is not more than 2 bbl per hr (3) Bailing test is made after cleaning out cement to within 100' of 4½" shoe to demonstrate that no fluid enters well between 6½" and 4½" (4) Division is notified to witness final mudding operations before cementing 4½", bailing test noted above, and bailing test of 4½" shut-off

Dabney-Johnston Oil Corp well No 10 (Report No. P 1-27389) Proposal to alter casing approved. Conditions: Depth 5950', cement plug 5950'-5161'; 10" cemented at 4233'. 7" cemented at 5385', perforated 5270'-5250' and 5161'-5100'; 4½" liner, 5301'-5950', perforated 5421'-5950' Proposed to perforate 7" 4979'-4930'.

Delaney Petroleum Corp well No "Armor" 2 (Report No. T 1-27381) Inspection of pressure mudding operations. Inspector noted mud fluid pumped into 5½" casing and 450 lb pressure applied for ¼ hr without pressure loss, hole was open to 4775'. Pressure mudding operations are approved.

## LOS ANGELES CITY FIELD

One lot W. of 1261 Colton St., on Lot 8, Block 8—Otto Ritzert well No "Ritzert" 4 (Report No. T 1-27373.) Inspection of cementing operations. Inspector noted top of fluid at about 160'; feeler could not be run below 216'; slurry of 10 sacks cement and 5 sacks sand dumped into hole from surface. Operations are approved.

## MONTEBELLO FIELD

## T 2 S, R 11 W., S B B and M

Sec 5—Universal Consolidated Oil Co well No. N-1. (Report No. P 1-27401) Proposal to drill approved provisionally. Conditions: Well is 530' South-easterly along center line of Siphon Road (Temple) from center of intersection of Siphon Road and Durfee Ave, thence 171' northeasterly at right angles. Prospect well.

Sec 6—Fullerton Oil Co well No "McGinley F" 29. (Report No. T 1-27398) Inspection of mudding operations. During ¼ hr circulation test mud fluid was lost from pit at rate of 3 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 9" at 7134'. The St. Helens Petroleum Co, Ltd, well No "Piuma-Briano" 6 (Report No. T 1-27367.) Inspection of mudding operations. During ¼ hr circula-

tion test mud fluid was lost from pit at rate of 3.8 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 7" at 7005'.

T. 2 S., R. 12 W., S. B. B. and M.

- Sec 1—Union Oil Co. well No. "La Merced" 4. (Report No. P 1-27334) Proposal to plug approved. Conditions: Depth 2805', cement plugs 2805'-2720' and 2660'-2457'; 10 $\frac{3}{4}$ " cemented at 2246'; 604' of 8 $\frac{3}{4}$ " landed at 2777', including 531' perforated, ripped and shot 2527'-2777', shot 2635'-2645', 2600'-2612' and 2540'-2552', water entry at 2442'. Proposed to plug with cement to 2430', having division test plug; test on production.
- Union Oil Co. well No. "La Merced" 4. (Report No. T 1-27447) Inspection of cementing operations. Well cleaned out to 2457' and 7 sacks cement dumped; unset cement shot 2437'-2442'; 3 $\frac{3}{4}$  sacks cement dumped at 2450'; 6 sacks cement dumped in stages starting at 2437'. Inspector noted bailer would not spud below 2425' and brought up sample of set cement. Location and hardness of cement plug at 2425' are approved.
- Union Oil Co. well No. "La Merced" 6. (Report No. T 1-27446) Inspection of cementing operations. 42 sacks cement dumped in stages starting on cement plug at 2536'; 14 sacks cement dumped in stages starting at 2550'. Inspector noted bailer would not spud below 2488' and brought up sample of set cement. Location and hardness of cement plug at 2488' are approved.

### PLAYA DEL REY FIELD

T. 2 S., R. 15 W., S. B. B. and M

- Sec 21—Pacific Western Oil Co. well No. "Stanley-Lieber" 1. (Report No. P 1-27356) Proposal to abandon approved provisionally. Conditions: Depth 6100'; 20" cemented at 739'; 13 $\frac{3}{8}$ " cemented at 3453'; 8 $\frac{3}{8}$ " cemented at 5700'; 6 $\frac{3}{8}$ " liner 5664'-5961'. Proposed to clean out to 6100'; plug with cement from clean-out depth to 5644'; cut and pull 8 $\frac{3}{8}$ " from not lower than 3433' and 13 $\frac{3}{8}$ " from not lower than 719', capping each stub with cement; fill hole with heavy mud and cap 20" at surface. Decision: Proposal is approved provided that: (1) Proposed plugging with cement 6100'-5644' is done under pressure if possible. (2) All portions of hole not plugged with cement are filled with heavy mud fluid. (3) 8 $\frac{3}{8}$ " and 13 $\frac{3}{8}$ " stubs are capped with at least 20' cement. (4) Division is notified to witness clean-out depth, placing of all cement, cutting or shooting of 8 $\frac{3}{8}$ " and 13 $\frac{3}{8}$ " at not lower than 3433' and 719', respectively, and location and hardness of cement plugs at 5644' and on 8 $\frac{3}{8}$ " and 13 $\frac{3}{8}$ " stubs.
- Sec 28—Union Oil Co. well No. "Del Rey" 7. (Report No. P 1-27296) Proposal to drill approved provisionally. Conditions: Well is 220' S. and 1100' Easterly from NW corner of Del Rey Lease. Estimate oil sand at 3500'. Proposed to cement 13 $\frac{3}{8}$ " at 750'; cement 8 $\frac{3}{8}$ " at 3500'; land 600' of 6 $\frac{3}{8}$ " liner at 4075'; core for shut-off and finishing depths; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Exact cementing depth for 8 $\frac{3}{8}$ " is determined by coring starting not lower than 3375'. (4) Column of mud fluid back of 8 $\frac{3}{8}$ " is maintained to surface for at least 30 days after cementing casing. (5) Division is notified to witness 13 $\frac{3}{8}$ " casing test and bailing test of 8 $\frac{3}{8}$ " shut-off.

### POTRERO FIELD

T. 2 S., R. 14 W., S. B. B. and M

- Sec 28—James Kelly well No. "Grant-Inglewood" 5. (Report No. P 1-27310) Proposal to deepen approved provisionally. Conditions: Depth 6159', 6 $\frac{3}{8}$ " cemented at 5110'; 4 $\frac{3}{8}$ " cemented at 6070'; 100' of 3" liner landed at 6158'. Proposed to pull liner if possible; take one core and put on production; or clean out to bottom if liner can not be pulled. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Division is notified to witness all cores taken during deepening and production test within 10 days after placing on production. Note: No work other than that outlined in above proposal shall be started without filing supplementary notice with and securing approval of division.

### RICHFIELD FIELD

T. 3 S., R. 9 W., S. B. B. and M.

- Sec 27—Nugent Drilling Co. well No. 3. (Report No. P 1-27399) Proposal to abandon approved provisionally. Conditions: Depth 4535'; 13" S. P. cemented at 60'; 8 $\frac{3}{8}$ " cemented at 3151'; 6 $\frac{3}{8}$ " cemented at 3655', perforated 3155'-3160'; 4 $\frac{3}{8}$ " cemented at 4491'. Junk: One joint of tubing sidetracked

- 3720'-3745'. Proposed to fill with cement 4535'-4470'; cut and pull 4 $\frac{3}{4}$ " from 3600' and place 20' plug on stub; cut and pull 6 $\frac{5}{8}$ " from 3130'; bridge with cement 3170'-3110'; place cement plug 25'-5'; cap and abandon. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug 4470'-3110'. Note: Approval does not apply without further consideration if well is to be abandoned by any one other than company.
- Vista Oil Trust well No. "Vista" 1 (Report No. T 1-27370) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of 2.5 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to land 5 $\frac{3}{4}$ " combination casing at 5994' and cement through perforations at 5750'.
- Sec 28—Jose Oil Co., Ltd, well No "Jose" 1 (Report No P 1-27337.) Supplementary proposal to redrill water string approved. Conditions: Depth 2930'; 8 $\frac{1}{4}$ " cleaned out and 20' whipstock set at 2250', casing drilled through and hole drilled to 2900', then core to 2930'; 8 $\frac{1}{4}$ " appears to be bad in places. Proposed to underream hole to 9", 2250'-2730'; cement 6 $\frac{5}{8}$ " at 2730', lowering pipe to at least 2760' to leave at least 30' cement bridge below cementing point; notify division to witness shut-off test on 6 $\frac{5}{8}$ " with hole open not more than 10' below shoe, use enough cement to fill back of 6 $\frac{5}{8}$ " to reach to at least 2200'; make open hole test; if wet, file supplementary notice covering further work.
- Oliver & Spradling well No. "McFadden" 2. (Report No P 1-27341) Proposal to plug approved provisionally. Conditions: Depth 4620', plugged to 4540' with cement; 8 $\frac{1}{4}$ " cemented at 3150'; 6 $\frac{1}{2}$ " cemented at 4280'; 4 $\frac{3}{4}$ " landed 4235'-4540', perforated 4255'-4520'. Proposed to plug 4540'-4330' and put on production. Decision: Proposal is approved provided that: (1) Proposed plug is placed under high hydrostatic head. (2) Division is notified to witness location and hardness of cement plug at 4330'.
- Sec 32—Chanslor-Canfield Midway Oil Co well No 3-B. (Report No. P 1-27306) Supplementary proposal to plug approved provisionally. Conditions: 3" plugged 4431'-4309'. Proposed to cut and pull 3" from 4150'; perforate 4 $\frac{3}{4}$ " 4140'-3900'; make production test, if nonproductive, clean out to 4309', plug 3" and 4 $\frac{3}{4}$ " with cement to 3775', have plug witnessed, and test water shut-off; cut and pull 4 $\frac{3}{4}$ " from about 3750' and cap stub with 20' cement, having this plug witnessed; test lower portion of Chapman zone by perforating 6 $\frac{1}{2}$ " 3585'-3450'; if nonproductive, plug 6 $\frac{1}{2}$ " with cement to 3430', cut and pull 6 $\frac{1}{2}$ " from about 3400', cap stub with 20' cement, having this plug witnessed, and test water shut-off. test upper portion of Chapman zone by perforating 8 $\frac{1}{4}$ " 3410'-3285'; if no commercial production obtained, plug 8 $\frac{1}{4}$ " to 3175' and test water shut-off; cut and pull 8 $\frac{1}{4}$ " from about 3150', cap stub with 20' cement, and have plug witnessed; file supplementary notice covering further work. Decision: Proposal is approved provided 8 $\frac{1}{4}$ " is not pulled from below 3130'.
- Sec 33—Chanslor-Canfield Midway Oil Co well No 7-R (Report No. P 1-27305) Supplementary proposal to plug and alter casing approved. Conditions: 6 $\frac{1}{2}$ " plugged with cement 4553'-3972', cut and pulled from 3952' and plugged to 3945', perforated 3858'-3842' and 3996'-3790' in separate stages, both being found wet, plugged with cement 3945'-3775'. Proposed to place bridge 3535'-3515'; place 35 lb cavity shot at 3490', clean out and place 18 lb cement shot with 2 sacks cement; dump enough cement to continue plug up to 3468'; have plug witnessed and test bottom water shut-off; perforate 8 $\frac{1}{4}$ " 3462'-3165' and make production test.
- Chanslor-Canfield Midway Oil Co well No 7-R. (Report No T 1-27400) Inspection of cementing operations. Hole cleaned out to 3945' and 26 sacks cement dumped, filling to 3835', hole cleaned out to 3802' and 8 sacks cement dumped. Inspector noted bailer would not spud below 3775' and brought up sample of set cement. Location and hardness of cement plug at 3775' are approved.
- Chanslor-Canfield Midway Oil Co well No 7-R (Report No T 1-27401) Inspection of cementing operations. 8 $\frac{3}{4}$ " shot 3495'-3500' and 3 $\frac{1}{2}$  sacks cement dumped in cavity at 3500'; wet cement shot at 3500' and 22 $\frac{1}{2}$  sacks cement dumped in stages, filling to 3468'. Inspector noted bailer would not spud below 3467' and brought up sample of set cement. Location and hardness of cement plug at 3467' are approved.

## ROSECRANS FIELD

T. 3 S, R. 13 W., S B. B and M.

- Sec. 7—W H Bowen, Guy S Bowen and J. R Gogin well No "Athens" 3 (Report No. P 1-27325.) Proposal to redrill oil string approved provisionally. Conditions: Depth 4441'; 8 $\frac{1}{4}$ " cemented at 4207', bad 2568'-2573'; 6 $\frac{1}{2}$ " cemented at 4171'; 6 $\frac{1}{2}$ " liner 4171'-4441', perforated 4215'-4441'; top of junk at 4382', capped with cement to 4378'. Proposed to drill out junk inside 6 $\frac{1}{2}$ " liner to bottom and complete well. Decision: Proposal is approved provided division is notified to witness production test 30 days after recompleting well.
- Guy N Stafford well No "Athens" 7. (Report No P 1-27394) Proposal to plug approved provisionally. Conditions: Depth 5400', sanded up to about 4900'; 16" S. P. cemented at 1040'; 6 $\frac{5}{8}$ " cemented at 5270'; hole in 7" pipe 3450'. Proposed to repair casing by setting plug at 3460', dumping enough cement to reach up to 3400'; drill out and make casing test; if casing O K., clean out and return to production, if not O K., recement under pressure. Decision: Proposal is approved provided division is



notified to witness test of 6½" casing, and production test within 10 days after placing on production.

Sec 18—F B. Gormley well No. "Schafer" 2. (Report No. P 1-27293.) Proposal to alter casing approved provisionally. Conditions: Depth 4963, cement plugs 4958'-4930' and 4898'-4876'; 12½" cemented at 914', collapsed at 350'; 8½" cemented at 4803', perforated 4664'-4684', water reported below shoe; 6½" cemented at 4860', perforated 4664'-4684' and 4810'-4905'; 4½" landed at 4913', shot at 4886', pulled from 4826', 8½" and 6½" reperfected 4664'-4684'. Proposed to clean out to 4684'; cut 6½" at 3700' and run in adapter on 6½" stub, clean out to 4684' and return to production. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4876'.

G. W. Houser well No. 2. (Report No. P 1-27380.) Proposal to redrill oil string approved provisionally. Conditions: Depth 4017', cement plug 4017'-3969'; 8½" cemented at 3984', 4½" perforated liner landed 3974'-4017', shot 3994'-4004', sand and water entering. Proposed to redrill to about 4100' and complete with suitable liner. Decision: Proposal is approved provided that. (1) Supplementary notice is filed before cementing additional casing or before placing any cement plugs. (2) Division is notified to witness bailing test of 8½" shut-off after redrilling to 3989', and production test 30 days after recompleting well

Sec. 20—Cypress Petroleum Co. well No. 1. (Report No. P 1-27345.) Supplementary proposal of Emmons & Emmons, Contractors, to plug and alter casing approved provisionally. Conditions: Depth 3923', cement plug 3860'-3782'; 8½" cemented at 4072', drilled through at 3587'; about 3800' of 6½" and 1000' of 4½" landed at 4840', perforated 4490'-4840', cemented through perforations at 4435', drilled through at 3587', 4½" at 3871', bad 3815'-3863', perforated 3775'-3725'; 3" perforated liner landed 3867'-3909'; 2½" perforated liner landed 3809'-3860'. Proposed to dump thin cement 3728'-3708'; pull 4½" from 3567' and cap stub with 20' cement. Decision: Proposal is approved provided division is notified to witness clean-out depth before cementing, all cementing operations, shooting or cutting operations for removal of 4½", and location and hardness of cement plugs at 3708' and 3547'.

Cypress Petroleum Co well No. 1 (Report No. T 1-27417) Inspection of cementing operations of Emmons & Emmons, Contractors. Hole could not be cleaned out below 3728' due to collapsed or parted casing; 3 sacks cement dumped at 3728'. Inspector noted bailer would not spud below 3693' and brought up sample of set cement. Location and hardness of cement plug at 3693' are approved

Cypress Petroleum Co. well No. "Rosecrans" 1. (Report No. P 1-27344.) Proposal to abandon approved provisionally. Conditions: Depth 6321', cement plugs 6321'-5981' and 5644'-5619'; 15½" cemented at 896', 6½" cemented at 4253'; 6½" cemented at 5693', perforated 5470'-5410', 5" and 4½" liner landed 5482'-6321', perforated 6321'-6004' and 5970'-5720', cemented through perforations at 6004'; 3½" perforated liner froze 5644'-5744', 6½" casing and 5" and 4½" liners shot and possibly perforated 5610'-5500'. Junk: (1st hole) 4½" 4273'-4520'; total depth 4520'; (2d hole) 4½" 4287'-5000'; 3" 4770'-5551'; total depth 5551', cement plug 5100'-4487', (3d hole) 4½" 5719'-6068', total depth 6068'; (4th hole) 4½" 5696'-6460', total depth 6501', cement plug 6501'-6460', and 60 sacks cement pumped into 4½" below 5696'. Proposed to clean out to 4½" stub at 5484' and plug with wood plug; dump enough cement on 4½" stub to fill 6½" casing to 5390' or 20' above top of perforation; notify division to witness location and hardness of this plug; shoot to pull 6½", first shot not deeper than 4225', drive wood plug in stub; dump enough cement to fill 8½" at least 20' above 6½" stub; shoot to pull 8½", first shot not deeper than 875', drive wood plug in stub; dump enough cement to fill 15½" at least 20' above 8½" stub; weld cap on 15½" 6' below surface and clean up property. Decision: Proposal is approved provided that: (1) Cementing 5485'-5390' is concluded under 500 lb. pressure (2) Division is notified to witness location and hardness of cement plugs at 5390' and 855'

T. 3 S, R. 14 W, S. B. B. and M.

Sec 12—Woodward Oil Co., Ltd., well No. "Scher" 81. (Report No. P 1-27381.) Proposal to abandon approved provisionally. Prospect well.

### SANTA FE SPRINGS FIELD

T. 2 S., R 11 W, S. B. B. and M.

Sec. 31—Shell Oil Co. well No. "G. H. N." 18. (Report No. P 1-27386.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 6522'; 8½" cemented at 5286'; 6½" cemented at 5725'; 4½" cemented at 6400'; top of fish tubing at 6397'. Proposed to plug to about 6200'; perforate 4½" 5980'-6020'; land tubing and swab for production; if unproductive, bridge 4½" 6030'-5950'; cut and pull 4½" from 5200' and 6½" from 4800', capping 6½" stub with cement; perforate 8½" 4310'-4360' and 4400'-4450'; swab and bail; land tubing and test for production by pumping. Decision: Proposal is approved provided that: (1) Hole is plugged below junk with thin cement placed at 6397' under 500 lb. minimum pressure if possible. (2) 4½" and 6½" stubs are capped with at least 20' cement plugs. (3) Division is notified to witness location and hardness of cement plugs at about 6200' and 5950'. (4) If well is wet

- after perforating 8½", supplementary notice is filed outlining additional work.
- Standard Oil Co. well No. "Santa Gertrudes" 6. (Report No P 1-27336) Proposal to plug approved. Conditions. Depth 4638'; 8½" cemented at 3996', 6½" cemented at 4265'; 527' of 4¾" landed at 4681', bottom 398' perforated, hole could not be cleaned out below 4600' due to packed sand or bad pipe, water witch showed water source 4310'-4320', and at 4390', minor source at 4510', also low-head conditions 4450'-4460', and in bottom of hole. Proposed to clean out to 4681' if possible; reperforate 4¾" oil string 4681'-4270'; plug with cement 4681'-4570' and make production test; if not commercially productive, continue cement plug 4570'-4470' and make production test, if commercially productive, continue cement plug 4470'-4370' and make production test, notify division to witness plug which excludes or materially reduces water, if commercial production not obtained, file proposal covering further work.
- Standard Oil Co. well No. "Santa Gertrudes" 7. (Report No. P 1-27385) Proposal to plug approved. Conditions. Depth 4650', cement plug 4587'-4555'; 6¼" cemented at 4245', 4¾" perforated liner 4223'-4650', reperforated 4591'-4250', shot 4570'-4585'; water reported entering 4430'-4450'. Proposed to reperforate 4¾" 4410'-4460'; clean out to 4555' and continue cement plug to 420', swab perforations, bail and make production test, if wet, clean out to 4430' and replug to 4410', return to production; notify division to witness plug which excludes or materially reduces water (this is not to constitute permanent abandonment of lower portion of hole); if not commercially productive, file supplementary proposal.

T. 3 S., R. 11 W., S B. B and M.

- Sec. 5—Bandini Petroleum Co. well No. "Off" 14. (Report No. P 1-27311.) Proposal to alter casing approved provisionally. Conditions. Depth 8142', cement plugs 8142'-7322', 5097'-5075' and 4610'-4595'; 8½" cemented at 5666', perforated 4575'-4255' and 4600'-4610', 6¾" cemented at 6354', perforated 4575'-4255' and 4600'-4610'; 4¾" cemented at 7530', pulled from 5097'; 3" liner landed 7347'-8002', perforated 7503'-8002'. Proposed to drill out cement plug in 6¾" 4595'-4610'; shoot 6¾" and 8½" 4725'-4740', if well clean and production increased, produce with Meyer zone; if well shows water, plug with cement 4610'-4595' and produce regular Meyer zone alone. Decision. Proposal is approved provided that: (1) If well is wet after perforating, hole is plugged with cement under as much pressure, as possible 4750'-4715'. (2) Division is notified to witness production test within 10 days after placing on production, and location and hardness of cement plug at about 4715' and 4595'.
- Bandini Petroleum Co. well No. "Off" 17. (Report No P 1-27312) Proposal to alter casing approved provisionally. Conditions. Depth 7491', cement plugs 7491'-6929' and 5050'-5002', 8½" cemented at 5648', 6¾" cemented at 6345', 8½" and 6¾" perforated 4585'-4270', reperforated 4575'-4515'; 3" liner landed 6945'-7491', perforated 6975'-7491'. Proposed to clean out to 5000'; shoot 6¾" and 8½" 4710'-4730'; if well clean and production increased, produce with Meyer zone, if well shows water, plug with cement 4735'-4700' and produce Meyer zone alone, if oil not much increased, continue perforating to 4740'. Decision. Proposal is approved provided division is notified to witness production test within 10 days after placing on production, and location and hardness of cement plug at 4700'.
- Bandini Petroleum Co well No. "Off" 18. (Report No P 1-27313) Proposal to alter casing approved provisionally. Conditions. Depth 7940', cement plugs 7915'-7650' and 4620'-4600', 8½" cemented at 5629', perforated 4565'-4290'; 6¾" cemented at 7797', pulled from 5557', perforated 4565'-4290'; 232' of 4¾" liner landed at 7915', including 119' perforated. Proposed to drill out cement plug in 6¾" 4600'-4620'; shoot 6¾" and 8½" 4692'-4730'; if well clean and production increased, produce with Meyer zone; if last perforating shows water, plug with cement 4735'-4680' and produce Meyer zone alone. Decision. Proposal is approved provided division is notified to witness production test within 10 days after placing on production, and location and hardness of cement plug at 4630'.
- Buckeye Union Oil Co. well No 5. (Report No. P 1-27322) Proposal to abandon approved. Conditions. Depth 4557'; 12¾" cemented at 2000', 8¾" at 4470'; 4¾" landed at 4557', perforated 4474'-4557', parted at about 4490', 320' and 160', screwed together at upper depths; top of junked tubing and rods inside 4¾" at 1500'. Proposed to shoot and pull 4¾" at about 1500', having division witness shooting; fill hole with mud fluid to surface and apply at least 500 lb. pressure, pump in mud fluid until hole will not take more under above pressure, notify division to witness final mudding operations and running of bailer to top of junk after mudding; dump enough cement on junk to reach at least 20' above 4¾" stub; notify division to witness cementing operations and location and hardness of plug; shoot and pull 8¼" above plug and dump 20' cement on stub; notify division to witness shooting and location and hardness of plug; plug 12¾" with cement at surface and abandon.
- Buckeye Union Oil Co well No 5. (Report No T 1-27437) Inspection of cementing operations. 4¾" shot and parted at 1462', 6 sacks cement dumped at 1463'. Inspector noted bailer would not spud below 1443' and brought up sample of set cement. Location and hardness of cement plug at 1443' are approved.
- General Petroleum Corp well No "Santa Fe" 24. (Report No P 1-27364) Supplementary proposal to redrill water string and deepen approved provisionally. Conditions. Depth 4721'; 6¾" cemented at 4135'; 4¾" landed at 4719', including 36' perforated, cemented through perforations

- at 4680'. Proposed to perforate 4 $\frac{1}{2}$ " 4600'-4650'. Decision: Proposal is approved provided division is advised of results of production test after perforating as proposed, additional requirements may be outlined at that time.
- General Petroleum Corp. well No. "Santa Fe" 25 (Report No. T 1-27376.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 1 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to land 6 $\frac{1}{2}$ " at 4688' and cement through perforations at 4620'.
- General Petroleum Corp. well No. "Santa Fe" 36. (Report No. P 1-27282.) Proposal to drill approved provisionally. Conditions: Well is 50.36' N. and 320.83' E. of center lines of Butler Ave and Third St. Proposed to cement 12 $\frac{1}{2}$ " at 1000'; cement 8 $\frac{1}{2}$ " at 4120'; land 6 $\frac{1}{2}$ " at 4600'. Decision: Proposal is approved provided that (1) (a) Mud fluid of not less than 70 lb per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Enough cement is used to fill back of 8 $\frac{1}{2}$ " to reach at least 600' above shoe. (5) Column of mud fluid back of 8 $\frac{1}{2}$ " is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness test of 13 $\frac{1}{2}$ " surface casing, final mudding operations before cementing 8 $\frac{1}{2}$ ", and bailing test of 8 $\frac{1}{2}$ " shut-off.
- General Petroleum Corp. well No. "Santa Fe" 36. (Report No. T 1-27380.) Inspection of operations for demonstrating that 13 $\frac{1}{2}$ " casing is water-tight. Inspector noted 750 lb. pressure applied inside 13 $\frac{1}{2}$ " casing for  $\frac{1}{2}$  hr. without pressure loss. Casing test is approved.
- General Petroleum Corp. well No. "Santa Fe" 136-A. (Report No. T 1-27418.) Inspection of cementing operations. Hole cleaned out to 7900' and 4 sacks cement dumped, 31 $\frac{1}{2}$  sacks cement dumped in stages starting at 7830', last 3 $\frac{1}{2}$  sacks bridged at 7205', cleaned out to 7360', 2 $\frac{1}{2}$  sacks cement dumped at 7360' but did not set and was cleaned out; 2 sacks cement dumped at 7360'. Inspector noted bailer would not spud below 7331' and brought up sample of set cement. Location and hardness of cement plug at 7331' are approved.
- General Petroleum Corp. well No. "Santa Fe" 136-A. (Report No. P 1-27350.) Supplementary proposal to plug and alter casing approved provisionally. Conditions: Depth 8007'; cement plug 8007'-7331'; 9" cemented at 6340', 6 $\frac{1}{2}$ " cemented at 7326'; 4 $\frac{1}{2}$ " landed at 7900', perforated 7352'-7900', cemented through perforations at 7348', cut and pulled from 4854'. Proposed to cut and pull 6 $\frac{1}{2}$ " from 4850' and cap stub to 4845', perforate 9" 4825'-4835' and test; if dry, perforate 9" 4785'-4825' and test for production. Decision: Proposal is approved provided that (1) Division is notified to witness location and hardness of cement plug at 7331' (2) Division is informed of results of tests after perforating as proposed; additional requirements may be outlined at that time.
- General Petroleum Corp. well No. "Santa Fe" 240. (Report No. P 1-27400.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 8000'; 8 $\frac{1}{2}$ " cemented at 7430'; 6 $\frac{1}{2}$ " cemented at 7992', perforated 7443'-7992', bad 7387'-7393'; top of fish at 7399'. Proposed to plug on top fish by running thin cement away to 7370', having plug witnessed, pull 6 $\frac{1}{2}$ " from this point if possible, or as low as vibration can be obtained, and cap stub with 15' cement; test portion of lower O'Connell zone and upper part of first Clark zone by perforating 8 $\frac{1}{2}$ " 6880'-6980'. Decision: Proposal is approved provided that: (1) Thin cement is forced away below top of junk under 500 lb. pressure if possible. (2) Supplementary notice is filed if production unsatisfactory after perforating 8 $\frac{1}{2}$ " as proposed.
- Santa Fe Extension Oil Co. well No. "Sunshine Farms" 1. (Report No. P 1-27404.) Supplementary proposal to redrill water string approved provisionally. Conditions: Depth 4425'; old 9" sidetracked 712'-4425'. Proposed to core for top of Meyer oil sand or to about 4550'; drill with bit to 4710'; core 4710'-4825'; make Schlumberger test 4200'-4825'; cement 7" or 8 $\frac{1}{2}$ " at 4825' with enough cement to extend to about 4000' behind pipe; perforate 7" or 8 $\frac{1}{2}$ " in short stages starting from bottom, testing for production after each stage. Decision: Proposal is approved provided that: (1) Formations left back of 7" or 8 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (2) Division is notified to witness final mudding operations before cementing 7" or 8 $\frac{1}{2}$ ", and production test within 10 days after placing on production. (3) Division is consulted further if well is wet after any stage of perforating and testing; additional requirements may be outlined at that time.
- Standard Oil Co. well No. "South Whittier Community" 11. (Report No. P 1-27287.) Proposal to abandon approved. Conditions: Depth 4725'; 13" cemented at 1990'; 8 $\frac{1}{2}$ " cemented at 3953'; 6 $\frac{1}{2}$ " cemented at 4332'; 436' of 4 $\frac{1}{2}$ " landed at 4708', bottom 374' is inserted joint and perforated, casing very crooked 4340'-4346'. Junk: 350' of 2 $\frac{1}{2}$ " tubing, including 110' of 2" tubing on bottom, inside 4 $\frac{1}{2}$ " 4358'-4708'; 3 $\frac{1}{2}$ " die tap, 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " drill pipe sub and 2 $\frac{1}{2}$ " drill pipe tool joint pin inside 4 $\frac{1}{2}$ " about 4340'-4342'. Proposed to pump in 50 sacks cement through tubing hung at about 4330', allowing cement to siphon down hole if it will, to try to plug bottom portion of hole, run water in hole on top cement to apply pressure; continue pumping in patches of cement until cement plug reaches about 4250', notifying division to witness this plug; fill hole with fluid, cut and pull 6 $\frac{1}{2}$ " from about 3925' or above if necessary, and cap stub with 20' cement; fill hole with fluid; cut and pull 8 $\frac{1}{2}$ " from about 1970', cap stub with 20' cement and notify division to witness this plug; fill hole with fluid; hang wood

- plug inside 13" 10' below cellar floor; fill to cellar floor with cement, weld plate on 13" at cellar floor, and abandon well; remove wood rig and equipment.
- Standard Oil Co. well No. "South Whittier Community" 11. (Report No. T 1-27377.) Inspection of cementing operations. Hole washed down to 4337' and 50 sacks cement pumped in; when drill pipe pulled 500' of tubing was left in hole; top of tubing found at 3837' and could not be washed over, hole took no fluid under 500 lb. pressure, 9½ sacks cement dumped at 3837'. Inspector noted bailer would not spud below 3819' and brought up sample of set cement. Location and hardness of cement plug at 3819' are approved.
- Standard Oil Co. well No. "South Whittier Community" 11. (Report No. T 1-27415.) Inspection of cementing operations. 6½" ripped 3660'-3673' and 3200'-3240', pulled from 3204', wood plug driven in stub and 7½ sacks cement dumped on plug; top of cement at 3180'; 8½" shot and pulled from 1945', wood plug driven in stub and 15 sacks cement dumped on plug. Inspector noted bailer would not spud below 1896' and brought up sample of set cement. Location and hardness of cement plug at 1896' are approved.
- Standard Oil Co. well No. "South Whittier Community" 11. (Report No. P 1-27346.) Supplementary proposal to abandon approved. New conditions: 2" tubing in hole 3837'-4337', could not be washed over; 9 sacks cement dumped on tubing at 3837', filling to 3819'; hole standing full of water. Proposed to consider well abandoned; landowners will convert into water well.
- Union Oil Co. well No. "Farwell" 14. (Report No. P 1-27333.) Proposal to plug and alter casing approved. Conditions. Depth 6850', cement plug 6850'-5919'; 8½" cemented at 5597', perforated 5590'-5597'; 6½" cemented at 6329', perforated 5590'-5895', perforated and plugged 5940'-5975'; 4½" liner landed 6284'-6850', perforated 6314'-6850', bad at 6750'. Proposed to plug with cement 5919' to above 5570' and have division test plug; perforate 6½" and 8½" 5450'-5470'; if wet, plug from below 5430' to above 5430' and have division test, perforate 6½" and 8½" 5220'-5240' and test.
- Union Oil Co. well No. "Farwell" 14. (Report No. T 1-27423.) Inspection of cementing operations. 5½ sacks cement dumped in stages starting at 5920'; water was run in hole while cementing. Inspector noted bailer would not spud below 5571' and brought up sample of set cement. Location and hardness of cement plug at 5571' are approved.
- Union Oil Co. well No. "Farwell" 14. (Report No. T 1-27453.) Inspection of cementing operations. 2 sacks cement dumped at 5571'; 20 sacks cement dumped at 5568'. Inspector noted bailer would not spud below 5416' and brought up sample of set cement. Location and hardness of cement plug at 5416' are approved.
- Sec 6—Associated Oil Co. well No. "Dewenter" 8. (Report No. P 1-27340.) Proposal to alter casing approved provisionally. Conditions: Depth 6835', cement plugs 6143'-6117', 6100'-6055' and 5712'-5674'; 9" cemented at 6320', perforated 5672'-5620', cemented through perforations 5569'-5610', shot 5690'-5710', reperfornated 5672'-5620'; 6½" landed at 6823', including 540' perforated on bottom, pulled from 6100'. Proposed to clean out plug at 5674'; perforate 9" about 5930'-5950'; test for production. Decision: Proposal is approved provided division is informed of results of tests after perforating 9" as proposed; additional requirements may be outlined at that time.
- Associated Oil Co. well No. "Fulton" 4. (Report No. P 1-27288.) Proposal to alter casing approved. Conditions: Depth 8330', plugged to 8038'; 9" cemented at 7032'; 6½" and 7" cemented at 7602'; 5" cemented at 7850'. Proposed to clean out with bailer to plug at 8038' or as far below 5" shoe as possible; dump cement from bottom of clean-out depth up to at least 7830', having division witness location of cement plug at about 7830'; cut and pull 5" from not lower than 7580' and 7" and 6½" from not lower than 7012', capping each stub with at least 20' cement; file notice covering additional work in upper part of well.
- Associated Oil Co. well No. "Fulton" 4. (Report No. T 1-27379.) Inspection of cementing operations. Hole could not be cleaned out with bailer below 7894', 8 sacks cement dumped in stages starting at 7894'; water was run in hole while cementing. Inspector noted bailer would not spud below 7826' and brought up sample of set cement. Location and hardness of cement plug at 7826' are approved.
- Pedro Petroleum Corp. well No. "Fulton" 3. (Report No. T 1-27411.) Inspection of mudding operations. During ¼ hr. circulation test mud fluid was lost from pit at rate of 2 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 7" at 4240'.
- Pedro Petroleum Corp. well No. "Fulton" 3. (Report No. T 1-27436.) Bailing test approved. 7" casing cemented at 4240'. Hole bailed to 2500' for test and stood 1½ hr. No fluid entered well.
- Standard Oil Co. well No. "Walker Community" 7. (Report No. P 1-27342.) Proposal to abandon approved. Conditions: Depth 4571'; 13" froze at 1760'; 8½" cemented at 3975'; 6½" cemented at 4213', 4½" froze at 4555', perforated 4220'-4555', reperfornated 4220'-4533'. Junk: About 22' of 2½" bailer inside 4½" casing 4533'-4555'. Proposed to clean out to 4533' if possible; plug with cement 4533'-4190', running water in hole while dumping cement to apply pressure, and notify division to witness this plug; cut and pull 4½" from about 4190', or above if necessary, and 6½" from about 3950', capping each stub with 20' cement; fill hole with fluid; cut and pull 8½" from 1740' or above, cap stub with 20' cement, and have division witness plug; fill hole with fluid, hang wood plug inside 13"

- casing 10' below cellar floor, and fill to cellar floor with cement; weld plate on 13" at cellar floor and abandon well; remove wood rig and equipment.
- Standard Oil Co well No "Walker Community" 12. (Report No T 1-27397.) Inspection of cementing operations. Hole cleaned out to 4645' and 38 sacks cement dumped in stages. Inspector noted bailer would not spud below 4519' and brought up sample of set cement. Location and hardness of cement plug at 4519' are approved.
- Standard Oil Co. well No. "Weisel" 4. (Report No. P 1-27335.) Proposal to alter casing approved. Conditions: Depth 4650', cement plugs 4500'-4525' and 4565'-4610', 6½" cemented at 4364'; 4¾" landed at 4637', bottom 267' perforated. Proposed to install cable tools; clean out to 4500', re-perforate 4¾" oil string 4370'-4500', swab perforations, and return to production; if not commercially productive, file supplementary notice covering further work.
- The Texas Co. well No. "Matern Two" 12. (Report No. P 1-27391.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 7900'; 11¾" cemented at 4155', 7" cemented at 7654', 5" landed at 7893', perforated 7681'-7893'. Proposed to plug to 7654' under pressure and have plug witnessed, continue plug to 7634'; cut and pull 5" from 7634' and cap stub with 20' cement; perforate 7" in lower Meyer zone. Decision. Proposal is approved provided division is advised of results of production tests after perforating as proposed; additional requirements may be outlined at that time.
- The Texas Co. well No. "Matern Three" 11. (Report No. T 1-27375.) Inspection of cementing operations. Hole cleaned out to 6879'; 20 sacks cement pumped in through tubing hung at 6874', filling to 6552'; 45 sacks cement pumped in through tubing hung at 6550' and 6505'. Inspector noted bailer would not spud below 6335' and brought up sample of set cement. Location and hardness of cement plug at 6335' are approved.
- The Texas Co. well No. "Matern Three" 11. (Report No. P 1-27390.) Supplementary proposal to plug and alter casing approved provisionally. Conditions: Top of cement plug at 6335'; 5" cut and pulled from 6195' and capped to 6161' with cement. Proposed to perforate lower Buckbee zone 5980'-6020' and test; if unproductive, follow plan outlined in proposal dated Sept 18, 1934, after cementing off Buckbee zone perforation. Decision: Proposal is approved provided that: (1) Division is notified to witness location and hardness of cement plug at 5960'. (2) In all other respects work is done as per Report No. P 1-27265, Sept., 1934.
- The Texas Co. well No. "Matern Three" 15. (Report No. P 1-27349.) Proposal to plug and alter casing approved provisionally. Conditions. Depth 7975'; 11¾" cemented at 4179'; 7" cemented at 7740'; 5" landed at 7970', including 229' perforated. Proposed to clean out to bottom and plug with cement to 7720'; cut and pull 5" from 7720'; perforate 7" 4590'-4580' and test. Decision. Proposal is approved provided that: (1) Proposed plugging is done under as much pressure as possible. (2) Plug at 7720' is continued to at least 20' above 5" stub. (3) Division is notified to witness location and hardness of cement plug at 7720'. (4) Division is informed of results of tests after perforating 4590'-4580'; additional requirements may be outlined at that time.
- The Texas Co. well No. "Standlee" 3. (Report No P 1-27409.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 5027'; 8¾" cemented at 3655'; 6¾" cemented at 4980'; 64' of 5" landed at 5021', including 48' perforated. Proposed to clean out to bottom and plug to 4979', having plug witnessed; continue plug to 4950'; perforate 6¾" 4605'-4625' and test for production. Decision. Proposal is approved provided that: (1) Proposed plug at 4979' is continued to at least 20' above top of 5" liner. (2) Division is notified to witness location and hardness of cement plug at 4979'. (3) Supplementary notice is filed covering further work if well is wet after perforating as proposed.
- The Texas Co well No. "Standlee" 3 (Report No. T 1-27476.) Inspection of cementing operations. Hole cleaned out to 5027' and 20 sacks cement dumped in stages; hole kept full of fluid during cementing operations. Inspector noted bailer would not spud below 4948' and brought up sample of set cement. Location and hardness of cement plug at 4948' are approved.
- Union Oil Co. well No. "Alexander" 10. (Report No. P 1-27353.) Proposal to plug and alter casing approved. Conditions: Depth 6800'; 6½" cemented at 5548'; 4¾" froze and cemented at 6032'; 3" cemented at 6300'; well wet. Proposed to clean out as far as possible below 6300'; plug with thin cement under hydrostatic head to 6300' and have division test plug; continue plug above 6280'; perforate 3" x 4¾" casing 5900'-5910'; test on production; if wet, plug from below 5920' to 5870' and have division test; cut and pull 3" x 4¾" casing as low as possible and cap stub; file new proposal covering future perforations.
- Union Oil Co well No. "Bell" 9 (Report No. P 1-27352.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 4775', cement plug 4761'-4561'; 8¾" cemented at 3470', drilled through at 3257', 6¾" cemented at 4062'; 783' of 4¾" landed at 4768', including 28' perforated, cemented through perforations at 4737', perforated and plugged 4651'-4674' and 4605'-4594', perforated 4468'-4163' and 4112'-4073'. Proposed to plug to 4062' with cement, having division test plug; continue plug to 3980'; perforate and test by stages 3955'-3965', 3845'-3860', 3715'-3735' and 3650'-3670'; plug each stage, if wet, to 30' above top of perforations; have division test plug at stage below which production

DIVISION OF OIL AND GAS

- obtained Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at about 3630'
- Union Oil Co. well No. "Bell" 9. (Report No. T 1-27443) Inspection of cementing operations. 6 sacks cement dumped on cement plug at 4561', 55 sacks cement dumped in stages starting at 4500'; water was run in hole during cementing operations. Inspector noted bailer would not spud below 4033' and brought up sample of set cement. Location and hardness of cement plug at 4033' are approved.
- Union Oil Co. well No. "Bell" 65. (Report No. T 1-27369) Inspection of cementing operations. Hole cleaned out to 3722', 30 sacks cement pumped in through drill pipe hung at 3720'; excess cement circulated out with drill pipe hung at 3620', set cement drilled out 3624'-3687'. Inspector noted bailer would not spud below 3687' and brought up sample of set cement. Location and hardness of cement plug at 3687' are approved.
- Union Oil Co. well No. "Bell" 67. (Report No. T 1-27363) Inspection of operations for demonstrating that 13 $\frac{3}{8}$ " casing is water-tight. Inspector noted well closed in under 545 lb pressure, after  $\frac{1}{4}$  hr. pressure was 510 lb. Casing test is approved.
- Union Oil Co. well No. "Bell" 67. (Report No. T 1-27422) Inspection of mudding operations. During  $\frac{1}{2}$  hr circulation test mud fluid was lost from pit at rate of 5 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 4060'.
- Union Oil Co. well No. "Bell" 67. (Report No. T 1-27445.) Bailing test approved. 8 $\frac{3}{8}$ " cemented at 4057'. Hole bailed to 2510' for test and stood 12 hr. No fluid entered well.
- Union Oil Co. well No. "Bell" 68. (Report No. P 1-27298.) Proposal to drill approved provisionally. Conditions: Well is 378' S and 940' W. of NE section corner. Proposed to cement 13 $\frac{3}{8}$ " at 950', cement 8 $\frac{3}{8}$ " at 3675'; land 6 $\frac{3}{8}$ " perforated liner at 3750', drill with rotary tools. Decision: Proposal is approved provided that (1) (a) Mud fluid of not less than 70 lb. per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{3}{8}$ " are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Column of mud fluid back of 8 $\frac{3}{8}$ " is maintained to surface for at least 30 days after cementing casing. (5) Division is notified to witness test of 13 $\frac{3}{8}$ " surface casing, final mudding operations before cementing 8 $\frac{3}{8}$ ", and bailing test of 8 $\frac{3}{8}$ " shut-off.
- Union Oil Co. well No. "Bell" 68. (Report No. T 1-27444) Inspection of operations for demonstrating that 13 $\frac{3}{8}$ " surface casing is water-tight. Inspector noted 510 lb pressure applied; after  $\frac{1}{4}$  hr. pressure was 500 lb. Casing test is approved.
- Whittier Santa Fe Springs Oil Co. well No. "Alexander" 2. (Report No. P 1-27307) Supplementary proposal to deepen approved provisionally. Conditions: Depth 4492', cement plug 4488'-4450', 8 $\frac{3}{8}$ " cemented at 4052', 501' of 6 $\frac{3}{8}$ " liner landed at 4488', perforated 4238'-4488'; well wet. Proposed to drill out cement plug to 4475'; shoot with cavity shot 4455'-4475', clean out hole to 4475' and plug with cement 4475'-4450'; notify division to witness location and hardness of cement plug at 4450', put on production. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4450'.
- Whittier Santa Fe Springs Oil Co. well No. "Alexander" 2. (Report No. T 1-27416) Inspection of cementing operations. Cement plug at 4450' drilled out to 4475' and 3 sacks cement dumped; hole shot in wet cement 4470'-4460', hole cleaned out to 4475' and 4 sacks cement dumped. Inspector noted bailer would not spud below 4450' and brought up sample of set cement. Location and hardness of cement plug at 4450' are approved.
- Wilshire Oil Co., Inc. well No. "Wilshire-Julian" 6. (Report No. P 1-27398) Proposal to abandon approved provisionally. Conditions: Depth 4656'; 15 $\frac{1}{2}$ " cemented at 1000', 8 $\frac{1}{2}$ " cemented at 4370'; 4 $\frac{1}{2}$ " landed at 4656', including 268' perforated, pulled from 4310', 8 $\frac{1}{2}$ " collapsed at 4170' with junk and tools below, unable to sidetrack, plugged with cement to about 4100'. Proposed to clean out to hard cement at about 4100', having plug witnessed, shoot and pull 8 $\frac{1}{2}$ " from 980' and cap stub with 20' cement, having plug witnessed, fill all portions of hole not cemented with heavy mud or sand, cap at surface and abandon. Decision: Proposal is approved provided division is notified to witness shooting and cementing operations, and location and hardness of cement plugs at 4100' and about 960'.

SEAL BEACH FIELD

T. 5 S., R. 12 W., S. B. B. and M.

- Sec. 3—Continental Oil Co. well No. "McGrath" 4. (Report No. P 1-27374) Proposal to plug approved. Conditions: Depth 5645', plugged to 5440', 8 $\frac{3}{8}$ " cemented at 4739'; 6 $\frac{3}{8}$ " cemented at 5240', 203' of 4 $\frac{1}{2}$ " perforated liner landed at 5440'. Proposed to plug with cement inside 4 $\frac{1}{2}$ " liner 5440'-5270' and test for location and hardness, put on production.
- Pacific Western Oil Co. well No. "Bryant" 6-A. (Report No. P 1-27357) Supplementary proposal to abandon approved provisionally. Conditions: Depth 5475', cement plug 5475'-5235'; 16" at 542', 9" 4641'; 6 $\frac{3}{8}$ " at 5448', perforated 5448'-4991', cemented through perforations at 4991', shot 5260'-5265' and plugged 5448'-5255'. Proposed to clean out to 5255'; plug with cement 5255'-4970'; cut and pull 6 $\frac{3}{8}$ " from not lower than 4620' and

9" from not lower than 520', capping each stub with cement, cap 16" with welded plug at surface and abandon Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4970' and on 9" stub.

Ring Petroleum Corp well No. 16. (Report No. P 1-27285.) Supplementary proposal to plug and alter casing approved provisionally. Conditions 4½" and 6½" liners perforated 4667'-4657'; well wet. Proposed to place wood plug in 4½" liner at 4680'; fill with cement to top of liner at 4456', and continue 20' above, bail to see if water shut off, have plug witnessed, perforate 8½" 4220'-4240'; try to secure dry gas well. Decision: Proposal is approved provided that: (1) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Division is notified to witness location and hardness of cement plug at 4400'.

Ring Petroleum Corp well No. 16 (Report No. T 1-27405.) Inspection of cementing operations 25 sacks cement dumped on wood plug driven into 4½" liner to 4680' and 550 lb pressure applied Inspector noted bailer would not spud below 4427' and brought up sample of set cement Location and hardness of cement plug at 4427' are approved

Trinity Oil Corp, Ltd., well No. "Fueller" 1. (Report No. P 1-27355) Proposal to plug and alter casing approved provisionally. Conditions Depth 5414', cement plugs 5061'-5041', 4751'-4418', and unknown depth to 4390', 8½" cemented at 4650', perforated 4465'-4397'; 6½" cemented at 5089', perforated 4720'-4660' and 4465'-4397', pulled from 3100'; 4½" landed 5061'-5414', perforated 5108'-5414', hole cleaned out to 4365' where unknown iron and junk found Proposed to plug with cement to about 4250'; perforate in stages starting at about 4250' for gas production. Decision: Proposal is approved provided that: (1) Cement plug proposed 4365'-4250' is placed under pressure if possible (2) Division is notified to witness location and hardness of cement plug at 4250'.

Trinity Oil Corp, Ltd., well No. "Fueller" 1. (Report No. T 1-27439.) Inspection of cementing operations 8 sacks cement dumped on iron junk at 4365'; bailer would not run below bad place in 6½" at 4165', 4 sacks cement dumped at 4165'. Inspector noted bailer would not spud below 4142' and brought up sample of set cement. Location and hardness of cement plug at 4142' are approved.

Sec. 11—Associated Oil Co. well No "Bryant" 12. (Report No. T 1-27419.) Inspection of mudding operations During ¾ hr. circulation test mud fluid was lost from pit at rate of 1 bbl per hr; cement bridge at reported depth of 5843' held part of weight of drill pipe Mudding operations are approved Oral approval is hereby confirmed to cement 6½" at 5843'.

Associated Oil Co well No. "Bryant" 12. (Report No T 1-27459) Shut-off test approved. 6½" casing cemented at 5845'. Inspector noted wall packer set at reported depth of 5832'; while tester valve open for 39 min considerable air issued from drill pipe during first 5 min, fluid between drill pipe and 6½" casing remained stationary during test, when pulled, drill pipe contained 25 bbl. of very heavy gas-cut mud above tester, fluid sample from bottom of drill pipe tasted fresh, sample from perforated nipple below tester was sand Shut-off is approved

### TORRANCE FIELD

T. 3 S, R 14 W., S. B. B. and M.

Sec 31—Aron H. Hover Organization well No. "Bryant" 1. (Report No T 1-27449.) Inspection of mudding operations. Inspector noted cement plug at 3259' held part of weight of drill pipe; during ¾ hr. circulation test mud fluid was lost from pit at rate of 1 bbl per hr. Mudding operations are approved Oral approval is hereby confirmed to cement 8½" at 3220'

General Petroleum Corp well No. "Carson" 5. (Report No. P 1-27365) Proposal to redrill oil string approved provisionally Conditions Depth 3375'; 10" cemented at 2900'; 6½" landed at 3368', perforated 2912'-3368', reported collapsed at 2943' Proposed to pull 6½" from as far below 10" shoe as possible, redrill to 3375' and finish with 6½" oil string Decision: Proposal is approved provided that (1) 6½" to be sidetracked is plugged with cement as far as possible (2) Division is notified to witness production test 30 days after recompleting well

Standard Oil Co well No "Kirk Community" 4. (Report No T 1-27372) Inspection of cementing operations. Well cleaned out to 3281' and 64 sacks cement dumped in stages, each third run was treated with quick-setting chemical, water was run, in hole while cementing Inspector noted bailer would not spud below 3065' and brought up sample of set cement. Location and hardness of cement plug at 3065' are approved

Standard Oil Co well No "Kirk Community" 4 (Report No T 1-27385) Inspection of cementing operations 8½" ripped 2850'-2872' and 2848'-2880', pulled from 2848', wood plug driven in stub and 18 sacks cement dumped in stages filling to 2805'; 10½" ripped 773'-800' and 760'-775', shot and pulled from 734', wood plug driven in stub and 61 sacks cement dumped in stages. Inspector noted bailer would not spud below 694' and brought up sample of set cement. Location and hardness of cement plug at 694' are approved

Sec 15—Chanslor-Canfield Midway Oil Co well No "Torrance" 55 (Report No P 1-27339) Proposal to redrill oil string approved. Conditions: Depth 3725'; 8½" cemented at 3235'; 6½" landed at 3725', including 478' perforated, bad at 3360'. Proposed to shoot or cut off 6½" at 3285', pull, and redrill to original bottom; land new oil string.

- Sec. 24—Ed. Pietzschke & J. D. Phalen well No. "Thomas" 1. (Report No. P 1-27323) Proposal to redrill oil string approved provisionally. Conditions: Depth 3900'; 10" cemented at 3625'; 8½" landed at 3900', perforated 3634'-3900', cemented through perforations at 3633', casing tight at 2700'. Proposed to cut and pull 8½" at vibration point; redrill, carrying 6½" casing 3650'-3900'; land 6½" liner 2600'-3900' and complete well. Decision: Proposal is approved provided that: (1) 6½" is pulled from at least 3650'. (2) 6½" casing below 3650' is plugged with cement if possible. (3) Division is notified to witness bailing test of 10" shut-off and production test 30 days after recompleting.
- Ed. Pietzschke & J. D. Phalen well No. "Thomas" 1. (Report No. P 1-27359.) Supplementary proposal to redrill oil string approved provisionally. Proposed to cut and pull 8½" from 1670'; redrill 3650'-3900', carrying 6½", or with rotary tools; complete with full string of 6½" landed at 3900'; cement through perforations at 3640' Decision: Proposal is approved provided division is notified to witness production test after redrilling is completed.

### LOS ANGELES COUNTY

T. 1 S., R. 11 W., S. B. B. and M.

- Sec. 11—Andrus & Hutcheson, Inc., well No. "A & H." 1. (Report No. P 1-27292.) Proposal of Midway Supply Co. to abandon approved provisionally. Prospect well.

T. 2 S., R. 10 W., S. B. B. and M.

- Sec. 14—N. O. Shively well No. "Shively" 1. (Report No P 1-27283) Proposal to drill approved provisionally. Conditions: Well is 275' N. of center line of Graziade Road and 2450' W. of center line of Nogales St. Estimate oil sand at 2200'. Proposed to cement 12½" at 250'; land or cement 8½" at depth to be determined by coring; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) At least 500' of conductor casing is cemented in hole. (3) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (4) Hole is cored, starting not lower than 2300', and hole is not drilled below 2500' without consulting division. (5) Supplementary notice is filed before cementing or landing any additional casing. (6) Division is notified to witness test of 12½" surface casing and all cores taken.

T. 2 S., R. 11 W., S. B. B. and M.

- Sec 19—Midfield Oil Co. well No. "Midfield-Walker" 1. (Report No. T 1-27368.) Inspection of cementing operations. 30 sacks cement dumped at 1025'. Inspector noted bailer would not spud below 982' and brought up sample of set cement. Location and hardness of cement plug at 982' are approved.



## DISTRICT No. 2

## BARSDALE FIELD

T 3 N., R. 19 W., S. B. B. and M.

Sec. 5—Daniel Fisher well No. "Elkins" 4. (Report No P 2-3209) Proposal to drill approved provisionally. Conditions: Well is 600' S. and 250' W. of center of section. Estimate oil sand at 600'. Proposed to cement 15" at 150'; cement 12" at depth to be determined by coring; drill with cable tools. Decision: Proposal is approved provided that: (1) Casing is cemented at depth and in manner to protect any fresh strata from contamination from oil or other detrimental mineral fluids. (2) All upper waters are shut off by landing and cementing solid string of casing above first possible commercial oil or gas zone. (3) All needed equipment is provided and necessary precautions taken to prevent blow-outs. (4) Division is notified before drilling below 600' or landing or cementing any casing below that depth, and to witness bailing test of each possible water string.

## OJAI FIELD

T. 4 N., R. 23 W., S. B. B. and M.

Sec. 13—Continental Oil Co. well No. "Pirie" 1. (Report No P 2-3219) Proposal to drill approved provisionally. Conditions: Well is 2664' S. and 2652' W. of NE. corner of Lot 9, Bard's Subdivision. Estimate oil sand at 1000'-2000'. Proposed to cement 13 $\frac{3}{8}$ " conductor at 300'; further casing program to depend upon oil showings worthy of testing and ability to drill open hole or necessity of carrying casing. Decision: Proposal is approved provided that: (1) Casing is cemented at depth and in manner to protect any fresh water strata from contamination from oil or other detrimental mineral fluids. (2) All upper waters are shut off by landing and cementing string of casing above first possible commercial oil or gas zone. (3) All needed equipment is provided and precautions taken to prevent blow-outs. (4) Division is notified before drilling below 1000' or landing or cementing any casing below that depth, and to witness bailing test of each possible water string.

Sec. 27—A. N. Macrate well No. "Riva-Kosmon" 1. (Report No. T 2-2420.) Inspection of cementing operations. 15 sacks cement dumped on bridge at 4966', filling to 4971'; 7" pulled and tubing circulated as far as possible (4965'); 50 sacks cement pumped in through tubing hung at 4965'. Deputy noted tubing set down to solid plug at reported depth of 4900'. Operations are approved as indicating satisfactory cement plugs have been placed 4966'-4971' and 4965'-4900'. Note: Approval is given with understanding that supplementary notice will be filed at once covering placing of plug 4965'-4900'.

## PIRU FIELD

T. 4 N., R. 18 W., S. B. B. and M.

Sec. 4—Bolsa Chica Oil Corp well No "Snow" 2. (Report No P 2-3210) Proposal to drill approved provisionally. Conditions: Well is 200' S. and 417.76' W. of NE corner of Lot 5. Estimate oil sand at 2470'. Proposed to cement 18" at 100'; cement 16" at 850'; cement 13 $\frac{3}{8}$ " at 1600'; cement 10 $\frac{3}{4}$ " at 2460'; land 6 $\frac{3}{8}$ " at 2700'. Decision: Proposal is approved provided that: (1) All water suitable for irrigation or domestic purposes is protected from infiltration of detrimental substances. (2) All needed equipment is provided and necessary precautions taken to prevent blow-out. (3) Formations left back of 13 $\frac{3}{8}$ " and 10 $\frac{3}{4}$ " water strings are satisfactorily sealed with mud and cement. (4) Division is notified before landing and cementing 13 $\frac{3}{8}$ " and 10 $\frac{3}{4}$ ", and to witness bailing tests of 13 $\frac{3}{8}$ " and 10 $\frac{3}{4}$ " shut-offs and bailing or pressure test of 16" shut-off.

T. 5 N., R. 18 W., S. B. B. and M.

Sec. 33—Jacob F. Kaar well No. "Kaar" 1. (Report No. T 2-2416.) Inspection of operations of J. H. Gilbertson for purpose of noting depth of open hole and fact that plug has been placed on top of 10" casing. Deputy noted plug with 2" nipple and gate valve was screwed in collar of 10" casing; small amount of water flowed from valve; line with iron weight on bottom was lowered to 32' where it stopped on some solid obstruction. Operation is approved as indicating well is being left in condition to be used as water well.

Jacob F. Kaar well No. V-27. (Report No. T 2-2417.) Inspection of cementing operations of J. H. Gilbertson. Prospect well.  
Jacob F. Kaar well No. V-27. (Report No. T 2-2422.) Inspection of cementing operations of J. H. Gilbertson. Prospect well.

## RINCON FIELD

T 3 N, R 24 W, S. B. B. and M.

- Sec. 7—Honolulu Oil Corp, Ltd, well No 56-1 (Report No P 2-3211) Supplementary proposal to redrill oil string approved. Conditions: Depth 3016', plugged to 3004'; cement bridge 2933'-2924'; 13 $\frac{3}{4}$ " cemented at 2918'; recemented nine times, using 1900 sacks cement, and final pressure 700-1475 lb; 9" perforated liner 2933'-3004', pulled from 2933'. Proposed to drill out cement bridge and sidetrack 9" liner to 2936'; cement 70' of blank liner at 2936'; redrill to 3000' and land 6 $\frac{5}{8}$ " perforated liner at 3000', notify division to witness production test after recompleting well
- Sec. 8—Chansior-Canfield Midway Oil Co. well No. "Hobson" C-5. (Report No. T 2-2407.) Bailing test approved. 11 $\frac{3}{4}$ " casing recemented at 3193' Hole bailed to 1500' for test and stood 24 hr Fluid level rose at rate of 2 bbl. in 24 hr Fluid from bottom was very thick mud.
- Richfield Oil Co. well No. "Hobson" 4. (Report No T 2-2409) Bailing test. Decision deferred. 8 $\frac{5}{8}$ " casing recemented at 4200'. Hole swabbed to 3226' for test and stood 14 hr. Deputy noted gas flowing from tubing, and gauge on casing head showed 170 lb casing pressure; top of fluid in tubing located at 2600', and sample of fluid was thick oily gassy mud Company later reported that after releasing all pressure on casing head top of fluid was found at 3100', indicating about 125' rise in about 18 hr, or at rate of 7.5 or 10 bbl. per 24 hr, this rise probably due to entry of oil and gas action on mud in hole; hole was filled with mud, tubing pulled, and bailer was run to 4188' where bridge found; sample from bottom was nearly all oil Test is not entirely conclusive but indicates 8 $\frac{5}{8}$ " shut-off is probably effective. Decision on shut-off is deferred pending results of production test to be made before deepening below 4221'
- Richfield Oil Co well No. "Hobson" 4. (Report No. T 2-2423) Production test approved 8 $\frac{5}{8}$ " casing recemented at 4200' Deputy noted well producing on gas lift, lead line sample had 25.8° A P I gravity, and cut 2 mud and no water Pressures were casing, 60 lb; tubing, 0 Shut-off is approved

## SIMI FIELD

T 2 N., R. 17 W, S. B. B. and M

- Sec. 6—American Drilling Co well No. 10-A (Report No T 2-2408.) Bailing test approved. 90' of 4 $\frac{1}{2}$ " and 174' of 6 $\frac{1}{4}$ " casing cemented at 264'. Hole bailed to 270' for test and stood 18 hr. No fluid entered well

## VENTURA FIELD

T 3 N., R. 23 W, S. B. B. and M.

- Sec 22—Associated Oil Co well No "Hartman" 19. (Report No. P 2-3217.) Supplementary proposal to drill approved provisionally. Conditions: Depth 98' Proposed to cement 18 $\frac{3}{4}$ " at 1000'; cement 11 $\frac{3}{4}$ " at 6500'; decide remainder of program after cementing 11 $\frac{3}{4}$ " Decision: Proposal is approved provided that: (1) Hole is kept full to surface at all times with mud fluid weighing not less than 70 lb. per cu. ft. and adequate blow-out prevention equipment is provided and ready for operation at all times (2) Water is shut off by landing and cementing 11 $\frac{3}{4}$ " above first commercial oil zone, and coring for such zone is started at not deeper than 5650'. (3) Formations left back of 11 $\frac{3}{4}$ " are sealed with mud as demonstrated by satisfactory open hole circulation test (4) Division is notified before drilling below 6200' or running 11 $\frac{3}{4}$ " in hole, and to witness circulation test noted above and 11 $\frac{3}{4}$ " shut-off test
- Sec. 23—Associated Oil Co. well No "McGonigle" 5 (Report No. P 2-3213.) Supplementary proposal to drill approved provisionally. Conditions: Depth 6363'; 22" cemented at 112', 16" cemented at 1973'; hole crooked and plugged with cement 6363'-5453'; hole redrilled 5453'-6175'. Proposed to cement 9" at 6175'; land 5 $\frac{3}{8}$ " perforated liner at 7000'. Decision: Proposal is approved provided that: (1) Hole is cored below 6850' to determine probability of edgewater which may be found 6900'-7000'. (2) Division is notified to witness 9" shut-off test and as to core data obtained before running in perforated liner
- Associated Oil Co. well No. "McGonigle" 5. (Report No. T 2-2413.) Inspection of mudding operations. During  $\frac{3}{4}$  hr test mud loss was at rate of 10 bbl. per hr. Mudding of formations 1973'-6170' is satisfactory.
- Associated Oil Co. well No "McGonigle" 5. (Report No. T 2-2415.) Shut-off test approved. 9" casing cemented at 6175'. Deputy noted Johnston tester run in on 4" drill pipe and packer set at reported depth of 6165'; while test valve open for  $\frac{3}{4}$  hr small flow of air issued from drill pipe, and space between drill pipe and casing remained full of mud; when test valve closed and packer freed  $\frac{3}{4}$  bbl. of fluid was required to refill casing; when pulled, drill pipe contained 88' of fluid, which with fluid in two drill collars was computed at 1 $\frac{1}{2}$  bbl; this fluid was all thin mud; fluid samples from drill pipe from 44' from top, 88' from top, and from bottom, tested 147.6, 147.6, and 150.7 gr. salt per gal, respectively. Later reported that after running drill pipe to point below 9" shoe 900 lb pressure was applied to 9" casing and shut-off, but no fluid could be forced away. Shut-off is approved.

Sec. 24—Property Service Corp, Ltd, well No "Dabney-Lloyd" 3 (Report No T 2-2414) Inspection of mudding operations During  $\frac{1}{2}$  hr. circulation test mud loss was at rate of 16 bbl per hr Mudding of formations 1195'-6850' is satisfactory.

Property Service Corp., Ltd, well No "Dabney-Lloyd" 3. (Report No. T 2-2418.) Shut-off test approved 11 $\frac{1}{2}$ " casing cemented at 6855'. Deputy noted Johnston testing device run in and packer set at reported depth of 6841'; while test valve open for  $\frac{1}{2}$  hr. space between drill pipe and casing remained filled with mud, and air flowed from drill pipe in first 5 min., was barely perceptible in next 10 min., and ceased in last 15 min; when test valve closed and packer released 2 bbl of fluid was required to refill casing, when pulled, drill pipe contained 8 2 bbl of very thick gas-cut mud fluid, top and bottom samples being slightly thinner than two intermediate samples; samples filtered from fluid from 44' and bottom tested 179 and 188 gr. salt per gal., respectively; after standing all night practically no water filtered from samples from 220' and 396' so no salt test could be made, drill pipe measurement showed hole open to 6862'; 1000 lb pressure held in 11 $\frac{1}{2}$ " casing and shut-off for  $\frac{1}{2}$  hr., but no fluid could be forced away. Shut-off is approved

Sec 26—Associated Oil Co. well No "Lloyd" 92. (Report No. P 2-3218) Proposal to drill approved provisionally. Conditions: Well is 622' S and 6226' E. of Rancho Canada Larga Corner No. 11. Estimate oil sand at 6100' Proposed to cement 18 $\frac{1}{2}$ " at 200'; cement 13 $\frac{3}{4}$ " at 1200'; cement 9" at 6100'; land 6 $\frac{1}{2}$ " liner at 6650'. Decision: Proposal is approved provided that: (1) Hole is kept full to surface at all times with mud fluid weighing not less than 70 lb per cu ft, and adequate blow-out prevention equipment is provided and ready for operation at all times (2) 9" is cemented above first commercial oil zone encountered, and coring is started not deeper than 5950' to locate this zone and proper 9" cementing point (3) Formations left back of 9" water string are sealed with mud as demonstrated by open hole circulation test. (4) Division is notified before running 9" in well or drilling below 6200', and to witness mudding test required above and satisfactory 9" shut-off test

Sec 27—Associated Oil Co. well No "Lloyd" 134. (Report No. T 2-2410.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud loss was at rate of 3 bbl per hr. Mudding of formations 7064'-8344' is satisfactory.

Associated Oil Co. well No "Lloyd" 134. (Report No. T 2-2411.) Shut-off test approved. 8 $\frac{1}{2}$ " casing cemented at 7982'. Deputy noted Johnston tester run in on 4" drill pipe and packer set at reported depth of 7972'; while test valve open for  $\frac{1}{2}$  hr. air flowed from drill pipe for first 3 to 5 min. and then ceased, and space between drill pipe and casing remained filled with fluid; when test valve closed and packer released  $\frac{1}{2}$  bbl. of fluid was required to refill space between drill pipe and casing, when pulled, drill pipe contained 18 bbl of fluid; fluid samples from drill pipe were: top, thick mud, 33' down, thick mud; bottom, very thick mud; same showed 276 gr. salt per gal. in each case. Shut-off is approved. Note: 8 $\frac{1}{2}$ " casing froze and was cemented at 7982' instead of being cemented at 8150' as proposed, therefore supplementary proposal should be filed outlining plans

Sec. 28—General Petroleum Corp. well No. "Notten" 13 (Report No P 2-3214.) Supplementary proposal to drill approved provisionally Conditions: Depth 7491'; 22" cemented at 909'; 16" cemented at 3775' Proposed to cement 9" at 7470'; finish well with 6 $\frac{1}{2}$ " cemented at about 9000' and perforate opposite best looking oil sands found between 8100' and 9000'. Decision: Proposal is approved provided that. (1) Formations left back of 9" are sealed with mud as demonstrated by satisfactory open hole circulation test. (2) Well is cored practically continuously below 8100' (3) 6 $\frac{1}{2}$ " is cemented with enough cement to reach to 9" shoe, and hole is kept full of mud between 9" shoe and 6 $\frac{1}{2}$ " casing for 30 days after cementing 6 $\frac{1}{2}$ " (4) Division is notified to witness 9" shut-off test and mudding test noted above, and as to core data obtained 8100'-9000' and location of top of hard cement inside 6 $\frac{1}{2}$ " before perforating that string Division also suggests that balling test be made of 6 $\frac{1}{2}$ " casing before perforating. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Shell Oil Co well No "Gosnell" 32. (Report No T 2-2405) Inspection of operations for demonstrating the effectiveness and locating top of cement plug proposed below 7375'. Hole cleaned out to 7647' and 40 sacks cement pumped in through tubing hung at 7647', top of cement at 7612'; 50 sacks cement pumped in through tubing hung at 7607' under 1100 lb final pressure; fluid inside 5 $\frac{1}{2}$ " balled to 3500'. Deputy noted top of fluid (water) at 3515' after standing 15 hr.; solid plug found at 7247' and bailer brought up pieces of cement from that depth. Operation is approved as indicating cement plug 7647'-7247' is effective.

Shell Oil Co well No "Gosnell" 32. (Report No. T 2-2419) Production test. Decision deferred. 5 $\frac{1}{2}$ " casing cemented through perforations at 7040'. Deputy noted well flowing on gas lift; lead line sample cut 71.8% water and 2% mud; water tested 1214 gr. salt per gal; pressures were: tubing, 80 lb.; casing, 550 lb. Decision on productivity of formations 7000'-6700' is deferred. Oral approval is hereby confirmed to test next stage above 6700' either after plugging up to 6700' or before such plugging. Notify division to witness another production test after performing additional perforating

Shell Oil Co well No "Gosnell" 35 (Report No P 2-3215) Supplementary proposal to drill approved provisionally. Conditions: Depth 8472'; 9 $\frac{1}{2}$ " cemented at 7149'; 6 $\frac{1}{2}$ " cemented and recemented four times at 8235', last

- reccement job under 4350 lb. final pressure. Proposed to drill to about 9090'; complete with 4½" combination string cemented through perforations at 8915'; core for exact depths. Decision: Proposal is approved provided that: (1) Formations left back of combination string above 8915' are satisfactorily sealed with mud, and enough cement is used in cementing to reach to 6½" shoe (2) Well is cored below present bottom. (3) Division is notified as to core data obtained before running 4½" combination string, and to witness mudding test noted above and production test after combination cementing job Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- Shell Oil Co well No. "Taylor" 77. (Report No. P 2-3220.) Supplementary proposal to drill approved. Conditions: Depth 9482'; 9½" cemented at 6532'; 6½" landed at 9380', perforated 7245'-9380', cemented through perforations at 7245'; tubing cemented at 9194', pulled from 8839'. Proposed to plug with cement 8839'-8739' and make production test. Decision: Proposal is approved. Notify division to witness proposed production test.
- Sec. 29—Shell Oil Co well No. "Taylor" 82. (Report No. T 2-2406.) Inspection of mudding operations. During ¾ hr. test fluid loss was at the rate of 14 bbl. per hr. Mudding of formations 895'-4699' is satisfactory.
- Shell Oil Co well No. "Taylor" 82. (Report No. T 2-2412.) Bailing test approved. 8½" casing cemented at 4700'. Hole swabbed to 3525' for test and stood 13½ hr. Oil entered at rate of 10.6 bbl in 24 hr. Water entered at rate of 18.5 bbl. in 24 hr. Samples of water from 3350' and bottom tested 30.8 and 34.2 gr salt per gal., respectively. Later reported that after pulling tubing 800 lb. pressure was applied to casing and shut-off, no fluid could be forced away. Shut-off is approved.
- Shell Oil Co. well No. "Taylor" 83. (Report No. P 2-3216.) Proposal to drill approved provisionally. Conditions: Well is 2135' S and 9275' W. of Rancho Canada Larga Corner No. 11. Estimate oil sand at 5200'. Proposed to cement 13½" at 900'; cement 8½" at 5200'; land 5½" at 5775'. Decision: Proposal is approved provided that: (1) Hole is kept full to surface at all times with mud fluid weighing not less than 70 lb. per cu. ft., and adequate blow-out prevention equipment is provided and ready for operation at all times (2) 8½" is cemented above first commercial oil zone, coring to locate such zone to begin not deeper than 4500'. (3) Formations left back of 8½" water string are sealed with mud as demonstrated by satisfactory open hole circulation test (4) Division is notified before drilling below 5200' or running 8½" in hole, and to witness mudding test required above, and satisfactory 8½" shut-off test.
- T. 4 N, R. 23 W., S. B. E. and M.
- Sec 33—Kittrell and Tucker well No. 25 (Report No. P 2-3212.) Proposal to drill approved provisionally. Conditions: Well is 120' E. from well No. 24. Proposed to cement 6½" at 163'; complete well at depth determined by drilling data. Decision: Proposal is approved provided that: (1) Top water is shut off by landing and cementing solid string of casing above first commercial oil zone. (2) Any water suitable for domestic or irrigation purposes is protected from infiltration of detrimental substances. (3) Hole is drilled dry if possible below water string (4) Division is notified to witness bailing test of 6½" shut-off, and if, and when, additional water is found below 6½" shut-off.

### VENTURA COUNTY

T. 4 N, R. 25 W, S. B. E. and M.

- Sec. 13—Mrs. Rafaela de Castaneda well No. 1. (Report No T 2-2421.) Inspection of cementing operations. Hole filled with surface clay to 3421'; 3 sacks cement dumped at 3421'. Deputy noted top of fluid at about 480', and bailer spudded on solid plug at 3380' and brought up pieces of hard cement. Cement plug 3421'-3380' is approved.

## DISTRICT No. 3

## CAPITAN FIELD

T. 5 N., R. 30 W., S. B. B. and M.

- Sec. 32—General Petroleum Corp. well No. "Erburu" 11 (Report No. T 3-1138.) Inspection of mudding operations During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of  $1\frac{1}{2}$  bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement  $8\frac{1}{2}$ " at 2380'.  
 General Petroleum Corp. well No. "Erburu" 11. (Report No. T 3-1146.) Shut-off test approved.  $8\frac{1}{2}$ " casing cemented at 2384'. Johnston tester run in and packer set at reported depth of 2376'; while tester valve open for 27 min. space between drill pipe and  $11\frac{1}{2}$ " casing remained filled with mud, and pure gas issued from drill pipe in large amount; when pulled, drill pipe contained 1.75 bbl. of gas-cut mud fluid. Shut-off is approved.  
 Shell Oil Co. well No. "Covarrubias 1" 3. (Report No. T 2-1126.) Inspection of mudding operations During 20 min. circulation test mud fluid was lost from pit at rate of 1.8 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement  $8\frac{1}{2}$ " at 2210'.  
 Shell Oil Co. well No. "Covarrubias 1" 3. (Report No. T 3-1131.) Production test approved.  $8\frac{1}{2}$ " casing cemented at 2211'. During this production test well produced at rate of 330 bbl of fluid per day; flow line sample cut 0.2% sand and tested 42.8° A. P. I. gravity. Pressures were: casing, 300 lb; tubing, 50 lb.

## CAT CANYON FIELD

T. 9 N., R. 33 W., S. B. B. and M

- Sec 23—Gilmore Oil Co well No. 7 (Report No. P 3-2374.) Proposal to abandon approved provisionally. Conditions: Depth 3085', cement plug 3057'-3085'; 20" landed at 80',  $16\frac{1}{2}$ " at 456',  $12\frac{1}{2}$ " at 1312'; 10" cemented at 2395';  $8\frac{1}{2}$ " cemented at 2977'. Proposed to clean out to 3057' or as far as possible; set cement plug 3057'-2957'; pull  $8\frac{1}{2}$ " at 2375' and 10" at 1290', capping each stub with cement; pull  $12\frac{1}{2}$ " at 436' and leave open for water reservoir; perforate  $16\frac{1}{2}$ " and  $12\frac{1}{2}$ " and leave as water well. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plugs at 2957' and 1290'.  
 Gilmore Oil Co well No. 7. (Report No. T 3-1139.) Inspection of cementing operations. Hole cleaned out to 3057' and 22 sacks cement dumped. Deputy noted bailer would not spud below 2938' and brought up sample of set cement. Location and hardness of cement plug at 2938' are approved.  
 Gilmore Oil Co well No. 7. (Report No. T 3-1149.) Inspection of cementing operations.  $8\frac{1}{2}$ " shot and pulled from 2375' and 10 sacks cement dumped, filling to 2355', 10" shot and pulled from 1260' and 15 sacks cement dumped. Bailer would not spud below 1240' and brought up sample of set cement. Location and hardness of cement plug at 1240' are approved.

## ELWOOD FIELD

T. 4 N., R. 29 W., S. B. B. and M.

- Sec 15—Barnsdall Oil Co well No "Doty" 8 (Report No. P 3-2375.) Supplementary proposal to drill approved provisionally. Conditions. Original depth 5737';  $10\frac{1}{2}$ " cemented at 3348', collapsed, cut and pulled from 1134', swaged out and new hole drilled 2988'-3420', again collapsed at 1225';  $8\frac{1}{2}$ " stuck at 3490', top at 3401'. Proposed to plug 1225'-560' with cement and redrill 20" 2550'; cement  $6\frac{1}{2}$ " at 1750', to be determined by coring. Decision: Proposal is approved provided division is notified to witness bailing test of  $6\frac{1}{2}$ " shut-off.  
 Barnsdall Oil Co. well No. "Doty" 8. (Report No. T 3-1150.) Bailing test approved.  $6\frac{1}{2}$ " casing cemented at 1750'. Hole bailed to 1700' for test and stood 12 hr. No fluid entered well.  
 Sec. 16—Pacific Western Oil Co. well No 92-13. (Report No. T 3-1148.) Bailing test approved.  $11\frac{1}{2}$ " casing cemented at 3296'. Hole bailed to 1800' for test and stood 12 hr. Fluid found 23' below reported bailing depth.  
 Signal Oil and Gas Co well No "Appleford 98" 3 (Report No. T 3-1147.) Bailing test approved.  $8\frac{1}{2}$ " casing cemented at 3563'. Hole swabbed to 2000' for test and stood 23 hr. Fluid level rose at rate of 0.1 bbl. in 24 hr.

## LA GOLETA GAS FIELD

T. 4 N., R. 28 W., S. B. B. and M.

- Sec. 20—Shell Oil Co. well No. "Bishop" 1. (Report No. P 3-2378.) Supplementary proposal to drill approved provisionally. Conditions: Depth 4253';  $18\frac{1}{2}$ "

cemented at 999'; cement bridge 4054'-4115'. Proposed to cement 11½" at 4054'; test water shut-off; prospect ahead. Decision: Proposal is approved provided division is notified to witness bailing test of 11½" shut-off.  
Shell Oil Co. well No "Bishop" 1 (Report No T 3-1137) Bailing test approved 11½" casing cemented at 4051'. Hole swabbed to 2550' for test and stood 12 hr. No fluid entered well

### MESA FIELD

T. 4 N, R 27 W, S B B. and M.

- Sec 28—A & B. Oil Co. well No "Caldwell" 1. (Report No T 3-1123) Bailing test approved 6½" casing cemented at 2029'. Hole bailed to 1200' for test and stood 15½ hr. No fluid entered well
- Allied Petroleum Corp well No "Allied" 15 (Report No T 3-1133) Bailing test approved 6½" casing cemented at 2022'. Hole bailed to 1200' for test and stood 11 hr. No fluid entered well
- Allied Petroleum Corp. well No "Allied" 16 (Report No P 3-2373) Proposal to drill approved provisionally. Conditions: Well is 40' N and 50' W of SE corner of Lot 17, Fair Acres on Mesa Tract. Estimate oil sand at 2000'. Proposed to cement 10½" at 100'; cement 6½" at 2000'; core for exact cementing point for water string and finishing depth. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Exact cementing depth for 6½" is determined by coring starting not lower than 2000' (4) 6½" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test (5) Division is notified to witness bailing test of 6½" shut-off.
- E C Arnold Oil Co well No "Adams" 1 (Report No P 3-2377) Proposal to drill approved provisionally. Conditions: Well is 36' S and 134' E of NW corner of Lot 30, Fair Acres Tract. Estimate oil sand at 2000'. Proposed to cement 12½" at 120'; cement 8½" at depth to be determined by coring. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Exact cementing depth for 8½" is determined by coring starting not lower than 2000'. (4) 8½" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test (5) Division is notified to witness bailing test of 8½" shut-off.
- Bastanchury Oil Co well No "Bastanchury" 1 (Report No P 3-2371) Proposal to drill approved provisionally. Conditions: Well is 28' S from N boundary and 36' E from W boundary line (Lease consists of Lot 62, Fair Acres Tract). Estimate oil sand at 1975'. Proposed to cement 12½" at 130'. cement 8½" at 2000'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Exact cementing depth for 8½" is determined by coring starting not lower than 2000' (4) 8½" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test (5) Division is notified to witness bailing test of 8½" shut-off.
- Beloil Corp. Ltd, well No "Martin" 2 (Report No T 3-1142.) Bailing test approved 9" casing cemented at 1983'. Hole bailed to 1200' for test and stood 15½ hr. Fluid level rose at rate of 0 3 bbl in 24 hr
- Fred E Cole well No. "Perkins" 3 (Report No P 3-2370) Proposal to drill approved provisionally. Conditions: Well is 50' N and 60' E of SE corner of Lot 46, Fair Acres. Estimate oil sand at 2020'. Proposed to cement 12½" at 100', cement 5" at 2020'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 5" is determined by coring starting not lower than 2000'. (4) 5" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test (5) Division is notified to witness bailing test of 5" shut-off
- F. E. Fairfield well No 28 (Report No. P 3-2368) Proposal to abandon approved provisionally. Conditions: Depth 2180', 12½" cemented at 207'; 8½" cemented at 2065'; 6½" landed 2021'-2127'; 5" landed 2122'-2180'. Junk: 18' of bailer in hole. Proposed to clean to bailer at 2162'; plug with cement under pressure up into 8½" shoe, notifying division to witness at that point; make pressure mud test on plug at shoe, before shooting casing, plug under and up into surface casing shoe. Decision: Proposal is approved provided that: (1) In addition to work outlined in proposal, cement cap is placed on 8½" stub (2) Division is notified to witness cementing under pressure, pressure mud test, cap on 8½" stub, and plug in surface pipe shoe.
- F. E Fairfield well No. 28. (Report No. P 3-2376.) Supplementary proposal to abandon approved provisionally. Conditions: Hole could not be cleaned out below 1850' due to iron in hole. Proposed to mud under

- 500 lb pressure until hole will take no more fluid, place cement plug 1800'-1850'; fill with heavy mud to surface, cap and abandon; remove no casing from below surface of ground Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 1800'.
- F E Fairfield well No. 28 (Report No T 3-1132.) Inspection of pressure mudding operations. Hole cleaned out to 1850' Deputy noted 500 lb pressure applied to fluid inside 8 $\frac{3}{4}$ " casing for  $\frac{3}{4}$  hr, without pressure loss. Pressure mudding operations are approved.
- F E Fairfield well No 28 (Report No T 3-1134.) Inspection of cementing operations. Hole cleaned out to 1850' and 15 sacks cement dumped. Deputy noted bailer would not spud below 1795' and brought up sample of set cement. Location and hardness of cement plug at 1795' are approved.
- Fair Mesa Oil Co well No "Gray" 1 (Report No T 3-1129.) Bailing test approved. 6 $\frac{3}{4}$ " casing cemented at 1980'. Hole bailed to 1200' for test and stood 19 hr No fluid entered well.
- Fornachon and Wilson, Inc, well No 1 (Report No T 3-1143.) Bailing test Decision deferred. 6 $\frac{3}{4}$ " casing cemented at 1987'. Hole bailed to 1200' for test and stood 12 hr Gas issued from 6 $\frac{3}{4}$ " casing; when bailer withdrawn mud fluid started to flow, making it inadvisable to lower bailer to casing shoe; fluid sample from 1200' was gas-cut mud, sand and oil Test indicates 6 $\frac{3}{4}$ " shut-off is probably effective but is not conclusive due to large fluid rise Decision is deferred pending receipt of production data after completing well.
- W. F. Higgins well No 8 (Report No. P 3-2380) Proposal to drill approved provisionally Conditions: Well is 80' S of N. property line and 26' W. of E. property line of Lot 56 of Fair Acres Estimate oil sand at 2000'. Proposed to cement 10" at 155', cement 6 $\frac{3}{4}$ " at 2000'. Decision: Proposal is approved provided that (1) Mud fluid of not less than 70 lb per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Exact cementing depth for 6 $\frac{3}{4}$ " is determined by coring starting not lower than 2000'. (4) 6 $\frac{3}{4}$ " is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test (5) Division is notified to witness bailing test of 6 $\frac{3}{4}$ " shut-off.
- William Hughes well No. "Hicks" 1 (Report No T 3-1135.) Bailing test approved. 7" casing cemented at 1933'. Hole bailed to 1000' for test and stood 12 hr. Samples from 342', 1020', 1531' and 1987' were oil and gas Shut-off is approved.
- Jordan & Maney well No. "Nye" 1. (Report No. T 3-1145.) Bailing test approved. 7" casing cemented at 2030'. Hole bailed to 1200' for test and stood 16 hr Fluid level rose at rate of 0.3 bbl. in 24 hr.
- Jordan & Maney well No. "Tye" 1 (Report No P 3-2381.) Proposal to drill approved provisionally Conditions: Well is 59' from Southerly boundary line and 32' from Easterly boundary line of Lot 24, Fair Acres on Mesa Estimate oil sand at 2050'. Proposed to cement 13" at 125'; cement 9" at 2040'. Decision. Proposal is approved provided that (1) Mud fluid of not less than 70 lb per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Exact cementing depth for 9" is determined by coring starting not lower than 1975'. (4) 9" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 9" shut-off.
- Midcoast Oil Co. well No "Rogers" 3 (Report No. T 3-1144.) Bailing test approved. 5" casing cemented at 2067'. Hole bailed to 1200' for test and stood 16 hr. Fluid level rose at rate of 6 bbl in 24 hr.
- Moss & Walker well No. "Securities" 1 (Report No. P 3-2372.) Proposal to drill approved provisionally. Conditions: Well is 45' S. and 45' W. of NE corner of Lot 43, Fair Acres Tract Estimate oil sand at 2000'. Proposed to cement 13 $\frac{3}{4}$ " at 100'; cement 8 $\frac{3}{4}$ " at 2000'. Decision. Proposal is approved provided that (1) Mud fluid of not less than 70 lb. per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 8 $\frac{3}{4}$ " is determined by coring starting not lower than 1975'. (4) 8 $\frac{3}{4}$ " is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 8 $\frac{3}{4}$ " shut-off.
- Palisades Petroleum Corp. well No "Meigs" 2. (Report No T 3-1125.) Inspection of operations for demonstrating that no fluid enters oil zone through 8 $\frac{3}{4}$ " casing. Deputy noted 500 lb pressure applied to fluid inside 8 $\frac{3}{4}$ " for  $\frac{3}{4}$  hr without pressure loss Pressure mudding test is approved Oral approval is hereby confirmed to pull all 8 $\frac{3}{4}$ " possible and cap stub with cement.
- Palisades Petroleum Corp well No. "Meigs" 2. (Report No. T 3-1128.) Inspection of cementing operations 8 $\frac{3}{4}$ " shot at 1580' and pulled up 25'; hole cleaned out to 1590'; 6 $\frac{1}{2}$  sacks cement dumped at 1585' on rock and gravel bridge; 10 sacks cement dumped at 1580'. Deputy noted bailer would not spud below 1560' and brought up sample of set cement. Location and hardness of cement plug at 1560' are approved.
- Palisades Petroleum Corp well No "Meigs" 2. (Report No T 3-1130.) Inspection of cementing operations 8 $\frac{3}{4}$ " pulled from hole; hole cleaned

- out to 181' and 13 $\frac{3}{8}$ " shoe located at 170' instead of 209' as previously reported; wood plug driven to 181'; 25 sacks cement dumped at 181'. Deputy noted bailer would not spud below 158' and brought up sample of set cement. Location and hardness of cement plug at 158' are approved.
- Palisades Petroleum Corp. well No. "Meigs" 3. (Report No. T 3-1136.) Inspection of pressure mudding operations. 500 lb. pressure held inside 8 $\frac{3}{8}$ " casing for  $\frac{1}{2}$  hr. without pressure loss. Pressure mudding operations are approved.
- Palisades Petroleum Corp. well No. "Meigs" 3. (Report No. T 3-1140.) Inspection of cementing operations. 8 $\frac{3}{8}$ " shot at 900', 760' and 480', pulled from 480', wood plug driven in stub to 489' and rock bridge placed on plug to 485'; 14 sacks cement dumped at 485'. Deputy noted bailer would not spud below 459' and brought up sample of set cement. Location and hardness of cement plug at 459' are approved.
- Palisades Petroleum Corp. well No. "Meigs" 3. (Report No. T 3-1141.) Inspection of cementing operations. When 8 $\frac{3}{8}$ " pulled marks on pipe indicated surface pipe was set at 90' instead of 190' as reported; hole cleaned out to 106'; rock and gravel bridge placed 103'-106'; 23 sacks cement dumped at 103'. Deputy noted bailer would not spud below 66' and brought up samples of set cement. Location and hardness of cement plug at 66' are approved.
- Rio Grande Oil Co. well No. "Perkins" 1. (Report No. P 3-2382.) Proposal to drill approved provisionally. Conditions: Well is 775' Southerly along W. boundary of Perkins property, thence 375.05' Easterly parallel to Cliff Drive. Estimate oil sand at 2050'. Proposed to cement 10 $\frac{3}{8}$ " at 108'; cement 5 $\frac{3}{8}$ " at 2050'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 5 $\frac{3}{8}$ " is determined by coring starting not lower than 1975'. (4) 5 $\frac{3}{8}$ " is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 5 $\frac{3}{8}$ " shut-off.
- Rio Grande Oil Co. well No. "Perkins" 2. (Report No. P 3-2383.) Proposal to drill approved provisionally. Conditions: Well is 1527' Southerly along W. boundary of Perkins property, thence 75.05' Easterly parallel to Cliff Drive. Estimate oil sand at 2050'. Proposed to cement 10 $\frac{3}{8}$ " at 100'; cement 5 $\frac{3}{8}$ " at 2050'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 5 $\frac{3}{8}$ " is determined by coring starting not lower than 1975'. (4) 5 $\frac{3}{8}$ " is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 5 $\frac{3}{8}$ " shut-off.
- Charles L. Ross well No. "Adams" 1. (Report No. P 3-2369.) Proposal to drill approved provisionally. Conditions: Well is 70' S and 27' W. of N.E. corner of Lot 6. Estimate oil sand at 2055'. Proposed to cement 10 $\frac{3}{8}$ " at 100'; cement 6 $\frac{3}{8}$ " at 2050'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 6 $\frac{3}{8}$ " is determined by coring starting not lower than 2000'. (4) 6 $\frac{3}{8}$ " is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 6 $\frac{3}{8}$ " shut-off.
- Trans-Oceanic Oil Corp. well No. "Morrison" 1. (Report No. T 3-1127.) Shut-off test. Decision deferred. 7" casing cemented at 2029'. Deputy noted when casing head valve was opened mud fluid and gas flowed from flow line. Test indicates 7" shut-off is probably effective, but is not conclusive, due to large fluid rise and pressure held on well. Decision is deferred pending receipt of production data after completing well.
- Sec 29—A. F. Krebaum well No. 1. (Report No. P 3-2379.) Supplementary proposal to drill approved provisionally. Conditions: Depth 2600'; 13 $\frac{3}{8}$ " set at 200'. Proposed to drill to about 4000'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Division is notified of any oil or gas showings encountered. (4) Division is notified to witness bailing test of each possible water shut-off.

### MONTEREY COUNTY

T 23 S., R 15 E., M. D. B. and M.

- Sec 19—Pacific Inland Oil Co. well No. 1. (Report No. P 3-2367.) Proposal to abandon approved. Conditions: Depth 3100', less than 1832' of 6 $\frac{3}{8}$ " hanging in hole not cemented, no oil or gas produced. Proposed to pull casing; fill hole with mud and surface earth; put cement cap and regulation marker at surface; clean up premises and fill up holes.



## SANTA BARBARA COUNTY

T. 4 N, R 28 W., S. E. B. and M.

Sec. 10—North American Oil Consolidated well No. "Pinkham" 1. (Report No. T 3-1124.) Inspection of cementing operations. Hole cleaned out to 570'; 75 sacks cement pumped in through drill pipe hung at 570', drill pipe pulled up to 510' and circulation established. Deputy noted bailer would not spud below 535' and brought up sample of set cement. Location and hardness of cement plug at 535' are approved.

## DISTRICT No. 4

## BELRIDGE FIELD

T. 27 S, R. 20 E, M. D. B. and M

- Sec 35—Belridge Oil Co well No. 10-35. (Report No T 4-12329.) Inspection of equipment Equipment as inspected is satisfactory.
- Belridge Oil Co well No. 10-35. (Report No. T 4-12348 ) Inspection of mudding operations During  $\frac{1}{2}$  hr circulation test mud fluid was lost from pit at rate of 35 bbl. per hr Mudding operations are approved. Oral approval is hereby confirmed to cement 11 $\frac{3}{4}$ " at 4917'.
- Belridge Oil Co well No. 16-35 (Report No T 4-12338.) Inspection of mudding operations During 1 hr circulation test 1.5 bbl of mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{5}{8}$ " at about 8404'.
- Belridge Oil Co well No. 16-35. (Report No T 4-12343.) Shut-off test approved. 8 $\frac{5}{8}$ " casing cemented at 8385'. Inspector noted wall packer set at reported depth of 8367', while tester valve open for 35 min. air flowed steadily from drill pipe, and space between 8 $\frac{5}{8}$ " casing and drill pipe remained full of mud fluid, about 19 bbl. of oil entered drill pipe during test; oil tested 34° A. P. I gravity, fluid sample from 8367' tested 86 gr. salt per gal Shut-off is approved.
- Sec. 36—Standard Oil Co. well No. "McPhail" 1-A. (Report No. T 4-12344.) Equipment as inspected is satisfactory.

## DEVILS DEN FIELD

T. 26 S, R. 19 E, M. D. B. and M.

- Sec 17—Amerada Petroleum Corp. well No. 1. (Report No P 4-15655.) Supplementary proposal to drill approved provisionally. Conditions: Depth 2723'; cement plug 2723'-2530'; 13 $\frac{3}{8}$ " cemented at 87'. Proposed to cement 9" at 2540' with 250 sacks cement, test formation 2540'-2685'. Decision: Proposal is approved provided division is notified to witness test of 9" casing with hole open not more than 5' below 9" shoe
- Amerada Petroleum Corp. well No. 1. (Report No. T 4-12339.) Bailing test approved. 9" casing cemented at 2540' Hole bailed to 2000' for test and stood 16 $\frac{1}{2}$  hr No fluid entered well

## EDISON FIELD

T. 30 S, R. 29 E, M. D. B and M

- Sec. 5—Lee Oil Co, Inc., well No "Edison-Seale-5" 1 (Report No. P 4-16258.) Supplementary proposal to drill approved provisionally. Conditions: Depth 4026'; 12 $\frac{3}{4}$ " cemented at 402'. Proposed to mud formations 402'-3757' under open circulation until mud loss is 2 bbl. per hr ; cement 7" at 3757'; notify division to witness mud test and 7" shut-off test with hole open not more than 5' below 7" shoe Decision: Proposal is approved provided 7" is cemented with at least 500 sacks cement
- Lee Oil Co., Inc, well No "Edison-Seale-5" 1. (Report No. T 4-13208 ) Inspection of mudding operations During 1 hr circulation test no mud fluid was lost from pit. Mudding of formations 402'-3757' is satisfactory
- Sec 14—General Petroleum Corp. well No. "Liddy-Nichols" 1 (Report No. P 4-16250.) Proposal to drill approved provisionally. Conditions: Well is 330' N and 330' E of W  $\frac{1}{4}$  corner of SW.  $\frac{3}{4}$ . Estimate oil sand at 1785'. Proposed to cement 16" at 250', cement 11 $\frac{3}{4}$ " at 1785', cement 8 $\frac{5}{8}$ " at 2750'; land 6 $\frac{5}{8}$ " at 2950'; core 1685'-1985' and 2600'-2950'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire (2) Enough cement is pumped behind 11 $\frac{3}{4}$ " to fill up to at least 900' (3) Formations left back of 8 $\frac{5}{8}$ " are mudded until mud loss is reduced to 1 bbl. per hr. (4) Enough cement is pumped behind 8 $\frac{5}{8}$ " to reach to 11 $\frac{3}{4}$ " shoe. (5) Division is notified to examine all cores taken before cementing 11 $\frac{3}{4}$ ", to witness 11 $\frac{3}{4}$ " water shut-off test with hole open not more than 5' below shoe, to witness mudding test just before cementing 8 $\frac{5}{8}$ ", and to witness 8 $\frac{5}{8}$ " water shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- A T Jergins Trust well No "Dougherty" 1 (Report No. P 4-16237 ) Supplementary proposal to plug approved provisionally Conditions: 16" cemented at 218', 11 $\frac{3}{4}$ " cemented at 1110' Proposed to place cement plug 1560'-1660' upon which to land 8 $\frac{3}{8}$ " liner to produce upper oil sands previously tested Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 1560'.
- North American Oil Consolidated well No. "Brown" 1. (Report No P 4-16240.) Proposal to drill approved provisionally. Conditions: Well is

330' N. and 330' W. from center of section. Estimate oil sand at 1350'. Proposed to cement 13½" at 250'; cement 9" at 1350', land 6½" at 1700'. Decision. Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (2) Enough cement is pumped behind 9" to fill up to at least 300'. (3) Division is notified to witness 9" water shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Sec 15—Edison Oil Co. well No. "C. C. M. O." 1 (Report No. T 4-13173.) Inspection of mudding operations. During 1 hr. circulation test 0.8 bbl. of mud fluid was lost from tank. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 3272'.

Edison Oil Co. well No. "C. C. M. O." 1. (Report No. T 4-13188.) Shut-off test. Decision deferred. 8½" casing cemented at 3253'. Hole cleaned out to 3638', well showed considerable gas activity and some oil, formation tester was run on 5" drill pipe and packer set at 3248'. Inspector noted 10 strokes of pump made but packer did not hold; 12 24' pump strokes made but packer did not hold properly during first 4 strokes and estimated 30 gal. of fluid leaked by packer, total of 42 gal. of fluid pumped into pit; operations suspended for ½ hr. with pump barrel down; 13 24' pump strokes made and packer held effectively; 42 gal. of mud pumped into mud pit, on up stroke of pump indicator registered 2 points of weight above normal weight of drill pipe, packer broken and drill pipe pulled from hole; mud fluid from just above testing tool valve showed some gas bubbles, otherwise it was identical to mud with which drill pipe was originally filled. Tests are not conclusive but indicate shut-off may be effective. Decision is deferred pending production test to be witnessed after completion of well.

General Petroleum Corp. well No. "Jed" 1. (Report No. P 4-16249.) Proposal to drill approved provisionally. Conditions: Well is 330' N. and 330' W. of SE corner. Estimate oil sand at 1983'. Proposed to cement 16" at 250'; cement 11½" at 1985'; cement 8½" at 2790', land 6½" at 3040'; core 1885'-2185' and 2650'-3040'. Decision. Proposal is approved provided that (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (2) Enough cement is pumped behind 11½" to fill up to at least 1100'. (3) Formations left back of 8½" are mudded until mud loss is reduced to 1 bbl per hr (4) Enough cement is pumped behind 8½" to reach to 11½" shoe (5) Division is notified to examine all cores taken before cementing 11½", to witness 11½" water shut-off test with hole open not more than 5' below shoe, to witness mudding test just before cementing 8½", and to witness 8½" water shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Monterey Exploration Co. well No. "Duff" 7. (Report No. P 4-16266.) Proposal to drill approved provisionally. Conditions: Well is 330' N. and 990' W. of SE section corner. Estimate oil sand at 2900'. Proposed to cement 16" at 250'; cement 8½" at 2900', land 6½" liner at unknown depth. Decision. Proposal is approved provided that (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (2) Formations left back of 8½" are mudded by open circulation until mud loss is reduced to 1 bbl per hr (3) Enough cement is pumped behind 8½" to fill up to at least 1500'. (4) Division is notified to witness mudding test just before cementing 8½" and 8½" water shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Monterey Exploration Co. well No. "Duff" 8 (Report No. P 4-16267.) Proposal to drill approved provisionally. Conditions: Well is 330' N. and 330' E from center of section. Estimate oil sand at 3200'. Proposed to cement 16" at 250'; cement 8½" at 3200', land 6½" liner at unknown depth. Decision. Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire (2) Formations left back of 8½" are mudded by open circulation until mud loss is reduced to 1 bbl per hr (3) Enough cement is pumped behind 8½" to fill up to at least 1500'. (4) Division is notified to witness mudding test just before cementing 8½" and 8½" water shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Sec 16—Shell Oil Co. well No. "Cauley" 1 (Report No. P 4-16251.) Supplementary proposal to drill approved provisionally. Conditions: Depth 4276'; 13½" cemented at 800'. Proposed to plug hole with cement 4276'-4220', 4000'-3920' and 2518'-2460', cement 8½" at about 2352'; try to produce 2352'-2460'. Decision. Proposal is approved provided division is notified to witness placing of cement plugs, location and hardness of cement plug at 2460', and 8½" water shut-off test with hole open not more than 5' below shoe.

Shell Oil Co. well No. "Cauley" 1 (Report No. T 4-13192.) Inspection of cementing operations. 24 sacks cement pumped in through drill pipe hung at reported depth of 4266', this cement pumped into place with 552 cu. ft. of mud, drill pipe raised to 4000' and circulated clean; 72 sacks cement pumped in through drill pipe hung at 4000', pumped into place with 516 cu. ft. of mud; drill pipe raised 3 stands and circulated clean, 75 sacks cement pumped in through drill pipe hung at 2518'.

- pumped into place with 324 cu. ft. of mud; drill pipe raised 2 stands and circulated clean. Inspector noted cement plug drilled hard from reported depth of 2450' to 2460'. Cementing operations are approved. Location and hardness of cement plug at 2460' are approved.
- Shell Oil Co. well No. "Cauley" 1. (Report No. T 4-13202) Shut-off test Decision deferred 8 $\frac{1}{2}$ " casing cemented at 2353'. Inspector noted that while tester valve open for  $\frac{3}{4}$  hr. packer did not leak; one strong puff of air came from drill pipe when trip valve opened, then decreased immediately until only weak heads of air came from drill pipe until valve closed; drill pipe contained 96' of thin watery drilling fluid showing some gas action. Test indicates small amount of watery fluid enters from unknown source. Decision is deferred pending results of further tests.
- Shell Oil Co. well No. "Cauley" 1. (Report No. P 4-16260.) Supplementary proposal to drill approved. New conditions: Plugged 4276'-4220', 4000'-3920' and 2518'-2460', 8 $\frac{1}{2}$ " cemented at 2353'; 4 $\frac{1}{2}$ " liner landed 2330'-2460', perforated 2353'-2460', well wet. Proposed to pull 4 $\frac{1}{2}$ " liner, clean out to 3980' and scrape walls to 12 $\frac{1}{2}$ "; cement 6 $\frac{1}{2}$ " at about 3935'; try to produce 3935'-3980'. Decision: Proposal is approved. Notify division to witness 6 $\frac{1}{2}$ " water shut-off test with hole open not more than 5' below shoe.
- Sec 22—A T Jergins Syn., Inc. well No. "Hay" 1. (Report No. P 4-16241.) Proposal to abandon approved provisionally. Conditions: Depth 3894' 16" surface pipe cemented at 194'; no commercial oil production obtained. Proposed to make mud test; place cement plugs 3325'-3375' and 2500'-2700', cap surface pipe with welded plate. Decision. Proposal is approved provided that: (1) All hole open between cement plugs is left filled with heavy mud. (2) Division is notified to witness placing of cement plug 3325'-3375' and location and hardness of cement plug at 2500'.
- A T Jergins Syn., Inc. well No. "Hay" 1. (Report No. T 4-13191.) Inspection of cementing operations. Inspector noted formations 149'-3400' mudded until fluid loss was 1.3 bbl. per hr. 35 sacks cement pumped in through drill pipe hung at reported depth of 3375'; drill pipe raised to 3320' and washed; 135 sacks cement pumped in through drill pipe at 2700'; drill pipe raised to 2490' and washed. Inspector noted cement plug at reported depth of 2501' held weight of 5" drill pipe several times. Plugging operations are approved.
- A. T. Jergins Syn., Inc. well No. "Hay" 1. (Report No. P 4-16254) Supplementary proposal to abandon approved provisionally. New conditions: Cement plugs 3375'-3325' and 2700'-2501'. Proposed to drill out cement plug 2500'-2700'; place cement plug 2820'-2770'; scrape walls; set 6 $\frac{1}{2}$ " water string at about 2740'; land 4 $\frac{1}{2}$ " oil string at depth determined by coring, test oil sands by bailing or swabbing. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 2770', and 6 $\frac{1}{2}$ " water shut-off test with hole open not more than 5' below shoe.
- Sec 23—Gilco, Inc. well No. "Stuart-Gerard" 2. (Report No. T 4-13200) Inspection of mudding operations. During 1 hr. circulation test 2 bbl. of mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 10" at 1844'.
- Sec 24—A T Jergins Trust well No. "Davis" 1. (Report No. P 4-16239) Proposal to drill approved provisionally. Conditions. Well is 330' N. and 330' E. of S $\frac{1}{2}$  corner. Estimate oil sand at 1500'. Proposed to cement 13 $\frac{3}{8}$ " at 100'; cement 8 $\frac{1}{2}$ " at 1400'; land 6 $\frac{1}{2}$ " at 1600'; core for exact depths for 8 $\frac{1}{2}$ " and 6 $\frac{1}{2}$ ". Decision. Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (2) Enough cement is pumped behind 8 $\frac{1}{2}$ " to fill up to at least 800'. (3) Division is notified to witness 8 $\frac{1}{2}$ " water shut-off test with hole open not more than 5' below shoe. Note. Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- Sec 26—Centralia Oil Co. well No. "Centralia-Eubanks" 1. (Report No. P 4-16245.) Proposal to abandon approved provisionally. Conditions: Depth 2317', cement plug 2317'-2260'; 13 $\frac{3}{8}$ " cemented at 325', 8 $\frac{1}{2}$ " cemented at 2167', 106' of 6 $\frac{1}{2}$ " combination liner landed at 2260', cemented through perforations at 2200'; tested wet; recemented under 900 lb pressure and cement followed down hole to 2225'; perforated 2205'-2225'; no commercial production obtained. Proposed to plug with cement 2260'-2136' and notify division to witness hardness and location, pull 8 $\frac{1}{2}$ " from about 1000', place cement plug on stub, and have division witness plug; cap surface casing and abandon. Decision. Proposal is approved provided that (1) All hole between cement plugs is left filled with heavy mud (2) Division is notified to witness location and hardness of cement plugs.
- Centralia Oil Co well No. "Centralia-Eubanks" 1. (Report No. T 4-13183.) Inspection of cementing operations. 25 sacks cement pumped in through tubing hung at 2260', tubing raised to 2100' and washed clean by reversing circulation. Inspector noted plug at reported depth of 2135' held weight of tubing several times. Location and hardness of cement plug at 2135' are approved.
- Sec. 36—The Ohio Oil Co. well No. "Cauley" 1. (Report No. P 4-16230) Proposal to abandon approved provisionally. Conditions: Depth 2173', cement plug 1203'-929'; 13 $\frac{3}{8}$ " cemented at 840'. Proposed to fill with cement 925' to at least 20' in 13 $\frac{3}{8}$ "; pull all 13 $\frac{3}{8}$ " possible, and abandon. Decision: Proposal is approved provided that: (1) Hole is left filled with heavy mud. (2) 16" casing is securely capped.

The Ohio Oil Co. well No. "Cauley" 1. (Report No. T 4-13177.) Inspection of cementing operations. 300 sacks cement pumped in through drill pipe hung at 1203'; drill pipe pulled without washing, top of plug not found; 40 sacks cement pumped in through drill pipe hung at 815'; top of hard cement at 775'; 7½" hole drilled through plug 775'-815', top of lower plug then found at 980'; hole tested wet; plug drilled out 775'-815', 65 sacks cement pumped in through drill pipe hung at 980', hard cement found at 915', drilled out to 929'; 40 sacks cement pumped in through drill pipe hung at 840', top of plug at 800'; 7½" hole drilled through this plug; well tested dry, plug drilled out 800'-840' and 13¾" casing cemented at 840' with 100 sacks cement; 21 sacks hard cement drilled out of 13¾". Inspector noted cement plug at reported depth of 929' held weight of drill pipe several times. Plugging operations are approved. Location and hardness of cement plug at 929' are approved.

The Ohio Oil Co. well No. "Cauley" 1. (Report No. T 4-13190.) Inspection of cementing operations. 85 sacks cement pumped in through drill pipe hung at 929'; drill pipe raised to 850' and washed, 47 sacks cement dumped at 858'. Inspector noted cement plug at reported depth of 799' held weight of drill pipe several times. Location and hardness of cement plug at 899' are approved.

### ELK HILLS FIELD

T. 30 S., R. 24 E., M. D B. and M.

Sec 34—U S Navy well No. 12. (Report No P 4-15664.) Proposal to plug approved. Conditions: Depth 3513', plugged to 2844'; 10" cemented at 2849', perforated 2831'-2841'. Proposed to clean out to 2844', plug with cement dumped in stages 2844'-2800', notifying division to witness plug at 2831'; fill hole from 2800' to surface with 5% aqua-gel water slurry, cap 10" at surface with screw plug and leave well suspended.

### FRUITVALE FIELD

T. 29 S., R. 27 E., M. D B. and M.

Sec 22—Western Gulf Oil Co. well No 5-KCL-B. (Report No. P 4-16255.) Proposal to plug approved provisionally. Conditions: Depth 4214', cement plug 4214'-3917'; 10¾" cemented at 3592'; 6¾" landed at 3917', perforated 3917'-3555'; core records show probable water source below 3800'. Proposed to plug oil string 3800'-3917' to try to exclude water. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 3800', and production test after recompleting well.

Western Gulf Oil Co. well No 13-KCL-B. (Report No. P 4-16259.) Proposal to abandon approved provisionally. Conditions: Original depth 3860', cement plugs 3860'-3621', 3473'-3373' and 3332'-3048'; redrilled depth 3352'; 11¾" cemented at 537', 7" cemented at 3332', collapsed 3329'-3327', milled through between 3028' and 3048'; 4¾" landed at 3352', perforated 3323'-3352', cemented through perforations at 3323'. Fish: casing roller, sub and drill pipe 3329'-3335'. Junk: Steel whipstock 3048'-3024'. Proposed to plug perforated casing 3358'-3315' with cement; cut and pull 4¾" at about 3000', and put cement plug on stub. Decision: Proposal is approved provided that: (1) Division is notified to witness location and hardness of cement plugs. (2) Casing is left filled with heavy mud between cement plugs. (3) 7" casing is capped at surface.

Western Gulf Oil Co. well No 14-KCL-B. (Report No. P 4-16243.) Supplementary proposal to drill approved. Conditions: Depth 3586', 12¼" cemented at 501'. Proposed to cement 8¾" in shale at 3355' and complete well. Decision: Proposal is approved. Notify division to witness 8¾" water shut-off test with hole open not more than 5' below shoe.

Western Gulf Oil Co. well No. 14-KCL-B. (Report No T 4-13203.) Shut-off test. Decision deferred. 8¾" casing cemented at 3355'. Inspector noted pressure on 8¾" casing head was 100 lb. per sq. in.; in ½ hr. pressure increased to 125 lb.; fluid sample from 3358' was heavy gas-cut mud showing oil spots. Well was killed by pumping in mud at surface, and mud circulated with tubing hanging at bottom. With well shut in casing head pressure was 200 lb.; when casing head opened up to 1¼" bean well flowed under 50 lb. pressure; well would not take fluid under 700 lb. pressure; mud fluid circulated through tubing at 2393' to quiet well and then was run to 3356'. Inspector noted return fluid from 3356' was heavy gassy mud showing oil. Decision is deferred pending receipt of production data after completing well.

Western Gulf Oil Co. well No. 15-KCL-B. (Report No. P 4-16268.) Proposal to drill approved provisionally. Conditions: Well is 330' N and 2332' E. of SW. section corner. Estimate oil sand 3400'. Proposed to cement 12¾" at 550'; cement 8¾" at 3400' or 3600', coring for exact depth. Decision: Proposal is approved provided that: (1) Well is drilled and equipped in manner to prevent oil or gas waste by blow-out or fire. (2) Formations left back of 8¾" are mudded until loss is reduced to 2 bbl. per hr. (3) Division is notified to witness mudding test just before cementing 8¾" and 8¾" water shut-off test with hole open not more than 5' below shoe.

Sec. 23—The Paroil Co. well No. 1. (Report No. P 4-16299.) Proposal to drill approved provisionally. Conditions: Well is 817' N. and 1030' W. of SE.

- corner of SW  $\frac{1}{4}$  of SE  $\frac{1}{4}$  of section. Estimate oil sand at 3500'. Proposed to cement 12 $\frac{1}{2}$ " at 650; cement 8 $\frac{3}{8}$ " or 6 $\frac{3}{8}$ " at depth to be determined by coring starting at 3200'; land 6 $\frac{3}{8}$ " or 4 $\frac{3}{4}$ " liner at unknown depth. Decision. Proposal is approved provided that: (1) Formations left back of 3 $\frac{3}{8}$ " or 6 $\frac{3}{8}$ " are mudded by open circulation until mud loss to formations is less than 2 bbl. per hr. (2) Division is notified to witness all cores taken before cementing 8 $\frac{3}{8}$ " or 6 $\frac{3}{8}$ ", final mudding operations before cementing 8 $\frac{3}{8}$ " or 6 $\frac{3}{8}$ ", and test of 8 $\frac{3}{8}$ " or 6 $\frac{3}{8}$ " water shut-off with hole open not more than 5' below shoe.
- C. E. Robertson well No. 1. (Report No. P 4-16252.) Proposal to alter casing approved. Conditions: Redrilled depth 3687'; 8 $\frac{3}{8}$ " cemented at 3697', bad and drilled through at 3570'; 6 $\frac{3}{8}$ " liner landed in redrilled hole 3538'-3645', perforated 3645'-3557'; 4 $\frac{1}{2}$ " liner landed 3625'-3687', perforated 3687'-3635', bad at 3645'. Proposed to shoot 100 holes between 3520' and 3570' and try for production. Decision: Proposal is approved. Notify division to witness production test after recompleting well.
- Tru-Dell Oil Co., Ltd., well No. "Truman" 1. (Report No. T 4-13166.) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of .5 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 6 $\frac{3}{8}$ " at 3502'.
- Tru-Dell Oil Co., Ltd., well No. "Truman" 1. (Report No. T 4-13175.) Bailing test Decision deferred. 6 $\frac{3}{8}$ " casing cemented at 3502'. Hole bailed to 1500' for test and stood 24 hr. No fluid entered well. Fluid samples were: 1500', medium heavy drilling fluid, 3511', very heavy drilling fluid. Test indicates shut-off is probably effective but is not conclusive due to shallow bailing depth. Decision is deferred pending results of production test to be made after completion of well.
- Sec. 27—Mohawk Petroleum Co. well No. 6. (Report No. P 4-16247.) Proposal to redrill approved provisionally. Conditions. Depth 4196', cement plug 4196'-4151'; 8 $\frac{3}{8}$ " cemented at 3695', 6 $\frac{3}{8}$ " perforated liner landed 4147'-3633', cemented through perforations 3660'-3820'. Proposed to plug liner with cement to some point in 3 $\frac{1}{2}$ "; sidetrack through 3 $\frac{1}{2}$ " and set full string of 6 $\frac{3}{8}$ " at about 3820'; complete well. Decision: Proposal is approved provided division is notified to witness 6 $\frac{3}{8}$ " water shut-off test with hole open not more than 5' below shoe.
- Western Gulf Oil Co. well No. 3—"Switzer." (Report No. T 4-13201.) Inspection of mudding operations. During 1 hr. circulation test mud fluid was lost from pit at rate of 2 bbl. per hr. Mudding operations are approved Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 3592'.

T. 30 S, R. 28 E, M. D. B. and M.

- Sec. 6—Alta Oil Corp. well No. "NC" 1. (Report No. T 4-13165.) Inspection of cementing operations. Hole could not be cleaned out below 3009', 11 sacks cement dumped at 3009'. Inspector noted bailer would not spud below 2966' and brought up sample of set cement. Location and hardness of cement plug at 2966' are approved.
- Alta Oil Corp. well No. "NC" 1. (Report No. P 4-16228.) Proposal to abandon approved provisionally. Conditions: Depth 4011', cement plugs 4011'-3919' and 3009'-2966'; 12 $\frac{1}{4}$ " cemented at 1234'; 8 $\frac{3}{8}$ " cemented at 3946', perforated 3860'-3840', shot and pulled from 980', bad at 3009', 6 $\frac{1}{2}$ " liner landed at 4011', perforated 4011'-3946'. Junk: Fletcher bailer 3919'-3889', total depth original hole 6457', plugged with cement 5085'-4965' and 4063'-3847'. Proposed to place 10 sack cement plug on 8 $\frac{3}{8}$ " stub at 980'; leave hole full of heavy mud, place welded cap over 12 $\frac{1}{4}$ " at surface and abandon. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug above 980'.
- Alta Oil Corp. well No. "NC" 1. (Report No. T 4-13169.) Inspection of cementing operations 4' redwood plug driven into 8 $\frac{3}{8}$ " stub at 900' (formerly reported at 890'); 10 sacks cement dumped on wood plug. Inspector noted bailer spudded at 886' and brought up sample of set cement. Location and hardness of cement plug at 886' are approved.

#### KERN RIVER FIELD

T. 27 S., R. 27 E., M. D. B. and M.

- Sec. 32—The Ohio Oil Co well No. "Midway Premier" 3. (Report No. P 4-16244.) Proposal to drill approved provisionally. Conditions. Well is 1655.66' S. and 1658.49' E. of SW section corner. Estimate oil sand at 2600'. Proposed to cement 18 $\frac{1}{2}$ " at 20'; cement 10 $\frac{3}{4}$ " at 2650'; land 8 $\frac{3}{8}$ " liner at 2775'. Decision: Proposal is approved provided division is notified to examine all cores taken before cementing 10 $\frac{3}{4}$ ", and to witness 10 $\frac{3}{4}$ " water shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

T. 28 S., R. 27 E., M. D. B. and M.

- Sec. 4—Rex Oil Co. well No. "Mabry" 1. (Report No. P 4-16226.) Supplementary proposal to drill approved. Conditions. Depth 2737'; 16" cemented at 10'. Proposed to place cement plug 2737'-2690'; cement 10 $\frac{3}{4}$ " at 2646' with 600 sacks cement; test water shut-off; land 8 $\frac{3}{8}$ " perforated liner at 2690'; notify division to witness mudding test of formations above 2646', test of 10 $\frac{3}{4}$ " water shut-off, and location and hardness of cement plug at 2690'.

- Rex Oil Co. well No. "Mabry" 1. (Report No. T 4-13164.) Inspection of mudding operations. During 1 hr. circulation test 2.5 bbl. of mud fluid was lost from tank. Mudding operations are approved. Oral approval is hereby confirmed to cement 10 $\frac{3}{4}$ " at 2646'.
- Rex Oil Co. well No. "Mabry" 1. (Report No. T 4-13181.) Inspection of cementing operations. 30 sacks cement pumped in through drill pipe hung at 2737', drill pipe raised to 2690' and washed clean by reversing circulation, no cement returned to surface. Formation heaved after shut-off test, drill pipe could not go below 2650'. Hole circulated clean 2650'-2693'. Inspector noted cement plug at reported depth of 2693' held weight of 5" drill pipe several times and showed hard drilling when drilled on. Location and hardness of cement plug at 2693' are approved.
- Rex Oil Co. well No. "Mabry" 1. (Report No. T 4-13194.) Shut-off test approved. 10 $\frac{3}{4}$ " casing cemented at 2646'. Inspector noted that while test valve open for 36 min. air rush from drill pipe head was strong and steady, and gas was noted at drill pipe head after 15 min.; packer held effectively during test; 308' of gassy frothy mud entered drill pipe during test; fluid sample from top of fluid column showed spots of oil, and bottom sample was only gas-cut mud. Shut-off is approved.
- Sec. 22—Pacific Western Oil Co. well No. 1. (Report No. T 4-13174.) Inspection of cementing operations. 8 $\frac{3}{8}$ " cut and pulled from 2517'; hole cleaned out to 2623' and 60 sacks cement dumped in stages. Inspector noted bailer would not spud below 2510'. Several unsuccessful attempts made to obtain sample of cement. Location and hardness of cement plug at 2510' are approved.
- Sec. 26—Asthore Watterson well No. 2. (Report No. T 4-13197.) Inspection of cementing operations. 8 $\frac{1}{2}$ " liner not ripped as proposed because perforations already in liner were found open; 20 sacks cement dumped at 2289' in three batches. Inspector noted bailer would not spud below 2253' and brought up sample of set cement. Location and hardness of cement plug at 2253' are approved.
- Sec. 36—Hugh B. Evans, Inc., well No. 1. (Report No. T 4-13185.) Inspection of cementing operations. 7 $\frac{7}{8}$ " shot and pulled from 1010'; bailer would not spud below 967' after repeated attempts; 6 sacks cement dumped at 967'. Inspector noted bailer would not spud below 950' and brought up sample of set cement; 9 $\frac{7}{8}$ " shot at 890' but could not be pulled from that depth. Shooting and plugging operations are approved. Location and hardness of cement plug at 950' are approved.
- Hugh B. Evans, Inc., well No. 1. (Report No. T 4-13186.) Inspection of cementing operations. 9 $\frac{7}{8}$ " shot at 475'; 11 $\frac{7}{8}$ " cemented to 9 $\frac{7}{8}$ " and came up with it; 5' wood plug driven in 9 $\frac{7}{8}$ " stub at 475', and 9 $\frac{7}{8}$ " and 11 $\frac{7}{8}$ " pulled up 20'. Inspector noted bailer would not spud below 469', and 12 sacks cement dumped at 469'. Later reported 9 $\frac{7}{8}$ " and 11 $\frac{7}{8}$ " pulled from 469' and 10 sacks cement dumped at 425'. Plugging operations are approved.
- Hugh B. Evans, Inc., well No. 2. (Report No. P 4-16257.) Supplementary proposal to abandon approved provisionally. Conditions: Depth 1447', cement plugs 1447'-1386', 1330'-1315' and 840'-820'; 12 $\frac{1}{2}$ " set at unknown depth, pulled from 80'; 10" set at 995', stretch in casing indicates it is free at 600'; 6 $\frac{1}{2}$ " at 1447', perforated 1395'-1447', cemented through perforations at 1395', pulled from 842', shot 1330'-1320' and at 965'. Junk: Unknown amount of 8 $\frac{1}{2}$ " below 955'; 8 $\frac{1}{2}$ " 1111'-1183'. Proposed to shoot 10" at 600' and pull up to 100', capping stub with cement; build bridge below 100' and dump 10' cement on bridge, set 10" casing in this cement and cap with cement at surface. Decision. Proposal is approved provided division is notified to witness shooting of 10" at 600', placing cement plug on 10" stub, location and hardness of this cement plug, placing cement bridge below 100', and location and hardness of this cement plug.
- Hugh B. Evans, Inc., well No. 2. (Report No. T 4-13206.) Inspection of shooting and plugging operations. Bailer would not spud below 1422' and brought up sample of set cement; 7 sacks cement dumped at 1422'; bailer would not spud below 1386' and brought up sample of set cement; cavity shot in 6 $\frac{1}{2}$ " casing 1320'-1330'; 10 sacks cement dumped at 1330'. Inspector noted bailer would not spud below 1315' and brought up sample of set cement; 6 $\frac{7}{8}$ " shot at 965' but could not be pulled. Shooting and plugging operations are approved.
- Hugh B. Evans, Inc., well No. 2. (Report No. T 4-13207.) Inspection of cementing operations. 6 $\frac{7}{8}$ " shot and pulled from 842' and 2' wood plug driven in stub; 6 sacks cement dumped at 840'. Inspector noted bailer would not spud below 820' and brought up sample of set cement; 10" shot at 593' but could not be pulled. Plugging operations are approved.
- Hugh B. Evans, Inc., well No. 5. (Report No. T 4-13171.) Inspection of cementing operations. Several unsuccessful attempts made to spud bailer below 953'; 12 sacks cement dumped at 953'. Inspector noted bailer would not spud below 935' and brought up sample of set cement. Location and hardness of cement plug at 935' are approved.
- Hugh B. Evans, Inc., well No. 5. (Report No. T 4-13172.) Inspection of cementing operations. Inspector noted 12 $\frac{1}{2}$ " shot at 363' and pulled up 20'; 14 sacks cement dumped at 363'. Cementing operations are approved.

## LOST HILLS FIELD

T. 27 S, R. 21 E, M. D. B. and M.

- Sec. 4—Standard Oil Co. well No. "Cahn" 26. (Report No. P 4-15657.) Supplementary proposal to alter casing approved. Conditions: Depth 1867'; 8 $\frac{3}{8}$ " cemented at 1780', corroded through at unknown depth above 1740'; 6 $\frac{3}{8}$ "

crooked below 1840', shot 1835'-1845' and 1845'-1850', set together with hemp packer at 1740', redrilled and deepened to 1867'. Proposed to pull 6 $\frac{3}{8}$ " and packer, fish out 6 $\frac{3}{8}$ " liner 1740'-1835'; clean out to 1830' and cement 6 $\frac{3}{8}$ " at that depth; notify division to witness 6 $\frac{3}{8}$ " shut-off test; redrill and deepen to about 1880' and recomplete with 5" perforated liner. Standard Oil Co well No. "Cahn" 26. (Report No T 4-12337.) Bailing test approved. 6 $\frac{3}{8}$ " casing cemented at 1831'. Hole bailed dry for test and stood 17 $\frac{1}{2}$  hr. No fluid entered well

### McKITTRICK FIELD

T. 29 S, R. 21 E., M D. B. and M.

Sec 26—Welpport Oil Co well No. 106. (Report No. T 4-12336.) Bailing test. Decision deferred. 10 $\frac{1}{2}$ " casing cemented at 935'. After standing 12 hr. for test 9' of oil and 172' of oil sand entered hole, equivalent to about 1 bbl. oil, no evidence of water. Test indicates 10 $\frac{1}{2}$ " shut-off is probably effective but is not conclusive due to large amount of oil sand entering hole. Decision is deferred pending receipt of production data after completing well.

T. 30 S; R. 22 E, M. D. B. and M.

Sec. 6—George E. Gamble well No 46 (Report No. P 4-15668) Proposal to abandon approved provisionally. Conditions: Depth 1180'; 12 $\frac{3}{4}$ " landed at 453'; 10" landed at 676'; 8" cemented at 693', 6" landed at 1180'; no record of perforations, well produced gas for short time until pressure dropped. Proposed to pull all pipe and abandon well subject to requirements of division. Decision: Proposal is approved provided that: (1) 12 $\frac{3}{4}$ " is not pulled. (2) If 6" is pulled from below 715', 20' cement plug is placed in open hole 705'-685' or as close to this depth as possible. (3) If 10" pulled from below 550', cement plug is placed 550'-480'. (4) Cement plug is placed 460'-450' if 10" pulled from below this depth; otherwise 10" stub is capped with 10' cement. (5) Well is capped at surface. (6) All unplugged portions of hole are filled with heavy mud or surface formation and water. (7) Division is notified to witness placing of all cement plugs. (8) Form 102 is filed in duplicate upon completion of above work.

Sec 15—Standard Oil Co. well No 45 (Report No. P 4-15669.) Proposal to abandon approved provisionally. Prospect well.

### MIDWAY FIELD

T 31 S, R 22 E, M D. B. and M.

Sec 23—Tumbador Oil Co well No 11. (Report No. P 4-15670) Proposal to alter casing approved provisionally. Conditions: Depth probably 1867'; 10" landed at 1640'; 8 $\frac{1}{4}$ " landed at 1867', cut at 1610', perforated 1660'-1860'. Proposed to perforate 10" 1500'-1625'. Decision: Proposal is approved provided that: (1) 10' cement bridge is placed on 8 $\frac{1}{4}$ " liner in hole before perforating 10". (2) Bridge is drilled out only after demonstrating that no water enters in damaging amounts through new perforations. (3) Division is notified to witness production test after perforating above cement bridge and after perforating 1600'-1625'. (4) Form 102 is filed in duplicate after completion of above work.

Sec 24—Brookshire Oil Co well No. 13. (Report No. T 4-12330) Inspection of cementing operations. Hole cleaned out to 3326' and 16 sacks cement dumped in stages. Inspector noted bailer would not spud below 3215' and brought up sample of set cement. Location and hardness of cement plug at 3215' are approved.

Brookshire Oil Co well No. 13 (Report No P 4-15661) Supplementary proposal to deepen approved. Conditions: Depth 4468', cement plugs 3950'-3850' and 3326'-3215', 8 $\frac{1}{4}$ " froze at 2690'; 6 $\frac{3}{8}$ " cemented at 3316', perforated 2984'-2992' and 3000'-3010'; salt water rose to 1000'. Proposed to place sand bridge 3215'-3020' and cement plug 3020'-2970', notify division to witness plug at 2970', let well stand idle temporarily.

Sec 28—Joseph McDonald well No. 18 (Report No. P 4-15666) Proposal to alter casing approved provisionally. Conditions: Depth 995'; 10" landed at 805'; 8 $\frac{1}{4}$ " landed at 995', perforated 920'-980', crooked at 927'; much sand removed from well, leaving large cavity. Proposed to pull 8 $\frac{1}{4}$ " oil string if possible and replace with straight oil string, if all 8 $\frac{1}{4}$ " oil string can not be recovered cut at about 927' and pull, replacing with straight oil string landed at original depth. Decision. Proposal is approved provided Form 102 is filed in duplicate upon completion of proposed work.

T. 31 S, R. 24 E, M D. B. and M.

Sec 32—Union Oil Co. well No. "St. Helens" 1. (Report No P 4-15675.) Proposal to abandon approved. Conditions: Depth 3820', 10" frozen at 2850'; 8 $\frac{1}{4}$ " landed at 3290'; 6 $\frac{3}{8}$ " landed at 3446', 186' of 4 $\frac{1}{2}$ " liner landed at 3590', perforated 3520'-3555'; 414' of 2 $\frac{1}{2}$ " drill pipe landed as liner at 3816', perforated 3676'-3816'; bottom of swab, rings and washers on top liner, junk milled out 3402'-3409', hole could not be cleaned out below 3388'; heavy mud and no water in hole. Proposed to clean out to 3388'; fill hole with cement 3388'-3360', having division test cement plug at 3360'; cut and pull 6 $\frac{1}{4}$ " from vibration point but not below 3250' and cap stub with



10' cement; cut and pull 8½" from vibration but not below 2825' and cap stub with 10' cement; leave 4' of 4" pipe over hole as marker; fill all unfilled portions of hole with loose earth, heavy mud etc.: throw rig and clean up location.

T. 32 S., R. 23 E., M. D. B. and M.

Sec. 22—Pan American Petroleum Co well No. "Buena Fe" 27 (Report No. P 4-15671) Proposal to plug approved. Conditions: Depth 798'; 7½" landed at unknown depth; 5½" landed at 791', perforated 582'-791', sand heaves in rapidly, can not be cleaned out below 790'. Proposed to clean out to 790'; plug with cement 790'-765', shoot 5½" 755'-765'; plug with cement 765'-750', return to production

Pan American Petroleum Co well No. "Buena Fe" 28. (Report No P 4-15663.) Proposal to redrill oil string approved. Conditions. Depth 886'; 12½" landed at 672'; 10" landed at 886', perforated 882'-886', apparently parted at about 740'. Proposed to pull 10"; sidetrack old hole to 800', carrying 8½"; return to production.

Sec 23—O. S. Poler well No. 5. (Report No T 4-12332) Inspection of cementing operations. 7½" ripped and pulled from 970'; hole filled with brick 1020'-978'; 6 sacks cement dumped at 978'. Bailer would not spud below 965' but no sample of cement could be obtained, bailer brought up about 2' of fluid only. Location and hardness of cement plug at 965' are approved.

Sec. 26—Mascot Oil Co. well No 4. (Report No P 4-15653.) Proposal to abandon approved provisionally. Conditions: Depth 934'; 11½" landed at 497'; 9½" landed at 673'; 7½" landed at 896', shot off at 762', sidetracked 762'-896', perforated 685'-896'; 5½" landed at 932', perforated 693'-932'. Total depth old hole 896'. Proposed to abandon well according to requirements of division. Decision: Proposal is approved provided that: (1) Hole is cleaned out to 932' and plugged with cement in stages 932'-762'. (2) 5½" is shot off and pulled from 762'. (3) Hole is plugged with cement 762'-710'. (4) 7½" is shot 700'-710' and pulled if possible. (5) Hole is plugged with cement 710'-660'. (6) 9½" is shot off at about 477' and pulled from that depth (7) 9½" is capped with at least 10' cement (8) Well is securely capped at surface. (9) All unplugged portions of hole are filled with heavy mud or surface formation and water (10) Division is notified to witness shooting off of all casings and dumping of all cement plugs. (11) Form 102 is filed in duplicate upon completion of proposed work.

Mascot Oil Co well No. 14. (Report No P 4-15659.) Proposal to abandon approved provisionally. Conditions Depth 1360'; 13½" hanging at 260'; 11½" landed at 749'; 9½" landed at 996'; 7½" landed at 1298', perforated 1038'-1298'; 5½" landed 1298'-1360', including 260' perforated, 62' plug in bottom. Junk: Sinker bar with 7½" bit near bottom of well. Proposed to abandon as per requirements of division Decision: Proposal is approved provided that: (1) Hole is cleaned out to 1360' and plugged with cement 1360'-1030' (2) 7½" is shot 1020'-1030' and pulled if possible. (3) Hole is plugged with cement 1030'-980'. (4) 9½" is shot and pulled from 730' or higher, and stub capped with at least 10' cement. (5) 13½" is all pulled, space outside 11½" filled with surface formation to 10', and top 10' filled with cement. (6) 11½" is securely capped at surface. (7) All unplugged portions of hole are filled with heavy mud or surface formation and water. (8) Division is notified to witness shooting off of all casings and placing of all cement plugs (9) Form 102 is filed in duplicate upon completion of proposed work

Mascot Oil Co. well No. 14. (Report No T 4-12341) Inspection of cementing operations Hole could not be cleaned out below 1266' where cement plug found; 2 sacks cement dumped at 1261'; bailer stuck at 1261', could not be removed, 76 cu ft. of cement-sand mix dumped at 1237' on stuck bailer; there was no fluid in hole; bailer would not spud below 1005' but no sample of cement obtained; there was no fluid above plug; 7½" shot off at 999'. Location and hardness of cement plug at 1005' and shooting operations are approved

T. 32 S., R. 24 E., M. D. B. and M.

Sec. 8—Honolulu Oil Corp, Ltd., well No 53. (Report No. P 4-15656) Proposal to drill approved provisionally. Conditions: Well is 1470' S and 1815' W. of NE corner. Estimate oil sand at 750'. Proposed to cement 16" at 160'; prospect for dry gas production 700'-2300'; file later proposal, including other casings to be determined from results of formation tests Decision: Proposal is approved provided that: (1) Mud fluid of sufficient weight to prevent blow-outs is used in drilling of well, and column of mud fluid is maintained to surface at all times, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Division is notified before landing or cementing any other casing.

Sec. 11—Standard Oil Co well No. 19 (Report No T 4-12334) Inspection of cementing operations. Hole cleaned out to 3527'; 200 sacks cement pumped in through drill pipe hung at 3525', filling to 3300'; 200 sacks cement pumped in through drill pipe hung at 3298', filling to 3207'; 200 sacks cement pumped in through drill pipe hung at 3205', filling to 3062', cleaned out to 3075'; 40 sacks cement pumped in through drill pipe hung at 3073'. Inspector noted cement plug at 3059' held entire weight of drill pipe Location and hardness of cement plug at 3059' are approved

Sec. 14—Honolulu Oil Corp, Ltd., well No 2 (Report No T 4-12331.) Shut-off test. Decision deferred. 8½" casing cemented at 2659'. Inspector noted wall

- packer set at reported depth of 2651'; while tester valve open for 25 min. air flowed intermittently from drill pipe and space between 4½" drill pipe and 8½" casing remained full of mud fluid; when packer released mud fluid did not drop around 4½" drill pipe; 4.4 bbl. of slightly mud fluid found in drill pipe; water filtered from fluid sample from 2651' tested 690 gr. salt per gal.; sample from perforated nipple below tester was shale. Later reported check test; hole cleaned out to 2318'; Johnston tester run on drill pipe and packer set at 2651'; tester valve was open for ¾ hr.; 27.5 bbl of fluid found in drill pipe, top 265' of fluid being heavy gas-cut mud, balance was oily gas-cut mud, bottom 135' being nearly all oil, with no evidence of free water; sample of oil from 2651' tested 22.8° A P I. gravity and cut 30% emulsion; emulsion was broken down into 66½% water and 33½% sand and mud; water tested 913 gr. salt per gal. Test indicates 8½" shut-off is probably effective but is not conclusive due to high salt content. Decision is deferred pending receipt of production data after completing well
- Honolulu Oil Corp., Ltd., well No. 2. (Report No. P 4-15665.) Supplementary proposal to drill approved. Conditions: Depth 3612', plugged to 2773'; 8½" cemented at 2659'; 6½" landed at 2769', including 116' perforated; water witch showed water entry below 2752' but none from around 8½" shoe. Proposed to clean out to about 3000'; drive in lead wool bridge and plug with cement to about 2770', testing plug for location and hardness, continue production test and turn well to production, if dry.
- Honolulu Oil Corp., Ltd., well No. 2. (Report No. T 4-12345.) Inspection of cementing operations. Hole cleaned out to 2890' and 100 sacks cement pumped in through drill pipe in two stages. Inspector noted cement plug at 2759' held entire weight of 3" drill pipe. Location and hardness of cement plug at 2759' are approved.
- Honolulu Oil Corp., Ltd., well No. 3 (Report No. P 4-15662.) Proposal to drill approved provisionally. Conditions: Well is 2066' S and 440' E. of NW. section corner. Proposed to cement 18½" at 160'; cement 10½" at 2530'; cement 8½" at 2760'; land 6½" at 2860', including 100' perforated on bottom. Decision: Proposal is approved provided that: (1) Mud fluid of sufficient weight to prevent blow-outs is used in drilling of well, and column of mud fluid is maintained to surface at all times, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Coring is started at 2450'. (4) Formations left back of 10½" and 8½" are mudded by open circulation until mud loss is not more than 4 and 1 bbl per hr, respectively. (5) Enough cement is used behind 10½" to reach at least 1000' above shoe. (6) Division is notified to witness final mudding operations before cementing 10½" and 8½", and 10½" and 8½" shut-off tests with hole open not more than 5' below shoe in each case.
- Honolulu Oil Corp., Ltd., well No. 3. (Report No. T 4-12342.) Inspection of mudding operations. During ¾ hr. circulation test mud fluid was lost from pit at rate of 4 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 10½" at 2500'.
- Honolulu Oil Corp., Ltd., well No. 3 (Report No. T 4-12347.) Shut-off test approved. 10½" casing cemented at 2504'. During test hole remained full of mud fluid around outside of drill pipe; while tester valve open for 3 min. gas flowed strongly from drill pipe and blew considerable mud into derrick; 4 bbl. of mud required to fill hole after packer released; 3.3 bbl of heavy gas-cut mud found in drill pipe; water filtered from mud in bottom of drill pipe tested 431 gr salt per gal. Shut-off is approved.
- Sec 15—Standard Oil Co well No. 27. (Report No. T 4-12346.) Inspection of mudding operations. During ¾ hr circulation test no mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 11½" at 2425'.

### MT. POSO FIELD

T. 27 S, R. 27 E, M. D. B. and M.

- Sec. 11—Buckeye Union Oil Co well No. "New Hope" 1. (Report No. P 4-16236.) Proposal to drill approved provisionally. Conditions: Well is 220' N and 397' E. of SW section corner. Estimate oil sand at 1130'. Proposed to cement 10" at 1130'; land 8½" at unknown depth; core for exact depth for 10" and for completion depth. Decision: Proposal is approved provided division is notified to witness bailing test of 10" water shut-off with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- T. 27 S, R. 28 E, M. D. B. and M.
- Sec. 4—Union Oil Co well No. "S. & M." 12. (Report No. T 4-13176.) Bailing test approved. 8½" casing cemented at 1748'. Hole bailed to 1700' for test and stood 8 hr. Clean oil entered at rate of 93.1 bbl in 24 hr.
- Sec. 9—Shell Oil Co well No "Vedder" 9. (Report No. T 4-13196.) Shut-off test approved. 8½" casing cemented at 1475'. Inspector noted that while test valve open for 20 min air rush from drill pipe head was fairly strong and steady for 10 min., and weak blow continued by heads for remaining 10 min; packer held effectively during test; 192' of badly gas-cut oily mud (more oily at bottom) entered drill pipe during test. Shut-off is approved.

- Shell Oil Co. well No. "Vedder" 13. (Report No. T 4-13182) Shut-off test approved. 8 $\frac{3}{4}$ " casing cemented at 1758'. Inspector noted Johnston tester run in on 4" drill pipe and packer set at reported depth of 1754'; while valve open for  $\frac{1}{2}$  hr. packer did not leak, and one strong puff of air lasting 1 min. issued from drill pipe; drill pipe contained 31' of heavy gassy mud; no evidence of free water in mud. Shut-off is approved.
- Sec 10—Pongratz Petroleum Co well No "Pongratz" 4 (Report No P 4-16233) Proposal to drill approved provisionally. Conditions: Well is 875' N and 75' E. of SW section corner. Estimate oil sand at 1670'. Proposed to cement 20" S. P. at 40'; cement 10 $\frac{1}{2}$ " at 1700'. Land 140' of perforated 8 $\frac{3}{4}$ " at unknown depth. Decision: Proposal is approved provided that (1) Coring is started not deeper than 1450'. (2) Division is notified to examine all cores taken before cementing 10 $\frac{1}{2}$ ". (3) Division is notified to witness 10 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below shoe. (4) 8 $\frac{3}{4}$ " liner is landed not deeper than 1845'.
- Pongratz Petroleum Co. well No. "Pongratz" 4. (Report No P 4-16248) Supplementary proposal to drill approved provisionally. Conditions: Depth 1888', hole drifted 142' in line of N 54° 30' E; 20" cemented at 20'. Proposed to place cement plug 1550'-1450'; notify division to witness cementing operations; place cement plug 600'-500', notifying division to witness this cement plug; redrill hole in manner to locate bottom of redrilled hole about due S of surface location of derrick. Decision: Proposal is approved provided division is notified to witness all cores taken before cementing any casing, and water shut-off test with hole open not more than 5' below shoe.
- Pongratz Petroleum Co. well No "Pongratz" 4 (Report No T 4-13205.) Inspection of cementing operations. 125 sacks cement pumped in through drill pipe hung at 1550'; 150 sacks cement pumped in through drill pipe hung at 600'. Inspector noted cement plug held weight of 5" drill pipe at reported depth of 487'. Location and hardness of cement plug at 487' are approved.
- Sec 16—Shell Oil Co. well No. "Security" 9 (Report No T 4-13199) Shut-off test approved. 8 $\frac{3}{4}$ " casing cemented at 1546'. Inspector noted while valve open for  $\frac{1}{2}$  hr. packer held effectively, and one strong puff of air came from drill pipe, followed by gradually decreasing air flow by heads for  $\frac{1}{2}$  hr; when pulled, drill pipe contained 132' of very gassy heavy mud and considerable oil; fluid sample from bottom of drill pipe showed no water or thin drilling fluid. Shut-off is approved.
- Shell Oil Co. well No "Security" 11. (Report No. P 4-16262.) Proposal to drill approved. Conditions: Well is 935' N and 1025' W of E $\frac{1}{2}$  section corner. Estimate oil sand at 1727'. Proposed to cement 16" S. P. at 30'; cement 8 $\frac{3}{4}$ " at 1722'; land 6 $\frac{1}{2}$ " at 1904'. Decision: Proposal is approved. Notify division to witness 8 $\frac{3}{4}$ " water shut-off test with hole open not more than 5' below shoe.
- Shell Oil Co well No "Security" 12 (Report No P 4-16263) Proposal to drill approved. Conditions: Well is 935' N and 1530' W. of E $\frac{1}{2}$  section corner. Estimate oil sand at 1667'. Proposed to cement 16" at 30'; cement 8 $\frac{3}{4}$ " at 1662'; land 6 $\frac{1}{2}$ " at 1742'. Decision: Proposal is approved. Notify division to witness 8 $\frac{3}{4}$ " water shut-off test with hole open not more than 5' below shoe.
- Shell Oil Co well No "Security" 13 (Report No P 4-16264) Proposal to drill approved. Conditions: Well is 1560' N. and 1055' W of E $\frac{1}{2}$  section corner. Estimate oil sand at 1688'. Proposed to cement 16" at 30'; cement 8 $\frac{3}{4}$ " at 1683'; land 6 $\frac{1}{2}$ " at 1880'. Decision: Proposal is approved. Notify division to witness 8 $\frac{3}{4}$ " water shut-off test with hole open not more than 5' below shoe.

## MOUNTAIN VIEW FIELD

T 30 S., R. 28 E., M. D B. and M.

- Sec 14—Associated Oil Co well No "Nunez" 1. (Report No P 4-16231) Proposal to drill approved provisionally. Conditions: Well is 330' N and 330' E of W $\frac{1}{2}$  section corner. Estimate oil sand at 5410'. Proposed to cement 13 $\frac{3}{4}$ " at 800'; cement 7" at 5400'; land 5" at 5550'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (2) Formations left back of 7" are mudded by open circulation until mud loss is reduced to 5 bbl. per hr. (3) Enough cement is used to fill to 1000' above 7" shoe. (4) Division is notified to examine all cores taken before cementing 7", to witness mudding test just before cementing 7", and to witness 7" shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- The Texas Co well No. "Mateo Smith" 1 (Report No T 4-13180) Inspection of mudding operations. During 1 hr circulation test 2 bbl of mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{4}$ " at 5475'.
- The Texas Co well No "Mateo Smith" 1 (Report No T 4-13193) Shut-off test approved. 8 $\frac{3}{4}$ " casing cemented at 5473'. Inspector noted 21st stand from bottom filled with clean oil; when 19th stand from bottom was pulled to crown it blew gas and oil for several minutes. 1st and 2d stands from bottom contained oil with mud trace; gray oily sand settled in last

double of pipe; 1 or 2 gal of thin watery mud settled above testing tool check valve. Shut-off is approved.

The Texas Co well No. "Mateo Smith" 3 (Report No P 4-16234.) Proposal to drill approved provisionally Conditions: Well is 1324' N and 1328' E. of SW. section corner Estimate oil sand at 5200'. Proposed to cement 13 $\frac{3}{4}$ " at 1150'; cement 8 $\frac{1}{2}$ " at 5400'; land 6 $\frac{1}{2}$ " at 5470'; core for exact setting points Decision: Proposal is approved provided that.

(1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire (2) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until mud loss is reduced to 5 bbl. per hr (3) Enough cement is used to fill up to 1000' above 8 $\frac{1}{2}$ " shoe (4) Division is notified to examine all cores taken before cementing 8 $\frac{1}{2}$ ", to witness mudding test just before cementing 8 $\frac{1}{2}$ ", and to witness 8 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below shoe Note: Attention is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools

The Texas Co well No "Mateo Smith" 3. (Report No T 4-13187.) Inspection of cementing operations 13 $\frac{3}{4}$ " casing cemented at 1113' with 750 sacks cement Inspector noted top of cement at 1099'. Operations are approved.

The Texas Co. well No "Mateo Smith" 4 (Report No P 4-16265.) Proposal to drill approved provisionally Conditions: Well is 1324' N and 1823' E of SW section corner Estimate oil sand at 5200' Proposed to cement 13 $\frac{3}{4}$ " at 1100'; cement 8 $\frac{1}{2}$ " at 5350'; land 6 $\frac{1}{2}$ " at 5420'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire (2) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until mud loss is reduced to 5 bbl per hr (3) Enough cement is used to fill up to 1000' above 8 $\frac{1}{2}$ " shoe (4) Division is notified to examine all cores taken before cementing 8 $\frac{1}{2}$ ", to witness mudding test before cementing 8 $\frac{1}{2}$ ", and to witness 8 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below shoe Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools

Sec 23—Standard Oil Co well No. "Wible" 1 (Report No T 4-13170.) Inspection of mudding operations During 1 hr. circulation test 3 $\frac{1}{2}$  bbl of mud fluid was lost from pit Mudding operations are approved Oral approval is hereby confirmed to cement 9" at 5409'

Standard Oil Co well No "Wible" 1 (Report No T 4-13204.) Bailing test approved 9" casing recemented at 5408' Hole bailed to 3250' for test and stood 23 hr. Oil entered at rate of 51 bbl in 24 hr Samples from top and bottom, and from several hundred feet below top, were clean oil.

Standard Oil Co. well No. "Wible" 2 (Report No P 4-16225.) Proposal to drill approved provisionally Conditions: Well is 323' S. and 2327' W. of NE section corner Estimate oil sand at 5410' Proposed to cement 13 $\frac{3}{4}$ " at 1200'; cement 9" at 5400'; land 7" at 5600' Decision: Proposal is approved provided that: (1) Formations left back of 9" are mudded by open circulation until mud loss is reduced to 5 bbl per hr (2) Enough cement is pumped behind 9" to fill up to at least 4600'. (3) Division is notified to witness cementing of 13 $\frac{3}{4}$ ", to examine all cores taken before cementing 9", to witness mudding test just before cementing 9", to inspect blow-out prevention equipment before drilling below 4800', and to witness 9" shut-off test with hole open not more than 5' below shoe Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Sec. 24—Gilmore Oil Co well No "Dechent" 1. (Report No P 4-16261.) Supplementary proposal to drill approved Conditions: Depth 5855', cement plug 5855'-5775'; 12 $\frac{1}{2}$ " cemented at 1113' 6 $\frac{1}{2}$ " cemented at 5475', 4 $\frac{1}{2}$ " liner landed 5775'-5445', perforated 5775'-5475', can not be pulled, well wet Proposed to shoot 4 $\frac{1}{2}$ " liner 5680'-5710' and plug with cement 5776'-5678', notifying division to witness location and hardness of this cement plug; try again for production

Gilmore Oil Co well No "Dechent" 1 (Report No T 4-13210.) Inspection of cementing operations. 4 $\frac{1}{2}$ " liner could not be pulled, was shot 5680'-5710'; 30 sacks cement pumped in through drill pipe hung at 5776', drill pipe pulled to 5670' and washed; hard cement found at 5692', 30 sacks cement pumped in through drill pipe hung at 5690', drill pipe raised to 5670' and washed; 6 sacks cement estimated washed out Inspector noted cement plug at reported depth of 5678' held weight of drill pipe several times Location and hardness of cement plug at 5678' are approved.

Gilmore-Snyder Co. well No. "Mullaney" 1. (Report No P 4-16235.) Proposal to drill approved provisionally Conditions: Well is 166 1/4' N and 330' E of SW corner of S $\frac{1}{2}$  of N $\frac{1}{2}$  of S $\frac{1}{2}$  of NE $\frac{1}{4}$  of section Estimate oil sand at 5265'. Proposed to land 24" conductor pipe at 30'; cement 13 $\frac{3}{4}$ " at 1150'; cement 8 $\frac{1}{2}$ " at 5265'; land 6" liner at 5495'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire (2) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until mud loss is reduced to 5 bbl per hr. (3) Enough cement is used to fill up to 1000' above 8 $\frac{1}{2}$ " shoe (4) Division is notified to examine all cores taken before cementing 8 $\frac{1}{2}$ ", to witness mudding test just before cementing 8 $\frac{1}{2}$ ", and to witness 8 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below shoe Note: Approval is contingent upon time of drilling and location of well

being in strict conformity with all Federal regulations relating to development of new pools.

Standard Oil Co. well No "Ranton" 3 (Report No. P 4-16227.) Proposal to drill approved provisionally. Conditions: Well is 1002' S. and 323' E. of NW section corner. Estimate oil sand at 5310'. Proposed to cement 13½" at 1200'; cement 9" at 5300', land 7" at 5500'. Decision: Proposal is approved provided that. (1) Formations left back of 9" are mudded by open circulation until mud loss is reduced to 5 bbl per hr (2) Enough cement is pumped behind 9" to fill up to at least 4500' (3) Division is notified to witness cementing of 13½", to examine all cores taken before cementing 9", to witness mudding test just before cementing 9", to inspect blow-out prevention equipment before drilling below 4800', and to witness 9" shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Standard Oil Co well No "Ranton" 3 (Report No. T 4-13168) Inspection of cementing operations. Inspector noted wood plug drilled up at reported depth of 1194', 13½" shoe drilled up at 1204' and formation drilled 1204'-1206'; wood fragments and cement chips recovered from circulating ditch. Operations are approved.

T. 30 S, R. 29 E, M. D B. and M.

Sec 19—Otis Hoyt well No "Petrol" 1. (Report No P 4-16246) Proposal to redrill approved provisionally. Conditions: Depth 5630'. 8½" cemented at 5381'. 6½" liner landed 5305'-5607', perforated 5607'-5356'; 2" tubing hung at 5580', pulled from 5355'; 6½" liner, 2" tubing, and probably 8½", are collapsed at 5355'. Proposed to pull 6½" liner from 5350', or as deep as possible, and dump 2 sacks cement on stub; set iron whipstock on 6½" cut-off; redrill through 8½" at about 5336' to about 5600', set new 6½" liner at 5600' and recomplete well. Decision: Proposal is approved provided division is notified to witness 8½" water shut-off test after redrilling to 5381' and production test after recompleting well.

Standard Oil Co well No "Nichols Community" 2 (Report No T 4-13189) Inspection of mudding operations. During ¾ hr circulation test no mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 9" at 5375'.

Standard Oil Co. well No "Nichols Community" 2 (Report No T 4-13209) Shut-off test approved. 9" casing cemented at 5375'. Inspector noted while valve open for ½ hr. there was slight blow of air by heads from drill pipe, and packer sealed off effectively; after valve closed and drill pipe pulled net rise of 152' of fairly light gas-cut drilling fluid was found in drill pipe; no evidence of clear water or grey sand in bottom of testing tool. Shut-off is approved.

Sec 29—Hogan Petroleum Co. well No. "Porter-Day" 4 (Report No T 4-13179.) Shut-off test not approved. 8½" casing recemented at 6063'. Inspector noted 12 stands of fluid brought up in drill pipe; first 2 stands contained heavy mud showing gas; next 3 stands, thin mud showing gas; last 7 stands, watery mud with much gas, about 60' of sand settled in last stand, this sand similar to that used to plug hole. Shut-off is not approved.

Hogan Petroleum Co well No "Porter-Day" 4 (Report No. T 4-13184) Shut-off test approved. 8½" casing recemented at 6063'. Inspector noted 8½" stands of fluid brought up in drill pipe, fluid was heavy mud showing gas, with no evidence of water. Shut-off is approved.

Sec 30—National Oil Co well No "Cowan" 1. (Report No. P 4-16253) Supplementary proposal to drill approved provisionally. Conditions: Depth 5604', cement plugs 5604'-5464' and 2500'-2000'; 13½" cemented at 951'. Proposed to redrill from about 2000'; cement 8½" at 5450'; land 6½" liner at 5650'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (2) Formations left back of 8½" are mudded by open circulation until mud loss is reduced to 5 bbl per hr (3) Enough cement is used to fill to 1000' above 8½" shoe (4) Division is notified to examine all cores taken before cementing 8½", to witness mudding test just before cementing 8½", and to witness 8½" shut-off test with hole open not more than 5' below shoe.

Sec 32—Barnsdall Oil Co. well No "Morris" 1 (Report No T 4-13167.) Inspection of mudding operations. During 1 hr 10 min circulation test mud fluid was lost from pit at rate of 1.7 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 3½" at 5430'.

Barnsdall Oil Co. well No "Morris" 1. (Report No. T 4-13195) Bailing test approved. 8½" casing cemented at 5430'. Hole bailed to 2500' for test and stood 17 hr. No fluid entered well. Fluid samples were: top, medium weight drilling mud, 5434', very heavy drilling fluid.

Hogan Petroleum Co well No "Wharton" 3. (Report No. T 4-13178.) Shut-off test not approved. 8½" casing recemented at 6191'. Inspector noted 9 stands of fluid brought up in drill pipe, first 2½ stands were heavy mud and gas-cut mud with good oil shows, next 3 stands, thinner mud with much silt and fine sand showing oil and gas; last 3½ stands, oily muddy water and packed medium grained to coarse oil sand. Tests indicate water entering from unknown source. Shut-off is not approved.

T. 31 S, R. 29 E, M. D B and M.

Sec. 3—Associated Oil Co. well No "DiGiorgio Farms" 1 (Report No P 4-16232) Proposal to drill approved provisionally. Conditions: Well is 200' N. and 60' W. of S½ section corner. Estimate oil sand at 5410'. Proposed to

cement 13 $\frac{3}{4}$ " at 800'; cement 7" at 5400'; land 5" at 5550'. Decision: Proposal is approved provided that: (1) 13 $\frac{3}{4}$ " is cemented not higher than 800'. (2) Every possible step is taken to prevent damage to oil or gas-bearing strata by infiltrating water and to underground water suitable for irrigation. (3) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (4) Division is notified when oil or gas showing encountered, before cementing 7", and to witness 7" water shut-off test with hole open not more than 5' below cementing depth. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

### ROUND MOUNTAIN FIELD

T 28 S, R. 28 E, M. D B and M.

Sec. 13—The Kern River Oilfields of Calif., Ltd, well No. "Kernco" 3. (Report No. P 4-16256.) Proposal to plug approved provisionally. Conditions: Depth 2099', plugged to 2088'; 10 $\frac{1}{2}$ " cemented at 1921'; 8 $\frac{1}{2}$ " landed at 2090', perforated 2039'-2090'. Proposed to clean and replace cement plug, extending same from bottom to 2075'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 2075'.

T. 28 S, R 29 E., M D B. and M.

Sec. 19—Round Mountain Oil Co well No. "Jewett" 1. (Report No. T 4-13198.) Bailing test not approved. 6 $\frac{1}{2}$ " casing recemented at 1880'. Hole bailed to 1523' for test and stood 18 hr. Water entered at rate of 7.9 bbl. in 24 hr. Bailer would not go below 1600' due to junk in hole. Test indicates water enters from unknown source. Shut-off is not approved.

### SUNSET FIELD

T 11 N., R. 23 W., S. B. B. and M.

Sec. 4—Lake View Oil & Refining Co. well No. 21. (Report No P 4-15674.) Proposal to abandon approved provisionally. Conditions: Depth 2684', cement plugs 2684'-2647', 2633'-2610' and 2607'-2587'; 10" cemented at 2535'; 8 $\frac{1}{2}$ " cemented at 2595', ripped 2579'-2580', perforated 2538'-2545' and 2560'-2580', shot 2570'-2580'; 6 $\frac{1}{2}$ " froze 2606'-2676', shot at 2606' and 2630', ripped 2616'-2676'. Junk: 6 $\frac{1}{2}$ " 2606'-2645' and 2619'-2659'; 4 $\frac{1}{2}$ " 2637'-2678'; total depth old hole 2680'. Proposed to clean out to 2580' if possible and cement under pressure, plug to extend well up into 10" shoe; pull 8 $\frac{1}{2}$ " from 2500' with collar shot and cap stub with cement; fill hole with mud fluid or surface dirt and water; plug 10" at surface; remove junk and debris from site. Decision: Proposal is approved provided that: (1) Division is notified to witness placing of all cement plugs and cement plug at 2535' before extending it above 10" shoe. (2) Upon completion of proposed work Form 102 is filed in duplicate.

Lake View Oil & Refining Co well No. "Midway Fields" 3. (Report No. P 4-15660.) Proposal to abandon approved provisionally. Conditions: Depth 2750' or more; 10" landed at 2600'; 8 $\frac{1}{2}$ " cemented at 2749', shot at 2720'; 6 $\frac{1}{2}$ " cemented at 2748'. Junk: 8 $\frac{1}{2}$ " cemented 2720'-2749'; 6 $\frac{1}{2}$ " cemented 2720'-2752'; 4 $\frac{1}{2}$ " cemented 2720'-2754'; 4 $\frac{1}{2}$ " cemented 2780'-3185', shot 3095'-3100', 3005'-3010', 2949'-2954' and 2795'-2800'; 3" bailer 3071'-3010'; 3" casing, tools and underreamer 3250'-3174'. Proposed to clean out to as near 2755' as possible and cement under pressure, extending cement well up into 6 $\frac{1}{2}$ " shoe; cut and pull 6 $\frac{1}{2}$ " from 2725' if possible, and cap stub with cement; cut and pull 8 $\frac{1}{2}$ " from 2650', and cap stub with enough cement to extend up into 10" shoe; pull all 10" possible and fill cavity with mud fluid. Decision: Proposal is approved provided that: (1) No 10" is pulled. (2) All unplugged portions of hole are filled with heavy mud or surface formation and water. (3) Well is capped at surface. (4) Division is notified to witness cutting or shooting of all casings and placing of all cement plugs.

Lake View Oil & Refining Co well No "Midway Fields" 3. (Report No. T 4-12335.) Inspection of cementing operations. Junk cleaned out to 2702' and 2 sacks cement dumped; 8 sacks cement dumped at 2702'; hole kept full of water during cementing operations: 300-500 lb pressure applied to fluid for  $\frac{3}{4}$  hr., about 1 $\frac{1}{2}$  cu. ft. of water forced into well. Bailer would not spud below 2663' and brought up sample of set cement. Location and hardness of cement plug at 2663' are approved.

Lake View Oil & Refining Co well No "Midway Fields" 3. (Report No. T 4-12340.) Inspection of cementing operations. 6 $\frac{1}{2}$ " shot at 2580', 2450' and 2360', pulled from 2360'. wood plug driven in stub to 2358', and 6 sacks cement dumped on plug, filling to 2338'; 8 $\frac{1}{2}$ " shot and pulled from 147', wood plug could only be driven to 97'. Inspector noted 4 sacks cement dumped at 97'. Cementing operations are approved.

Sec. 6—Gus Ninkovich well No 1. (Report No P 4-15673.) Proposal to alter casing approved provisionally. Conditions: Depth 2473'; 8 $\frac{1}{2}$ " at 1658'; 6 $\frac{1}{2}$ " at 2300'; 4 $\frac{1}{2}$ " at 2473', perforations unknown. Proposed to pull 4 $\frac{1}{2}$ "; locate 6 $\frac{1}{2}$ " shoe, test casing for leaks, and if O K try to cement 6 $\frac{1}{2}$ " to shut off water. Decision: Proposal is approved provided that: (1) Division is notified to witness 6 $\frac{1}{2}$ " shut-off test. (2) Form 102 is filed in duplicate upon completion of proposed work.

## T 12 N, R 23 W., S B B. and M.

- Sec. 32—Lake View Oil & Refining Co well No. 1 (Report No. P 4-15667.) Proposal to abandon approved provisionally. Conditions. Depth 2509'; 8 $\frac{1}{2}$ " cemented at 2243'; 6 $\frac{1}{2}$ " cemented at 2391', shot 2370'-2380', pulled from 2102'; 4 $\frac{3}{4}$ " cemented at 2399'. Junk: 6 $\frac{1}{2}$ " 2485'-2509', 2331'-2373' and 2278'-2313'; 4 $\frac{3}{4}$ " 2390'-2434'; total depth 2434'. Proposed to clean out to 2434' if possible; plug to 2399', having division witness plug; pull 4 $\frac{3}{4}$ " from 2245' if possible; fill hole with mud fluid. Decision: Proposal is approved provided that: (1) After plug is witnessed at 2399' it is continued to 2389'. (2) 4 $\frac{3}{4}$ " is capped with at least 10' cement. (3) Division is notified to witness placing of all cement plugs. (4) 8 $\frac{1}{2}$ " is capped at surface. (5) Form 102 is filed in duplicate after completing proposed work.
- Lake View Oil & Refining Co. well No 5. (Report No T 4-12333.) Inspection of operations for witnessing shooting off of 8 $\frac{1}{2}$ " casing in process of abandonment. 8 $\frac{1}{2}$ " shot at 1519', 1350' and 1275', pulled from 1275'. Shooting operations are approved. Oral approval is hereby confirmed to leave 8 $\frac{1}{2}$ " casing stub without cement cap.

## KERN COUNTY

## T 25 S, R. 23 E, M. D. B. and M.

- Sec. 3—Trico Oil and Gas Co. well No. 2. (Report No. P 4-16238.) Supplementary proposal to drill approved. Prospect well.
- T. 27 S., R. 23 E., M. D. B. and M.
- Sec. 8—Standard Oil Co. well No. "Hill" 1 (Report No. P 4-15673.) Proposal to drill approved provisionally. Conditions: Well is 2310' N. and 330' W. of SE. section corner. Prospect well.

## TULARE COUNTY

## T. 23 S., R. 27 E, M. D. B. and M.

- Sec. 10—Baker-Grover Co. well No "Baker-Grover" 1. (Report No. P 4-16242.) Supplementary proposal to abandon approved provisionally. Conditions: Depth 1606'; 12" S. P. landed at 443'; slight oil and gas showing at about 925'. Proposed to abandon present hole below 850' by running cement plug 1000'-850'; redrill from 850'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 850'.

## DISTRICT No. 5

## COALINGA FIELD

T 20 S, R. 14 E, M. D B. and M.

- Sec 12—Coalinga Star Oil Co well No 3. (Report No. P 5-3900.) Proposal to abandon approved provisionally. Conditions: Depth 1438'; 12 $\frac{1}{2}$ " landed at 65' and 10" at 90', these casings do not show at surface; 8 $\frac{1}{2}$ " landed at 1240' 6" landed at 1438', shot at 1418', drilled up to 1438', plugged with rope, rock and cement 1408'-1384' and cement 1400'-1384', then shot and pulled from 1350' and hole plugged with cement 1350'-1338'; perforated 4 $\frac{1}{2}$ " landed 1399'-1437'. Proposed to clean out to 1338' and plug with cement 1338'-1240'; shoot 8 $\frac{1}{2}$ " 1210'-1240' and plug with cement 1240'-1200'; fill to surface with mud or soil; cap at surface and abandon. Decision: Proposal is approved provided that. (1) Division is notified to witness location and hardness of cement plug at about 1200'. (2) Hole is kept full of water and other precautions taken to prevent bridging while it is being filled above 1200'.
- Coalinga Star Oil Co well No 5. (Report No. P 5-3901) Proposal to abandon approved provisionally. Conditions. Depth 1418', 10" landed at 998'; 8" landed at 1270'; 6 $\frac{5}{8}$ " landed at 1418', perforated 1370'-1418'; produced all water. Proposed to clean out to 1418' and plug with cement 1418'-1385'; shoot 6 $\frac{5}{8}$ " 1310'-1330' and plug with cement 1335'-1310'; pull all 6 $\frac{5}{8}$ " possible and continue cement plug 1310'-1270'; shoot 8 $\frac{1}{2}$ " 1230'-1255' and plug with cement 1270'-1230', plug with cement 1230'-1210'; pull 8 $\frac{1}{2}$ " from not lower than 975', fill with mud or soil to 975' and cap stub with cement; fill to surface with mud or soil, cap at surface and abandon. Decision: Proposal is approved provided that: (1) Fluid level is maintained at sufficient height while plugging to force cement out of casing against walls of hole. (2) Division is notified to witness location and hardness of cement plugs at 1310' and 1230'. (3) Hole is kept full of water and other means taken to prevent bridging while it is being filled above 1210'.
- Coalinga Star Oil Co well No 5 (Report No. T 5-1911) Inspection of cementing operations. Hole cleaned out to 1414' and 12 sacks cement dumped; top of cement at 1330'; 6 $\frac{5}{8}$ " shot and pulled from 1327'; 8 sacks cement dumped at 1330'; hole kept full of water during and just after cementing operations; hole would take practically no fluid. Inspector noted bailer would not spud below 1308' and brought up sample of set cement. Location and hardness of cement plug at 1308' are approved.
- Coalinga Star Oil Co well No 5 (Report No T 5-1914.) Inspection of cementing operations. 11 sacks cement dumped at 1308'; 8" shot 1231'-1255' in four stages, hole cleaned out to set cement at 1270' and 23 sacks cement dumped; 5 sacks cement dumped at 1245'; hole was kept full of fluid during and immediately after cementing. Inspector noted bailer would not spud below 1223' and brought up sample of set cement. Location and hardness of cement plug at 1223' are approved.
- Coalinga Star Oil Co well No 6. (Report No P 5-3906.) Proposal to abandon approved provisionally. Conditions: Depth 1493'; 8 $\frac{1}{2}$ " cemented at 1346'; 6 $\frac{5}{8}$ " landed at 1483'; perforations unknown; produced high percentage of water. Junk: 8 $\frac{1}{2}$ " 1210'-1283'; 6 $\frac{5}{8}$ " 1387'-1488' and 1420'-1486'. Proposed to plug with cement 1493'-1430'; destroy 6 $\frac{5}{8}$ " by shooting 1420'-1400' and pull from this depth if possible; plug with cement 1430'-1400'; continue cement plug to 1346' after shooting 1346'-1360' unless 6 $\frac{5}{8}$ " has already been pulled from below this depth; shoot 8 $\frac{1}{2}$ " 1260'-1280' and continue cement plug to 1250'; fill with mud or soil to surface; cap at surface and abandon. Decision: Proposal is approved provided that: (1) Fluid level is maintained at sufficient height during plugging operations to force cement out of casing against walls of hole. (2) Shot 1260'-1280' is of sufficient size to break sidetracked casing. (3) Division is notified to witness location and hardness of cement plugs at 1400', 1346' and 1250'. (4) Hole is kept full of water and other means taken to prevent bridging while being filled above 1250'.
- Coalinga Star Oil Co well No 11 (Report No. T 5-1910) Inspection of cementing operations. Hole could not be cleaned out below 931' due to iron in hole, hole shot with two shots spaced 922'-931', cavity cleaned out to 931' and 8 sacks cement dumped. Inspector noted bailer would not spud below 914' and brought up sample of set cement. Location and hardness of cement plug at 914' are approved.
- Sec. 13—Standard Oil Co. well No 34. (Report No P 5-1917.) Inspection of cementing operations. Hole cleaned out to 1296' and 80 sacks cement dumped in four stages, excess cement bailed off to 1190'; 8 $\frac{5}{8}$ " shot 1180'-1190', cavity cleaned out to 1190' and 70 sacks cement dumped in three stages, excess cement cleaned out 970'-990'; 8 $\frac{5}{8}$ " shot 980'-990', cavity cleaned out to 990' and 10 sacks cement dumped, excess cement bailed off to 980'. Inspector noted bailer would not spud below 979'



and brought up sample of set cement. Location and hardness of cement plug at 979' are approved.

Sec. 24—Salvia Oil Co. well No. 21. (Report No. P 5-3913.) Proposal to abandon approved provisionally. Conditions. Depth 1364'; 10" cemented at 1033' 8½" cemented at 1270'; 6½" landed at 1364', bottom 80' perforated, broken off at 919'; pulled from above that point, and adapter set. Junk: 8½" 1100'-1209', bottom 77' perforated. Proposed to plug with cement 1364'-1295'; shoot 6½" 1292'-1272' and plug with cement 1295'-1272'; continue cement plug 1272'-1250'; fill with mud or soil 1250'-925'; pull 8½" from as near 919' as possible and cap with cement; fill with mud or soil to surface; cap at surface and abandon. Decision: Proposal is approved provided that. (1) Hole is kept full of water during all plugging and filling operations, and other precautions used to prevent bridging. (2) Division is notified to witness location and hardness of cement plugs at 1272' and on 8½" stub..

Sec 35—The Texas Co well No "Circle" 1. (Report No. P 5-3912.) Proposal to drill approved provisionally. Conditions: Well is 1500' S. and 150' W. of NE section corner. Proposed to cement 8½" at 100'; start coring to 700'; notify division before setting any additional casing; drill with rotary tools. Decision: Proposal is approved provided that: (1) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (3) Division is notified when oil or gas showing encountered, before landing or cementing any casing below 1000', and to witness bailing test of each shut-off

T. 20 S., R. 15 E., M. D B. and M.

Sec 19—Standard Oil Co. well No. 24. (Report No P 5-3904.) Proposal to set packer approved. Conditions: Depth 2377', cement heaving plug 2368'-2377'; 10½" landed at 1505'; 8½" cemented at 2212'; 6½" and 7" landed at 2375', perforated 2202'-2375'. Proposed to cut and pull 6½" from about 2180'; rerun 6½" and set together at 2180' with hemp sleeve packer; return to production.

Sec. 30—Associated Oil well No. 7-A (Report No P 5-3908) Supplementary proposal to abandon approved provisionally. Conditions. Depth 2872'; 15½" landed at 40'; 10" landed at 2471'; 8½" landed at 2695', pulled above 2021'; 6½" cemented at 2698'; 4½" landed 2669'-2870', bottom 180' perforated. Junk: 6½", two or more pieces below 2689', bottom of one is at 2826'; 4½" 2816'-2872', piece of 6½" junk partially inside. Proposed to pull 6½" from some point between 2600' and 2660'; fill hole with cement 2680' to 10' above top of 6½" cut-off, fill to surface with brea, clay, sand, etc, with exception of cement cap on 8½" stub at 2021'. Decision: Proposal is approved provided that (1) Proposed cement plug is placed in two stages (2) Division is notified to witness location and hardness of first stage of cement plug at about 2660' (3) Hole is kept full of water while being plugged and filled to surface. Note: Abandonment not entirely satisfactory. Additional work will be required if damage traceable to this well ensues

T. 21 S, R 14 E, M D. B and M.

Sec. 12—Albert Beck Trust well No 3 (Report No. P 5-3914.) Supplementary proposal to drill approved. Conditions: Depth 1630', hole flowed water containing coal particles; there was considerable gas pressure; hole cleaned out to 1475' where hard shell encountered and evidence that new hole is being made. Proposed to run drill pipe to 1475' and mud thoroughly, pump cement plug 1475'-1450'; perforate 7" 1327'-1350', run in tubing, and make production test; if advisable, clean out again to 1400' to run tubing below perforated casing or to test formations just below 7" casing.

#### KETTLEMAN NORTH DOME FIELD

T 21 S, R 17 E, M. D B and M.

Sec 19—Standard Oil Co well No. 76 (Report No P 5-3910) Proposal to drill approved provisionally. Conditions: Well is 1670' N. and 1016' W. of SE. section corner. Estimate oil sand at 7430'. Proposed to cement 18½" at 600'; cement 9½" at 7800'; land 7" and 6½" at 8530'; drill with rotary tools. Decision: Proposal is approved provided that (1) Mud fluid of not less than 70 lb per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) 9½" is not cemented more than 400' below top of Temblor without consulting division. (4) 9½" is cemented with enough cement to reach up back of this casing at least 1500'. (5) Division is notified to witness 9½" shut-off test.

Standard Oil Co. well No. 78. (Report No T 5-1918.) Shut-off test approved 9½" casing cemented at 7767'. Inspector noted stand immediately above trip valve was hanging above table, reported to have been sounded out dry, but on cracking drill pipe it was found to contain

about 75' of water; 33' air pocket found just below trip valve; all fluid was fresh water except about bottom 40' which was thick mud, tasting fresh. Later telephoned that drill pipe had been measured to bottom at 7772' without circulating or rotating, and first cuttings obtained upon return to drilling were sand, and water filtered from mud sample from just above tester tested 50 gr. salt per gal. Shut-off is approved.

Standard Oil Co. well No. 78. (Report No. T 5-1919.) Inspection of equipment. Equipment as inspected was satisfactory with exception that high pressure gate for mud overflow line and stop-cock for Kelly had not been installed. Later reported by telephone that this equipment had been installed.

Sec 27—Standard Oil Co. well No. 36. (Report No. P 5-3909.) Proposal to drill approved provisionally. Conditions: Well is 1617' N. and 1640' E. of SW. section corner. Estimate oil sand at 7320'. Proposed to cement 18 $\frac{3}{4}$ " at 600', cement 9 $\frac{3}{4}$ " at 7770'; land 7" at 8170'; drill with rotary tools. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) 9 $\frac{3}{4}$ " is not cemented more than 450' below top of Temblor without consulting division. (4) 9 $\frac{3}{4}$ " is cemented with enough cement to reach up back of this casing at least 1500'. (5) Division is notified to witness 9 $\frac{3}{4}$ " shut-off test.

Sec. 29—Standard Oil Co. well No. 21. (Report No. P 5-3911.) Proposal to drill approved provisionally. Conditions: Well is 330' S and 1007' E. of NW. section corner. Estimate oil sand at 7295'. Proposed to cement 18 $\frac{3}{4}$ " at 600'; cement 9 $\frac{3}{4}$ " at 7670', land 7" and 6 $\frac{1}{2}$ " at 8600'; drill with rotary tools. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) 9 $\frac{3}{4}$ " is not cemented more than 400' below top of Temblor without consulting division. (4) 9 $\frac{3}{4}$ " is cemented with enough cement to reach up back of this casing at least 1500'. (5) Division is notified to witness 9 $\frac{3}{4}$ " shut-off test.

Sec. 34—Kettleman North Dome Assoc. well No. 61. (Report No. T 5-1912.) Shut-off test approved. 9 $\frac{3}{4}$ " casing cemented at 7390'. Inspector noted 3240' of drill pipe had been pulled, upon pulling remainder of drill pipe top of fluid found about 40' above trip valve and air pocket about 20' below trip valve, all fluid was fresh water except bottom 20' which was heavy mud tasting fresh. Later reported by telephone drill pipe was measured in to bottom at 7392' without circulating or rotating; first cuttings on ditch were sand and shale, mostly shale, water filtered from fluid sample from just above tester tested 185 gr. salt per gal. Shut-off is approved.

Kettleman North Dome Assoc. well No 61. (Report No. T 5-1913.) Inspection of equipment. Equipment as inspected was satisfactory except that there were no outside controls on Shaffer gates and no Kelly packer. Later reported missing equipment had been supplied.

Sec. 35—Associated Oil Co. well No. "Whepley" 5. (Report No. P 5-3907.) Proposal to drill approved provisionally. Conditions: Well is 1650' N. and 330' E. of SW. property corner. Estimate oil sand at 8200'. Proposed to cement 16" at 1000'; cement 9" at 8200'; land 6 $\frac{1}{2}$ " at 8450'; drill with rotary tools. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) 9" is cemented not more than 800' below top of Temblor without consulting division. (4) 9" is cemented with enough cement to reach up back of this casing at least 1500'. (5) Division is notified to witness bailing test of 9" shut-off.

T. 22 S, R 18 E, M D B and M.

Sec. 8.—Kettleman North Dome Assoc. well No. 56. (Report No. T 5-3902.) Supplementary proposal to drill approved. Conditions: Depth 10154'; 20" cemented at 1200'; 13 $\frac{3}{4}$ " cemented at 6847'; deviations from vertical: 0'-9000' within 3°, 9000'-9400', within 4°, below 9400', 4° to 12°. Proposed to cement 9 $\frac{3}{4}$ " at 8304' as conductor string; clean out and plug to 9400' and straighten; if oil showings encountered at correlative depth with those previously logged, file notice outlining further casing program.

T 23 S, R 18 E., M D. B. and M

Sec. 2—Kettleman North Dome Assoc. well No. 73. (Report No. P 5-3903.) Supplementary proposal to drill approved provisionally. Conditions: Depth 8630'; 16" cemented at 1296'; 11 $\frac{1}{2}$ " cemented at 5570'. Proposed to plug with cement to 7530'; cement 8 $\frac{1}{2}$ " at 7530' and prospect ahead. Decision: Proposal is approved provided division is notified to witness 8 $\frac{1}{2}$ " shut-off test.

Kettleman North Dome Assoc. well No. 73. (Report No. T 5-1915.) Shut-off test approved. 8½" casing cemented at 7528'. Inspector noted 3850' of drill pipe had been pulled, all dry; upon pulling remainder of drill pipe fluid was found risen about 200', all fluid was fresh water except bottom 220'; fluid samples from 7389', 7456' and 7510' were thick Colox-laden mud, upper two showing considerable gas; water filtered from same tested 1009, 1176 and 828 gr. salt per gal, respectively, water filtered from mud sample from ditch tested 869 gr. salt per gal.; space between 11¼" and 8½" was closed in and and 350 lb. pressure applied. Later reported drill pipe measured in to 7536' without circulating or rotating, without taking any weight. Shut-off is approved.

Kettleman North Dome Assoc. well No. 73. (Report No. T 5-1916.) Inspection of equipment Equipment as inspected is satisfactory.

#### KINGS COUNTY

T. 24 S, R. 22 E., M. D. B. and M.

Sec. 33—Trico Oil and Gas Co. well No. 1. (Report No P 5-3915.) Proposal to abandon approved provisionally. Prospect well.

MONTH OF NOVEMBER, 1934

Field or county <sup>1</sup>	Tests		Proposals					
	Rou- tine	Inspec- tion	New wells		Deepen	Redrill	Abandon	
			Drill	Supple- men- tary			First	Supple- men- tary
Distr. 1—Brea-Olinda.....	1			1				
Coyote Hills.....	2	2		1				
Dominguez.....	4	7		4				1
Huntington Beach.....	6	2	1			5		2
Inglewood.....		3		1	3			
Long Beach.....	8	28	14	1	3	15		1
Los Angeles City.....		1						1
Montebello.....	3	2	2	2				2
Playa del Rey.....	2	5	3					2
Richfield.....	1	5				3		
Rosecrans.....		3			1			2
Santa Fe Springs.....	2	29	3	2		13		1
Seal Beach.....		4						
Torrance.....	1				1	1		
Whittier.....			1					
Los Angeles County.....		2						
Orange County.....		1		1				
Riverside County.....		1						
Totals.....	30	95	24	13	8	41	10	
Distr. 2—Piru.....		2						
Rincon.....		1			1			
Santa Paula.....								1
Sespe.....				1				1
Simi.....		2						1
Ventura.....	2	5	1	2		3		
Ventura County.....		4						
Totals.....	2	14	1	3	1	3	2	1
Distr. 3—Capitan.....		1	2	2				
Cat Canyon.....							2	
Elwood.....	1		1					
Lompoc.....			1					
Mesa.....	11		8					
Santa Barbara County.....			1					
Totals.....	12	1	13	2			2	
Distr. 4—Belridge.....	2	1						
Edison.....	6		6	6				
Elk Hills.....	1	2				1	1	
Fruitvale.....	2	2	1					
Kern River.....	1					3		
Lost Hills.....			1					
McKittrick.....		1	1					
Midway.....	4	11	5	1	2	2		1
Mt Poso.....	7		2	1		1		
Mountain View.....	9	8	10	1			1	
Round Mountain.....			2					
Sunset.....		6	2			1	1	2
Temblor.....			1					
Kern County.....	2		4			1		
Totals.....	34	31	35	9	2	9	3	3
Distr. 5—Coalinga.....		3	1			1		
Kettleman North Dome.....	5	3	1					
Humboldt County.....			1					
Kings County.....							1	
Madera County.....	1							
Totals.....	6	6	3			1	1	
Grand totals.....	84	147	76	27	11	54	18	4

<sup>1</sup> Wells not in proved oil fields are designated by county only.

## DISTRICT No. 1

## BREA-OLINDA FIELD

T 3 S., R. 9 W., S. B. B. and M.

- Sec. 6—General Petroleum Corp. well No. "Tonner" 15. (Report No. T 1-27512.) Bailing test. Decision deferred 11 $\frac{3}{4}$ " casing cemented at 1298'. Hole bailed to 1280' for test and stood 12 hr. Fluid level rose at rate of 12 8 bbl. in 24 hr. Fluid sample from 1302' was slightly oily water which tasted salty. Reported hole took very little fluid under 1000 lb. pressure. Test indicates 11 $\frac{3}{4}$ " shut-off is probably effective but is not conclusive due to high fluid rise. Decision is deferred pending receipt of production data after completion of well.
- General Petroleum Corp. well No. "Tonner" 15. (Report No. P 1-27473.) Supplementary proposal to drill approved Conditions: Depth 2314', 18 $\frac{3}{8}$ " S. P. cemented at 146'; 11 $\frac{3}{4}$ " cemented at 1298'. Proposed to land 9" at 2300', including 420' perforated, and cement through perforations at 1875'.

## COYOTE HILLS FIELD

T. 3 S., R. 10 W., S. B. B. and M.

- Sec. 13—Bardeen Petroleum Co., Ltd, well No. C-1 (Report No. P 1-27466.) Supplementary proposal to drill approved provisionally Conditions. Depth 5200', cement plug 5200'-5025', cement bridges 4377'-4368' and 3810'-3794'; 8 $\frac{3}{8}$ " cemented 2906'-4415', perforated 3778'-3700', 3695'-3638', 3592'-3563', 4366'-4361', 4250'-4247 and 4237'-4223', 6 $\frac{5}{8}$ " liner landed 4377'-5025'. Proposed to place 6 $\frac{5}{8}$ " liner 3795'-3534' and cement same to close perforations in 8 $\frac{3}{8}$ " 3778'-3563'. Decision. Proposal is approved provided division is notified to witness casing test after drilling out cement below 6 $\frac{5}{8}$ " liner to not more than 3805'.
- Bardeen Petroleum Co., Ltd, well No C-1. (Report No T 1-27530.) Bailing test approved. 6 $\frac{5}{8}$ " casing cemented inside 8 $\frac{3}{8}$ " 3534'-3795'. Hole bailed to 3000' for test and stood 15 hr. Fluid level rose at rate of 0.9 bbl. in 24 hr. Test is approved as indicating no water enters hole in its present condition.
- Sec. 17—Standard Oil Co. well No. "Murphy-Coyote" 118 (Report No. T 1-27511) Shut-off test approved. 13 $\frac{3}{8}$ " casing cemented at 3558'. Inspector noted that while tester valve open for 45 min. air flowed gently for 3 min, followed by intermittent flows of air for 42 min, and fluid between drill pipe and 13 $\frac{3}{8}$ " casing remained stationary, when pulled, drill pipe contained 2.2 bbl of gassy drilling water above tester, water filtered from fluid samples from 3500' and 3545' tested 78 and 61 gr. salt per gal, respectively. Shut-off is approved.
- Standard Oil Co. well No. "Murphy-Coyote" 118. (Report No T 1-27584) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of 1 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 10 $\frac{3}{8}$ " at 4307'.
- Sec 18—Standard Oil Co. well No "Murphy-Coyote" 120 (Report No T 1-27488) Inspection of operations for demonstrating that 20" casing is water-tight Inspector noted 375 lb. pressure applied inside 20" casing for  $\frac{1}{4}$  hr without pressure loss. Casing test is approved

## DOMINGUEZ FIELD

T. 3 S, R. 13 W, S. B B. and M.

- Sec 33—Union Oil Co well No. "Callender" 36 (Report No. T-1-27458) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 3.8 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 11 $\frac{3}{4}$ " at 4050'
- Union Oil Co. well No. "Callender" 36. (Report No. T 1-27500) Bailing test approved 11 $\frac{3}{4}$ " casing cemented at 4047'. Hole bailed to 2030' for test and stood 12 hr. Fluid level rose at rate of 6.8 bbl in 24 hr. Fluid sample from 4060' was heavy mud which tasted fresh. During 4 hr. check test fluid rose at rate of 6.8 bbl per 24 hr, and fluid sample from bottom was heavy gas-cut mud, water filtered from this sample tested 232 gr. salt per gal. Shut-off is approved.
- Union Oil Co. well No. "Callender" 36 (Report No T 1-27521) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 3.8 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 5250'.
- Union Oil Co. well No. "Callender" 36. (Report No. T 1-27576) Bailing test approved. 8 $\frac{3}{8}$ " casing cemented at 5282'. Hole swabbed to 2500' for test and stood 15 hr. Oil entered at rate of 19 bbl. in 24 hr. No water entered well.

- Union Oil Co. well No. "Hellman" 31. (Report No. P 1-27455.) Supplementary proposal to drill approved provisionally. Conditions: Depth 7393', 11 $\frac{1}{2}$ " cemented at 3900'; 8 $\frac{3}{8}$ " cemented at 6170', 6 $\frac{1}{2}$ " landed at 7347', including 101' perforated, cemented through perforations at 7243', reperforated 7325'-7260'. Proposed to clean out liner to 7347' and plug to 7200' with cement, notifying division to witness location and hardness of cement plug; perforate 6 $\frac{1}{2}$ " 7125'-7020', test for production. Decision. Proposal is approved provided division is notified to witness production test within 30 days if satisfactory production secured after perforating 7020'-7125'.
- Union Oil Co. well No. "Hellman" 31. (Report No. T 1-27548.) Inspection of cementing operations. Hole cleaned out to 7347' and 21 sacks cement dumped in stages, top of cement at 7220'. Inspector noted bailer would not spud below 7223' and brought up sample of partially set cement. Location and hardness of cement plug at 7223' are approved.
- Union Oil Co. well No. "Hellman" 31. (Report No. P 1-27503.) Supplementary proposal to drill approved provisionally. New conditions. Plugged to 7223'. Proposed to plug with cement to 7000' and have division check; perforate 7000'-6875' and test for production. Decision. Proposal is approved provided division is notified to witness production test within 30 days if satisfactory production secured after perforating 6875'-7000'.
- Union Oil Co. well No. "Hellman" 31. (Report No. T 1-27581.) Inspection of cementing operations. 35 sacks cement dumped in stages starting at 7223', water was run in hole while cementing. Inspector noted bailer would not spud below 7000' and brought up sample of set cement. Location and hardness of cement plug at 7000' are approved.
- Sec. 34—Shell Oil Co. well No. "Reyes" 58. (Report No. T 1-27503.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 4.8 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 4625'.
- Shell Oil Co. well No. "Reyes" 58. (Report No. T 1-27564.) Bailing test. Decision deferred. 8 $\frac{3}{8}$ " casing cemented at 4630'. Hole swabbed to 2300' for test and stood 16 hr. Inspector noted fluid level found at about 500', could not be located accurately due to gas action. Pressures were. casing, 420 lb; tubing, 0. Fluid sample from 4635' was oil with small quantity of mud, water filtered from this sample tested 218 gr. salt per gal. Test indicates 8 $\frac{3}{8}$ " shut-off is probably effective but is not conclusive due to high fluid rise and action of gas in well. Decision is deferred pending receipt of production data after completing well.
- Shell Oil Co. well No. "Reyes" 59. (Report No. P 1-27484.) Supplementary proposal to drill approved provisionally. Conditions. Depth 4787'; 8 $\frac{3}{8}$ " cemented at 4620', 4 $\frac{1}{2}$ " landed 4780'-4596', top of perforations at 4632'; water witch showed water source 4760' to bottom. Proposed to pull 4 $\frac{1}{2}$ " liner, plug to about 4750' with cement, land 4 $\frac{1}{2}$ " perforated liner and swab for production. Decision: Proposal is approved provided that: (1) Any portion of 4 $\frac{1}{2}$ " liner not recovered is plugged with cement under 500 lb. pump pressure. (2) Hole 4787'-4750 is plugged with cement. (3) Division is notified to witness location and hardness of cement plug at about 4750'.
- Shell Oil Co. well No. "Reyes" 60. (Report No. T 1-27553.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 5 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 4545'.
- Shell Oil Co. well No. "Reyes" 60. (Report No. P 1-27504.) Supplementary proposal to drill approved. Conditions: Depth 4561'; 13 $\frac{3}{8}$ " cemented at 938'; 8 $\frac{3}{8}$ " cemented at 4545'. Proposed to drill and core 7 $\frac{1}{2}$ " hole to about 4890'; land 5 $\frac{1}{2}$ " liner at 4885', bottom 75' perforated, and cement through perforations at 4810', test upper fourth zone; if wet, plug; if clean, kill and perforate 5 $\frac{1}{2}$ " opposite known clean sands in third Callender zone.
- Shell Oil Co. well No. "Reyes" 61. (Report No. T 1-27524.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 5 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 4215'.
- Shell Oil Co. well No. "Reyes" 61. (Report No. T 1-27583.) Bailing test. Decision deferred. 8 $\frac{3}{8}$ " casing cemented at 4215'. Hole swabbed to 2851' for test and stood 17 hr. Fluid level rose at rate of 51.5 bbl. in 24 hr. Fluid sample from bottom tested 41 gr. salt per gal. Test indicates 8 $\frac{3}{8}$ " shut-off is probably effective but is not conclusive due to high fluid rise. Decision is deferred pending receipt of production data after completing well.
- T 4 S., R. 13 W., S. B. B. and M.
- Sec. 3—John B. Quinn well No. "Quinn" 1. (Report No. P 1-27453.) Proposal of Herley Supply Co. to abandon approved provisionally. Conditions. Depth 4697', cement plug 4697'-4295', 11 $\frac{1}{2}$ " cemented at 1061', 8 $\frac{3}{8}$ " cemented at 3000', 6 $\frac{1}{2}$ " cemented at 4153', 4 $\frac{1}{2}$ " liner 3100'-4290', cemented through perforations at 4180'; about 1500' of sand line and 3 $\frac{1}{2}$ " bailer stuck in top of liner at 3100', top of bailer at 3050'. Total depth first hole 4067', plugged with cement at 1600'; total depth second hole 4487', plugged with 70 sacks cement above 4487'; junk, 5" drill pipe, drill collar and bit 1500'-4487'. No production secured. Proposed to try to remove line and bailer; clean out to bottom; fill liner with cement 4295'-4167'; place cement plug in 6 $\frac{1}{2}$ " 3000'-2980'; pull 6 $\frac{1}{2}$ " from this point and cap stub; place cement plug in 8 $\frac{3}{8}$ " 1060'-1040', pull from this point and cap stub; place cement plug in top of 11 $\frac{1}{2}$ " and abandon. Decision. Proposal is approved.

provided that: (1) 4½" liner is plugged with cement 4295' to 20' above top of perforations at 4180'. (2) 4½" liner stub is capped with cement 3100'-3080'. (3) 6½" casing is pulled from not lower than 2980' and stub capped with 20' cement. (4) 8½" is pulled from not lower than 1040' and stub capped with 20' cement. (5) Division is notified to witness all cementing operations, all shooting or cutting operations for removal of casing, clean-out depth before placing any cement plug, and location and hardness of cement plugs noted above and at 1020'

### HUNTINGTON BEACH FIELD

T. 5 S, R. 11 W., S. B. B. and M.

Sec 34—Associated Oil Co. well No. "Fowler" 5. (Report No. P 1-27422) Proposal to plug approved provisionally. Conditions. Depth 4615', 8½" cemented at 3369'; 6½" landed at 4609', including 1229' perforated, perforated in hole 3380'-3559', plugged 4212'-4155', bad at 3660' but can get through to 4065'; water probably coming from below 3550'. Proposed to permanently abandon bottom of hole by plugging from as low as possible below 3660', probably from 4065', plug with dump bailer and keep fluid up to force cement out of perforations, plug in about 50' stages above 3660' with production test after each stage. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug, which excludes water, and production test within 10 days after placing on production. Note: Approval does not constitute approval of condition of hole below 4212'.

Standard Oil Co. well No. "Bolsa" 22. (Report No. P 1-27414.) Proposal to abandon approved. Conditions: Depth 4553', redrilled 3748'-4100'; 16" cemented at 653'; 9" cemented at 3740'; 351' of 6½" and 7" landed at 4096', perforated 3746'-4096', 6½" found loose and pulled from 3745', tapered mill lost in stub, mills and cable bit went down outside 6½"-7" 3745'-3770', impression block showed sliver of 6½"-7" sticking up at 3747'. Junk: 49' of 4½" drill pipe, bit collar and reamer sidetracked 4485'-4553'; 789' of 6½" landed at 4537', perforated 3756'-3776' and 3933'-4537', plugged with cement 4537'-3770', sidetracked 3748'-4100'. Proposed to clean out to 3770' if possible, plug hole with cement under pressure, leaving top of cement plug at 3720' or above, notify division to witness cement plug at 3720' or above; fill hole with fluid, cut and pull 8" from 633' or above, and cap stub with cement, notifying division to witness this plug; fill to surface with fluid, hang wood plug inside 16" casing 10' below cellar floor and fill to cellar floor with cement; weld steel plate on 16" at cellar floor and abandon; remove rig and equipment.

West American Oil Co. well No. "W. A." 7. (Report No. T 1-27492) Shut-off test approved. 8½" casing cemented at 4114'. Inspector noted that while tester valve open for 30 min. very large amount of air and gas issued from drill pipe, and fluid between drill pipe and 8½" casing remained stationary; when pulled, drill pipe contained 2 8 bbl of heavy gas-cut oily mud above tester, fluid sample from bottom of drill pipe tasted fresh; sample from perforated nipple below tester was sand. Shut-off is approved.

Sec 35—Concord Oil Co. well No. 2. (Report No. T 1-27494) Bailing test approved. 7" casing cemented at 3427'. Hole bailed to 3000' for test and stood 27 hr. Fluid found 10' below reported bailing depth, fluid sample from 3430' was very heavy mud which tasted fresh.

Holly Oil Co. well No. 5. (Report No. P 1-27469.) Proposal to plug and alter casing approved provisionally. Conditions. Depth 4921', cement plug 4250'-4208'; 8½" cemented at 3551'; 6½" landed at 4913', perforated 4443'-4913' and 3935'-4135', cemented through perforations at 4421' and 3935'-3947'. Proposed to swage out 6½", drill out plug 4208'-4250'; clean out to 4913', plug with cement 4913'-3650', cut and pull 6½" at 3650'; cement under pressure 3650'-3595', test barefooted, if dry, clean out and land 6½" perforated liner at 3595'. Decision: Proposal is approved provided that: (1) Cement plug 4913'-4443' is placed under 400 lb. pump pressure. (2) Division is notified to witness location and hardness of cement plugs at 4420' and 3595', and production test within 30 days after recompleting well.

Holly Oil Co. well No. 5 (Report No. P 1-27499) Supplementary proposal to plug and alter casing approved provisionally. New conditions 6½" bad at 3972'. Proposed to run tubing through bad place in 6½" and cement 4208'-3650', cut and pull 6½" from 3650', cement under pressure 3650'-3595'; if dry, land 6½" liner at 3650', perforated 3650'-3551'. Decision. Proposal is approved provided division is notified to witness location and hardness of cement plugs at 3650' and on 6½" stub, and production test within 30 days after recompleting well.

John Italiana well No. "La Bolsa Tile" 1. (Report No. P 1-27506) Proposal to alter casing approved provisionally. Conditions. Depth 4493'; 8½" cemented at 4380'; 6½" liner 4360'-4500'. Proposed to pull 6½" liner, cement back to 4456', and test, if still wet, cement back to 4360' and perforate 8½" 4280'-4180' by multiple stage, testing every 10' or 20'; use standard tools for perforating until sand is located, then use Lane Wells gun perforator; if water strata encountered plug and squeeze cement immediately. Decision: Proposal is approved provided that (1) Division is notified to witness clean-out depth before placing any cement in hole, location and hardness of cement plugs at 4456' and 4360', and production test within 30 days after placing on production. (2) Division is kept informed of results of bailing or production tests after each stage of plugging; additional requirements may be outlined at that time.

P. C. C. Oil Co. well No. "Flavan One" 2. (Report No. T 1-27493.) Bailing test approved. 7" casing cemented at 3612'. Hole bailed to 3000' for test and stood 20 hr. No fluid entered well. Fluid sample from 3616' was heavy mud which tasted fresh.

T. 6 S., R. 11 W., S. B. B. and M.

- Sec. 4—Standard Oil Co. well No. "Huntington B" 70. (Report No. T 1-27490.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 4 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{1}{2}$ " on cement bridge at 3610'.
- Standard Oil Co. well No. "Huntington B" 70. (Report No. T 1-27506.) Shut-off test approved. 8 $\frac{1}{2}$ " casing cemented at 3612'. Inspector noted that while tester valve open for 35 min. very large amount of gas issued from drill pipe and well started flowing oil; fluid between drill pipe and 8 $\frac{1}{2}$ " casing remained stationary during test; when pulled, drill pipe contained 52 bbl. of oil and only gas-cut mud above tester; fluid sample from 3604' was all oil; sample from perforated nipple below tester was sand. Shut-off is approved.
- Standard Oil Co. well No. "Huntington B" 71. (Report No. P 1-27413.) Proposal to drill approved. Conditions: Well is 3053' northwesterly and 125' northeasterly from center lines of 23d St. and Ocean Ave., distances measured along center line of Ocean Ave., thence 125' northeasterly at right angles. Estimate oil sand at 2900'. Proposed to cement 20" S. P. at 40'; cement 13 $\frac{1}{2}$ " at 750'; cement 8 $\frac{1}{2}$ " at 3830', land 580' of 6 $\frac{1}{2}$ " liner at 4380'; notify division to witness test on 13 $\frac{1}{2}$ " casing, mudding test just before cementing 8 $\frac{1}{2}$ " and 8 $\frac{1}{2}$ " shut-off test, using enough cement behind 8 $\frac{1}{2}$ " to reach to about 2200'.
- Standard Oil Co. well No. "P. E." 24. (Report No. T 1-27507.) Shut-off test approved. 8 $\frac{1}{2}$ " casing cemented at 3830'. Inspector noted that while tester valve open for 45 min. small amount of air issued from drill pipe, and fluid between drill pipe and 8 $\frac{1}{2}$ " remained stationary; when pulled, drill pipe contained 1 bbl. of thin gas-cut mud above tester; fluid sample from bottom of drill pipe tasted fresh; sample from perforated nipple below tester was sand and set cement. Shut-off is approved.
- Sec. 10—John Italiana well No. "Van Alen" 2. (Report No. P 1-27470.) Proposal of Egbert Van Alen to abandon approved provisionally. Conditions: Depth 2820', 12 $\frac{1}{2}$ " cemented at 1941', 8 $\frac{1}{2}$ " landed at unknown depth between 2040' and 2085', with top at 1888' or 1981', drilled through at 1981'; 6 $\frac{1}{2}$ " liner landed 1875'-2100', bottom 185' perforated; when deepened 2125'-2820' encountered only gray sand and shale. Proposed to clean out hole to 2820'; fill with heavy mud fluid 2820'-2200'; plug with cement from 2200' to 20' above top of perforations in 6 $\frac{1}{2}$ " liner; cap 6 $\frac{1}{2}$ " and 8 $\frac{1}{2}$ " liner stubs with 20' cement; fill balance of hole with heavy mud fluid and abandon. Decision: Proposal is approved provided that: (1) Cement plug 2200' to 20' above perforation in 6 $\frac{1}{2}$ " liner is placed under pressure if possible. (2) Division is notified to witness total clean-out depth before placing any cement in well, all cementing operations, and location and hardness of cement plug at 1920' and also 20' cap on 6 $\frac{1}{2}$ " stub.
- Macklin Oil Co. well No. "Macklin" 1. (Report No. P 1-27421.) Supplementary proposal to redrill water string approved provisionally. Conditions: Depth 3934', plugged with cement 3934'-3894', iron shavings and rosin 3894'-3870', cement 3870'-3770' and 3538'-3517', and 10 sacks at 858'; 9" cemented at 3793', pulled from 328'; 6 $\frac{1}{2}$ " landed at 3893', perforated 3786'-3893', pulled from 3538'; whipstock set at 3496' in 9", hole drilled in casing, and redrilled in formation to 3506'. Proposed to core at intervals and drill ahead to 3850', run Schlumberger; cement 6 $\frac{1}{2}$ " combination liner leaving blank pipe up into 9" at least 100', cementing through perforations at point below whipstock to be determined by coring and Schlumberger survey; notify division to witness bailing test, mudding test, and shut-off test in 6 $\frac{1}{2}$ " combination liner. Decision: Proposal is approved provided that: (1) 9" shut-off is demonstrated by bailing after drilling out through 9" to about 3540'. (2) If 9" shut-off can not be demonstrated, solid water string is cemented and hole drilled as per provisions of report No. P 1-27405, October, 1934. (3) If 9" shut-off can be demonstrated, division is notified to witness final mudding operations before cementing 6 $\frac{1}{2}$ " combination liner, bailing test after drilling out cement from 6 $\frac{1}{2}$ " combination liner to not lower than 20' above cementing point, and production test within 10 days after placing well on production.
- Sec. 14—D. D. Dunlap Oil Co. well No. "Mills" 1. (Report No. T 1-27522.) Inspection of operations for demonstrating that 8 $\frac{1}{2}$ " casing is water-tight. Inspector noted top of fluid at 2500'; no fluid entered well while standing 12 $\frac{1}{2}$  hr. for test. Casing test is approved.
- D. D. Dunlap Oil Co. well No. "Mills" 1. (Report No. T 1-27546.) Bailing test approved. 8 $\frac{1}{2}$ " casing cemented at 4153'. Hole bailed to 2500' for test and stood 14 $\frac{1}{2}$  hr. Fluid level rose at rate of 4.5 bbl in 24 hr. Fluid sample from 4075' was gas-cut muddy water and oil which tasted salty.

### INGLEWOOD FIELD

T. 2 S., R. 14 W., S. B. B. and M.

- Sec. 7—Associated Oil Co. well No. "Vickers" 50. (Report No. P 1-27418.) Proposal to deepen approved provisionally. Conditions: Depth 2535'; 10" cemented at 2080'; 8 $\frac{1}{2}$ " landed at 2535', including 461' perforated. Proposed to deepen through 8 $\frac{1}{2}$ " to 3020'; core pilot hole to 3150' and make Johnston



formation test of any questionable looking sands, ream out pilot hole; core continuously to 3450'; cement 6½" below formations producing in well No. "Vickers" 2 and depending upon data secured in well No. 1; complete with 4½" liner. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6½" are mudded by open circulation until loss is not more than 2 bbl per hr. (4) Division is notified to witness final mudding operations before cementing 6½" and bailing test of 6½" shut-off with cement drilled out not lower than 5' below shoe. (5) Hole may be drilled to completion before cementing 6½" if at least 40' cement bridge is placed at cementing depth before this casing is run in hole; in this event, division will witness mudding test noted above after cement bridge is placed.

Standard Oil Co. well No. "Vickers 1" 27. (Report No. P 1-27423) Proposal to deepen approved. Conditions: Depth 3075'; 10½" cemented at 2602'; 520' of 8½" landed at 3073', perforated 2599'-3073'. Proposed to drill ahead inside 8½" liner in small hole and test in 50' stages with formation tester, using oil for circulation; complete at about 3520' unless water encountered above that point; land 6½" perforated liner and return to production.

Standard Oil Co. well No. "Vickers 2" 11 (Report No. P 1-27468). Proposal to redrill oil string approved. Conditions: Depth 2088'; 11½" cemented at 1918'; 8½"-9" landed at 2087', perforated 1920'-2087' (3½" 0'-1898' and 1920'-2087', 9" 1898'-1920'). junk 1997'-2020'. Proposed to plug 8½"-9" with thin cement under pressure from top of junk at 1990' to about 1940', notifying division to witness this plug; pull 8½"-9" from about 1940' and sidetrack stub with cable tools; redrill, using oil for circulation, 1918'-2088'; complete with 8½" grade D liner.

Standard Oil Co. well No. "Vickers 2" 11. (Report No. T 1-27586.) Inspection of cementing operations. Hole cleaned out to 1990' and 28½ sacks cement dumped in stages. Inspector noted bailer would not spud below 1940' and brought up sample of set cement. Location and hardness of cement plug at 1940' are approved.

Western Consolidated Oil Co well No. "Smith" 1. (Report No. P 1-27487.) Supplementary proposal to drill approved provisionally. Conditions: Depth 5602'; 9" cemented at 3952'; 5½" landed at 5600', including 168' perforated, cemented through perforations at 5432'. Proposed to plug with cement 5600'-5400' and apply 500 lb. pressure; perforate 5154'-5170'; bail and swab for production test. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 5400', and production test within 10 days after placing on production.

Western Consolidated Oil Co well No. "Smith" 1. (Report No. T 1-27574.) Inspection of cementing operations. Hole cleaned out to 5600' and 25 sacks cement dumped in stages; 400 lb pressure applied on fluid column inside 5½" after each stage. Inspector noted bailer would not spud below 5349' and brought up sample of set cement. Location and hardness of cement plug at 5349' are approved.

Western Consolidated Oil Co well No. "Smith" 1. (Report No. T 1-27575.) Inspection of cementing operations. Hole cleaned out to 5349', 18 sacks cement dumped, and 400 lb pressure applied on casing head. Inspector noted bailer would not spud below 5172' and brought up sample of set cement. Location and hardness of cement plug at 5172' are approved.

Sec 8—Shell Oil Co well No. "Rindge" 1 (Report No. P 1-27505.) Supplementary proposal to alter casing approved provisionally. Conditions: Depth 2500'; 11" cemented at 1295'; 8½" landed at 2495', top of perforations at 1300', bad at 1545', 2050' and 2115'. 5½" landed at 2495', top of perforations at 1301', bad at 1500' and 2050'; top of fish at 2103' and 2070'. Proposed to plug 2060'-1560'; perforate 1350'-1370' with 20 holes, and 1380'-1490' with 110 holes; not to run bailer below 1490', tube to 1480' and put on pump; have division witness either top of plug with tubing or placing of cement. Decision: Proposal is approved provided that: (1) Placing of cement plug 2060'-1560' is done under pump pressure if possible. (2) Division is notified to witness placing of cement.

Sec 17—Standard Oil Co. well No. "Baldwin-Cienega" 51. (Report No. P 1-27454.) Proposal to redrill oil string and deepen approved. Conditions: Depth 2218'; 11½" cemented at 1082'; 8½"-9" landed at 2217', perforated 1102'-2217', bad at 1620', sidetracked 1091'-2218', ripped 1091'-1100' and plugged with cement 1157'-1483'. Proposed to install rotary, wash down as far as possible with small tubing, and plug 8½"-9" oil string with cement to about 1100', notifying division to witness this plug; pull 8½"-9" oil string from below 11½" shoe at 1082', sidetrack stub with cable tools and cement same in place; redrill with rotary to 2218' using oil for circulation; complete with 8½" oil string, cementing through perforations at about 1600' to support oil string and exclude upper low pressure sands; use grade D perforated casing opposite producing formations; notify division to witness production 30 days after returning to production.

### LONG BEACH FIELD

T 4 S, R. 12 W, S. B. B. and M.

Sec 18—Dabney-Johnston Oil Corp. well No. 81 (Report No. P 1-27460) Proposal to alter casing approved. Conditions: Depth 4848'; 11½" cemented at 628';

- 6½" cemented at 4735', perforated 4445'-4465'; 4¾" landed 4683'-4848', perforated 4765'-4848'; well wet Proposed to perforate 6½" 4330'-4280' and test for production
- Rio Grande Oil Co. well No "Derry" 6 (Report No. P 1-27440) Proposal to plug and alter casing approved provisionally Conditions: Depth 6838', cement plug 616'-5559', 8¾" cemented at 4229'; 5¾" cemented at 6210', perforated 5410'-5540', 5615'-5640', 5650'-5750' and 6110'-6135'; 3½" liner landed 6166'-6306', perforated 6213'-6806' Proposed to plug with cement 5559' to 5380' or higher, perforate 5¾" at 4890' and 4690, and squeeze with cement at these points, if bailing test shows cemented through perforations effectively perforate 4700'-4880' and put on production Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at about 5380'
- Rio Grande Oil Co well No "Derry" 6. (Report No T 1-27533.) Inspection of cementing operations. 17 sacks cement dumped, starting at 5559', water was run in hole while cementing Inspector noted bailer would not spud below 5381' and brought up sample of set cement Location and hardness of cement plug at 5381' are approved
- Sec 19—Apex Petroleum Corp. Ltd, well No "Seegar" 1 (Report No T 1-27516) Inspection of mudding operations During ¾ hr circulation test mud fluid was lost from pit at rate of 1 bbl per hr. Mudding operations are approved Oral approval is hereby confirmed to cement 6¾" at 4105'
- Apex Petroleum Corp, Ltd, well No "Seegar" 1. (Report No. T 1-27559) shut-off test approved. 6¾" casing cemented at 4095' Inspector noted wall packer set at reported depth of 4084', while tester valve open for 35 min. steady medium flow of air and then gas issued from drill pipe, and fluid between drill pipe and 6¾" casing remained stationary, when pulled, drill pipe contained 5 6 bbl. of medium heavy gas-cut oily mud above tester, fluid sample from bottom of drill pipe tasted fresh Shut-off is approved.
- Bernal Oil Co well No 2 (Report No T 1-27461) Bailing test approved. 7" casing cemented at 4345'. Hole bailed to 3000' for test and stood 24 hr. No fluid entered well Fluid sample from 4349' was very heavy slightly gas-cut mud which tasted fresh
- R L Goetz well No "Goetz" 3 (Report No T 1-27489.) Inspection of operations for demonstrating that 12½" surface casing is water-tight. Inspector noted mud fluid pumped into 12½" casing and 480 lb pressure applied, after ¼ hr pressure was 460 lb, hole was open to 570'. Casing test is approved.
- R L Goetz well No "Goetz" 3 (Report No T 1-27558) Inspection of mudding operations During ¾ hr. circulation test no mud fluid was lost Mudding operations are approved Oral approval is hereby confirmed to cement 7" at 4170'
- Mines Oil Co well No 2. (Report No T 1-27482) Shut-off test approved 6½" casing cemented at 4124' Inspector noted wall packer set at reported depth of 4097'; while tester valve open for ¾ hr air and gas flowed steadily from drill pipe, and fluid between drill pipe and 6½" casing remained stationary, when pulled, drill pipe contained 13 bbl of gas-cut oily mud above tester; fluid sample from bottom of drill pipe tasted fresh; sample from perforated nipple below tester was sand. Shut-off is approved
- Shell Oil Co well No "Cresson Community" 3 (Report No. P 1-27410) Proposal to redrill water string approved provisionally. Conditions: Depth 4026', 10" cemented at 2880'; 6¼" landed at 4026', top of perforations at 2887'; impression block shows bad casing at 3167' and 3191'; fish, top at 3792', also 3204'-3566' Proposed to rig up rotary; roll out 6¼" and clean out fish to about 3900'; plug well to 2775'; cut and pull 6¼" from 2760' and 10" from 900', capping each stub; redrill with 12½" hole to about 3365'; cement 8¾" at 3265' on bridge, land 4¾" liner with suitable perforations at about 3365'; tube and test for production by pumping Decision: Proposal is approved provided that (1) Proposed cement plug about 3900'-2775' is placed under 500 lb. pressure if possible (2) Formations left back of 8¾" are mudded by open circulation until loss is not more than 5 bbl per hr (3) Enough cement is used to fill back of 8¾" to reach at least 800' above shoe (4) Column of mud fluid back of 8¾" is maintained to surface for at least 30 days after cementing casing (5) Division is notified to witness location and hardness of cement plug at 2775', final mudding operations before cementing 8¾", and bailing test of 8¾" shut-off
- Dan Sheppard well No 1. (Report No T 1-27478) Inspection of cementing operations Wood plug driven into 8¾" stub at 3208' and 9 sacks cement dumped on plug Inspector noted bailer would not spud below 3190' and brought up sample of set cement Location and hardness of cement plug at 3190' are approved
- V R G. Wilbur well No "Bergstrom" 4 (Report No T 1-27556) Inspection of mudding operations During ¾ hr circulation test mud fluid was lost from pit at rate of 2.5 bbl per hr Mudding operations are approved Oral approval is hereby confirmed to cement 8¾" at 3835'
- Chester F Yunker & Associates No 2 well No 1 (Report No. T 1-27555) Inspection of mudding operations During ¾ hr circulation test mud fluid was lost from pit at rate of 1 bbl per hr Mudding operations are approved Oral approval is hereby confirmed to cement 7" at 3860'
- Sec 20—R R Bush Oil Co well No "Fee" 4 (Report No P 1-27444) Proposal to drill approved provisionally Conditions: Well is 145' N and 20' E of NE corner of Willow St and Dawson Ave Estimate oil sand at 4200' Proposed to cement 16" S P at 700'; cement 8¾" at 4200'; land 6¾" liner at 4500'. Decision: Proposal is approved provided that (1) 8¾"

shut-off is made at about 3675'. (2) (a) Mud fluid of not less than 70 lb per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (4) Formations left back of 8½" are mudded by open circulation until loss is not more than 5 bbl per hr. (5) Exact cementing depth for 8½" is determined by coring starting not lower than 3650'. (6) Enough cement is used to fill back of 8½" to reach at least 1000' above shoe. (7) Column of mud fluid back of 8½" is maintained to surface for at least 30 days after cementing casing. (8) Division is notified to witness test of 16" surface casing, final mudding operations before cementing 8½", and bailing test of 3½" shut-off.

Power Oil Co well No. "Tehmescal" 2 (Report No. P 1-27465.) Proposal of Emmons & Emmons, Contractors, to abandon approved provisionally. Conditions: Depth 4038'; 15½" cemented at 573'; 10" cemented at 2365'; 8½" cemented at 2786', drilled through at 2718'; 6½" cemented at 3775'; collapsed at 2860', pulled from 2500'; 4¾" liner 3753'-4038', perforated 3778'-4038'. Junk (old hole) whipstock 2718'-2730'; 8¼" 2718'-2786'; 6½" 2730'-2949'; 4¾" 2850'-3410'; tubing and rods inside 4¾", top at 3100'; total depth 3410', plugged with cement 3100'-2902' and 2850'-2838'. Proposed to mud hole under 500 lb pressure at 2860'; place cement plug 2860'-2820'; cap 6½" stub with 20' cement plug; shoot and pull 8¼" at 2345' and 10" at 553', capping each stub with 20' cement plug; cap hole at surface and abandon. Decision: Proposal is approved provided division is notified to witness pressure mudding operations, placing of all cement in hole, shooting 8¼" and 10", and location and hardness of cement plugs at 2820 and on 8¼" and 10" stubs. Note: This merely approves proposed abandonment work and does not pass upon right to enter this property.

Power Oil Co well No. "Tehmescal" 2 (Report No. T 1-27560.) Inspection of pressure mudding operations of Emmons & Emmons, Contractors. Hole could not be cleaned out below 2860' due to collapsed 6½" casing at that depth. Inspector noted mud fluid pumped in and 400 lb pressure applied for ¼ hr without pressure loss. Pressure mudding operations are approved.

Power Oil Co. well No. "Tehmescal" 2 (Report No. T 1-27567.) Inspection of cementing operations of Emmons & Emmons, Contractors. 11 sacks cement dumped at 2860'. Inspector noted baller would not spud below 2760' and brought up sample of set cement. Location and hardness of cement plug at 2760' are approved.

Willow Oil Co. well No. "Poltevin" 1 (Report No. P 1-27479.) Proposal to drill approved provisionally. Conditions: Well is 15' N. and 25' E of SW corner of Lot 22, Block 11, Hillside Addition Tract. Estimate oil sand at 3600'. Proposed to cement 13" at 600'; cement 7" at 3600'; land 5" at 3900'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 3575'. (5) Enough cement is used to fill back of 7" to reach at least 1000' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 13" surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.

Sec 29—Boswell Petroleum Co. well No. "Crest" 1 (Report No. P 1-27439.) Proposal to drill approved provisionally. Conditions: Well is 247 5' S. and 186' W. of intersection of center lines of Hill St and Orizaba Ave. Estimate oil sand at 3900'. Proposed to cement 11½" at 600'; cement 6½" at 3900'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6½" are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Exact cementing depth for 6½" is determined by coring starting not lower than 3400'. (5) Enough cement is used to fill back of 6½" to reach at least 1500' above shoe. (6) Column of mud fluid back of 6½" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 11½" surface casing, final mudding operations before cementing 6½", and bailing test of 6½" shut-off.

Estate of Tom J. Cannon well No. "Harriman-Jones" 2 (Report No. P 1-27447.) Supplementary proposal to alter casing approved provisionally. Conditions: Depth 6033', plugged with cement 6032'-5037', replugged with cement 5043'-5026'; 7" cemented at 5321', perforated 4832'-5032'; 4¾" landed at 6032', perforated 4312'-6032', pulled from 5100'; 5½" liner cemented 4774'-4925'; well wet. Proposed to plug with cement 5026'-4900'; run water in hole while dumping cement and notify division to witness plug at 4900'; test 7" casing; perforate 7" 4690'-4740'; if still uncommercial, plug and perforate in stages. Decision: Proposal is approved provided division is kept informed of results obtained after each

- stage of perforating and will designate any other operations to be witnessed
- Estate of Tom J Cannon well No. "Harriman-Jones" 2 (Report No T 1-27561) Inspection of cementing operations Hole cleaned out to 5043' and 9 sacks cement dumped, filling to 5020'; well tested wet, hole cleaned out to 5026' and 36 sacks cement dumped; water was run in hole while cementing. Inspector noted bailer would not spud below 4889' and brought up sample of set cement Location and hardness of cement plug at 4889' are approved.
- Plymouth Oil Co well No. 9 (Report No. P 1-27488) Supplementary proposal to redrill water string and deepen approved Conditions Depth 5800', 8 $\frac{1}{2}$ " cemented at 5516', drilled through at 4885', 5 $\frac{3}{8}$ " landed 4813'-5504', perforated 4900'-5504'; 3 $\frac{1}{2}$ " landed 5468'-5800', perforated 5500'-5800'; 5 $\frac{3}{8}$ " liner jarred off at 4940' and filled with cement under pressure to 4925'; whipstock cemented in top of 5 $\frac{3}{8}$ " and hole sidetracked to 5029' Proposed to redrill to 6200' and land combination 5 $\frac{3}{8}$ " liner, cementing through perforations at 5400' with enough cement to tie liner to 8 $\frac{1}{2}$ " casing above 4885'; notify division to witness mudding test, effectiveness of water shut-off between 8 $\frac{1}{2}$ " and 5 $\frac{3}{8}$ " and production test to determine effectiveness of water shut-off of cementing through perforations
- Richfield Oil Co well No "Denni" 9 (Report No T 1-27486.) Inspection of mudding operations During  $\frac{1}{2}$  hr circulation test mud fluid was lost from pit at rate of 2 bbl per hr Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{1}{2}$ " at 2793'
- Richfield Oil Co well No "Denni" 9 (Report No T 1-27532) Bailing test approved 8 $\frac{1}{2}$ " casing cemented at 2791' Hole bailed to 2500' for test and stood 12 hr Fluid level rose at rate of 1 bbl. in 24 hr. Fluid sample from 2795' was heavy mud which tasted fresh
- Richfield Oil Co. well No. "Heartwell" 2 (Report No P 1-27417) Proposal to plug and alter casing approved. Conditions Depth 5389'; 8 $\frac{1}{2}$ " cemented at 4025'; 5 $\frac{3}{8}$ " landed at 5389', perforated 4879'-5389' and 4035'-4865', cemented through perforations at 4855' Proposed to plug 5389'-4010' with cement under pressure if possible, having plug witnessed; pull 5 $\frac{3}{8}$ " from vibration point, probably about 3775', and cap stub with cement; perforate 8 $\frac{1}{2}$ " 3650'-3450'
- Richfield Oil Co well No "Heartwell" 2 (Report No T 1-27562) Inspection of cementing operations Hole could not be cleaned out below 5370' due to bad 5 $\frac{3}{8}$ " casing at that depth; 155 sacks cement dumped at 5370'; no pressure applied because formations were taking fluid Inspector noted bailer would not spud below 4008' and brought up sample of set cement Location and hardness of cement plug at 4008' are approved.
- Shell Oil Co well No "Alamitos" 20 (Report No T 1-27590) Inspection of cementing operations Hole cleaned out to 4476'; 20 sacks cement numped in through tubing hung at 4470' and 500 lb pressure applied Inspector noted bailer would not spud below 4165' and brought up sample of set cement. Location and hardness of cement plug at 4165' are approved
- Shell Oil Co. well No "Alamitos" 21. (Report No T 1-27563) Inspection of cementing operations 30 sacks cement pumped in through tubing hung at 4272', filling to 4178'; 8 $\frac{1}{2}$ " reperforated 4125'-4145'. 15 sacks cement pumped in through tubing hung at 4177' Inspector noted bailer would not spud below 4123' and brought up sample of set cement. Location and hardness of cement plug at 4123' are approved
- Shell Oil Co well No "Alamitos" 28 (Report No P 1-27441.) Proposal to alter casing approved Conditions Depth 6450'; 8 $\frac{1}{2}$ " cemented at 5338'; 5 $\frac{3}{8}$ " landed at 6436', cemented through perforations at 5354'. Proposed to cut and pull 5 $\frac{3}{8}$ " from about 5000' and set adapter on stub; tube well and put on pump.
- Shell Oil Co well No "Coseboom" 8 (Report No P 1-27438) Proposal to alter casing approved Conditions: Depth 7132'; 8 $\frac{1}{2}$ " cemented at 5332'; 5 $\frac{3}{8}$ " landed at 7111', cemented through perforations at 5366' Proposed to cut and pull 5 $\frac{3}{8}$ " from about 5000' and set adapter on stub; tube well and put on pump
- Shell Oil Co well No "Hamilton" 2. (Report No T 1-27515) Inspection of mudding operations During  $\frac{1}{2}$  hr circulation test mud fluid was lost from pit at rate of 4 bbl per hr Mudding operations are approved Oral approval is hereby confirmed to cement 8 $\frac{1}{2}$ " at 3856'
- Shell Oil Co well No "Hamilton" 2 (Report No T 1-27537) Bailing test approved 8 $\frac{1}{2}$ " casing cemented at 3875' Hole bailed to 2550' for test and stood 13 hr No fluid entered well. Fluid sample from 3887' tasted fresh.
- Shell Oil Co well No "Jones Community" 11 (Report No P 1-27437) Proposal to alter casing approved Conditions Depth 7066'; 8 $\frac{1}{2}$ " cemented at 5223'; 5 $\frac{3}{8}$ " landed at 7040', cemented through perforations at 5270'. Proposed to cut and pull 5 $\frac{3}{8}$ " from about 5000' and set adapter on stub; tube well and put on pump
- Sec 30—Bremmor Petroleum Corp well No "Roberts" 1 (Report No P 1-27442) Proposal to drill approved provisionally Conditions Well is 400' N. and 14' W of NW corner of Gaviota Ave and Hill St. Estimate oil sand at 4000'. Proposed to cement 12" at 600'. cement 6 $\frac{1}{2}$ " at 4000'; drill with rotary tools Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement (3) Formations left back of 6 $\frac{1}{2}$ " are mudded by open circulation until

- loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 6½" is determined by coring starting not lower than 4000'. (5) Enough cement is used to fill back of 6½" to reach at least 1000' above shoe. (6) Column of mud fluid back of 6½" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 12" surface casing, final mudding operations before cementing 6½", and bailing test of 6½" shut-off.
- Chief Oil Co well No. "Chief" 2. (Report No P 1-27443) Proposal to drill approved provisionally. Conditions Well is 105' N and 95' E of NE corner of Hill St and Rose Ave Estimate oil sand at 4550'. Proposed to cement 12" at 800'; cement 7" at 4550'; land 4½" at 4900', drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be side-tracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss not more than 5 bbl. per hr. (4) Exact cementing depth for 7" is determined by coring started not lower than 4100'. (5) Enough cement is used to fill back of 7" to reach at least 1000' above shoe (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 12" surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.
- Cochran & Taylor Oil Co well No "Cochran" 10. (Report No. P 1-27436) Proposal to drill approved provisionally. Conditions: Well is 210' N. and 145' E. of NE corner of Gaviota Ave and Hill St Estimate oil sand at 4250'. Proposed to cement 11½" at 600'; cement 6½" at 4250'; drill with rotary tools Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be side-tracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6½" are mudded by open circulation until loss is not more than 5 bbl per hr (4) Exact cementing depth for 6½" is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 6½" to reach at least 1000' above shoe. (6) Column of mud fluid back of 6½" is maintained to surface for at least 30 days after cementing casing (7) Division is notified to witness test of 11½" surface casing, final mudding operations before cementing 6½", and bailing test of 6½" shut-off.
- Commercial Drilling Co., Inc., well No "Commercial" 2 (Report No T 1-27496) Inspection of mudding operations During ½ hr. circulation test mud fluid was lost from pit at rate of 5 bbl per hr. Mudding operations are approved Oral approval is hereby confirmed to cement 9" at 4230'.
- Commercial Drilling Co, Inc, well No "Commercial" 2 (Report No T 1-27514.) Bailing test approved 9" casing cemented at 4230' Hole bailed to 2500' for test and stood 12½ hr Fluid found 3' below reported bailing depth; fluid sample from 4246' was very heavy mud which tasted fresh Shut-off is approved
- Congo Oil Co, Ltd, well No "Congo" 1 (Report No T 1-27477.) Inspection of operations for demonstrating that 12½" casing is water-tight. Inspector noted mud fluid pumped into hole and 400 lb pressure applied for ½ hr without pressure loss; hole was open to 800'. Casing test is approved
- Dabney-Johnston Oil Corp well No 91. (Report No. P 1-27476.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 5096', cement plug 5096'-5058'; 10½" cemented at 610'; 6½" cemented at 5081', perforated 4763'-4749', 4742'-4722' and 4708'-4687'. Proposed to fill perforations in 6½" with heavy mud 4793'-4593'; bridge with cement 4593'-4553', perforate 6½" 4509'-4484' and try for production. Decision: Proposal is approved provided division is notified to witness production test after recompleting well.
- Deco Oil Co well No "Deco" 2. (Report No T 1-27518) Inspection of mudding operations During ½ hr circulation test mud fluid was lost from pit at rate of 2 bbl per hr Mudding operations are approved. Oral approval is hereby confirmed to cement 6½" at 4310'
- Deco Oil Co well No "Deco" 2 (Report No T 1-27557) Bailing test approved 6½" casing cemented at 4298' Hole bailed to 3200' for test and stood 15 hr Fluid located 10' below reported bailing depth; fluid sample from 4302' was heavy mud which tasted fresh. Shut-off is approved
- D. D Dunlap well No 9 (Report No T 1-27463) Inspection of mudding operations During ½ hr circulation test mud fluid was lost from pit at rate of 3 bbl per hr Mudding operations are approved Oral approval is hereby confirmed to cement 8½" at 4205'.
- D D Dunlap well No 9 (Report No T 1-27495) Bailing test. Decision deferred 8½" casing cemented at 4205' Hole bailed to 2500' for test and stood 12 hr Fluid level rose at rate of 171 bbl in 24 hr Considerable gas issued from 8½" during test Fluid sample from 4169' was medium mud and oil, very gas-cut, which tasted fresh Test indicates 6½" shut-off is probably effective but is not conclusive due to large fluid rise Decision is deferred pending receipt of production data after completing well
- Geneva Marie Co well No 1 (Report No P 1-27467) Proposal to drill approved provisionally. Conditions: Well is 84' N. and 28' W of NW corner of Hill St. and Rose Ave Estimate oil sand at 4600'. Proposed

- to cement 13" at 650'; cement 7" at 4550', land 5" at 4600', drill with rotary tools Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl per hr (4) Exact cementing depth for 7" is determined by coring starting not lower than 4100' (5) Enough cement is used to fill back of 7" to reach at least 1200' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 13" surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.
- Hil-Mar Drilling Co, Inc., well No. 1. (Report No P 1-27477) Proposal to alter casing approved provisionally. Conditions: Depth 4587', 7" cemented at 4457', 4 $\frac{3}{4}$ " landed 4431'-4587', perforated 4457'-4587'. Proposed to perforate 7" 4220'-4335', put on production Decision. Proposal is approved provided division is notified to witness production test within 10 days after returning to production.
- Hil-Mar Drilling Co, Inc., well No. 2. (Report No P 1-27430) Proposal to drill approved provisionally. Conditions: Well is 170' N. and 105' E of NE corner of Rose Ave and Hill St Estimate oil sand at 4600'. Proposed to cement 12 $\frac{3}{4}$ " at 850', cement 7" at 4600'; land 4 $\frac{3}{4}$ " at 4700'; drill with rotary tools Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement (3) Formations to be left back of 7" are mudded by open circulation until loss is not more than 5 bbl per hr (4) Exact cementing depth for 7" is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 7" to reach at least 1000' above shoe (6) Division is notified to witness test of 12 $\frac{3}{4}$ " surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.
- Hil-Mar Drilling Co, Inc., well No 2 (Report No. T 1-27519.) Inspection of operations for demonstrating that 12 $\frac{3}{4}$ " surface is water-tight Inspector noted mud fluid pumped into 12 $\frac{3}{4}$ " surface casing and 500 lb pressure applied, after  $\frac{1}{2}$  hr pressure was 450 lb; hole was open to 800' Casing test is approved
- Huntington Investment Corp well No 2 (Report No P 1-27431) Proposal to drill approved provisionally Conditions Well is 176' N. and 255' E. of NE corner of Gaviota Ave. and Hill St Estimate oil sand at 4500'. Proposed to cement 11 $\frac{3}{4}$ " at 800'; cement 7" at 4500'; land 4 $\frac{3}{4}$ " at 4900'. drill with rotary tools Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu. ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement (3) Formations to be left back of 7" are mudded by open circulation until loss is not more than 5 bbl per hr (4) Exact cementing depth for 7" is determined by coring starting not lower than 4200'. (5) Enough cement is used to fill back of 7" to reach at least 1000' above shoe. (6) Division is notified to witness test of 11 $\frac{3}{4}$ " surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.
- Huntington Investment Corp well No. 2 (Report No T 1-27520) Inspection of operations for demonstrating that 11 $\frac{3}{4}$ " casing is water-tight Inspector noted mud fluid pumped into 11 $\frac{3}{4}$ " casing and 550 lb. pressure applied for  $\frac{1}{2}$  hr without pressure loss; hole was open to 725'. Casing test is approved
- Indiana Drilling Co. well No. "Indiana" 1 (Report No P 1-27428) Supplementary proposal to redrill water string and deepen approved provisionally. Conditions Depth 5595'; 8 $\frac{1}{2}$ " cemented at 3304', drilled through at 1947', 5 $\frac{3}{8}$ " cemented at 5505', 4" liner landed 5469'-5583', perforated 5487'-5583'; well tested wet. Proposed to plug 4" liner in stages and test; if still wet, plug to above top of liner and perforate 5 $\frac{3}{8}$ " in stages about 5400'-4100', test each stage for production; if wet, plug each stage under pressure Decision: Proposal is approved provided that: (1) Division is notified to witness location and hardness of cement plug at 5450'. (2) Division is kept advised of results of perforating, and will designate any further operations required
- Indiana Drilling Co well No "Indiana" 1. (Report No T 1-27502) Inspection of cementing operations. 10 sacks cement pumped in through tubing at 5583', filling to 5561'; well wet, 6 sacks cement dumped at 5561', filling to 5554', well still wet; 10 sacks cement dumped at 5554', hole kept full of fluid during cementing operations Inspector noted bailer would not spud below 5445' and brought up sample of set cement Location and hardness of cement plug at 5445' are approved
- Italo Petroleum Corp of America well No. "Ellis" 1. (Report No P 1-27501) Proposal to alter casing approved. Conditions: Depth 5045', cement plug 5045'-5033'; 11 $\frac{3}{4}$ " cemented at 3152', drilled through at 2735' and 1682'; 6 $\frac{3}{8}$ " at 4297'; 4 $\frac{3}{4}$ " liner at 5045'-4229', perforated 5015'-4950'. Proposed to perforate 4 $\frac{3}{4}$ " liner 4910'-4850' and 4810'-4790'.

- P. A. Kingsland well No. "P. A. Kingsland" 8 (Report No. P 1-27425.) Proposal to drill approved provisionally. Conditions: Well is 73' N. and 24' W of SE. corner of Lot 2, Corbrey Tract. Estimate oil sand at 4100'; Proposed to cement 13" at 650', cement 7" at 4100'; land 43" at 4150'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 7" to reach at least 1200' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 13" surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.
- P. A. Kingsland well No. "P. A. Kingsland" 8 (Report No. T 1-27535) Inspection of operations for demonstrating that 13" casing is water-tight. Inspector noted mud fluid pumped into 13" casing and 420 lb pressure applied for ¼ hr without pressure loss, hole was open to 666'. Casing test is approved.
- Madison Oil Co well No. "L. B." 1. (Report No. T 1-27570) Inspection of mudding operations. During ½ hr circulation test mud fluid was lost from pit at rate of 5 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 4368'.
- Medal Oil Co. well No. 1 (Report No. P 1-27446.) Supplementary proposal to drill approved provisionally. Conditions: Depth 4847', cemented up to 4520'; 5" perforated 4360'-4390', well perforated 4180'-4260'. Proposed to plug with cement up to 4170'; fill casing with heavy mud; cement whipstock on 5" stub, go out of 8½" casing and redrill to about 4300'; set and cement 5" casing. Decision: Proposal is approved provided that: (1) Formations left back of 5" are mudded by open circulation until loss is not more than 2 bbl per hr. (2) Exact cementing depth for 5" is determined by coring starting not lower than 4100'. (3) Enough cement is used to fill back of 5" to reach at least 800' above shoe. (4) Column of mud fluid back of 5" is maintained to surface for at least 30 days after cementing casing. (5) Division is notified to witness location and hardness of cement plug at 4170', final mudding operations before cementing 5", and bailing test of 5" shut-off.
- E. L. Olmstead Oil Co well No. "McKenzie" 2 (Report No. T 1-27543.) Inspection of operations for demonstrating that 12½" casing is water-tight. Inspector noted mud fluid pumped into 12½" casing and 500 lb. pressure applied for ¾ hr without pressure loss; hole was open to 710'. Casing test is approved.
- Pacific Empire Petroleum, Inc., well No. "Empire" 3. (Report No. P 1-27424) Proposal to drill approved provisionally. Conditions: Well is 315' N. and 210' E of NE corner of Hill St and Gaviota Ave. Estimate oil sand at 4500'. Proposed to cement 12½" at 800'; cement 8½" at 4500'; land 6½" at 4900'. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8½" are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Exact cementing depth for 8½" is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 8½" to reach at least 1200' above shoe. (6) Column of mud fluid back of 8½" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 12½" surface casing, final mudding operations before cementing 8½", and bailing test of 8½" shut-off.
- Pacific Empire Petroleum, Inc., well No. "Empire" 3. (Report No. T 1-27536) Inspection of operations for demonstrating that 13½" casing is water-tight. Inspector noted mud fluid pumped into hole and 450 lb pressure applied for ¼ hr. without pressure loss; hole was open to 594'. Casing test approved.
- Pencole Petroleum well No. "Fee" 1 (Report No. P 1-27463.) Proposal to drill approved provisionally. Conditions: Well is 600' N. and 45' E. of intersection of center lines of Hill St and Gaviota Ave. Estimate oil sand at 4700'. Proposed to cement 10½" at 900'; cement 7" at 4700'; land 43" at 4800'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 7" to reach at least 1200' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing.

(7) Division is notified to witness test of 10½" surface casing, final mudding operations before cementing 7," and bailing test of 7" shut-off. Sentinel Oil Co. well No. "Sentinel" 1. (Report No. P 1-27458.) Proposal to drill approved provisionally. Conditions: Well is 230' N. and 30' W. of NW. corner of Rose Ave. and Hill St. Estimate oil sand at 4450'. Proposed to cement 13" at 650'; cement 7" at 4450'; land 5" at 4500'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 7" to reach at least 1200' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 13" surface casing, final mudding operations before cementing 7," and bailing test of 7" shut-off.

Union Oil Co. well No. "Long Beach Community" 14. (Report No. T 1-27534.) Inspection of cementing operations. Hole cleaned out to 3890' and 86 sacks cement dumped; no pressure applied to cement as formations took fluid. Inspector noted bailer would not spud below 3317' and brought up sample of set cement. Location and hardness of cement plug at 3317' are approved.

Union Oil Co. well No. "Long Beach Community" 25. (Report No. P 1-27427.) Proposal to drill approved provisionally. Conditions: Well is 305' N. and 225' E. from intersection of center lines of Walnut Ave and Burnett St. Proposed to cement 13½" at 600'; cement 8½" at 3750'; cement 6½" liner at unknown depth, and cement through perforations at 3950'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8½" and 6½" are mudded by open circulation until loss is not more than 5 and 1 bbl per hr, respectively. (4) Bailing test is made after drilling out cement in 6½" within 50' of cementing point to demonstrate that no fluid enters well between 8½" and 6½". (5) Column of mud fluid back of 8½" is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness test of 13½" surface casing, final mudding operations before cementing 8½" and 6½", bailing test noted above, and bailing test of 8½" shut-off.

#### T. 4 S., R. 13 W., S. B. E. and M.

Sec. 13—Dabney-Johnston Oil Corp. well No. 46. (Report No. P 1-27464.) Proposal to alter casing approved. Conditions: Depth 6806'; 11½" cemented at 4293'; 8½" cemented at 6390'; 4½" landed 6320'-6806', perforated 6404'-6806'. Proposed to perforate 8½" 4378'-4328' and test for production.

Ring Oil Co., Ltd., well No. "W. M. C." 1. (Report No. P 1-27426.) Proposal to plug and alter casing approved. Conditions: Depth 7861', cement plug 6315'-5281'; 6½" cemented at 6330', perforated 4840'-4830', cemented through perforations at 4830'; 4½" liner landed 7544'-6300', perforated 6330'-7544'; 3" liner landed 7861'-7485', perforated 7746'-7861', cemented through perforations at 7746'. Proposed to set wood plug in 6½" at 4500' and dump cement to fill to 4475'; shoot 6½" 4470'-4475' for shut-off; if dry, perforate 6½" 4235'-4460' and put on production.

Sec. 24—C. & F. Oil Co well No. "Rainbow" 1. (Report No. P 1-27490.) Proposal to alter casing approved provisionally. Conditions: Depth 7500', cement plug 7500'-7108'; 8½" cemented at 4210'; 6½" perforated liner 4171'-4602'; 4½" landed at 6789', perforated 6284'-6789', cemented through perforations at 6284'; 3½" landed at 7500', perforated 7140'-7500' and 6951'-7013', cemented through perforations at 7140'. Proposed to pull 3" above 6700'; perforate and test in stages. Decision: Proposal is approved provided that: (1) Perforations 6951'-7013' are first plugged with cement under pressure if possible. (2) Division is notified to witness location and hardness of cement plug at about 6931'. (3) Division is informed of results of each stage of perforating, and will designate any other operations to be witnessed.

Dabney-Johnston Oil Corp. well No. 22. (Report No. P 1-27411.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 5640'; 8½" cemented at 5435'; 6½" landed at 5640', perforated 5450'-5640', cemented through perforations at 5450'. Proposed to plug 6½" with cement 5640'-5450', having division witness top of plug; perforate 6½" and 8½" 5402'-5368'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 5450'.

Dabney-Johnston Oil Corp. well No. 22. (Report No. T 1-27517.) Inspection of cementing operations. Hole cleaned out to 5609'; 40 sacks cement pumped in through tubing, tubing raised to 5515' where it froze, and



was pulled from 5446'; 20 sacks cement pumped in through tubing hung at 5446' and 600 lb. pressure applied. Inspector noted bailer would not spud below 5405' and brought up sample of set cement. Location and hardness of cement plug at 5405' are approved.

Italo Petroleum Corp. of America well No. "Kading" 6 (Report No. P 1-27459.) Proposal to redrill water string and deepen approved provisionally. Conditions: Depth 4579', cement plug 4579'-4378'; 10½" cemented at 4079'; 7" landed 3978'-4445', perforated 4297'-4445', cemented through perforations at 4297'. Proposed to plug with cement under pressure 4293'-4250'; land and cement all steel whipstock with base at 3978'; drill through 10½" about 3966'-3978'; deepen to about 5200', exact depth dependent on core data; land and cement 5½" blank casing on bottom; shoot desired horizon with Lane-Wells gun perforator. Decision: Proposal is approved provided that: (1) Formations left back of 5½" are mudded by open circulation until loss is not more than 2 bbl. per hr. (2) Division is notified to witness location and hardness of cement plug at 4250', final mudding operations before cementing 5½", and production test within 10 days after recompleting well.

### LOS ANGELES CITY FIELD

Lot 3, Cottage Home Tract—B. F. Brieg well No. "Brieg" 3. (Report No. T 1-27475.) Inspection of cementing operations. Inspector noted hole open to 220', and slurry of 10 sacks cement and 5 sacks sand dumped into hole from surface. Cementing operations are approved.

1620 Beverly Blvd—Harris Rogalske well No. "Alexander" 2. (Report No. P 1-27429.) Proposal to abandon approved provisionally. Conditions: Well abandoned some years ago; no log available; casing believed to be 9"; tubing removed; derrick dismantled; hole open to about 250', casing evidently collapsed below this depth. Proposed to blast with 10 sticks of 40% dynamite; fill with mixture of 10 sacks cement and 5 sacks sand; have division witness operations, and abandon well. Decision: Proposal is approved provided that: (1) Hole is cleaned out to 250' or below if possible, and outer string of casing shot as proposed at 250' or below. (2) Shot cavity is cleaned out to 250' or below and plugged with a slurry of 10 sacks cement and 5 sacks sand. (3) Hole above cement slurry is filled with surface formation.

### MONTEBELLO FIELD

T 2 S, R. 11 W., S B. B. and M.

Sec. 5—Universal Consolidated Oil Co. well No. N-2. (Report No. P 1-27457.) Proposal to drill approved provisionally. Conditions: Well is 385.9' southeasterly along center line of Siphon Road (Temple) from center of intersection of Siphon Road and Durfee Ave., thence 372.1' north-easterly at right angles. Prospect well.

Sec. 6—Fullerton Oil Co. well No. "McGinley F" 29. (Report No. T 1-27469.) Shut-off test. Decision deferred. 9" casing cemented at 7134'. Inspector noted when tester valve opened for 60 min. air flowed moderately from drill pipe, and fluid between drill pipe and 9" casing remained stationary; when pulled, drill pipe contained 18 bbl. of gas-cut slightly muddy water with scum of oil above tester; water filtered from fluid sample from 7130' tested 21 gr. salt per gal; sample from perforated nipple below tester was shale and sand. Test indicates 9" shut-off is probably effective but is not conclusive due to high fluid rise. Decision is deferred pending production test to be made within 30 days after completing well.

Fullerton Oil Co. well No. "McGinley F" 29. (Report No. T 1-27526.) Bailing test approved. 9" casing cemented at 7135'. Hole bailed to 2500' for test and stood 15 hr. Fluid level rose at rate of 2.5 bbl. in 24 hr. Fluid sample from 7141' was medium mud fluid which tasted fresh.

Fullerton Oil Co. well No. "McGinley F" 29. (Report No. P 1-27474.) Supplementary proposal to drill approved. Conditions: Depth 7195'; 13½" cemented at 2720'; 9" cemented at 7134'; salt water found 7180'-7134'. Proposed to prospect ahead; land and cement 6½" above first productive oil zone encountered; notify division before cementing 6½"

Standard Oil Co. well No. "Baldwin" 75. (Report No. P 1-27450.) Supplementary proposal to drill approved. Conditions: Depth 8321'; 22" cemented at 52'; 16" cemented at 2188'. Proposed to fill hole to surface with rotary mud; plug hole with cement 3700'-3500', notifying division to witness plug at depth where plug takes weight of drill pipe; cement 11½" at 3180' with enough cement to reach within 100' of 16" shoe, and place bridge 3180'-3200' during cementing operations; notify division to witness mudding test before cementing 11½" and shut-off test on same; complete with 9" perforated liner hung at 3500'.

Standard Oil Co. well No. "Baldwin" 75. (Report No. T 1-27530.) Inspection of cementing operations. Hole bridged with 100 sacks cement and 200 sacks cement pumped in through drill pipe hung at 3700'; top of cement at 3400', cleaned out at 3500'. Inspector noted cement bridge at 3500' held 8 points of weight of drill pipe. Location and hardness of cement plug at 3500' are approved.

Standard Oil Co. well No "Baldwin" 75. (Report No. T 1-27531.) Inspection of mudding operations. During 1 hr circulation test 1.5 bbl. of mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 11 $\frac{3}{4}$ " on cement bridge 3200'-3180'.

Standard Oil Co. well No. "Baldwin" 75. (Report No. T 1-27569.) Shut-off test approved. 11 $\frac{3}{4}$ " casing cemented at 3195'. Inspector noted Johnston tester run in on 5 $\frac{1}{2}$ " drill pipe and wall packer set at 3181'; while tester valve open for 35 min. air flowed moderately from drill pipe for 2 min, followed by weak flow by heads for 10 min, and no flow for remainder of period; fluid remained stationary between drill pipe and 11 $\frac{3}{4}$ " casing while valve was open, when pulled, drill pipe contained 130' of gas-cut muddy water, 86' of medium rotary mud, and 172' of very heavy mud above tester, equivalent to 5.5 bbl; water filtered from fluid samples from 2837', 2923' and 3009', tested 68, 34 and 20 gr. salt per gal, respectively, fluid sample from bottom of drill pipe tasted fresh; sample from perforated nipple below tester was shale. Shut-off is approved.

Standard Oil Co. well No. "Baldwin" 77. (Report No. P 1-27494.) Proposal to drill approved. Conditions: Well is 1512' S. and 200' E. from N. and W. section lines. Estimate oil sand at 2000'. Proposed to cement 20" at 40', cement 11 $\frac{3}{4}$ " at 1975'; cement 8 $\frac{5}{8}$ " at 3680'; land 6 $\frac{3}{8}$ " at 3900'; notify division to witness 11 $\frac{3}{4}$ " and 8 $\frac{5}{8}$ " water shut-off tests, and mudding test before running 8 $\frac{5}{8}$ ", cement 11 $\frac{3}{4}$ " with enough cement to reach to surface and 8 $\frac{5}{8}$ " with enough cement to fill 1000' or more behind casing, core to determine exact depths for 11 $\frac{3}{4}$ " and 8 $\frac{5}{8}$ " shut-offs, use mud fluid of quality consistent with good drilling practice in drilling well to 8 $\frac{5}{8}$ " shut-off, drill in with oil for circulation, maintain fluid column to surface at all times during drilling operations.

Universal Consolidated Oil Co. well No. R-1. (Report No. P 1-27434.) Proposal to abandon approved. Conditions. Depth 7702', 13 $\frac{3}{8}$ " cemented at 514'; 13 $\frac{3}{8}$ " cemented at 2603'; no oil or gas produced. Junk. 1 stand of 5" drill pipe, drill collar, reamer, and fishtail bit, 5810'-5930'. Proposed to plug with cement 2800'-2580', having division witness same, cap 13 $\frac{3}{8}$ " at surface

T. 2 S, R. 12 W., S. E. B. and M.

Sec 1—Community Oil Co. of Nevada well No. 1 (Report No. P 1-27483.) Proposal of H. J. Montgomery, Contractor, to abandon approved provisionally. Conditions: Depth 7481', cement plugs 5635'-5235', 4600'-4576' and 3765'-3736'; 15" cemented at 1700'; 8 $\frac{5}{8}$ " cemented at 4505', 5 $\frac{1}{2}$ " landed at 5550', perforated 5495'-5550' and 4830'-4850', cut at 3865', 3850' and 3825, shot and pulled from 3765'; no oil or gas production. Junk Drill pipe 4705'-5230'; whipstock 4818'-4833'; Hughes rock bit; 12' of 4" drill. Proposed to shoot and pull 8 $\frac{5}{8}$ " from 1680' or higher and cap stub with 20' cement; cap with cement at surface and abandon. Decision: Proposal is approved provided division is notified to witness shooting of 8 $\frac{5}{8}$ " not lower than 1680', placing cement plug on 8 $\frac{5}{8}$ " stub, and location and hardness of cement plug at about 1660'. Note: This merely approves proposed abandonment work and does not pass upon right to enter this property.

PLAYA DEL REY FIELD

T. 2 S., R 15 W., S B. B. and M.

Sec. 21—Pacific Western Oil Co well No. "Stanley-Lieber" 1. (Report No. T 1-27498.) Inspection of cementing operations. 28 sacks cement dumped in stages starting at 6029'; 27 sacks cement dumped in stages starting at about 5850'. Inspector noted bailer would not spud below 5638' and brought up sample of set cement. Location and hardness of cement plug at 5638' are approved

Pacific Western Oil Co. well No "Stanley-Lieber" 1 (Report No T 1-27545 ) Inspection of cementing operations 8 $\frac{5}{8}$ " shot at 3360', pulled from 3335', bailer would not go below bad place in casing at 2609'; 15 sacks cement dumped on wood plug at 2609'. Inspector noted bailer would not spud below 2599' and brought up sample of set cement, 7 sacks cement dumped at 2599'. Location and hardness of cement plug at 2599' and subsequent cementing operations are approved.

Pacific Western Oil Co. well No. "Stanley-Lieber" 1 (Report No. T 1-27582 ) Inspection of cementing operations. 13 $\frac{3}{8}$ " shot and pulled from 685', wood plug driven to 673' and 25 sacks cement dumped on plug. Inspector noted bailer would not spud below 654' and brought up sample of set cement. Location and hardness of cement plug at 654' are approved.

Sec. 27—Big Ben Oil Co. well No. "Big Ben" 1. (Report No. P 1-27492.) Proposal to drill approved provisionally. Conditions. Well is 1419.79' N. and 1138.37' W. of SE section corner. Estimate oil sand at 6300'. Proposed to cement 12 $\frac{3}{4}$ " at 750'; cement 6 $\frac{3}{8}$ " at 6250'; land 4 $\frac{1}{2}$ " at 6500'; drill with rotary tools. Decision: Proposal is approved provided that (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left

- back of 6½" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 6½" is determined by coring starting not lower than 6250'. (5) Column of mud fluid back of 6½" is maintained to surface for at least 30 days after cementing casing.
- (6) Division is notified to witness test of 12½" casing, final mudding operations before cementing 6½", and bailing test of 6½" shut-off.
- Charles W. Fournl well No. "Fourl" 1. (Report No T 1-27501.) Inspection of mudding operations. During ½ hr. circulation test mud fluid was lost from pit at rate of 4.2 bbl. per hr., cement bridge at reported depth of 6248' held part of weight of drill pipe. Mudding operations are approved. Oral approval is hereby confirmed to cement 6½" at 6250'.
- Charles W. Fournl well No. "Fourl" 1 (Report No T 1-27541) Production test. Decision deferred. 6½" casing cemented at 6250'. During this production test well produced at estimated rate of 4400 bbl. fluid per day, which tested 22° A. P. I. gravity oil and cut 2% water and 10% gas emulsion containing no water, well flowed through 78/64" bean with 150 lb pressure on tubing and 900 lb. on casing. Later reported well produced in 24 hr. 4460 bbl. of 22.8° A. P. I. gravity oil, cutting 0.6%, flowing through 78/64" bean with 220 lb. pressure on tubing and 800 lb. on casing; during this period metered gas production was 2,500,000 cu. ft with gasoline content of 3.55 gal. per 1000 cu. ft. Test indicates 6½" shut-off is probably effective but is not conclusive due to pressure held on well. Decision is deferred pending results of further tests after elimination of back pressure.
- Madison Oil Co. well No. "Madison" 1. (Report No. P 1-27478.) Proposal to drill approved provisionally. Conditions: Well is 25' S. and 25' W of NE. corner of Lot 24, Block 25, Tract 9809. Estimate oil sand at 6200'. Proposed to cement 12½" at 750'; cement 6½" at 6200'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu. ft. is used in drilling of well, and column of mud fluid is maintained to surface at all times, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6½" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 6½" is determined by coring starting not lower than 6200'. (5) Column of mud fluid back of 6½" is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness test of 12½" casing, final mudding operations before cementing 6½", and bailing test of 6½" shut-off.
- The Petrol Corp well No. "Bergman" 1. (Report No P 1-27486.) Proposal to drill approved provisionally. Conditions: Well is 20' S. and 20' E. of NW. corner of Lot 7, Block 25, Tract 9809. Estimate oil sand at 6250'. Proposed to cement 11½" at 750'; cement 6½" at 6250', coring for exact depth; land 4½" liner at 6500'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6½" are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Exact cementing depth for 6½" is determined by coring starting not lower than 6250'. (5) Column of mud fluid back of 6½" is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness test of 11½" casing, final mudding operations before cementing 6½", and bailing test of 6½" shut-off.
- Sec 28—A W Lindberg and F. B. Connelly well No. 2. (Report No. P 1-27448) Proposal of J. C. Hansmeyer, Contractor, to abandon approved provisionally. Conditions: Depth 4419'; 16" S. P. cemented at 743'; 10½" cemented at 3454'; 6½" landed 3422'-4419', perforated 3489'-4419'. Junk: 2½" tubing, top reported at about 3480'. Proposed to clean out as far as possible, or to top of junked tubing; plug with cement to 3400'; pull 10½" from not lower than 723' and cap stub with 20' cement. Decision. Proposal is approved provided that: (1) If hole can not be cleaned out below 3480', hole below 3480' is mudded under 500 lb. pressure until there is no mud fluid loss to formation. (2) Hole is plugged with cement from clean-out depth to 3400'. (3) Division is notified to witness clean-out depth, pressure mudding operations, placing of all cement in hole, cutting or shooting 10½" at not lower than 723', and location and hardness of cement plugs at 3400' and 703'. Note: This merely approves proposed work and does not pass upon right to enter this property.
- The Petrol Corp. well No. 2. (Report No. P 1-27489.) Proposal of Oil Tool Exchange, Inc, to abandon approved provisionally. Conditions: Depth 4408'; 13" cemented at 615'; 8½" cemented at 3608', 5" liner 3589'-4408', perforated 3614'-4408'. Proposed to clean out to bottom if possible; plug liner with cement; place 20' cement plug on 5" liner; shoot and pull 8½" from 595' and place 20' cement plug on stub. Decision: Proposal is approved provided that: (1) Hole is plugged with cement 4408'-3569' while running water in hole to apply pressure. (2) Division is notified to witness placing of all cement in hole, cutting or shooting 8½" at not lower than 595', and location and hardness of cement plug at 3569' and on 8½" stub. Note. This merely approves proposed abandonment work and does not pass upon right to enter this property.
- Union Oil Co. well No. "Del Rey" 7. (Report No. T 1-27499.) Inspection of operations for demonstrating that 13½" casing is water-tight. Inspector

noted 575 lb. pressure applied on 13 $\frac{3}{8}$ " casing for  $\frac{1}{2}$  hr. without loss. Casing test is approved.  
 Union Oil Co. well No. "Del Rey" 7. (Report No. T 1-27547.) Bailing test. Decision deferred. 8 $\frac{3}{8}$ " casing cemented at 3451'. Hole bailed to 1800' for test and stood 13 hr. Gas issued from casing; top of fluid found at about 520', could not be located accurately due to gas action; fluid sample from 3455' was very gas-cut oily mud and oil; no free water in sample. Test indicates 8 $\frac{3}{8}$ " shut-off is probably effective but is not conclusive due to gas action. Decision is deferred pending receipt of production data after completing well.

### RICHFIELD FIELD

T. 3 S., R. 9 W., S. B. E. and M.

- Sec. 28—Jose Oil Co., Ltd., well No. "Jose" 1 (Report No. T 1-27510.) Bailing test not approved. 6 $\frac{5}{8}$ " casing cemented at 2732'. Hole bailed to 2000' for test and stood 21 hr. Fluid level rose at rate of 58.6 bbl. in 24 hr. Bailer sample from 400' was water with heavy oil scum; fluid sample from 2740' was water and little oil, and water filtered from this sample tested 102 gr. salt per gal. Shut-off is not approved.
- Sec. 29—Chanslor-Canfield Midway Oil Co. well No. 2-BB. (Report No. P 1-27419.) Proposal to alter casing approved. Conditions: Depth 3546', cement plug 3546'-3541'; 10" cemented at 3356', shot and drilled through at 2620'; 8 $\frac{1}{2}$ " cemented at 3150'; 6 $\frac{1}{2}$ " landed at 3546', including 332' perforated, plugged with cement to 3541', bad 3500'-3530'. Proposed to clean out and swedge 6 $\frac{1}{2}$ " to 3541'; land 55' of perforated 4 $\frac{3}{4}$ "; swedge 4 $\frac{3}{4}$ " top at 3486' against 6 $\frac{1}{2}$ "; put on production.
- Sec. 32—Chanslor-Canfield Midway Oil Co. well No. 3-E. (Report No. T 1-27473.) Inspection of cementing operations. Hole could not be cleaned out below 4160'; 41 sacks cement dumped in stages starting at 4160', filling to 3339'; 4 $\frac{3}{4}$ " cut and pulled from 3564', hole cleaned out to 3839' and 34 sacks cement dumped in stages. Inspector noted bailer would not spud below 3542' and brought up sample of set cement. Location and hardness of cement plug at 3542' are approved.
- Chanslor-Canfield Midway Oil Co. well No. 3-E. (Report No. T 1-27573.) Inspection of cementing operations. Hole cleaned out to 3542' and 20 sacks cement dumped in stages filling to 3443'; 6 $\frac{1}{2}$ " and 8 $\frac{1}{2}$ " perforated 3400'-3262'; well tested wet; 4 sacks cement dumped at 3443'. Inspector noted bailer would not spud below 3418' and brought up sample of set cement. Location and hardness of cement plug at 3418' are approved.
- Sec. 33—Chanslor-Canfield Midway Oil Co. well 7-R. (Report No. T 1-27470.) Inspection of cementing operations. 8 $\frac{3}{8}$ " perforated 3450'-3186' and tested wet, casing parted at 3335', hole could not be cleaned out below 3339'; 13 sacks cement dumped at 3339'. Inspector noted bailer would not spud below 3294' and brought up sample of set cement. Location and hardness of cement plug at 3294' are approved.
- Chanslor-Canfield Midway Oil Co. well No. 7-R. (Report No. P 1-27420.) Supplementary proposal to plug and alter casing approved provisionally. Conditions: 8 $\frac{3}{8}$ " plugged to 3467', perforated 3450'-3186'; casing bad at 3335', tried to swedge out but started making new hole. Proposed to dump 13 sacks cement under high hydrostatic head (this work already done and plug at 3294' approved by division); test by further producing from above 3294', and if noncommercial plug with cement to 3160' inside blank 8 $\frac{3}{8}$ "; cut and pull 8 $\frac{3}{8}$ " at first collar about 20' above 11" shut-off at 3154'; file supplementary notice covering additional work. Decision Proposal is approved provided division is notified to witness location and hardness of cement plug at 3160'.
- Chanslor-Canfield Midway Oil Co. well No. 7-R. (Report No. T 1-27571.) Inspection of cementing operations. Hole could not be cleaned out below 3121' due to collapsed or bad pipe; 14 sacks cement dumped at 3121'; hole kept full of fluid during cementing operations. Inspector noted bailer would not spud below 3069' and brought up sample of set cement. Location and hardness of cement plug at 3069' are approved.
- Chanslor-Canfield Midway Oil Co. well No. 7-R. (Report No. P 1-27500.) Supplementary proposal to plug and alter casing approved. Conditions: 8 $\frac{3}{8}$ " plugged with cement to 3165', shot at 3121' but could not be pulled, plugged to 3069' with cement. Proposed to perforate 8 $\frac{3}{8}$ " and 11" 2390'-2905'; swab 8 $\frac{3}{8}$ " and test; if wet, plug with cement 3069' to about 2865', having plug witnessed; file supplementary notice covering further work.
- Chanslor-Canfield Midway Oil Co. well No. 7-R. (Report No. T 1-27572.) Inspection of cementing operations. Hole cleaned out to 3069' and 60 sacks cement dumped; hole kept full of fluid during cementing operations. Inspector noted bailer would not spud below 2860' and brought up sample of set cement. Location and hardness of cement plug at 2860' are approved.

### ROSECRANS FIELD

T. 3 S., R. 13 W., S. B. E. and M.

- Sec. 7—George F. Getty, Inc., well No. "Athens" 2-A. (Report No. P 1-27498.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 5245'; 8 $\frac{3}{8}$ " cemented at 4253'; 6 $\frac{1}{2}$ " and 5 3/16" cemented at 5076'. Proposed to pull 5 3/16" above 8 $\frac{3}{8}$ " shoe; plug and abandon 5245'-5076'; perforate 4570'-4620' and test; if wet, plug; perforate 4258'-4300' and

test. Decision: Proposal is approved provided that: (1) Hole is cleaned out to 5245' and plugged with cement under 500 lb. minimum pressure 5245'-5076'. (2) Division is notified to witness location and hardness of cement plug at 5076' and production test within 10 days after placing on production. (3) Division is kept informed of results of each stage of perforating and testing; additional requirements may be outlined at that time.

Sec 17—A N. Macrate well No. "Gray" 1. (Report No. P 1-27462.) Proposal to redrill water string and deepen approved provisionally. Conditions: Depth 4300'; 6½" cemented at 4124'; 4½" landed 4094'-4156', including 40' perforated; 3" landed 4130'-4300', all perforated, bad 4224'-4300'. Proposed to clean out to bottom, cement plug to 3700'; cut and pull 6½" from 3700'; redrill to Gordon zone estimated at 6200' and Miocene sands at 7500', core Zins zone and mud off same; cement 5½" on top Gordon zone. Decision: Proposal is approved provided that: (1) Hole is cleaned out to 4300' and plugged 4300'-4074' under pressure. (2) 6½" stub at 3700' is capped with 20' cement. (3) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (4) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (5) Coring is started at 5650' or sufficiently high to encounter top of Zins zone. (6) Supplementary notice is filed proposing revised cementing depth for 5½" water string based upon results of coring through Zins zone. (7) Formations left back of 5½" are mudded by open circulation until loss is not more than 5 bbl. per hr. (8) Hole may be drilled to completion before cementing 5½", provided at least 40' cement bridge is placed at cementing depth before running this casing in hole; in this event, division will witness mudding test noted above after cement bridge has been placed. (9) Division is notified to witness location and hardness of cement plug at 4074', final mudding operations before cementing 5½", bailing test of 5½" shut-off, and all cores taken.

A. N. Macrate well No. "Gray" 1 (Report No T 1-27554.) Inspection of cementing operations. Hole cleaned out to bad point in 3" liner at 4193', 35 sacks cement pumped in through drill pipe and tubing hung at 4193', cementing operations finished under 500 lb. pressure, top of cement at 4093', 5 sacks cement pumped in through drill pipe hung at 4192'. Inspector noted bailer would not spud below 4054' and brought up sample of set cement. Location and hardness of cement plug at 4054' are approved.

Sec. 20—Cypress Petroleum Co. well No 1. (Report No P 1-27412 ) Supplementary proposal of Emmons & Emmons, Contractors, to plug and alter casing approved provisionally. Conditions: Depth 3923', cement plugs 3809'-3782' and 2808'-2780'; 8½" cemented at 4072', drilled through at 3587'; 3800' of 6½" and 1040' of 4½" landed at 4840', cemented through perforations at 4435', drilled through at 3587', 4½" cemented at 3871', perforated 3775'-3725', pulled from 2818'. Proposed to shoot and pull 6½" from some point above 2800', drive wood plug into stub, and dump 20' of cement on stub; file proposal before doing any further work. Decision: Proposal is approved provided division is notified to witness placing of 20' cement plug on 6½" stub, and location and hardness of 20' cement plug on 6½" stub. Note: Complete report should be filed in duplicate at once covering pulling of 4½" and capping stub with cement.

Cypress Petroleum Co well No 1. (Report No T 1-27487 ) Inspection of cementing operations of Emmons & Emmons, Contractors 4½" shot at 3400', 3000', 2950', and 2818', pulled from 2818', wood plug driven in stub. hole open to 2808' where 4 sacks cement dumped. Inspector noted bailer would not spud below 2780' and brought up sample of set cement. Location and hardness of cement plug at 2780' are approved.

Cypress Petroleum Co well No "Rosecrans" 1 (Report No T 1-27483 ) Inspection of cementing operations. Wood plug driven into 4½" stub at 5482' and 15 sacks cement dumped, hole kept full of fluid during cementing operations. Inspector noted bailer would not spud below 5394' and brought up sample of set cement. Location and hardness of cement plug at 5394' are approved.

## SANTA FE SPRINGS FIELD

T. 2 S, R 11 W, S. B. B. and M.

Sec 31—Shell Oil Co well No. "G H N." 10 (Report No P 1-27507 ) Proposal to alter casing approved. Conditions: Depth 4644', plugged to 4508'; 10" cemented at 3779'; 8½" cemented at 4178', 5 3/16" liner landed 4104'-4644', top of perforations at 4193', perforations apparently plugged by well No. "G H N" 25. Proposed to reperfurate 4310'-4435' with 170 holes and 4460'-4480' with 20 holes.

Shell Oil Co well No "G H N" 18 (Report No T 1-27468.) Inspection of cementing operations. Hole cleaned out to 6374' and 11 sacks cement dumped, hole kept full of fluid during cementing operations. Inspector noted bailer would not spud below 6222' and brought up sample of set cement. Location and hardness of cement plug at 6222' are approved.

Standard Oil Co well No "Santa Gertrudes" 6 (Report No T 1-27565 ) Inspection of cementing operations. Hole could not be cleaned out below 4611'; 4½" liner reperfurated 4570'-4605'; well wet; 4 sacks cement dumped.

in stages starting at 4611', filling to 4570'; 4½" liner perforated 4270'-4283' and reperforated 4283'-4570'; well swabbed and bailed, then placed on pump and produced only water, which tested 451 gr. salt per gal.; well cleaned out to 4570' and 23 sacks cement dumped in stages starting at 4570', filling to 4467'. Inspector noted bailer would not spud below 4465' and brought up sample of set cement. Location and hardness of cement plug at 4465' are approved.

Standard Oil Co. well No. "Santa Gertrudes" 7. (Report No. T 1-27529.) Inspection of cementing operations. Hole cleaned out to cement plug at 4555'; 20½ sacks cement dumped at 4583'; hole cleaned out to 4470' and 9 sacks cement dumped; 13½ sacks cement dumped in two stages, at 4431' and 4422'; water was run in hole during cementing operations. Inspector noted bailer would not spud below 4420' and brought up sample of set cement. Location and hardness of cement plug at 4420' are approved.

Union Oil Co. well No. "Bell" 72. (Report No. P 1-27481.) Proposal to drill approved provisionally. Conditions: Well is 91' N. and 727' W. of SE. section corner. Proposed to cement 13½" at 950', cement 8½" at 4125', land 6½" at 4500'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8½" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Enough cement is used to fill back of 8½" to reach at least 600' above shoe. (5) Column of mud fluid back of 8½" is maintained to surface for at least 30 days after cementing this casing. (6) Division is notified to witness test of 13½" surface casing, final mudding operations before cementing 8½", and bailing test of 8½" shut-off.

### T. 3 S., R. 11 W., S. B. B. and M

Sec 5—Bandini Petroleum Co. well No. "Off" 17. (Report No. T 1-27568.) Inspection of cementing operations. Well cleaned out to 4770' and water broke in, hole bridged with sand 4770'-4742'; 70½ sacks cement dumped in stages starting at 4742', filling to 4690'; cement drilled out to 4722' and water broke in; 16½ sacks cement dumped in stages starting at 4722', filling to 4683'; cement cleaned out to 4690'. Inspector noted bailer would not spud below 4695' and brought up sample of set cement. Location and hardness of cement plug at 4695' are approved.

Bandini Petroleum Co. well No. "Off" 20. (Report No. P 1-27452.) Proposal to alter casing approved provisionally. Conditions: Depth 4694'; 8½" cemented at 4175'; 6½" landed at 4691', including 79' perforated, cemented through perforations at 4612', parted at 4643'; 67' of 4½" perforated liner landed at 4691'. Proposed to perforate 6½" 4540'-4580' and test, if sufficient fluid enters, produce well; if insufficient fluid enters, perforate upper portion of Meyer zone and produce well. Decision: Proposal is approved provided division is informed of results of tests after each stage of perforating; additional requirements may be outlined at that time.

Buckeye Union Oil Co. well No. 5. (Report No. T 1-27474.) Inspection of cementing operations. 8½" shot at 1438' and 753' pulled from 753', wood plug driven in stub and 14 sacks cement dumped. Inspector noted bailer would not spud below 730' and brought up sample of set cement. Location and hardness of cement plug at 730' are approved.

General Petroleum Corp. well No. "Santa Fe" 36. (Report No. T 1-27481.) Inspection of mudding operations. During ¾ hr. circulation test mud fluid was lost from pit at rate of 1.5 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 4120'.

General Petroleum Corp. well No. "Santa Fe" 36. (Report No. T 1-27513.) Bailing test approved. 8½" casing cemented at 4120'. Hole bailed to 2500' for test and stood 12½ hr. No fluid entered well. Fluid sample from 4127' was medium mud fluid which tasted fresh.

General Petroleum Corp. well No. "Santa Fe" 36. (Report No. P 1-27472.) Supplementary proposal to drill approved provisionally. Conditions: Depth 4723'; 13½" cemented at 1001'; 8½" cemented at 4120'. Proposed to core to about 4800'; determine casing program after coring to 4800'. Decision: Proposal is approved provided supplementary notice is filed covering proposed work to be done before running any additional casing in hole.

General Petroleum Corp. well No. "Santa Fe" 36. (Report No. P 1-27491.) Supplementary proposal to drill approved provisionally. New conditions: Depth 4816'. Proposed to land 6½" at 4810', including perforations 4755'-4810' and cement through perforations at 4750'. Decision: Proposal is approved provided that: (1) Formations left back of 6½" are mudded by open circulation until loss is not more than 2 bbl. per hr. (2) Enough cement is used to fill back of 6½" to reach at least 600' above shoe. (3) Column of mud fluid back of 6½" is maintained to surface for at least 30 days after cementing casing. (4) Division is notified to witness final mudding operations before cementing 6½" and production test within 30 days after placing on production.

General Petroleum Corp. well No. "Santa Fe" 36. (Report No. T 1-27588.) Inspection of mudding operations. During ¾ hr. circulation test mud fluid was lost from pit at rate of 1 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to land 6½" at 4816' and cement through perforations at 4750'.

- General Petroleum Corp. well No. "Santa Fe" 240. (Report No. T 1-27527.) Inspection of cementing operations 57 sacks cement dumped in stages starting at 7399'; water was run in hole while cementing. Inspector noted bailer would not spud below 7370' and brought up sample of set cement. Location and hardness of cement plug at 7370' are approved.
- General Petroleum Corp. well No. "Santa Fe" 240. (Report No. T 1-27542.) Inspection of cementing operations. 7 sacks cement dumped on rope bridge on 6½" stub at 7015', filling to 6986'; 8½" perforated 6980'-6980'; well swabbed for two days during which salt water with very little oil entered well; 43 sacks cement dumped in stages starting on cement plug at 6986'. Inspector noted bailer would not spud below 6860' and brought up sample of set cement. Location and hardness of cement plug at 6860' are approved.
- General Petroleum Corp. well No. "Santa Fe" 240. (Report No. P 1-27471.) Supplementary proposal to plug approved. Conditions: Depth 8000', plugged to 6986'; 8½" cemented at 7430', perforated 6880'-6980', 6½" landed at 7992', perforated 7443'-7992', pulled from 7015'; well produced all salt water. Proposed to plug off present perforations and bring plug to about 6850'; perforate 8½" 6380'-6420' and test; if wet, plug off perforations and have plug witnessed; perforate 8½" 5815'-5840' and test, if wet, plug off perforations and have plug witnessed; perforate 5700'-5750' and test.
- General Petroleum Corp. well No. "Santa Fe" 240. (Report No. T 1-27589.) Inspection of cementing operations. Hole cleaned out to 6860' and 180 sacks cement dumped in stages, hole kept full of fluid during cementing operations. Inspector noted bailer would not spud below 6300' and brought up sample of set cement. Location and hardness of cement plug at 6300' are approved.
- George F. Getty, Inc. well No. "S F S" 13. (Report No. P 1-27451.) Proposal to plug approved provisionally. Conditions: Depth 5440'; 6½" cemented at 4028', 4½" cemented at 4926'; 3" liner 4889'-5440', perforated 4913'-5440', water witch showed water source at 5325' and 5360'. Proposed to plug 5440'-5300'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 5300'.
- George F. Getty, Inc., well No. "S F S." 13. (Report No. T 1-27549.) Inspection of cementing operations. Hole cleaned out to 5440' and 13 sacks cement dumped in stages, filling to 5345'. Inspector noted bailer would not spud below 5336' and brought up sample of set cement. Location and hardness of cement plug at 5336' are approved.
- George F. Getty, Inc., well No. "S F S." 13. (Report No. T 1-27585.) Inspection of cementing operations. Hole cleaned out to 5336' and 3 sacks cement dumped. Inspector noted bailer would not spud below 5300' and brought up sample of set cement. Location and hardness of cement plug at 5300' are approved.
- Santa Fe Extension Oil Co. well No. "Sunshine Farms" 1. (Report No. T 1-27508.) Inspection of mudding operations. During ¾ hr circulation test mud fluid was lost from pit at rate of 1.6 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 4780'.
- Union Oil Co. well No. "Farwell" 14. (Report No. P 1-27416.) Supplementary proposal to plug and alter casing approved. Conditions: Depth 6850', plugged to 5210'; 8½" cemented at 5597', perforated and plugged 5590'-5597', 5450'-5470' and 5220'-5240', 6½" cemented at 6329', perforated and plugged 5975'-5940', 5650', 5590', 5655'-5895', 5450'-5470' and 5220'-5240'; 566' 4½" landed at 6850', including 536' perforated and plugged. Proposed to continue plug above 5200'; perforate 6½" and 8½" 4650'-4675' and test, if wet, shoot and pull 6½" from as low as possible and plug to 4630'; if can not be pulled below 675', plug to 4630', notify division to test plug at 4630'; perforate 8½" 4525'-4170' and test on production.
- Union Oil Co. well No. "Farwell" 14. (Report No. T 1-27485.) Inspection of cementing operations 4 sacks cement dumped at 5416'; 6½" and 8½" perforated 5240'-5220' and tested wet, hole cleaned out to 5379' and 33 sacks cement dumped in stages; hole kept full of fluid during cementing operations. Inspector noted bailer would not spud below 5210' and brought up sample of set cement. Location and hardness of cement plug at 5210' are approved.
- Union Oil Co. well No. "Farwell" 14. (Report No. T 1-27566.) Inspection of cementing operations 4 sacks cement dumped at 5210', filling to 5177', 6½" and 8½" perforated 4680'-4650'; well tested wet; 6½" shot at 4730' and 4710', could not be pulled; wood bridging plug set at 4770'; 26 sacks cement dumped in stages starting at 4770'. Inspector noted bailer would not spud below 4648' and brought up sample of set cement. Location and hardness of cement plug at 4648' are approved.
- Sec 6—Bardeen Petroleum Co., Ltd. well No. "Pulliam" 1. (Report No. P 1-27449.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 7054', cement plugs 7054'-6247', 5770'-5578', 4800'-4756' and 4555'-4500'; 8½" cemented at 5220', pulled from 2516', perforated 4550'-4300'; 6½" cemented at 5603', perforated 4550'-4300', pulled from 4253'; 4½" cemented at 6375', perforated 5720'-5610', pulled from 4800'; 3" liner landed 6300'-6820', perforated 6350'-6820', ripped 6725'-6375'; 2" liner landed 6784'-7054', all perforated. Proposed to fill 6½" with mud to 4253'; place cement bridge in 8½" 4253'-4243', notifying division to witness location and hardness of cement; perforate 8½" 4047'-4025' and test. Decision: Proposal is approved provided division is informed of results of tests after performing as proposed; additional requirements may be outlined at that time.

- Bardeen Petroleum Co., Ltd., well No. "Pullham" 1. (Report No T 1-27552.) Inspection of cementing operations. Hole cleaned out to 4496' and filled with heavy mud 4496'-4253', wood plug driven in 6 $\frac{3}{8}$ " stub at 4253', 2 $\frac{1}{2}$  sacks cement dumped at 4253'. Inspector noted bailer would not spud below 4240' and brought up sample of set cement. Location and hardness of cement plug at 4240' are approved.
- East Santa Fe Oil Co. well No. 1. (Report No. P 1-27435) Proposal to abandon approved provisionally. Conditions: Depth 4565', 12 $\frac{1}{2}$ " cemented at 1885'; 8 $\frac{1}{2}$ " cemented at 3854'; 6 $\frac{1}{2}$ " cemented at 4203', perforated 3860'-3940', cemented through perforations 3860'-3884', drilled through at 3869', 4 $\frac{1}{2}$ " at 4357', 3" liner 4342'-4565'. Junk (1st hole); 6 $\frac{1}{2}$ " 3869'-4203'; 4 $\frac{1}{2}$ " liner 4000'-4505', unknown junk 4000'-4505' and at 3884'; 19' whipstock cemented 3865'-3884', total depth 4505', plugged with cement 3994'-3947'. Proposed to plug with cement 4565'-4335'; try to pull 4 $\frac{1}{2}$ " from about 3800' or above, and place 20' cement plug on stub; try to pull 6 $\frac{1}{2}$ " from 3700' or above, and place 20' cement plug on stub; try to pull 8 $\frac{1}{2}$ " at 1750' or above, and place 20' cement plug on stub; weld cap on 12 $\frac{1}{2}$ " in bottom of cellar and abandon. Decision: Proposal is approved provided that: (1) Proposed cement plug 4565'-4335' is placed under as much pressure as possible. (2) Division is notified to witness location and hardness of cement plugs at 4335' and on 8 $\frac{1}{2}$ " stub at about 1730'.
- East Santa Fe Oil Co well No 1. (Report No T 1-27551.) Inspection of cementing operations. Hole cleaned out to 4561' and 28 sacks cement dumped, 200 lb. pressure applied for 1 $\frac{1}{2}$  hr. without loss; top of cement at 4312'. Inspector noted bailer would not spud below 4302' and brought up sample of set cement. Location and hardness of cement plug at 4302' are approved.
- East Santa Fe Oil Co. well No. 1. (Report No T 1-27578) Inspection of cementing operations. 4 $\frac{1}{2}$ " cut and pulled from 3740', wood plug driven to 3740' and 6 sacks cement dumped on plug. Inspector noted bailer would not spud below 3711' and brought up sample of set cement. Location and hardness of cement plug at 3711' are approved.
- East Santa Fe Oil Co. well No 1. (Report No. T 1-27579) Inspection of cementing operations. 6 $\frac{1}{2}$ " cut and pulled from 3107', wood plug driven in stub and 8 sacks cement dumped on plug. Inspector noted bailer would not spud below 3081' and brought up sample of set cement. Location and hardness of cement plug at 3081' are approved.
- East Santa Fe Oil Co well No. "National" 1. (Report No. P 1-27497.) Proposal to redrill water string approved provisionally. Conditions: Depth 8032', cement plugs 8032'-7470' and 4700'-4604'; 13 $\frac{3}{8}$ " 788'-4386'; 8 $\frac{1}{2}$ " landed on plug at 4666', perforated 4427'-4660', cemented through perforations at 4427', shot at 4610', well wet. Proposed to plug 8 $\frac{1}{2}$ " with cement to 4410', pull from about 4150' and place 10' cement plug on stub; drill out of 13 $\frac{3}{8}$ " at 4100' cement 8 $\frac{1}{2}$ " on top Meyer zone at about 4390'; core ahead to about 4600', hang 6 $\frac{1}{2}$ " liner, and produce from Meyer sand. Decision: Proposal is approved provided that. (1) Cement plug 4604'-4410' is placed under at least 500 lb. pressure if possible. (2) At least 20' cement plug is placed on 8 $\frac{1}{2}$ " stub. (3) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (4) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 1 bbl. per hr (5) Enough cement is used to fill back of 8 $\frac{1}{2}$ " to extend up inside 13 $\frac{3}{8}$ ". (6) Division is notified to witness location and hardness of cement plug at 4410', final mudlogging operations before cementing 8 $\frac{1}{2}$ ", and bailing test of 8 $\frac{1}{2}$ " shut-off.
- Ryan Oil Co well No. 2. (Report No. P 1-27432.) Supplementary proposal to plug and alter casing approved. Conditions: Well plugged with cement 6000'-5918'; 4 $\frac{1}{2}$ " perforated 5930'-5965' and 5640'-5600', perforated and reperfdrated 5645'-5605', casing bad at 5645'. Proposed to plug with cement under pressure 5645'-5550', having division witness plug; pull 4 $\frac{1}{2}$ " from above 5550', cap stub with at least 20' cement, and notify division to witness plug; shoot and pull 6 $\frac{1}{2}$ " from not lower than 5200', having division witness shooting, place 20' cement plug on stub, and have division witness plug; perforate about 4700'-4725' and test; if well produces, notify division to witness production test; if wet, file supplementary notice.
- Ryan Oil Co. well No. 2. (Report No. T 1-27523.) Inspection of cementing operations. Hole cleaned out to cement plug at 5918'; 15 $\frac{1}{2}$  sacks cement dumped in stages starting at 5650', filling to 5570', water was run in hole while cementing. Inspector noted bailer would not spud below 5571' and brought up sample of set cement. Location and hardness of cement plug at 5571' are approved.
- Shell Oil Co. well No. "Slusher" 16. (Report No. T 1-27544) Inspection of cementing operations. Hole cleaned out to 7900'; 40 sacks cement pumped in through drill pipe hung at 7898'. Inspector noted bailer would not spud below 7608' and brought up sample of set cement. Location and hardness of cement plug at 7608' are approved.
- Standard Oil Co well No. "Walker Community" 7. (Report No. P 1-27505) Inspection of cementing operations. 57 $\frac{1}{2}$  sacks cement dumped in stages starting at 4530'; water was run in hole during cementing operations to apply pressure; top of cement at 4188'. Inspector noted bailer would not spud below 4185' and brought up sample of set cement. Location and hardness of cement plug at 4185' are approved.
- Standard Oil Co. well No. "Walker Community" 7. (Report No. T 1-27525.) Inspection of cementing operations. 4 $\frac{1}{2}$ " shot and pulled from 4131', wood plug driven in stub and 6 sacks cement dumped, filling to 4108'; 6 $\frac{1}{2}$ " ripped 3340'-3365', pulled from 3354', wood plug driven in stub to 3352' and 15 sacks cement dumped, filling to 3324'; 8 $\frac{1}{2}$ " shot and pulled from 1685', wood plug driven in stub, top at 1675', and 20 sacks cement dumped, filling to 1647'. Inspector noted bailer would not spud below



- 1645' and brought up sample of set cement. Location and hardness of cement plug at 1645' are approved.
- Standard Oil Co. well No. "Weisel" 12. (Report No P 1-27495) Supplementary proposal to plug and alter casing approved. Conditions: Depth 4625', cement plug 4565'-4615', cement bridge 4488'-4505'; 6 $\frac{1}{2}$ " cemented at 4362'; 315' of 4 $\frac{3}{4}$ " landed at 4615', perforated 4370'-4615', reperforated 4365'-4565', perforations seamed with cement 4365'-4490'; well wet. Proposed to clean out to 4565' if possible and place cement plug 4565'-4500', running water in hole to apply pressure, and notify division to witness this plug, make bailing or pumping test; if necessary, reperformate 4 $\frac{3}{4}$ " liner 4425'-4500' and make bailing or pumping test; if not O K, file supplementary notice covering abandonment; it is understood that plug at 4500' will constitute permanent abandonment of lower portion of hole.
- Standard Oil Co. well No. "Weisel" 17. (Report No P 1-27496) Proposal to plug and alter casing approved. Conditions: Depth 8152', cement plugs 8152'-7925', 4635'-4530' and 4530'-4570'; 11 $\frac{3}{4}$ " cemented at 4315'; 9"-8 $\frac{1}{2}$ " cemented at 7956', perforated 4590'-4560' and 4555'-4325', shot 4590'-4610' and 4570'-4590'; water witch showed water entering 4355'-4370' and at 4500' and below. Proposed to reperformate 8 $\frac{1}{2}$ " 4480'-4530'; continue cement plug 4530'-4500', running water in hole to apply pressure; make bailing or production test, and if necessary continue cement plug 4500'-4490', running water in hole to apply pressure; make bailing or production test, and if production still not O K check water source with water witch; notify division to witness plug that excludes water or materially reduces water; it is understood that portion of hole below this plug will be considered permanently abandoned.
- The Texas Co. well No. "Matern Two" 12 (Report No. T 1-27472) Inspection of cementing operations. Hole cleaned out to 7890' and 27 sacks cement dumped in stages; hole kept full of water during cementing operations. Inspector noted bailer would not spud below 7660' and brought up sample of set cement. Location and hardness of cement plug at 7660' are approved.
- The Texas Co. well No. "Matern Three" 11. (Report No. T 1-27471.) Inspection of cementing operations. Hole bridged with sand 6161'-6023'; 9 sacks cement dumped in stages starting at 6023', filling to 5998'; 6 $\frac{1}{2}$ " perforated 5998'-5989', water entered through perforations; 5 $\frac{1}{2}$  sacks cement dumped at 5998'; top of cement at 5986'. Inspector noted bailer would not spud below 5987' and brought up sample of set cement. Location and hardness of cement plug at 5987' are approved.
- The Texas Co. well No. "Matern Three" 15 (Report No. T 1-27577) Inspection of cementing operations. Hole cleaned out to 7975' and 11 sacks cement dumped; hole cleaned out to 7884' and 20 sacks cement dumped in stages. Inspector noted bailer would not spud below 7711' and brought up sample of set cement. Location and hardness of cement plug at 7711' are approved. Note: Attention is directed to fact that well was plugged with cement 7975'-7884' without filing notice or receiving approval of division, which is contrary to requirements.
- Union Oil Co. well No. "Alexander" 25 (Report No P 1-27482) Proposal to drill approved provisionally. Conditions: Well is 424' S and 1670' W of NE section corner. Proposed to cement 13 $\frac{3}{4}$ " at 950'; cement 8 $\frac{1}{2}$ " at 3670'; land 6 $\frac{1}{2}$ " perforated liner at 3750'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Column of mud fluid back of 8 $\frac{1}{2}$ " is maintained to surface for at least 30 days after cementing this casing. (5) Division is notified to witness test of 13 $\frac{3}{4}$ " surface casing, final mudding operations before cementing 8 $\frac{1}{2}$ ", and bailing test of 8 $\frac{1}{2}$ " shut-off.
- Union Oil Co. well No. "Bell" 65. (Report No P 1-27456.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 3750', plugged to 3687'; 8 $\frac{1}{2}$ " cemented at 3667'; 54' of 6 $\frac{1}{2}$ " landed at 3687', including 32' perforated, perforations plugged 3706'-3722'; well wet. Proposed to pull 6 $\frac{1}{2}$ " liner, clean out to 3705' and replug to 3677'; land 6 $\frac{1}{2}$ " perforated liner; if not enough fluid, perforate 6 $\frac{1}{2}$ " and 8 $\frac{1}{2}$ " 3660'-3667'; test on production. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 3677'.
- Union Oil Co. well No. "Bell" 68. (Report No. T 1-27479) Inspection of mudding operations. During  $\frac{3}{4}$  hr circulation test mud fluid was lost from pit at rate of 2 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{1}{2}$ " at 3672'.
- Union Oil Co. well No. "Bell" 68. (Report No T 1-27509) Bailing test approved. 8 $\frac{1}{2}$ " casing cemented at 3670'. Hole bailed to 2500' for test and stood 12 hr. Oil entered at rate of 54 bbl in 24 hr. No water entered well. Fluid sample from 3680' was oily water; water filtered from this sample tested 35 gr salt per gal. Shut-off is approved.
- Union Oil Co. well No. "Bell" 71. (Report No P 1-27433) Proposal to drill approved provisionally. Conditions: Well is 838' N, and 720' W. of center lines of Telegraph and Butler roads. Proposed to cement 13 $\frac{3}{4}$ " at 950'; cement 8 $\frac{1}{2}$ " at 3650'; land 6 $\frac{1}{2}$ " perforated liner at 3750'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu. ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any

hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Division is notified to witness test of 13 $\frac{3}{8}$ " casing, final mudding operations before cementing 8", and bailing test of 8 $\frac{1}{2}$ " shut-off.

Union Oil Co. well No. "Bell" 71. (Report No. T 1-27550.) Inspection of operations for demonstrating that 13 $\frac{3}{8}$ " surface casing is water-tight. Inspector noted 475 lb. pressure applied for  $\frac{1}{4}$  hr. without pressure loss. Casing test is approved.

Wilshire Annex Oil Co. well No. "Wilshire Annex Koontz" 4. (Report No. P 1-27493.) Proposal to alter casing approved provisionally. Conditions: Depth 6520', cement plug 6520'-5638'; 11 $\frac{3}{4}$ " cemented at 4079'; 8 $\frac{1}{2}$ " cemented at 5633', perforated 4460'-4085'; 6 $\frac{1}{2}$ " cemented at 6388', perforated 6315'-6360', 5658'-5700' and 4460'-4085'. Proposed to shoot 8 $\frac{1}{2}$ " and 6 $\frac{1}{2}$ " with 10 holes 4536'-4546' and try to produce portion of Meyer zone open in wells No. "Texas Matern" 3-13 and 3-11 along with present production. Decision: Proposal is approved provided division is informed of results of tests after perforating as proposed, additional requirements may be outlined at that time.

T. 3 S., R. 12 W., S. B. B. and M.

- Sec. 1—Associated Oil Co. well No. "Clarke" 21. (Report No. P 1-27415.) Proposal to plug approved provisionally. Conditions: Depth 3060', plugged to 7980'; 11 $\frac{3}{4}$ " cemented at 4345'; 7" cemented at 7985', perforated 4585'-4435', cemented through perforations 4430'-4420', plugged 4635'-4585'; water source at 4581'. Proposed to dump cement on bottom, maintaining high fluid level to shut off bottom water. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug which excludes or substantially reduces amount of water entering from bottom.
- Associated Oil Co. well No. "Clarke" 21. (Report No. T 1-27504.) Inspection of cementing operations. 2 sacks cement dumped at 4581'; high fluid level maintained during cementing operations. Inspector noted bailer would not spud below 4568' and brought up sample of set cement. Location and hardness of cement plug at 4568' are approved.

#### SEAL BEACH FIELD

T. 5 S., R. 12 W., S. B. B. and M.

- Sec. 3—Continental Oil Co. well No. "McGrath" 4. (Report No. T 1-27540.) Inspection of cementing operations. Hole cleaned out to 5408' and filled with sand 5408'-5376'; 10 sacks cement dumped at 5376'. Inspector noted bailer would not spud below 5246' and brought up sample of set cement. Location and hardness of cement plug at 5264' are approved.
- Pacific Western Oil Co. well No. "Bryant" 6-A. (Report No. T 1-27480.) Inspection of cementing operations. 38 sacks cement dumped, starting at 5217'; hole kept full of water. Inspector noted bailer would not spud below 4943' and brought up sample of set cement. Location and hardness of cement plug at 4943' are approved.
- Pacific Western Oil Co. well No. "Bryant" 6-A. (Report No. T 1-27484.) Inspection of cementing operations. 6 $\frac{1}{2}$ " could not be pulled from 4007', shot and pulled from 3525', wood plug driven in stub and 5 sacks cement dumped on plug. Inspector noted bailer would not spud below 3506' and brought up sample of set cement. Location and hardness of cement plug at 3506' are approved.
- Pacific Western Oil Co. well No. "Bryant" 6-A. (Report No. T 1-27484.) Inspection of cementing operations. 9" shot and pulled from 513', wood plug driven in stub, and 22 sacks cement dumped on plug. Inspector noted bailer would not spud below 491' and brought up sample of set cement. Location and hardness of cement plug at 491' are approved.

#### TORRANCE FIELD

T. 3 S., R. 14 W., S. B. B. and M.

- Sec. 31—Aron H. Hover Organization well No. "Bryant" 1. (Report No. T 1-27523.) Bailing test approved. 8 $\frac{1}{2}$ " casing recemented at 3210'. Hole bailed to 2570' for test and stood 12 hr. Fluid level rose at rate of 5.3 bbl in 24 hr. Fluid sample from 3214' was medium gas-cut mud which tasted fresh.

T. 4 S., R. 14 W., S. B. B. and M.

- Sec. 8—General Petroleum Corp. well No. "Carson" 3. (Report No. P 1-27502.) Proposal to redrill oil string approved provisionally. Conditions: Depth 3300'; 10" cemented at 2850'; 6 $\frac{1}{2}$ " landed at 3296', perforated 2859'-3296', bad at 2868'. Proposed to pull 6 $\frac{1}{2}$ " from as far below 10" shoe as possible; redrill to 3300' and finish with 6 $\frac{1}{2}$ " oil string. Decision: Proposal is approved provided 6 $\frac{1}{2}$ " to be sidetracked is plugged with cement as far as possible.
- Sec. 9—Chanslor-Canfield Midway Oil Co. well No. "Del Amo" 2. (Report No. P 1-27485.) Proposal to redrill oil string and deepen approved provisionally. Conditions: Depth 3530'; 10" cemented at 2940'; 8 $\frac{1}{2}$ " landed at 3530', including 588' perforated, bad at 2955'. Proposed to shoot or cut off 8 $\frac{1}{2}$ "

at 2953' and pull; redrill to 3530', coring last 15'; if core looks good deepen to about 3660', coring for depth; land new oil string. Decision: Proposal is approved provided that: (1) 8 $\frac{1}{2}$ " to be sidetracked is plugged with cement if possible. (2) Division is notified to witness production test 30 days after recompleting well.

### WHITTIER FIELD

T. 2 S., R. 11 W., S. B. B. and M.

- Sec. 22—C. W. Partridge & Wm. Chambers well No. 5. (Report No. P 1-27480.) Proposal to drill approved provisionally. Conditions: Well is 250' N. and 50' E. of SW. corner of SW.  $\frac{1}{4}$  of NW.  $\frac{1}{4}$  of SE.  $\frac{1}{4}$  of section. Estimate oil sand at 360'. Proposed to cement 12" at 125'; cement 10" at 360'; complete well open hole about 400'; drill with cable tools. Decision: Proposal is approved provided that: (1) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (2) Division is notified to witness bailing test of 10" shut-off.

### LOS ANGELES COUNTY

T. 1 S., R. 11 W., S. B. B. and M.

- Sec. 11—Andrus and Hutcheson, Inc., well No. "A. & H." 1. (Report No. T 1-27497) Inspection of cementing operations of Midway Supply Co. Prospect well.

T. 2 S., R. 10 W., S. B. B. and M.

- Sec. 14—N. O. Shively well No. "Shively" 1. (Report No. T 1-27538.) Inspection of operations for demonstrating that 12 $\frac{1}{2}$ " casing is water-tight. Inspector noted 200-250 lb. pressure applied for 10 min. without loss. Casing is approved.

### ORANGE COUNTY

T. 6 S., R. 10 W., S. B. B. and M.

- Sec. 9—Explorers Drilling Co. well No. "Morris" 1. (Report No. P 1-27461.) Supplementary proposal to drill approved provisionally. Conditions: Depth 954'; 12 $\frac{1}{2}$ " cemented at 103'; 8 $\frac{3}{8}$ " landed at 441', perforated 375'-441', cemented through perforations at 375'. Proposed to land and cement 6 $\frac{3}{8}$ " at 460' in shale body to test water shut-off; if water is shut off, land 4 $\frac{1}{2}$ " in combination with perforated liner for oil string and test for production. Decision: Proposal is approved provided that: (1) Cement bridge is placed 490'-460' at time 6 $\frac{3}{8}$ " is cemented. (2) Hole is cleaned out not more than 5' below 6 $\frac{3}{8}$ " shoe for water shut-off test. (3) Division is notified to witness bailing test of 6 $\frac{3}{8}$ " shut-off test.
- Sec. 19—B. & B. Oil Co. well No. "B. & B." 1. (Report No. T 1-27539) Inspection of operations for demonstrating that 12 $\frac{1}{2}$ " casing is water-tight. Inspector noted 550 lb. pressure applied for  $\frac{1}{4}$  hr. without pressure loss; hole was open to 476'. Casing test is approved.

### RIVERSIDE COUNTY

T. 5 S., R. 5 W., S. B. B. and M.

- Sec. 36—Great Coastal Oil Corp. well No. 1. (Report No. T 1-27587.) Inspection of operations for demonstrating that 10" casing is water-tight. 10" cemented at 285'; hole cleaned out to 290' and balled dry; no fluid entered well while standing 72 hr. for test. Casing test is approved.

## DISTRICT No. 2

## PIRU FIELD

T. 5 N., R. 18 W., S. B. B. and M.

- Sec. 33—Jacob F. Kaar well No. V-27. (Report No. T 2-2424.) Inspection of cementing operations of J. H. Gilbertson. Prospect well.  
Jacob F. Kaar well No V-27. (Report No T 2-2427 ) Inspection of operations of J. H. Gilbertson for demonstrating that well has been capped and marker set as required. Prospect will.

## RINCON FIELD

T 3 N., R. 24 W., S. B. B. and M.

- Sec. 8—Chanslor-Canfield Midway Oil Co well No. "Hobson" B-4. (Report No. P 2-3224.) Proposal to deepen approved provisionally. Conditions: Depth 3213', plugged 3188'-3213'; 11½" cemented at 3156'; 60' of perforated 6½" liner landed at 3185'. Proposed to pull 6½" liner; recement 11½"; core to Miley zone; drill and core Miley zone to about 4200'; make combination job at Miley zone; shoot and test top and intermediate zones before drilling out cement at combination job. Decision: Proposal is approved provided that: (1) Satisfactory shut-off is secured with 11½" recementing operation. (2) Enough cement is used in combination cement job to reach up to 11½" shoe (3) Fairly clean production is secured in tests made, after shot perforating solid combination string above combination cementing point. (4) Completion depth and points for shot perforating depend on core data. (5) Division is notified to witness 11½" shut-off test with hole open about 5' below shoe, core data secured before running combination string, and tests made after shot perforating as proposed and after cleaning out below combination cementing point.
- Sec 23—Continental Oil Co. well No. "Grubb" 3 (Report No. T 2-2438.) Inspection of mudding operations. Deputy noted mud fluid loss was at rate of 5.4 bbl per hr., and cement plug at 5905' held weight of drill pipe. Mudding operations are approved.

## SANTA PAULA FIELD

T 4 N., R 20 W, S B B and M

- Sec. 29—Mausard & Jameson well No. 1. (Report No. P 2-3231.) Proposal of Dan O'Leary to abandon approved. Conditions: Depth about 700'; 9½", 7½", 5½" and 4½" all landed at unknown depths; 3" landed on bottom; well full of fresh water to about 6' from top, inside 4½"; no log or data available. Proposed to pull all casing possible, leaving well in condition to make water well.

## SESPE FIELD

T. 4 N., R. 19 W., S. B. B. and M.

- Sec 20—The Texas Co. well No "Faulkner" 1. (Report No. P. 2-3225 ) Supplementary proposal to abandon approved. Conditions: Depth 2170', cement plugs 1886'-1846' and 1326'-1289'; 20" 165'-215'; 15½" 385'-480', 12½" 853'-1083'; 10" 1323'-1866'; 8½" 2000'-2121'; hole filled with mud to bottom of 15½"; 18-sack cement bridge placed at 30'; hole filled with mud and cavings up to this point, and filled to surface with mud and cavings. Proposed to clean out to about 300' and use same for seismographic work; fill hole with mud and again plug with 30 sacks cement at 30' from surface, fill remainder of hole with mud and cavings.
- T. 5 N., R 19 W., S. B. B and M.
- Sec 28—Sullivan & Roberts well No 1 (Report No P 2-3229 ) Supplementary proposal to drill approved. Conditions: Depth 1183'; 7½" landed at 475'; 5½" landed at 983'. Proposed to drill ahead to depth to be determined by drilling data, dumping water to drill with; notify division if additional water encountered, and to witness production test after completing well.

## SIMI FIELD

T. 2 N., R. 17 W, S B. B. and M.

- Sec 6—American Drilling Co. well No. 10-A (Report No P 2-3230 ) Proposal to abandon approved. Conditions: Depth 898', bridged with sand to

253'; 10" cemented at 182'; 6½" cemented at 264'; produced considerable salt water and no oil. Proposed to fill 6½" and space between 10" and 6½" with mud to surface, notifying division to witness that this has been done; weld on cap and leave well in present condition as to casing.  
 American Drilling Co well No 10-A. (Report No T 2-2435.) Inspection of mudding operations Deputy noted mud fluid standing at top both inside and outside 6½" casing; bailer was run to about 60' inside 6½" where it stopped in thick mud. Operation is approved as indicating that space inside and outside 6½" has been left full of mud.

T. 3 N, R. 18 W, S. B. B. and M.

Sec. 36—Charles and Hoxie Anderson well No "Marr" 13. (Report No T 2-2432) Inspection of cementing operations. Hole cleaned out to 1860'; 30 sacks cement pumped in through drill pipe hung at 1850'. Deputy noted bailer spudded on solid plug at 1750' and brought up pieces of shale and fairly hard cement from that point; top of fluid located at about 170'. Operation is approved as indicating satisfactory cement plug has been placed 1850'-1750'.

### VENTURA FIELD

T. 3 N., R. 23 W., S. B. B and M.

Sec 24—Associated Oil Co well No. "V. L. & W." 23. (Report No. T 2-2434) Inspection of mudding operations During ½ hr. circulation test mud fluid was lost from pit-at rate of 8 bbl per hr Mudding of formations 1062'-6350' is satisfactory.

Sec 27—Associated Oil Co. well No "Lloyd" 135. (Report No T 2-2436) Inspection of mudding operations During ½ hr. circulation test mud fluid was lost at rate of 6.7 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 1½" at 6980'.

Sec 28—General Petroleum Corp. well No "Notten" 13. (Report No T 2-2437) Inspection of mudding operations During ½ hr. circulation test mud fluid was lost at rate of 4 bbl per hr. Mudding of formations 3775'-7480' is satisfactory.

General Petroleum Corp. well No "Notten" 13. (Report No T 2-2431) Shut-off test not approved. 9" casing cemented at 7469'. Deputy noted Johnston tester run in on 4" drill pipe and packer set at reported depth of 7461'; space between drill pipe and casing remained full of mud during test; when test valve opened for 20 min air flowed strongly first 8 min, decreased slightly last 12 min; test valve closed and packer released; 4 bbl fluid required to refill space between drill pipe and casing; when pulled, drill pipe contained 54 bbl. of gas-cut fluid, top was fairly thick mud, gradually becoming thinner down to bottom, which was almost clear water; lower 2000'-2500' showed some oil; filtered samples from 87' down, 1131' down, 2129' down, 3000' down and 3740' down, tested 150, 444 527, 527, and 530 gr. salt per gal, respectively. Later reported hole took mud under pressure and 9" casing was recemented with 300 sacks cement Shut-off is not approved.

General Petroleum Corp. well No. "Notten" 13. (Report No. T 2-2433.) Shut-off test not approved. 9" casing recemented at 7469'. Deputy noted Haliburton tester run in and packer set at reported depth of 7461'; space between drill pipe and casing remained full of mud during test; while test valve open for 25 min air flowed fairly strong for first 10 min, gas flowed by heads last 15 min.; packer released and drill pipe pulled, 1173' of fluid found in drill pipe; this fluid was thick gas-cut mud down to 261', showing some oil, gradually becoming thinner and showing some water, last 200' was nearly all water; fluid samples from top, 261', 609', 1044' and bottom tested 287, 516, 486, 451 and 454 gr. salt per gal, respectively; sample of sand found in bottom joint of drill pipe Later reported drill pipe run to bottom of hole and 1500 lb pressure applied, forcing away 3 bbl. of mud fluid in first hour and 2 bbl. in second hour. Shut-off is not approved.

Shell Oil Co well No "Edison" 3 (Report No. P 2-3227) Proposal to alter casing approved Conditions: Depth 5000'; 11" cemented at 3165'; 8½" cemented at 4185'; 3" drill pipe stuck at 4844' Proposed to recover drill pipe; clean out to 5000'; land 5½" perforated liner 4100'-5000'

Shell Oil Co well No. "Edison," 15 (Report No P 2-3226) Proposal to alter casing approved Conditions: Depth 5969'; 11" cemented at 4004'; 8½" cemented at 5372'; 7" open hole 5372'-5969'. Proposed to clean out to 5969', land 5½" perforated liner 5350'-5969'

Shell Oil Co well No. "Gosnell" 32. (Report No. P 2-3222) Supplementary proposal to plug and alter casing approved Conditions Depth 7686', plugged 7015'-7040'; 8½" cemented at 5881'; 5½" cemented at 7618', perforated 6416'-7000', cemented through perforations at 7040'; water coming down from behind blank 5½". Proposed to set bridging plug in 5½" at about 6385'; perforate 5½" 6352'-6358' and cement through perforations; clean out cement and make production test. Decision Proposal is approved Notify division to witness proposed production test

Shell Oil Co. well No. "Gosnell" 35 (Report No T 2-2428) Inspection of mudding operations During 1 hr. circulation test no mud fluid was lost Mudding of formations 8325'-8767' is approved.

Shell Oil Co well No "Gosnell" 35 (Report No. P 2-3221) Supplementary proposal to drill approved. Conditions: Depth 8767'; 9½" cemented at 7149'; 6½" cemented at 8325'; ditch showings and core evi-

dence indicate high pressure oil zone 8690'-8767'. Proposed to land 4½" combination string at 8767', perforated 8690'-8767'; cement through perforations at 8690'; make production test. Decision: Proposal is approved. Notify division to witness proposed production test. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Shell Oil Co well No. "Gosnell" 36. (Report No. P 2-3223) Proposal to drill approved provisionally. Conditions: Well is 1668.02' S and 197.84' W. of Rancho Canada Larga Corner No. 11. Estimate oil sand at 5600'. Proposed to cement 13½" at 900'; cement 8½" at 5600'; land 5½" at 7200'. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Formations left back of 8½" water string are sealed with mud as demonstrated by satisfactory open hole circulation test. (3) Water is shut off by landing and cementing 8½" above first possible commercial oil or gas producing zones encountered, this point to be determined from data secured in well No. "Gosnell" 8-A and by coring below 5000'. (4) Division is notified before drilling below 5600' or running 8½" in hole, and to witness mudlogging test noted above and 8½" shut-off.

Shell Oil Co. well No. "Taylor" 77. (Report No. P 2-3223) Supplementary proposal to drill approved. Conditions: Depth 9482', plugged to 8736'; 9½" cemented at 6532'; 6½" landed at 9380', perforated 7245'-9380', cemented through perforations at 7245', blank 8650'-8730'; produces all water. Proposed to set packer in blank pipe at 8690' and cement around blank pipe; make production test. Decision: Proposal is approved. Notify division to witness proposed production test. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

T. 4 N., R. 23 W., S. B. B. and M.

Sec. 23—Kittrell and Tucker well No. 25. (Report No. T 2-2425.) Inspection of operations for demonstrating that there is no top water at this location. Deputy noted in 21 hr. oil entered at rate of 1.6 bbl. per 24 hr., and practically no water entered. Operations are approved as indicating there is no top water at this location and consequently no necessity of cementing 6½" water string as proposed.

### VENTURA COUNTY

T. 4 N., R. 25 W., S. B. B. and M.

Sec. 13—Mrs. Rafaela de Castaneda well No. 1. (Report No. T 2-2426.) Inspection of cementing operations. 1 sack cement dumped on plug at 3380'; 4½" casing filled with surface material from this cement plug to 2937', then casing shot and pulled from 2937', wood plug driven in stub to 2936' and 2 sacks cement dumped on plug. Deputy noted bailer spudded on solid plug at 2923'; no sample of cement brought up as bailer bottom leaked badly. Operations are approved as indicating satisfactory cement plug placed on 4½" stub.

Mrs. Rafaela de Castaneda well No. 1. (Report No. T 2-2429) Inspection of cementing operations. 6½" filled with surface silt 2923'-2365', shot and pulled from 2365', wood plug driven in stub and 3 sacks cement dumped on plug. Deputy noted bailer spudded on solid bridge at 2357' and brought up pieces of fairly hard cement. Operation is approved as indicating satisfactory cement plug has been placed on 6½" stub.

Mrs. Rafaela de Castaneda well No. 1. (Report No. T 2-2437.) Inspection of cementing operations. 8½" shot and pulled from 955', wood plug driven in stub and capped with 5 sacks cement. Deputy noted bailer would not spud below 936' and brought up sample of set cement. Location and hardness of cement plug at 936' are approved.

Mrs. Rafaela de Castaneda well No. 1. (Report No. T 2-2439.) Inspection of cementing operations. 10" shot and pulled from 571', wood plug driven in stub and 7 sacks cement dumped on plug. Inspector noted bailer would not spud below 560' and brought up sample of set cement. Location and hardness of cement plug at 560' are approved.

## DISTRICT No. 3

## CAPITAN FIELD

T. 5 N., R. 30 W., S. B. B. and M.

Sec. 32—General Petroleum Corp well No "Erburu" 11 (Report No. P 3-2387) Supplementary proposal to drill approved provisionally. Conditions: Depth 3130'; 13½" cemented at 291'; 8½" cemented at 2384'; 165 sacks cement pumped in at 3130', washed out at 2545', top of plug not located. Proposed to make swabbing test to determine if water believed to exist between 1st and 2d Erburu zones is present in this well; clean out plug to 2600' and have division witness plug; land 6½" at 2600', and if water has been found cement through perforations at 2530'. Decision: Proposal is approved provided division is notified to witness final mudding operations before cementing 6½", and location and hardness of cement plug at 2600'. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

General Petroleum Corp. well No "Erburu" 11. (Report No. T 3-1159) Inspection of cementing operations 165 sacks cement pumped in through drill pipe hung at 3130'; 75 sacks cement pumped in through drill pipe hung at 2655' and cement washed out to 2540'; hole cleaned out to 2600'. Deputy noted cement plug took weight of drill pipe at 2600', and stands of drill pipe measured 2600'. Location and hardness of cement plug at 2600' are approved.

General Petroleum Corp. well No. "Erburu" 12. (Report No P 3-2386) Proposal to drill approved provisionally. Conditions: Well is 1685' North-erly along Westerly line of Erburu Lease from SW corner of said lease, thence at right angles 310'. Proposed to cement 13½" at 300'; cement 8½" at 2350'; land 6½" at 2600' and cement through perforations at 2530'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu ft. is used in drilling of well and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Formations above Vaqueros zone are mudded until loss is not more than 2 bbl per hr (4) Formations above 8½" shut-off are mudded until loss is not more than 2 bbl per hr. (5) Division is notified to witness final mudding operations before entering Vaqueros zone, and before cementing 8½" and 6½" casings, and bailing test of 8½" shut-off. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Shell Oil Co well No. "Covarrubias 1" 4. (Report No. P 3-2391.) Proposal to drill approved provisionally. Conditions: Well is 3179.34' N and 241.08' W of SE corner of lease. Estimate oil sand at 1250'. Proposed to cement 13½" at 450'; cement 8½" at 2270'; land 5½" at 2710'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Formations above Vaqueros zone are mudded until loss is not more than 2 bbl. per hr. (4) Formations above 8½" shut-off are mudded until loss is not more than 2 bbl. per hr (5) Division is notified to witness final mudding operations before entering Vaqueros zone and before cementing 8½", and bailing test of 8½" shut-off. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Shell Oil Co well No "Orella" 2. (Report No P 3-2393.) Supplementary proposal to drill approved provisionally. Conditions: Depth 2919'; 10½" cemented at 1749'. Proposed to bridge with cement to 2700'; cement 7" at 2700'; clean out bridge; land 4½" perforated liner 2650'-2919'. Decision: Proposal is approved provided that: (1) Formations left back of 7" are mudded by open circulation until loss is not more than 2 bbl. per hr. (2) Division is notified to witness bailing test of 7" shut-off with not more than 5' of open hole below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

## CAT CANYON FIELD

T. 9 N., R. 32 W., S. B. B. and M.

Sec. 30—Palmer Stendel Oil Corp well No. "Stendel" 2. (Report No. P. 3-2392) Proposal to abandon approved provisionally. Conditions: 18" S. P. at 40'; 12½" at 1246'; 10" at 1693'; 8½" at 2665'; 295' of 6½" liner. Proposed to clean out 8½" to top of 6½" liner; place cement bridge on 6½"; loosen 8½" at lowest possible depth, cut and pull, and place cement bridge on stub, extending it up in 10" shoe if necessary; cut and pull 10"

at lowest possible depth and place cement bridge, extending it to point above 12½" shoe; try to convert into water well by perforating or shooting 12½" at various points from 1002' to 360'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plugs at 2370' and above 1246'.

T. 9 N., R. 33 W., S. B. B. and M.

Sec 26—Palmer Stendel Oil Corp. well No "Blockman" 7-B (Report No P 3-2394) Proposal to abandon approved provisionally. Conditions: 18½" S. P. at 46'; 10" at 2726'; 8½" at 2974'; at various times 1182 sacks cement have been pumped through perforations, last 415 sacks under pressure at 2874'. Proposed to loosen 8½" at lowest possible point, cut and pull, and place cement on stub, if necessary running cement up to point above 10" shoe Decision: Proposal is approved provided division is notified to witness location and hardness of cement plugs above 2974' and 2726'.

### ELWOOD FIELD

T. 4 N., R. 29 W., S. B. B and M.

Sec. 15—Bankline Oil Co well No. 89-10. (Report No. T 3-1151) Bailing test approved. 9" casing cemented at 3402'. Hole bailed to 2000' for test and stood 12 hr. Fluid found 35' below reported bailing depth

Sec. 16—Caroline C. Spalding well No. "Blue Goose 93" 9. (Report No P 3-2388.) Proposal to drill approved provisionally. Conditions: Well is 753.08' S and 3202' W of NE. corner of State Lease No 92. Estimate oil sand at 3475'. Proposed to cement 18½" at 460'; cement 11½" at 3475'; land 6½" liner at 3725'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Division is notified to witness bailing test of 11½" shut-off.

### LOMPOC FIELD

T. 8 N., R. 34 W., S. B. B. and M.

Sec. 33—York-Smullin Oil Co. well No. A-1. (Report No. P 3-2390) Proposal to drill approved provisionally. Conditions: Well is 150' S. of N. line of section and 150' W. of E. line of lease. Estimate oil sand at 2350'. Proposed to cement 11½" at 200', cement 9" at 2400'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 9" is determined by coring starting not lower than 2350'. (4) Division is notified to witness bailing test of 9" shut-off.

### MESA FIELD

T. 4 N., R. 27 W., S. B. B. and M.

Sec. 28—Allied Petroleum Corp. well No. "Allied" 16. (Report No. T 3-1154) Bailing test approved. 6½" casing cemented at 2029'. Hole bailed to 1200' for test and stood 16 hr Fluid level rose at rate of .2 bbl. in 24 hr.

E C Arnold Oil Co. well No "Adams" 1 (Report No T 3-1153) Bailing test. Decision deferred. 8½" casing cemented at 1987'. Hole bailed to 1160' for test and stood 61 hr. Gas pressure gradually released at casing head, well showed no tendency to flow. Samples from top and bottom of fluid column were black oily fluid with no trace of free water. Test indicates 8½" shut-off is probably effective but is not conclusive due to high fluid rise because of entrance of oil and gas. Decision is deferred pending receipt of production data after completing well.

Barmesa Oil Co. well No. 1 (Report No T 3-1160) Bailing test approved 6½" casing cemented at 1980' Hole bailed to 1200' for test and stood 16 hr. No fluid entered well

Bastanchury Oil Co. well No. 2 (Report No P 3-2397.) Proposal to drill approved provisionally. Conditions: Well is 38' N. and 25' W. of SE. boundary corner of Lot 62, Fairacres on Mesa Estimate oil sand at 2025'. Proposed to cement 10" at 150'; cement 6½" at 2050' Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 6½" is determined by coring starting not lower than 2000'. (4) 6½" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 6½" shut-off.

Bastanchury Oil Co. well No "Bastanchury" 1. (Report No T 3-1156.) Shut-off test. Decision deferred 6½" casing cemented at 2026'. Deputy noted gas issuing through closed gate valve. Test indicates 6½" shut-off is probably effective but is not conclusive due to heavy gas pressure and



- large fluid rise. Decision is deferred pending receipt of further production data.
- Fred E Cole well No. "Cole" 5. (Report No. T 3-1161.) Shut-off test. Decision deferred. 5" casing cemented at 1969'. Deputy noted gas leaking through closed gate valve. Test indicates 5" shut-off is probably effective but is not conclusive due to heavy pressure held on casing. Decision is deferred pending receipt of production data after completing well.
- Fred E. Cole well No. "Cole" 6. (Report No. P 3-2396.) Proposal to drill approved provisionally. Conditions: Well is 73' N. and 20' W. of SE. corner of Lot 23, Fair Acres Tract, La Mesa. Estimate oil sand at 2010'. Proposed to cement 12½" at 100'; cement 5" at 2010'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 5" is determined by coring starting not lower than 1875'. (4) 5" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 5" shut-off.
- Fred E Cole well No "Cole" 7. (Report No P 3-2400.) Proposal to drill approved provisionally. Conditions: Well is 54' N. and 84' E. of SE. corner of Lot 47, Fair Acres Tract. Estimate oil sand at 1960'. Proposed to cement 12½" at 100', cement 5" at 1970'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 5" is determined by coring starting not lower than 1950'. (4) 5" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 5" shut-off.
- Crude Oil Drilling Co., Ltd., well No. 1. (Report No. P 3-2395.) Proposal to drill approved provisionally. Conditions: Well is 25' N. and 25' W. of SE. corner of Lot 50-A. Estimate oil sand at 2000'. Proposed to cement 12½" at 145'; cement 6½" at 1985'; core for exact depth. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 6½" is determined by coring starting not lower than 1975'. (4) 6½" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 6½" shut-off.
- Fairacres Oil Co well No. "Anchoroquy" 1. (Report No T 3-1163.) Shut-off test. Decision deferred. 5½" casing cemented at 1965'. Deputy noted valve on 5½" closed and pressure registered 310 lb. on casing. Test indicates 5½" shut-off is probably effective but is not conclusive due to high fluid column and heavy gas pressure held on casing. Decision is deferred pending receipt of production data after completing well.
- Fairacres Oil Co well No "T L. & B A." 1. (Report No. T 3-1152.) Bailing test. Decision deferred. 5½" casing cemented at 1975'. Hole bailed to 1200' for test and stood 21 hr. Fluid level rose at rate of 5.3 bbl. in 24 hr. Fluid samples from 1001' and 1975' were frothy gas-cut mud, gas issued from casing head. Test indicates 5½" shut-off is probably effective but is not conclusive due to high fluid rise because of entrance of gas. Decision is deferred pending receipt of production data after completing well.
- Fornachon and Wilson, Inc, well No. 2. (Report No. P 3-2398.) Proposal to drill approved provisionally. Conditions: Well is 14' S. and 63' E of NW. corner of Lot 28. Estimate oil sand at 2050'. Proposed to cement 10" at 100'; cement 5½" at 2000'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 5½" is determined by coring starting not lower than 2000'. (4) 5½" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 5½" shut-off.
- Rex C Gale well No. 1. (Report No P 3-2384.) Proposal to drill approved provisionally. Conditions: Well is 28' S and 25' W. of NE. corner of Lot 58, Fair Acres Tract. Estimate oil sand at 2040'. Proposed to cement 14" S P. at 100'; cement 6½" at 2040'; complete with suitable 4½" liner or barefoot as best suits conditions. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb per cu. ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 6½" is determined by coring starting not lower than 1985'. (4) 6½" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 6½" shut-off.
- W F Higgins well No 8. (Report No T 3-1153.) Shut-off test approved. 5½" casing cemented at 2015'. Johnston tester was run in and packer set at reported depth of 1983'; space between drill pipe and 5½" casing remained filled with mud fluid during test, demonstrating that packer prevented migration of fluid between drill pipe and casing; tester valve opened for 25 min., no gas issued from drill pipe; when pulled, drill pipe

- contained 0 06 bbl. of mud fluid with small amount of gas. Shut-off is approved.
- Jordan & Maney well No. "Tye" 1. (Report No. T 3-1162) Bailing test. Decision deferred. 9" casing cemented at 1983'. Hole bailed to 800' for test and stood 15 hr. Deputy noted some gas issuing from 9". Fluid samples were: 800', gas-cut mud and froth; 1987', gas-cut mud and sand which tasted fresh. Test indicates 9" shut-off is probably effective but is not conclusive due to large fluid rise. Decision is deferred pending receipt of production data after completing well
- Mac Oil Corp. well No. "Mac" 1. (Report No. P 3-2399.) Proposal to drill approved provisionally. Conditions: Well is 40' N. and 40' W. from Santa Rosa and Santa Cruz Blvd. Estimate oil sand at 2100'. Proposed to cement 12 $\frac{1}{2}$ " at 150', cement 8 $\frac{1}{2}$ " at 2100'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 8 $\frac{1}{2}$ " is determined by coring starting not lower than 1975'. (4) 8 $\frac{1}{2}$ " is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 8 $\frac{1}{2}$ " shut-off.
- Moss & Walker well No. "Securities" 1. (Report No T 3-1157.) Shut-off test. Decision deferred. 6 $\frac{3}{8}$ " casing cemented at 1983'. Deputy noted Johnston tester run in on 3" drill pipe and packer set at reported depth of 1976'; space between drill pipe and 6 $\frac{3}{8}$ " casing remained full of mud fluid during test, demonstrating that packer prevented migration of fluid between drill pipe and casing; while tester valve open for 5 min. gas flow increased at such rate that it was deemed advisable to close valve; when pulled, drill pipe contained 176' of frothy mud fluid which tasted fresh; sample from bottom of tester was sand and oil. Test indicates 6 $\frac{3}{8}$ " shut-off is probably effective but is not conclusive due to heavy gas pressure held on shoe. Decision is deferred pending receipt of production data after completing well.
- Moss & Walker well No. "Securities" 2 (Report No. P 3-2389.) Proposal to drill approved provisionally. Conditions. Well is 25' S. and 25' E of NW corner of Lot 49-A, Fair Acres Tract. Estimate oil sand at 2000'. Proposed to cement 12 $\frac{1}{2}$ " at 100', cement 8 $\frac{3}{8}$ " at 2000'. Decision. Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 8 $\frac{3}{8}$ " is determined by coring starting not lower than 1975'. (4) 8 $\frac{3}{8}$ " is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 8 $\frac{3}{8}$ " shut-off.
- Charles L. Ross well No. "Adams" 1. (Report No. T 3-1155.) Bailing test approved 5" casing cemented at 2060'. Hole bailed to 1240' for test and stood 16 hr. Fluid level rose at rate of 0 6 bbl. in 24 hr.

### SANTA BARBARA COUNTY ,

T. 10 N., R. 34 W., S. B. B. and M.

- Sec. 23—Union Oil Co. well No. "Enos" 1. (Report No. P 3-2385.) Proposal to drill approved provisionally. Conditions: Well is 960' N and 990' W. from SE. corner of section. Prospect well.

## DISTRICT No. 4

## BELRIDGE FIELD

T. 27 S., R. 20 E., M. D. B. and M.

- Sec. 35—Belridge Oil Co. well No. 10-35. (Report No. T 4-12360) Shut-off test approved. 11½" casing cemented at 4917'. Inspector noted Johnston tester run in on drill pipe and wall packer set at reported depth of 4911'; when tester valve opened for 30 min. air flowed from drill pipe steadily for 5 min, followed by intermittent air flow, and space between drill pipe and 11½" casing remained full of mud fluid; when packer released 19.6 cu. ft. of mud fluid was required to fill space between drill pipe and 11½" casing, 28.3 cu. ft. of heavy gas-cut mud found in drill pipe; water filtered from fluid sample from 4911' tested 301 gr. salt per gal. Shut-off is approved.
- Sec 36—Continental Oil Co. well No. "Result" 5 (Report No. T 4-12367.) Inspection of mudding operations. During 1 hr. circulation test 1.96 bbl. of mud fluid was lost from pit. Mudding of formations above 7856' is satisfactory.
- Continental Oil Co. well No. "Result" 5. (Report No. T 4-12368.) Shut-off test approved. 7" casing cemented at 7856'. Hole bailed to 3015' for test and stood 14 hr. No fluid entered well. Bottom of well first measured 7868'; 7" equipped with double Shaffer blow-out preventer for closing casing completely and for closing around drill pipe; outside controls provided; mud discharge equipped with gate valve; mud line installed into 7" below blow-out preventer. Later reported derrick remeasured several times, and bailer strung in twice; final measurement was 7859½'. Shut-off is approved. Blow-out prevention equipment is approved as adequate for this field.

## EDISON FIELD

T. 30 S., R. 29 E., M. D. B. and M.

- Sec 4—The Texas Co. well No. "Edison Seale" 4-25. (Report No. P 4-16283) Proposal to drill approved provisionally. Conditions: Well is 1990 2' N and 990' W. of SE. section corner. Proposed to cement 18½" at 450'; determine further casing depths by coring. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire (2) Supplementary notice is filed before placing any plugs or casing in hole below 18½" at 450'.
- Sec 5—Lee Oil Co., Inc., well No. "Edison-Seale-5" 1. (Report No. T 4-13220) Shut-off test approved. 7" casing cemented at 3782'. Inspector noted that when tester valve opened for 30 min. air rushed slowly but steadily from drill pipe and packer held effectively; 90' of medium heavy mud showing little gas entered drill pipe during 30 min. Shut-off is approved.
- Sec. 14—General Petroleum Corp. well No. "Leddy-Nichols" 1. (Report No. T 4-13236) Shut-off test approved 11½" casing cemented at 1845'. Inspector noted that when valve opened for 30 min. packer sealed effectively, and few small heads of air came from drill pipe; 86' of heavy drilling mud, with no sign of free water, found in drill pipe. Shut-off is approved.
- General Petroleum Corp. well No. "Leddy-Nichols" 1. (Report No. P 4-16303.) Supplementary proposal to drill approved provisionally. Conditions: Depth 3046'; 16" cemented at 308'; 11½" cemented at 1845'. Proposed to plug with cement 3046'-2880' and have division witness plug. Decision: Proposal is approved provided that: (1) Formations left back of 8½" are mudded until mud loss is reduced to satisfactory minimum. (2) Enough cement is pumped behind 8½" to reach to 11½" shoe at 1845'. (3) Division is notified to witness mudding test just before cementing 8½" and 8½" water shut-off test with hole open not more than 5' below shoe.
- A. T. Jergins Trust well No. "Hershey" 1. (Report No. T 4-13244.) Bailing test approved. 8½" casing cemented at 1125'. Hole bailed dry (1130') for test and stood 6½ hr. Fluid (heavy mud showing oil) level rose at rate of 6.6 bbl. in 24 hr. Bailer spudded at 1093' and brought up sample of heavy mud showing oil; after sand line was strung in to check above measurement bailer spudded at 1089'. Shut-off is approved.
- North American Oil Consolidated well No "Brown" 1. (Report No. T 4-13235.) Bailing test approved. 9" casing cemented at 1198'. Hole bailed dry (1209') for test and stood 24 hr. Inspector noted bailer stopped at 1129' and brought up 10' of heavy oily mud fluid and hard oil sand; after many attempts bailer finally spudded at 1139' and brought up heavy oil sand on each run; no indication of free water or thin drilling fluid in any of bailer samples. Shut-off is approved.
- North American Oil Consolidated well No "Brown" 1 (Report No. P 4-16304.) Supplementary proposal to drill approved. Conditions: Depth 1653'; 13" cemented at 298'; 9" cemented at 1198'; 6½" landed 1180'-

1634', perforated 1634'-1369'; water witch showed water source at 1369'. Proposed to pull 6 $\frac{1}{2}$ " liner; land 6 $\frac{1}{2}$ " combination string at 1637', perforated 1637'-1369', cemented through perforations at 1369', try for production.

Shell Oil Co. well No. "Brown" 1. (Report No. P 4-16302.) Proposal to drill approved provisionally. Conditions: Well is 330' N. and 330' E. of W $\frac{1}{4}$  section corner. Estimate oil sand at 2730'. Proposed to cement 1 $\frac{3}{8}$ " at 250'; cement 8 $\frac{1}{2}$ " at 2730'; land 5 $\frac{1}{2}$ " at 2900'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) String of casing is cemented at about 1700' using enough cement to fill up at least 800' behind casing, exact cementing depth to be determined by coring starting not deeper than 1675'. (3) Formations left back of proposed 8 $\frac{1}{2}$ " at 2730' are mudded by open circulation until mud loss is reduced to satisfactory minimum. (4) Enough cement is pumped behind 8 $\frac{1}{2}$ " to fill up to shoe of casing required to be cemented at about 1700'. (5) Division is notified to examine all cores taken before cementing casing at about 1700', to witness shut-off test at about 1700', with hole open not more than 5' below shoe, and to witness mudding test just before cementing 8 $\frac{1}{2}$ " and 3 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Shell Oil Co. well No. "Nichols" 1. (Report No. P 4-16285.) Proposal to drill approved provisionally. Conditions: Well is 329.41' S. and 333.84' E. of W $\frac{1}{4}$  section corner. Estimate oil sand at 2780'. Proposed to cement 1 $\frac{3}{8}$ " at 250'; cement 8 $\frac{1}{2}$ " at 2780'; land 5 $\frac{1}{2}$ " at 2950'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) String of casing is cemented at about 1800' with enough cement to fill up at least 1000' behind casing, exact cementing depth to be determined by coring starting not deeper than 1750'. (3) Formations left back of proposed 8 $\frac{1}{2}$ " at about 2780' are mudded by open circulation until mud loss is reduced to 1 bbl. per hr. (4) Enough cement is pumped behind 8 $\frac{1}{2}$ " to fill up to shoe required to be cemented at about 1800'. (5) Division is notified to examine all cores taken before cementing casing at about 1800', and to witness shut-off test at about 1800' with hole open not more than 5' below shoe, mudding test just before cementing 8 $\frac{1}{2}$ ", and 3 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Sec 15—Monterey Exploration Co. well No. "Duff" 7. (Report No. P 4-16299.) Supplementary report on proposal to drill approved provisionally. Conditions: Well is 330' N. and 990' W. of SE. section corner. Estimate oil sand at 2900'. Proposed to cement 16" at 250'; cement 8 $\frac{1}{2}$ " at 2900', land 6 $\frac{1}{2}$ " liner at unknown depth. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) Surface casing is cemented not higher than 500'. (3) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until loss is reduced to satisfactory minimum. (4) Enough cement is pumped behind 8 $\frac{1}{2}$ " to fill up to at least 1800'. (5) Division is notified to witness mudding test just before cementing 8 $\frac{1}{2}$ " and 8 $\frac{1}{2}$ " water shut-off test with hole open not more than 5' below shoe. Note: 1. Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools. 2. This report supersedes and nullifies Report No. P 4-16266, October, 1934.

Shell Oil Co. well No. "Duff" 3. (Report No. P 4-16301.) Proposal to drill approved provisionally. Conditions: Well is 330' N. and 330' W. from E $\frac{1}{4}$  section corner. Estimate oil sand at 2780'. Proposed to cement 1 $\frac{3}{8}$ " at 250', cement 8 $\frac{1}{2}$ " at 2780'; land 5 $\frac{1}{2}$ " at 2950'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) String of casing is cemented at about 1750' using enough cement to fill up at least 800' behind casing, exact cementing depth to be determined by coring starting not deeper than 1725'. (3) Formations left back of proposed 8 $\frac{1}{2}$ " at 2780' are mudded by open circulation until mud loss is reduced to satisfactory minimum. (4) Enough cement is pumped behind 8 $\frac{1}{2}$ " to fill up to shoe of casing required to be cemented at about 1750'. (5) Division is notified to examine all cores taken before cementing casing at about 1750', to witness shut-off test at about 1750', with hole open not more than 5' below shoe, and to witness mudding test just before cementing 8 $\frac{1}{2}$ " and 8 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Shell Oil Co. well No. "Duff" 5. (Report No. P 4-16277.) Proposal to drill approved provisionally. Conditions: Well is 328.41' S. and 333.25' E. from center of section. Estimate oil sand at 3150'. Proposed to cement 1 $\frac{3}{8}$ " at 250'; cement 8 $\frac{1}{2}$ " at 3150'; land 5 $\frac{1}{2}$ " at 3400'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until mud loss is reduced to 1 bbl. per hr. (3) Enough cement is pumped behind 8 $\frac{1}{2}$ " to fill up to at least 1500'. (4) Division is notified to witness mudding test just before cementing 8 $\frac{1}{2}$ " and 3 $\frac{1}{2}$ " water shut-off test with hole open not more

- than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- Shell Oil Co. well No. "Duff" 5. (Report No P 4-16300) Supplementary proposal on proposal to drill approved provisionally. Conditions: Well is 328.41' S and 333.25' E from center of section. Estimate oil sand at 3150'. Proposed to cement 13½" at 250'; cement 8½" at 3150'; land 5½" at 3400'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) Surface casing is cemented not higher than 500'. (3) Formations left back of 8½" are mudded by open circulation until loss is reduced to satisfactory minimum. (4) Enough cement is pumped behind 8½" to fill up to at least 1800'. (5) Division is notified to witness mudding test just before cementing 8½" and 8½" water shut-off test with hole open not more than 5' below shoe. Note: 1 Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools. 2. This report supercedes and nullifies Report No. P 4-16277, November, 1934.
- Shell Oil Co. well No "Osborne" 1. (Report No. P 4-16278.) Proposal to drill approved provisionally. Conditions: Well is 333.38' S. and 329.66' W from center of section. Estimate oil sand at 3325'. Proposed to cement 13½" at 250', cement 8½" at 3325'; land 5½" at 3600'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) Formations left back of 8½" are mudded by open circulation until mud loss is reduced to 1 bbl per hr. (3) Enough cement is pumped behind 8½" to fill up to at least 1500'. (4) Division is notified to witness mudding test just before cementing 8½" and 8½" water shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- Sec 16—Shell Oil Co well No. "Cauley" 1 (Report No P 4-16289) Supplementary proposal to drill approved. Conditions: Depth 4276', plugged 4276'-4220' and 4000'-3980'; 8½" cemented at 2353'; 6½" cemented at 3935', 4½" liner landed at 3980, perforated 3937'-3980'; produced practically all water. Proposed to pull 4½" liner; clean out to 4255' and land 4½" liner, perforated 4235'-4255', and cement through perforations at 4234'; make production test.
- Shell Oil Co. well No. "Cauley" 1. (Report No. T 4-13219) Bailing test approved. 6½" casing cemented at 3935'. Hole swabbed to 3050' for test and stood 12 hr. Oil entered at rate of 12 3 bbl. in 24 hr. Fluid samples from 2855', 3300' and 3450' were clean oil, bottom sample contained about 1 gal of clear water.
- Sec 23—Gilco, Inc, well No. "Stuart-Gerard" 2. (Report No. T 4-13212.) Shut-off test. Decision deferred. 10½" casing cemented at 1844'. Inspector noted by computation that capacity of one 24' pump stroke is 12 gal, and 1841' of 4" drill pipe holds 42 bbl. of fluid; 188, 24' pump strokes were made before operations stopped by tool sanding up; 39 bbl. of fluid pumped into drill pipe from below packer; packer sealed effectively during test; 1st pump stroke displaced about 12 gal. of fluid, 2d stroke 5 gal, 3d stroke no fluid, 4th stroke 4 gal, 5th to 19th strokes no fluid, 20th and practically all strokes thereafter about 12 gal., four times during this pumping no fluid was displaced during 2 to 5 strokes of pump, probably because sand held standing valve open, packer broken and drill pipe pulled from hole; fluid sample from 85' down was gassy watery mud showing few oil spots; below this point samples were muddy water showing gas and increasing amount of oil, 120' of drill pipe filled with washed oil sand. Test indicates shut-off is probably effective but is not conclusive due to large amount of watery fluid pumped into well. Decision is deferred pending results of further tests.
- Gilco, Inc., well No "Stuart-Gerard" 2 (Report No. P 4-16286.) Supplementary proposal to drill approved provisionally. Conditions: Depth 2599'; 10½" set at 1844'; water witch located infiltrating water 1975'-2039'. Proposed to set cement plug from bottom to 2110' on which to land 8½" combination liner with blank pipe 1960'-2070' to be cemented by equalizing method with baffle plate, outlet holes and basket at 2070'; test Kern River sands by pumping, drill out cement plug and test Kern River and lower sands by pumping. Decision: Proposal is approved provided division is notified to witness production test of Kern River oil sands before cleaning out below 1960'.

## ELK HILLS FIELD

T. 30 S, R. 24 E, M. D. B. and M.

- Sec 34—U. S. Navy well No 12. (Report No. T 4-12363) Inspection of cementing operations. Hole cleaned out to 2842' and 6 sacks cement dumped. Baller would not spud below 2834' and brought up sample of set cement. Location and hardness of cement plug at 2834' are approved.
- Sec. 35—Standard Oil Co well No 1 (Report No. P 4-15681.) Proposal to abandon approved provisionally. Conditions: Depth 3090'; 11½" cemented at 2938'; 8½" cemented at 2997', where drilled through, ripped 2997'-2993'; 6½" and 7" landed at 3089', perforated 3089'-3010'; produces all water. Side-tracked junk: 8½" 2997'-3010'; 6½" 3023'-3075', plugged with cement

3025'-3058'; 4 $\frac{3}{4}$ " 3070'-3082'. Proposed to dump cement plug 3089'-3010'; pull 6 $\frac{5}{8}$ " and 7" from near that depth; dump cement plug 3010'-2950' and pull 8 $\frac{1}{2}$ " from near that depth; dump cement plug 2950'-2900'; fill hole with mud or soil; cap 11 $\frac{1}{2}$ " in cellar and abandon. Decision: Proposal is approved provided that: (1) Division is notified to witness location and hardness of cement plugs at 2993' and 2938' (2) Upon completion of proposed work subsequent work report is filed in duplicate covering all work done since September 28, 1931.

Standard Oil Co. well No. 1. (Report No. T 4-12365.) Inspection of cementing operations. Hole cleaned out to 3089' and 17 sacks cement dumped filling to 3010'; 6 $\frac{5}{8}$ " shot and pulled from 3010'; 10 sacks cement dumped at 3010'. Inspector noted bailer would not spud below 2993' and brought up sample of set cement. Location and hardness of cement plug at 2993' are approved.

Sec. 36—Standard Oil Co. well No. "Tupman" 12 (Report No. P 4-15680.) Proposal to redrill oil string approved. Conditions: Depth 3034'; 10 $\frac{3}{4}$ " cemented at 2800'; 8 $\frac{1}{2}$ " landed at 3034', perforated 2807'-3034', bad at 2835', parted at 2831'. Proposed to pull 8 $\frac{1}{2}$ " from 2831' and redrill past top of stub; dump cement plug from redrill depth to 2810'; make bailing test of 10 $\frac{3}{4}$ " shut-off; if shut-off O. K. redrill carrying 8 $\frac{1}{2}$ " casing and recomplete at 3034' with 8 $\frac{1}{2}$ " oil string.

T. 31 S., R. 24 E., M. D. B. and M.

Sec. 1—Pan American Petroleum Co. well No. "Crampton" 4-H. (Report No. T 4-12369.) Bailing test approved. 8 $\frac{1}{2}$ " casing cemented at 2895'. Hole bailed to 2500' for test and stood 15 $\frac{1}{2}$  hr. No fluid entered well.

### FRUITVALE FIELD

T. 29 S., R. 27 E., M. D. B. and M.

Sec. 22—Western Gulf Oil Co. well No. 4—"Price & Stewart" (Report No. P 4-16280.) Proposal to drill approved provisionally. Conditions: Well is 2263.75' N. and 1550' E. of SW. section corner. Estimate oil sand at 3600'. Proposed to cement 12 $\frac{1}{2}$ " at 500'; cement 8 $\frac{1}{2}$ " at 3600'. Decision: Proposal is approved provided that: (1) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until mud loss is less than 2 bbl. per hr. (2) Division is notified to witness final mudding operations before running 8 $\frac{1}{2}$ " and bailing test of 8 $\frac{1}{2}$ " water shut-off with hole open not more than 5' below shoe.

Sec. 23—The Paroil Co. well No. 1. (Report No. T 4-13231.) Inspection of mudding operations. During 1 hr circulation test 2 bbl of mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{1}{2}$ " at 3520'.

The Paroil Co. well No. 1. (Report No. T 4-13242.) Shut-off test. Decision deferred. 8 $\frac{1}{2}$ " casing cemented at 3537'. Inspector noted space between drill pipe and 8 $\frac{1}{2}$ " casing filled to surface with water and considerable gas escaped through this water; this gas in mud outside drill pipe was due to fluid level being lowered sufficiently when drill pipe was pulled to allow gas from formations just below shoe to enter hole; packer held effectively while tool was pumped 35 strokes for test; during this pumping about 10 gal of fluid was pumped into mud pit and gas activity in 8 $\frac{1}{2}$ " continued without abatement; packer seal broken and drill pipe pulled; hole kept full of fluid while pulling drill pipe; each stand of drill pipe broken off showed some gas activity, three stands pulled dry due to fluid being blown out by entrained gas in mud; fluid from just above tester valve was gas-cut mud showing some oil; 1 $\frac{1}{2}$ " of perforated nipple was filled with cement cuttings; pump proved to be in working condition by rerunning to about 100' and pumping with by-pass valve open. Test indicates shut-off is effective but is not conclusive due to gas interference. Decision on shut-off is deferred pending receipt of production data after completing well.

Sec. 27—Mohawk Petroleum Co. well No. 6. (Report No. T 4-13217.) Inspection of cementing operations. Bad place located in 6 $\frac{5}{8}$ " liner at 3755', 3825', 3985' and 4110'; 27 sacks cement pumped in through tubing hung at 4110', tubing raised to 3931' and 30 sacks cement pumped in; tubing raised to 3740' and circulated clean. Inspector noted bailer would not spud below 3776' and brought up sample of cement showing good initial set. Location and hardness of cement plug at 3776' are approved.

Western Gulf Oil Co. well No. 3—"Switzer." (Report No. T 4-13215.) Bailing test approved. 8 $\frac{1}{2}$ " casing cemented at 3592'. Hole bailed to 1300' for test and fluid rose to surface in 4 hr. Well killed by circulating mud. Inspector noted bailer spudded at 3592' and brought up sample of mud showing oil and gas. Shut-off is approved.

### KERN RIVER FIELD

T. 27 S., R. 27 E., M. D. B. and M.

Sec. 32—The Ohio Oil Co. well No. "Midway Premier" 3. (Report No. T 4-13228.) Shut-off test approved. 10 $\frac{3}{4}$ " casing cemented at 2607'. Inspector noted packer set and valve opened without dropping go-devil; air rush from drill pipe was fairly strong for 13 min., followed by weak blow for 2 min. when valve closed and drill pipe pulled; packer held effectively during test; fluid outside drill pipe dropped about 3' when packer broken, and

steady slow rush of air came from drill pipe head for 2 min.; no air came from drill pipe head after first stand was broken off; 170' of heavy gassy mud entered drill pipe during 15 min. of test. Shut-off is approved.

T. 28 S., R. 27 E., M. D. B. and M.

Sec. 22—California Star Oil Co. well No. 1-40. (Report No. P 4-16269.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 2616'; 11 $\frac{1}{2}$ " cemented at 2243'; 8 $\frac{1}{2}$ " liner 2217'-2616', cemented through perforations 2250'-2236', broken off or bent over at 2257'. Proposed to pull all 8 $\frac{1}{2}$ " liner possible, and if possible plug stub in hole with cement; redrill to 2330' and set about 340' of 9", cementing for water shut-off; redrill to original bottom and set 6 $\frac{3}{8}$ " perforated liner. Decision: Proposal is approved provided that: (1) 8 $\frac{1}{2}$ " liner is plugged with cement as deep as possible. (2) Division is notified to witness casing test after cementing 9" liner with hole cleaned out at least 5' below top of liner, and 9" water shut-off test with hole open not more than 5' below 9" shoe.

Pacific Western Oil Co. well No. 1. (Report No. P 4-16293.) Proposal to redrill approved provisionally. Conditions: Depth 2634'; 10 $\frac{3}{4}$ " cemented at 2519', perforated 2502'-2480', plugged to 2510' with cement, top of sand bridge at 2341'; 8 $\frac{3}{8}$ " perforated liner plugged with cement 2623'-2517'. Proposed to clean out to 2510'; plug with cement 2510'-2250' and redrill from that point to about 2630', run full string of 8 $\frac{3}{8}$ ", perforated 2630'-2340', and cement through holes at about 2340'. Decision: Proposal is approved provided 8 $\frac{3}{8}$ " is cemented with enough cement to reach to 10 $\frac{3}{4}$ " shoe.

Sec 36—Hugh B Evans, Inc., well No. 6. (Report No. P 4-16284.) Proposal to alter casing approved. Conditions: Depth 1145', 10" at 925' or 948'; 8 $\frac{1}{2}$ " at 971', parted above 10" shoe. Proposed to pull all 8 $\frac{1}{2}$ "; place bull plug in 10" at surface, leaving hole in condition to be deepened.

#### LOST HILLS FIELD

T. 26 S., R. 20 E., M. D. B. and M.

Sec. 2—Associated Oil Co. well No. "Williamson" 2. (Report No. P 4-15685.) Proposal to drill approved provisionally. Conditions: Well is 200' N. and 500' E. of S $\frac{1}{4}$  section corner. Prospect well.

#### McKITTRICK FIELD

T. 29 S., R. 21 E., M. D. B. and M.

Sec. 26—Welpport Oil Co. well No. 10. (Report No. P 4-15695.) Proposal to drill approved provisionally. Conditions: Well is 96' N. and 373' W. from center of SE $\frac{1}{4}$  of section. Estimate oil sand at 960'. Proposed to cement 10 $\frac{3}{4}$ " at 960'; land 8 $\frac{3}{8}$ " at 1200'. Decision: Proposal is approved provided that: (1) Formations left behind 10 $\frac{3}{4}$ " are protected by circulating mud fluid until mud loss is reduced to 2 bbl. per hr. (2) Enough cement is used behind 10 $\frac{3}{4}$ " to extend up to at least 600'. (3) Division is notified to witness final mudding operations before cementing 10 $\frac{3}{4}$ " and 10 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below shoe.

T. 30 S., R. 22 E., M. D. B. and M.

Sec. 8—Franco Western Oil Co. well No. 11. (Report No. T 4-12372.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 1.4 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 9 $\frac{5}{8}$ " at 2254'.

#### MIDWAY FIELD

T. 31 S., R. 22 E., M. D. B. and M.

Sec. 23—Tumbador Oil Co. well No. 5. (Report No. P 4-15687.) Proposal to plug approved provisionally. Conditions: Depth 1526', cement plug 1400'-1388', 12 $\frac{1}{2}$ " landed at 1250'; 8 $\frac{1}{2}$ " landed at 1526', perforated 1300'-1526', shot 1390'-1400', parted at 1305'; well wet. Proposed to clean out to 1400' and fill with cement to 1360'. (2) Form 102 is filed in duplicate covering all work done on well since August 1, 1917.

Sec. 24—Brookshire Oil Co. well No. 13. (Report No. T 4-12374.) Inspection of cementing operations. Hole filled with sand 3215'-3022'; 9 sacks cement dumped at 3022', filling to 2956'; fluid bailed to 1700'. No fluid entered well while standing 21 days; bailer would not spud below 2956' and brought up sample of set cement. Location and hardness of cement plug at 2956' are approved.

T 32 S., R. 23 E., M. D. B. and M.

Sec. 2—North American Oil Consolidated well No. 23. (Report No. P 4-15692.) Proposal to deepen approved. Conditions: Depth 2728', plugged to 2713' with cement; 11 $\frac{1}{2}$ " cemented at 2585'; 8 $\frac{1}{2}$ " landed at 2722', perforated 2572'-2663' and 2692'-2722', water witch showed water source below 2710'. Proposed to clean out cement plug and deepen to 2742' with cable tools; test.

- Sec. 5—St. Lawrence Oil Co. well No. 1. (Report No P 4-15682.) Supplementary proposal to abandon approved provisionally. Conditions: Depth 2200', plugged 1646'-1629'; 12 $\frac{3}{4}$ " at 890'; 10 $\frac{3}{4}$ " at 1320', pulled from unknown depth; 8 $\frac{1}{2}$ " at 1790'; parted at 30' or below; 6 $\frac{1}{2}$ " at 2200', pulled from 1681'. Junk: 3" x 40' bailer 1646'-1686'; packer in 6 $\frac{1}{2}$ " at 1686'. Proposed to pull 8 $\frac{1}{2}$ " from 1300' and cap stub with 10' cement; cap at surface. Decision: Proposal is approved provided that: (1) Division is notified to witness shooting off of 8 $\frac{1}{2}$ " and placing cement cap on stub. (2) All unplugged portions of hole are filled with heavy mud or surface formation and water. (3) After completion of proposed work Form 102 is filed in duplicate covering all work done on well since November 17, 1916.
- St. Lawrence Oil Co. well No. 1. (Report No. T 4-12366.) Inspection of cementing operations. 8 $\frac{1}{2}$ " shot at 1288', 1100' and 880'; pulled from 880' and wood plug driven to 880'; some heavy oil entered hole; no 10" found above 880'; 7 sacks cement dumped at 880'. Bailer picked up several times at 871', many small pieces of partially set cement brought up in heavy oil. Shooting operations and location and hardness of cement plug at 871' are approved.
- Sec. 22—Pan American Petroleum Co. well No "Buena Fe" 40. (Report No. P 4-15679.) Proposal to deepen approved. Conditions: Depth 537'; 10" landed at about 537', perforated 330'-537'. Proposed to deepen to about 600' and land 8 $\frac{1}{2}$ " perforated liner, return to production
- Sec. 26—Mascot Oil Co. well No. 4. (Report No. T 4-12373.) Inspection of cementing operations. Hole could not be cleaned out below 739'; 5 $\frac{1}{2}$ " shot and pulled from 739'; 7 $\frac{1}{2}$ " could not be pulled from much below 9 $\frac{1}{2}$ " shoe; 15 cu. ft. of 1:1 $\frac{1}{2}$  cement-sand mix dumped at 739', sufficient to fill 7 $\frac{1}{2}$ " to 688'. Cementing operations are approved.
- Mascot Oil Co. well No. 4. (Report No. T 4-12376.) Inspection of cementing operations. 7 $\frac{1}{2}$ " shot at 688' and 650', parted at 419', cement plug placed 739'-722'. Inspector noted hole open to 722', and 18.5 cu ft of cement-sand concrete mix dumped at 722', filling 7 $\frac{1}{2}$ " to 660'. Cementing operations are approved.
- Mascot Oil Co. well No. 14. (Report No. T 4-12349.) Inspection of shooting and cementing operations. 7 $\frac{1}{2}$ " shot at 999', 975' and 880', pulled from 880'; 4 sacks cement dumped on 7 $\frac{1}{2}$ " stub at 880' and washed down to 1005'; hole filled with sand and surface formations to 876', 4 sacks cement dumped at 876'. Inspector noted bailer would not spud below 858' and brought up sample of set cement, and also 9 $\frac{1}{2}$ " shot and parted at 703'. Location and hardness of cement plug at 858' and shooting operations are approved.
- Mascot Oil Co. well No. 14. (Report No. T 4-12356.) Inspection of cementing operations. 9 $\frac{1}{2}$ " could not be pulled from 703', shot at 550' and 503'; 498' of 9 $\frac{1}{2}$ " pulled from 503', hole filled with surface formation and water to 497'; 13 $\frac{1}{2}$ " not found free when pull taken on it; 6 sacks cement dumped at 497'. Cementing operations are approved.
- Mascot Oil Co. well No. 14. (Report No. T 4-12359.) Inspection of shooting and cementing operations. Top of cement plug placed on 9 $\frac{1}{2}$ " stub located at 486'; 11 $\frac{1}{2}$ " shot at 232' and pulled up 20'; hole filled 486'-228' with surface formation and water; 9 sacks cement dumped at 228'. Shooting and cementing operations are approved.

## T. 32 S., R. 24 E., M. D. B. and M.

- Sec. 8—Honolulu Oil Corp., Ltd, well No. 53. (Report No P 4-15678) Supplementary proposal to drill approved. Conditions: Depth 2235'. Proposed to plug with cement 2180'-2235', place cement bridge 1870'-1850'; cement 8 $\frac{1}{2}$ " at 1845' with enough cement to fill to 1400' plus 20% excess; test water shut-off; underream and clean out 1845'-2180'; land 6 $\frac{1}{2}$ " perforated liner at 2180'.
- Honolulu Oil Corp., Ltd., well No. 53. (Report No. T 4-12355.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 2.7 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{1}{2}$ " on 25' cement bridge at 1845'.
- Honolulu Oil Corp., Ltd., well No. 53 (Report No. T 4-12362.) Shut-off test approved. 8 $\frac{1}{2}$ " casing cemented at 1845'. While tester valve open for 15 min. light fluctuating flow of air issued from drill pipe, and hole remained full of mud fluid outside drill pipe; 2 bbl of mud fluid required to fill hole after packer released, drill pipe contained 3.7 bbl. of heavy gas-cut mud; mud sample from bottom of drill pipe was too heavy to secure water sample for salt test. Shut-off is approved.
- Sec 14—Honolulu Oil Corp., Ltd., well No. 3. (Report No. T 4-12353.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 0.7 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{1}{2}$ " at 2745'.
- Honolulu Oil Corp., Ltd., well No. 3. (Report No T 4-12358) Shut-off test approved. 8 $\frac{1}{2}$ " casing cemented at 2740'. Johnston tester run in on 4" drill pipe and packer set at 2728'; hole remained full of fluid during test, when tester valve opened for  $\frac{1}{2}$  hr. gas flowed steadily from drill pipe; when packer released 2 bbl. of mud fluid were required to fill hole; 7 bbl. of fluid found in drill pipe; top 130' was heavy gas-cut mud, balance was very gassy and oily mud, much of which was blown out of drill pipe; sample of water from fluid in bottom of drill pipe tested 492 gr salt per gal. Shut-off is approved.
- Honolulu Oil Corp., Ltd., well No. 4. (Report No. P 4-15697.) Proposal to drill approved provisionally. Conditions: Well is 3077.27' S. and



458 33' E of NW section corner Estimate oil sand at 2825' Proposed to cement 18½" at 160'; cement 10½" at 2815'; cement 8½" at 3055'; land 6½" at 3155', including 100' perforated on bottom Decision Proposal is approved provided that (1) Mud fluid of not less than 70 lb. per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Coring is started not deeper than 2750' (4) Formations left behind 10½" and 8½" are mudded by open circulation until mud loss is reduced to 5 and 1 bbl per hr, respectively (5) Enough cement is used behind 10½" to reach at least 1000' above 10½" shoe and behind 8½" to reach to 10½" shoe (6) Division is notified to witness final mudding operations before cementing 10½" and 8½", and 10½" and 8½" shut-off tests with hole open, in each case, not more than 5' below respective shoes

Honolulu Oil Corp, Ltd, well No 21. (Report No P 4-15698.) Proposal to drill approved provisionally. Conditions: Well is 431 34' S and 2204.97' E of NW section corner Estimate oil sand at 2670' Proposed to cement 18½" at 160'; cement 8½" at 2661'; cement 6½" at 2720', including 60' perforated on bottom Decision Proposal is approved provided that (1) Mud fluid of not less than 70 lb per cu. ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Coring is started not deeper than 2550' (4) Formations left behind 8½" are mudded by open circulation until mud loss is not more than 5 bbl per hr (5) Enough cement is used behind 8½" to reach at least 1000' above shoe (6) Division is notified to witness final mudding operations before cementing 8½" and 8½" shut-off test with hole open not more than 5' below 8½" shoe

Honolulu Oil Corp, Ltd, well No 22 (Report No P 4-15688) Proposal to drill approved provisionally. Conditions: Well is 1349 23' S and 2283 85' E of NW corner. Estimate oil sand at 2710' Proposed to cement 18½" at 160'; cement 10½" at 2700'; cement 8½" at 2960'; land 6½" at 3040', including 80' perforated Decision: Proposal is approved provided that (1) Mud fluid of sufficient weight to prevent blow-out is used in drilling well, and column of mud fluid is maintained to surface at all times, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Coring is started at 2600'. (4) Formations left back of 10½" and 8½" are mudded by open circulation until mud loss is not more than 5 and 1 bbl per hr, respectively (5) Enough cement is used behind 10½" to reach at least 1000' above shoe (6) Division is notified to witness final mudding operations before cementing 10½" and 8½", and 10½" and 8½" shut-off tests with hole open not more than 5' below shoe in each case

Honolulu Oil Corp, Ltd, well No 43 (Report No P 4-15699) Proposal to drill approved provisionally. Conditions: Well is 2172 7' S and 1458 7' W. of NE corner Estimate oil sand at 3100' Proposed to cement 8½" at 3090'; land 6½" at 3150', including 60' perforated Decision: Proposal is approved provided that (1) Mud fluid of sufficient weight to prevent blow-outs is used in drilling of well, and column of mud fluid is maintained to surface at all times, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Formations left behind 8½" are mudded by open circulation until mud loss is not more than 5 bbl per hr (4) Division is notified to witness final mudding operations before cementing 8½" and 8½" shut-off test with hole open not more than 5' below shoe

Sec 15—Standard Oil Co well No 25. (Report No P 4-15696) Proposal to drill approved provisionally. Conditions: Well is 2290' N and 453' W of SE section corner Estimate oil sand at 2635' Proposed to cement 11½" at 2625'; cement 9" at 2850'; land 7" at 2975' Decision Proposal is approved provided that (1) Mud fluid of sufficient weight to prevent blow-outs is used in drilling well, and column of mud fluid is maintained to surface at all times, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) Formations left behind 9" and 7" are mudded by open circulation until mud loss is not more than 5 and 1 bbl. per hr, respectively (4) Enough cement is used behind 11½" to reach at least 1000' above 11½" shoe and behind 7" to reach to 11½" shoe (5) Division is notified to witness final mudding operations before cementing 11½" and 9", and 11½" and 9" shut-off tests with hole open not more than 5' below respective shoes.

Standard Oil Co well No. 27 (Report No T 4-12350) Shut-off test approved 11½" casing cemented at 2425' Inspector noted wall packer set at reported depth of 2420', space between 4½" drill pipe and 11½" casing remained full of mud fluid during test, when tester valve opened for 18 min. air blew strongly for 2½ min, followed by blow of gas, estimated gas blowing at rate of 400,000 cu ft per day, when packer released 14 cu ft of mud fluid was required to fill space between drill pipe and 11½" casing; 27.9 cu. ft of oily gas-cut mud fluid found in drill pipe with no evidence of free water, fluid samples from 2070' and 2420' tested 32 gr and 470 gr. salt per gal, respectively Shut-off is approved

Standard Oil Co well No 27 (Report No T 4-12361.) Inspection of mudding operations During ½ hr circulation test mud fluid was lost from pit at rate of 1 bbl per hr Mudding operations are approved. Oral approval is hereby confirmed to cement 9" at 2652'.

Standard Oil Co. well No 27 (Report No T 4-12364) Shut-off test approved 9" casing cemented at 2643'. Inspector noted Johnston tester run in on drill pipe and wall packer set at reported depth of 2639'; while tester valve open for 32 min. air flowed intermittently from drill pipe for 20 min, followed by strong steady gas flow, and space between drill pipe and 9" casing remained full of mud fluid; when packer released 8 4 cu. ft of mud fluid was required to fill space between drill pipe and 9" casing; drill pipe contained 267' of frothy gas-cut mud fluid and 348' of oily gas-cut mud fluid, with no evidence of free water; water filtered from fluid samples from 2024' and 2639' tested 150 gr. and 501 gr salt per gal, respectively; salt content is not excessive for this zone Shut-off is approved.

Sec. 34—Richfield Oil Co. well No "Calvada" 4. (Report No P 4-15677) Supplementary proposal to alter casing approved. Conditions: Depth 3757', plugged 3757'-3710'; 16" cemented at 485'; 8½" cemented at 3723', perforated 3685'-3705'. Proposed to plug with cement 3710'-3670'; notify division to witness plug at 3670'.

Richfield Oil Co. well No "Calvada" 4 (Report No. T 4-12354) Inspection of cementing operations. Hole cleaned out to 3710' and 14 sacks cement dumped; 5 sacks cement dumped at 3676'; top of cement at 3644', cleaned out to 3656'. Inspector noted bailer would not spud below 3656' and brought up sample of set cement. Location and hardness of cement plug at 3656' are approved.

### MT. POSO FIELD

T. 27 S., R. 27 E., M. D. B. and M.

Sec 11—Buckeye Union Oil Co. well No. "New Hope" 1. (Report No T 4-13238) Bailing test approved. 10" casing cemented at 1107'. Hole bailed dry (1062') for test and stood 18 hr. 331' of oil, oily mud and oil sand entered in 18 hr; considerable free oil on top fluid column, but impossible to find line dividing clean oil from oily mud. Later reported hole cleaned out to 1112' and sample from that depth was heavy oily mud. Shut-off is approved.

T 27 S, R. 28 E., M. D. B. and M.

Sec. 4—Shell Oil Co well No "Matthew Fee" 2 (Report No T 4-13241) Shut-off test approved 8½" casing cemented at 1590'. Inspector noted that while valve was open ¾ hr. packer did not leak, and slight blow of air by heads came from drill pipe; drill pipe contained 96' of heavy gassy mud, no evidence of free water in fluid sample from bottom of drill pipe Shut-off is approved

Union Oil Co. well No. "S. & M." 16 (Report No. T 4-13226) Bailing test approved 8½" casing recemented at 1860'. Hole bailed dry (1865') for test and stood 1¼ hr. Inspector noted bailer spudded at 1865' and brought up 5' of muddy water showing little oil. Shut-off is approved.

Union Oil Co well No. "S. & M." 16 (Report No P 4-16287) Supplementary proposal to drill approved. Conditions. Depth 1910'; 13½" cemented at 45'; 8½" cemented at 1860'. Proposed to clean out to 1910' and core ahead to about 1940'; land 6½" at about 1940', including 40' perforated, and cement through perforations at about 1885'.

Union Oil Co well No "S & M." 21. (Report No P 4-16292) Proposal to drill approved. Conditions. Well is 300' N and 1120' W from S½ section corner. Estimate oil sand at 1770'. Proposed to cement 8½" at 1765'; land 72' of 6½" liner at about 1890', including 50' perforated. Decision. Proposal is approved. Notify division to witness 8½" water shut-off test with hole open not more than 5' below shoe

Sec 9—Shell Oil Co well No "Vedder" 6 (Report No P 4-16279) Proposal to plug approved. Conditions: Depth 1825': 8½" cemented at 1466', 6½" liner landed at 1424'-1825', perforated 1462'-1825'. Proposed to pull rods and tubing; set bridging plug at 1625' in 6½" liner and dump in enough cement to form cement bridge to 1500'; run tubing and rods, put on production in upper Vedder zone

Shell Oil Co well No. "Vedder" 14 (Report No P 4-16297) Proposal to drill approved. Conditions. Well is 292 98' S and 590 45' W of N½ section corner. Estimate oil sand at 1688'. Proposed to cement 16" S P at 30'; cement 8½" at 1683'; land 6½" liner at 1743'. Decision: Proposal is approved. Notify division to witness 8½" water shut-off test with hole open not more than 5' below shoe.

Sec. 16—Shell Oil Co. well No "Security" 11. (Report No T 4-13214) Shut-off test approved 8½" casing cemented at 1717'. Inspector noted that while valve open for ¾ hr 3 small puffs of air issued from drill pipe just after valve opened; there was no further action; packer held effectively while valve open; drill pipe contained 31' of frothy gassy drilling mud when removed. Shut-off is approved.

Shell Oil Co well No "Security" 12 (Report No T 4-13227) Shut-off test approved 8½" casing cemented at 1661'. Inspector noted when trip valve opened for 35 min. air rush from drill pipe was unsteady but fairly strong for 10 min, then activity was almost dead for 5 min, followed by 5 min of slight activity, no activity during last 15 min; packer held effectively during test; 130' of heavy gassy oily mud entered drill pipe during test, with 20' or 25' of oil sand just above tester valve. Shut-off is approved.

Shell Oil Co. well No. "Security" 13. (Report No. T 4-13243) Shut-off test approved. 8½" casing cemented at 1680'. Inspector noted that while valve open for 20 min. packer sealed effectively and initial air flow was followed by few short heads of a second's duration; 22' of thin mud brought up in drill pipe Shut-off is approved.

Sec. 21—D. T. Stevens well No. "Glide" 1. (Report No T 4-13211.) Shut-off test Decision deferred. 6½" casing cemented at 1940'. Inspector noted when valve opened for 30 min. air blew slightly from drill pipe for 10 min., and packer held effectively; when pulled, drill pipe contained 264' of thin frothy mud fluid with about 20' of sand in bottom. Test indicates small amount of fluid enters well from unknown source. Decision is deferred pending results of further testing.

### MOUNTAIN VIEW FIELD

T. 30 S., R. 28 E., M. D. B. and M.

Sec. 9—Union Oil Co. well No. "Kernco" B-1 (Report No. P 4-16298.) Proposal to drill approved provisionally. Conditions: Well is 330' N. and 330' W. from center of section. Prospect well

Sec. 10—Star Petroleum Co. of Calif., Ltd., well No. "Bakersfield-Star" 1. (Report No. P 4-16296.) Proposal to drill approved provisionally. Conditions: Well is 330' N. and 330' E. of SW corner of NW¼ of section. Estimate oil sand at 5450'. Proposed to cement 13½" at 300'; cement 8½" at 5400'. Decision: Proposal is approved provided that: (1) Fluid content of each porous formation encountered is determined as definitely as possible. (2) Every possible step is taken to prevent damage to oil or gas-bearing strata by infiltrating water and to underground water suitable for irrigation. (3) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (4) Division is notified when oil or gas showing encountered, before landing or cementing any casing, and to witness bailing test of each possible water shut-off with hole open not more than 5' below cementing depth.

Sec. 14—General Petroleum Corp. well No. "Brantley" 2. (Report No. T 4-13223.) Inspection of mudding operations. During 1 hr. circulation test 3 bbl. of mud fluid was lost. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 5470'

General Petroleum Corp. well No. "Brantley" 2 (Report No. T 4-13237.) Shut-off test approved. 8½" casing cemented at 5470'. Inspector noted when valve opened for 30 min. packer held effectively, and reasonably strong blow of air and gas by heads came from drill pipe; valve closed and packer reset; when valve reopened for 10 min gas flowed strongly from drill pipe; after 2 stands of drill pipe taken off in pulling drill pipe, oil and gas flowed for about 20 min; when 22 stands of drill pipe taken off oil flowed again and continued to flow at intervals while pipe being pulled; there was clean oil in bottom joint of drill pipe just above tool; no indication of free water in oil Shut-off is approved.

The Hancock Oil Co well No. "Miller" 1. (Report No. T 4-13245) Inspection of mudding operations. During 1 hr. circulation test 4 bbl. of mud fluid was lost from tank. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 5365'.

The Hancock Oil Co. well No "Miller" 1. (Report No. T 4-13246.) Shut-off test approved 8½" casing cemented at 5365'. Inspector noted when trip valve opened for 35 min. strong air flow followed by strong gas flow by heads issued from drill pipe for 5 min and then stopped; packer held effectively while valve open; when drill pipe pulled it was found that heavy mud previously placed in drill pipe had risen 440'; when drill pipe joint just under trip valve was opened heavy mud and oil under great pressure blew out, practically all fluid in drill pipe blew out; ¼" bean showed it had sanded up until no more fluid could enter; small amount of oil sand, oily mud, and clean oil found in bottom joint of drill pipe; no evidence of water or watery fluid found during test Shut-off is approved.

The Hancock Oil Co. well No. "Miller" 2. (Report No. P 4-16295) Proposal to drill approved provisionally. Conditions: Well is 331.24' N. and 993' E. of S¼ section corner. Estimate oil sand at 5350'. Proposed to cement 13½" at 1150'; cement 8½" at 5350'; land 6½" perforated liner 5330'-5430'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) Formations left back of 8½" are mudded by open circulation until mud loss is reduced to 5 bbl. per hr. (3) Enough cement is used to fill up to 1000' above 8½" shoe (4) Division is notified to examine all cores taken before cementing 8½", to witness mudding test just before cementing 8½" and 8½" shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

The Texas Co. well No "Mateo Smith" 3. (Report No. T 4-13218.) Inspection of mudding operations During 1 hr. circulation test no mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 5330'

The Texas Co. well No "Mateo Smith" 3. (Report No. T 4-13225.) Shut-off test approved. 8½" casing cemented at 5330'. Inspector noted when valve opened slight rush of air issued from drill pipe lead line for 10 min. after which test was dead; packer held effectively. Reported valve closed after 45 min.; drill pipe contained 34' of heavy mud; when packer broken fluid dropped about 10' outside of drill pipe. Shut-off is approved.

- The Texas Co. well No. "Schamblin" 1. (Report No. P 4-16290.) Proposal to drill approved provisionally. Conditions: Well is 2207.29' N. and 330' E. of SW. section corner. Estimate oil sand at 5380'. Proposed to cement 24" at 50'; cement 13 $\frac{3}{8}$ " at 1100'; cement 8 $\frac{3}{4}$ " at 5380'; land 6 $\frac{3}{4}$ " at 5450'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire (2) Formations left back of 8 $\frac{3}{4}$ " are mudded by open circulation until mud loss is reduced to 5 bbl per hr. (3) Enough cement is used to fill up to 1000' above 8 $\frac{3}{4}$ " shoe (4) Division is notified to examine all cores taken before cementing 8 $\frac{3}{4}$ ", and to witness mudding test just before cementing 8 $\frac{3}{4}$ " and 8 $\frac{3}{4}$ " water shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- Sec. 15—Union Oil Co. well No "Kernco" 4. (Report No. P 4-16270) Proposal to drill approved provisionally. Conditions: Well is 2320 93' N and 330' W of SE. section corner. Estimate oil sand at 5425'. Proposed to cement 13 $\frac{3}{8}$ " at 1200'; cement 8 $\frac{3}{4}$ " at 5420'; land 85' of 6 $\frac{3}{8}$ " liner at 5480', including 60' perforated. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire (2) Formations left back of 8 $\frac{3}{4}$ " are mudded by open circulation until mud loss is reduced to 5 bbl per hr. (3) Enough cement is used to fill to 1000' above 8 $\frac{3}{4}$ " shoe. (4) Division is notified to examine all cores taken before cementing 8 $\frac{3}{4}$ ", to witness mudding test just before cementing 8 $\frac{3}{4}$ ", and to witness 8 $\frac{3}{4}$ " shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- Sec 23—Standard Oil Co. well No. "Wible" 2. (Report No T 4-13222) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test no mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{4}$ " at 5445'.
- Standard Oil Co. well No "Wible" 2. (Report No. T 4-13233) Shut-off test approved. 9" casing cemented at 5445'. Inspector noted when valve opened for 19 min. air rush from drill pipe head was strong and steady, and packer held effectively; about 1968' of oil entered drill pipe; fluid sample from just above tester tool valve was medium heavy rotary mud (similar to that placed in drill pipe) showing some gas; no evidence of free water or mud dilution by water in any of samples from drill pipe. Shut-off is approved.
- Union Oil Co well No "Wible" 2 (Report No. T 4-13232) Inspection of mudding operations. During 1 hr. circulation test 1 bbl. of mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{4}$ " at 5513'.
- Union Oil Co well No "Wible" 2 (Report No. T 4-13240.) Bailing test. Decision deferred. 8 $\frac{3}{4}$ " casing cemented at 5513'. Inspector noted bailer sample from 5513' was medium heavy mud showing oil; lead line oil sample cut 8% water and 2% emulsion; bailer spudded at 5497' and brought up sample of medium heavy mud similar to that originally in hole, showing little gas and oil. Test indicates shut-off is effective but is not conclusive. Decision on shut-off is deferred pending receipt of production data after completing well.
- Sec 24—Standard Oil Co well No. "Ranton" 3 (Report No T 4-13216) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test no mud fluid was lost from tank. Mudding operations are approved. Oral approval is hereby confirmed to cement 9" at 5385'.
- Standard Oil Co well No. "Ranton" 3 (Report No T 4-13221.) Shut-off test approved. 9" casing cemented at 5385'. Inspector noted when tester valve opened for 25 min. air rush from drill pipe head was steady and strong for 15 min, blow showed tendency to head for 5 min, last 5 min. blow was very strong, and packer held effectively; after 17 stands of drill pipe pulled heavy gassy mud blew out of drill pipe head for 10 min.; after 18 stands pulled heavy gassy mud blew out of drill pipe for 5 min., then oil blew out for 10 min.; fluid samples from stands 50, 51 and 53 were clean lively oil, from stands 55 and 57 were medium heavy brown rotary mud showing oil and sand spots in suspension; fluid sample from just above tester tool was heavy gassy oily mud. Shut-off is approved.
- Sec. 25—Allen Brown Corp well No. "Dor-Max" 1 (Report No T 4-13224) Inspection of mudding operations. During 1 hr circulation test 14 bbl of mud fluid was lost from tank. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{4}$ " at 5575'.
- Allen Brown Corp. well No "Dor-Max" 1 (Report No. T 4-13239) Shut-off test approved. 8 $\frac{3}{4}$ " casing cemented at 5579'. Inspector noted Johnston formation tester run in on drill pipe; 792' of heavy mud placed in drill pipe below trip valve; packer set at reported depth of 5566'; when valve opened for 30 min. air blew slightly from drill pipe for 10 min., followed by slight flow of gas by heads which increased to strong gas flow at end of 30 min.; drill pipe contained 86' of heavy gassy mud with some oil and small amount of clean oil in bottom; no evidence of free water or thin drilling fluid in fluid column. Shut-off is approved.
- T. 30 S, R. 29 E., M. D B. and M.
- Sec. 18—Major Oil Co, Ltd, well No. "Major Oil" 1. (Report No P 4-16288.) Proposal to drill approved provisionally. Conditions: Well is 330' N and 330' E of SW. corner of NW $\frac{1}{4}$ . Estimate oil sand at 4000'. Proposed to

cement 13 $\frac{3}{8}$ " at 800'. Decision: Proposal is approved provided that (1) 13 $\frac{3}{8}$ " is cemented not higher than 800'. (2) Fluid content of each porous formation encountered is determined as definitely as possible. (3) Every possible step is taken to prevent damage to oil or gas-bearing strata by infiltrating water and to underground water suitable for irrigation. (4) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (5) Division is notified when oil or gas showing encountered, before landing or cementing any casing, and to witness bailing test of each possible water shut-off with hole open not more than 5' below cementing depth. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Sec. 19—Otis Hoyt well No. "Petrol" 1. (Report No. T 4-13229.) Bailing test approved. 8 $\frac{3}{8}$ " casing cemented at 5381'. Hole bailed to 2500' for test and stood 15 $\frac{3}{4}$  hr. Oil entered at rate of 92 bbl. in 24 hr. Gas issued from casing head during test; fluid samples were: 1502', medium heavy mud; 5331', live oil showing little medium heavy rotary mud, due to danger involved company requested that bailer be run not deeper than 5331'. Shut-off is approved.

Sec. 29—Hogan Petroleum Co. well No. "Haley" 1. (Report No. P 4-16271.) Proposal to abandon approved. Conditions: Depth 6050', cement plugs 6050'-5644' and 3225'-3074', hole redrilled 3074'-4946', plugged with brick 900'-825', with cement 825'-789', with brick 789'-751'; fish in redrilled hole, 5" drill pipe, Eastman whipstock and bit 900'-4925'; hole shot at 4865', 4765', 3638' and 1400'; hole filled with heavy mud and steel cap welded on top 14". Proposed to abandon well as of this date, and have drilling bond released.

Sec. 30—A. T. Jergins Trust well No. "Nance" 2. (Report No. P 4-16272.) Supplementary proposal to drill approved provisionally. Conditions: Depth 5699', 13 $\frac{3}{8}$ " surface pipe cemented at 1119'; unable to recover fish, top of Clendenin Limey ash at 5693'. Proposed to drill by fish at 5233'; run 500' of 2 $\frac{3}{4}$ " tubing by fish to bottom and cement 5699'-5150' in three stages with 400 sacks cement, drill new hole from 5150' to top of Clendenin Limey ash, set 8 $\frac{3}{8}$ " at about 5400'. Decision: Proposal is approved provided that: (1) Division is notified to witness location and hardness of cement plug at 5150'. (2) Formations left back of 8 $\frac{3}{8}$ " are mudded by open circulation until mud loss is reduced to 5 bbl. per hr. (3) Enough cement is used to fill up to 1000' above 8 $\frac{3}{8}$ " shoe. (4) Division is notified to witness mudding test just before cementing 8 $\frac{3}{8}$ " and 8 $\frac{3}{8}$ " shut-off test with hole open not more than 5' below shoe.

A. T. Jergins Trust well No. "Nance" 2. (Report No. T 4-13230.) Inspection of mudding operations. During 1 hr. circulation test 4 bbl. of mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 5410'.

A. T. Jergins Trust well No. "Nance" 2 (Report No. T 4-13247.) Shut-off test approved 8 $\frac{3}{8}$ " casing cemented at 5410'. Inspector noted when valve opened strong steady air flow immediately came from drill pipe; in about 20 sec air flow changed to strong steady gas flow; after 2 min fine spray of mud fluid began to come from drill pipe with gas; after 4 min. gas flow was so strong it was necessary to close valve and pull tester; packer held effectively while valve was open; drill pipe contained 396' of very heavy mud fluid which had hole blown through center of each stand, no sign of free water found in fluid. Shut-off is approved.

Wood-Callahan Oil Co. Ltd. well No. "National Oil" 3. (Report No. P 4-16276.) Proposal to drill approved provisionally. Conditions: Well is 1280' N. and 950' W. of center of section. Estimate oil sand at 5800'. Proposed to cement 13 $\frac{3}{8}$ " at 1200'; cement 8 $\frac{3}{8}$ " at 5500', coring for setting point. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) Formations left back of 8 $\frac{3}{8}$ " are mudded by open circulation until mud loss is reduced to 5 bbl. per hr. (3) Enough cement is used to fill up to 1000' above 8 $\frac{3}{8}$ " shoe. (4) Division is notified to examine all cores taken before cementing 8 $\frac{3}{8}$ ", to witness mudding test just before cementing 8 $\frac{3}{8}$ " and 8 $\frac{3}{8}$ " shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Sec 32—Barnsdall Oil Co. well No. "Morris" 2. (Report No. P 4-16281.) Proposal to drill approved provisionally. Conditions: Well is 330' N and 330' E. of SW. property corner. Estimate oil sand at 5500'. Proposed to cement 13 $\frac{3}{8}$ " at 810'; cement 8 $\frac{3}{8}$ " at 5500'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) Formations left back of 8 $\frac{3}{8}$ " are mudded by open circulation until mud loss is reduced to 5 bbl. per hr. (3) Enough cement is used to fill up to 1000' above 8 $\frac{3}{8}$ " shoe. (4) Division is notified to examine all cores taken before cementing 8 $\frac{3}{8}$ ", to witness mudding test just before cementing 8 $\frac{3}{8}$ " and 8 $\frac{3}{8}$ " shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Sec. 33—The Ohio Oil Co. well No. "Derby" 1. (Report No. P 4-16291.) Proposal to drill approved provisionally. Conditions: Well is 1656.07' N. and 330' E of SW. section corner. Estimate oil sand at 5450'. Proposed to cement 18 $\frac{3}{8}$ " at 30'; cement 13 $\frac{3}{8}$ " at 850'; cement 8 $\frac{3}{8}$ " at 5450'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to

prevent oil or gas waste by blow-out or fire. (2) Formations left back of 8½" are mudded by open circulation until mud loss is reduced to 5 bbl. per hr (3) Enough cement is used to fill up to 1000' above 8½" shoe. (4) Division is notified to examine all cores taken before cementing 8½", and to witness mudding test just before cementing 8½" and 8½" shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all federal regulations relating to development of new pools.

T. 31 S., R 29 E., M. D. B. and M.

Sec. 4—Hogan Petroleum Co. well No. "Symons" 1. (Report No. P 4-16275.) Proposal to drill approved provisionally. Conditions: Well is 990' N. and 330' W. from center of section Estimate oil sand at 5400'. Proposed to cement 13½" or 14" at 800'; cement 8½" or 9" at 5725'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (2) Formations left back of 8½" or 9" are mudded by open circulation until mud loss is reduced to 5 bbl. per hr. (3) Enough cement is used to fill to 1000' above 8½" or 9" shoe. (4) Division is notified to examine all cores taken before cementing 8½" or 9", to witness mudding test just before cementing 8½" or 9½", and to witness 8½" or 9" shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all federal regulations relating to development of new pools

### ROUND MOUNTAIN FIELD

T. 28 S., R 29 E., M. D B. and M.

Sec 18—Honolulu Oil Corp., Ltd, well No. 32. (Report No P 4-16273.) Proposal to drill approved provisionally. Conditions: Well is 1341.28' S. and 2340.37' E. of NW. corner Estimate oil sand at 1960'. Proposed to cement 8½" at 1960'; further casings dependent on results obtained at well No. 76. Decision: Proposal is approved provided that: (1) Enough cement is used to fill to at least 700' above 8½" shoe (2) Division is notified to witness 8½" water shut-off test with hole open not more than 5' below shoe.

Honolulu Oil Corp., Ltd, well No. 76. (Report No. P 4-16274.) Proposal to drill approved provisionally. Conditions: Well is 815 49' S. and 682.49' W. of E½ corner. Estimate oil sand at 1855'. Proposed to cement 8½" at 1850'; prospect ahead for lower Vedder sand, further casing to depend on results of this test Decision: Proposal is approved provided that: (1) Enough cement is used to fill to at least 700' above 8½" shoe. (2) Division is notified to witness 8½" water shut-off test with hole open not more than 5' below shoe.

### SUNSET FIELD

T. 11 N., R. 23 W, S. B. B and M.

Sec. 4—Kneen-McPherson well No. 3. (Report No. P 4-15686.) Supplementary proposal to abandon approved. Conditions: Depth 3695', cement plug 3520'-3249'; 15½" cemented at 500'; 10" landed at 3427', sidetracked below 3240'; 6½" cemented at 3485', perforated 3470'-3450', shot 3360'-3365' and 3263'-3265'; can not be cleaned out below 3249'. Junk: 10' 3240'-3427'; 4½" 3487'-3676', perforated 3656'-3676'; 4½" 3519'-3668' and 3520'-3580'. Proposed to place cement plug 3249'-3217'; ball fluid to 2800' and test casing and plug; perforate 6½" and 10" 3196'-3201' and test for production from tar sand logged between those depths; if unproductive, plug with cement 3217' to top of perforations; perforate 3100'-3114' and test for Kinsey production, if unproductive, plug perforations with cement; cut and pull 6½" from 2800' and 10" from 480', capping each stub with 10' cement; plug 15½" at surface; fill all unplugged portions of hole with heavy mud or surface formation and water; notify division to witness cement plug at 3217' and those plugs placed in perforated casing.

Sec. 8—Signal Oil and Gas Co. well No. "Signal Wallace" 3. (Report No P 4-15693.) Proposal to drill approved provisionally. Conditions: Well is 850' N. and 200' W. of SE. corner of W½ of SW¼. Estimate oil sand at 2920'. Proposed to cement 14½" at 250'; cement 8½" at 2920'; land 6½" liner at 2960'; core for cementing and completion depths; core brown shale continuously. Decision: Proposal is approved provided that: (1) Mud fluid of sufficient weight to prevent blow-outs is used in drilling of well, and column of mud fluid is maintained to surface at all times, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Formations left back of 8½" are mudded by open circulation until mud loss is not more than 5 bbl. per hr. (4) Enough cement is used behind 8½" to reach to at least 1800' from surface. (5) Division is notified to witness final mudding operations before cementing 8½" and 8½" shut-off test with hole open not more than 5' below 8½" shoe.

Sec. 9—Standard Oil Co. well No. 47. (Report No. P 4-15683.) Proposal to abandon approved. Conditions: Depth 3986', cement plug 3850'-3986'; 18 $\frac{3}{8}$ " cemented at 377'; 11 $\frac{3}{8}$ " cemented at 3775'; no oil string. Proposed to clean out to 3850' and pump in cement plug to 3740, where division will test it; fill hole with soil or mud to 360'; cut and pull 11 $\frac{3}{8}$ " from about 357', place wood plug in stub and dump cement, filling 20' into 18 $\frac{3}{8}$ " ; fill to surface with mud or soil; cap 18 $\frac{3}{8}$ " and abandon.

Standard Oil Co. well No. 47. (Report No. T 4-12371.) Inspection of cementing operations. Hole cleaned out to 3850'; 125 sacks cement pumped in through tubing hung at 3848'. Inspector noted bailer would not spud below 3616' and brought up sample of set cement. Location and hardness of cement plug at 3616' are approved.

T 11 N., R 24 W., S. B. B. and M.

Sec. 12—Snook & Wells, Inc., well No. 2. (Report No. P 4-15689.) Proposal to alter casing approved provisionally. Conditions: Depth 1075'; 12" landed at 749'; drilled through 727'-749' and remainder sidetracked; 9 $\frac{3}{8}$ " landed at 1075', perforated 731'-1075'. Proposed to pull 9 $\frac{3}{8}$ " from point above 700'. Decision: Proposal is approved provided that: (1) Division is notified to witness shooting off of 9 $\frac{3}{8}$ " (2) Care is taken not to damage 12" casing. (3) Form 102 is filed in duplicate upon completion of proposed work.

Snook & Wells, Inc., well No. 2. (Report No. T 4-12370.) Inspection of operations for witnessing shooting off of 9 $\frac{3}{8}$ " casing. 9 $\frac{3}{8}$ " shot at 700'; did not come loose and was shot again at same depth with slightly larger shot which severed casing. Shooting operations are approved.

Snook & Wells, Inc., well No. 34. (Report No. T 4-12375.) Inspection of cementing operations. 8 $\frac{1}{2}$ " shot and pulled from 846'; hole filled with heavy mud and surface formation to 845'; wood plug driven in 3 $\frac{1}{2}$ " stub to 844', and 5 sacks cement dumped, filling to 883'. Shooting and cementing operations are approved.

T. 12 N., R 23 W., S. B. B. and M.

Sec. 32—Lake View Oil & Refining Co. well No. 1. (Report No. P 4-15676.) Supplementary proposal to abandon approved provisionally. Conditions: Depth 2509', cement plug 2435'-2367'; 8 $\frac{3}{8}$ " cemented at 2243'; 6 $\frac{1}{2}$ " cemented at 2391', shot 2370'-2380', pulled from 2102'; 4 $\frac{3}{8}$ " cemented at 2399', shot and pulled from 2200'; well contains 15 $\frac{1}{2}$ ", 12 $\frac{3}{8}$ " and possibly 10" of which there is no record. Junk: 6 $\frac{1}{2}$ " 2485'-2509', 2331'-2373' and 2313'; 4 $\frac{1}{2}$ " 2390'-2434'. Proposed to determine amount of removable casing by amount of stretch obtained and by vibration, leaving at least 100' overlap in each string of pipe; cap stubs and fill spaces between with mud fluid, plug 15 $\frac{1}{2}$ " at surface; notify division to witness all shots and plugs. Decision: Proposal is approved provided it is demonstrated to satisfaction of division that there is no portion of hole left without casing which provides continuous metallic conductor to 2399'.

Lake View Oil & Refining Co. well No. 1. (Report No. T 4-12351) Inspection of cementing operations. Hole cleaned out to 2435' and 3 $\frac{1}{2}$  sacks cement dumped; bailer would not spud below 2421' and brought up sample of set cement; 4 $\frac{1}{2}$  sacks cement dumped at 2421'; bailer would not spud below 2367' and brought up sample of set cement. Inspector noted 4 $\frac{3}{8}$ " casing shot and parted at 2197'. Location and hardness of cement plug at 2367' and shooting operations are approved.

Lake View Oil & Refining Co. well No. 1. (Report No. T 4-12352.) Inspection of cementing operations. 4 sacks cement dumped at 2197'. Inspector noted bailer would not spud below 2183' and brought up sample of set cement, and 8 $\frac{1}{2}$ " was shot at 511'. Location and hardness of cement plug at 2183' and shooting operations are approved.

Lake View Oil & Refining Co. well No. 1. (Report No. T 4-12357.) Inspection of cementing operations. 8 $\frac{1}{2}$ " shot and pulled from 344'; no 10" found in well; hole filled with heavy mud and surface formation to 344'. Collar or bottom of 12 $\frac{3}{8}$ " casing located at 340', showing 12 $\frac{3}{8}$ " extends to this depth or below; 7 sacks cement dumped at 344'. Cementing operations are approved.

T. 12 N., R 24 W., S. B. B. and M

Sec. 25—Hallmark Oil Co., Inc., well No. 1-A. (Report No. P 4-15690.) Proposal to drill approved provisionally. Conditions: Well is 325' S. and 132' E of NW section corner. Estimate oil sand at 2250'. Proposed to cement 15 $\frac{1}{2}$ " at 200'; determine additional casing by coring starting at 1950'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Well is equipped and drilled in manner to prevent damage to oil or gas-bearing strata by infiltrating water and oil or gas waste by blow-out or fire. (3) Formations left back of water string are mudded by open circulation until mud loss is not more than 4 bbl. per hr. (4) Enough cement is used back of water string to reach to at least 1500'. (5) Division is notified to examine cores before running water string, and to witness final mudding operations before cementing water string, and water shut-off test.

## TEMBLOR FIELD

T. 29 S., R. 21 E., M. D. B. and M.

Sec. 29—The Texas Co well No. "Jared How" 1 (Report No. P 4-15691.) Proposal to drill approved provisionally. Conditions: Well is 2220 69' N. and 559.79' E of SW. section corner. Prospect well.

## KERN COUNTY

T 11 N., R 19 W., S. B B and M.

Sec. 31—The Petrol Corp. well No. "Badger" 1 (Report No. P 4-15684.) Proposal to redrill oil string and plug approved provisionally. Prospect well.

T. 25 S., R. 23 E., M. D B and M.

Sec. 3—Trico Oil and Gas Co. well No. 2. (Report No. T 4-13234.) Bailing test approved. Prospect well.

T. 25 S., R 27 E., M. D. B. and M.

Sec. 14—Cimarron Oil Corp. well No. "Quinn" 1. (Report No. P 4-16294.) Proposal to drill approved provisionally. Conditions: Well is 1560' S. and 620' E. of N.  $\frac{3}{4}$  section corner. Estimate oil sand at 1400'. Proposed to cement 8 $\frac{3}{8}$ " at about 1400'; core for exact cementing depth and total depth. Decision: Proposal is approved provided that: (1) Fluid content of each porous formation encountered is determined as definitely as possible (2) Every possible step is taken to prevent damage to oil or gas-bearing strata by infiltrating water and to underground water suitable for irrigation. (3) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (4) Division is notified when oil or gas showing encountered, before landing or cementing any casing, and to witness bailing test of each possible water shut-off with hole open not more than 5' below cementing depth.

T. 27 S., R 27 E., M. D. B and M.

Sec 22—The Ohio Oil Co. well No. "Brown" 1. (Report No. T 4-13213 ) Bailing test approved. 8 $\frac{3}{8}$ " casing recemented at 1339'. Hole bailed to 1280' for test and stood 17 hr. Oil entered at rate of 4.3 bbl. in 24 hr. Water entered at rate of 1.1 bbl. in 24 hr.

T. 29 S. R. 30 E., M. D B and M.

Sec 31—Signal Oil and Gas Co. well No. "Southern Pacific Land Company" 1. (Report No. P 4-16305.) Proposal to drill approved provisionally. Conditions: Well is 1750' S. and 970' E. of NW. section corner. Prospect well.

T 31 S., R. 28 E., M. D. B. and M.

Sec. 7—Sea Cliff Oil Co., Ltd., well No. "Sea Cliff-Houghton" 1. (Report No. P 4-16282 ) Proposal to drill approved provisionally. Conditions: Well is 340' S. and 3630' W. of NE section corner. Estimate oil sand at 5300'. Proposed to cement 13 $\frac{3}{8}$ " at 600'. Decision: Proposal is approved provided that: (1) 13 $\frac{3}{8}$ " is cemented not higher than 600'. (2) Fluid content of each porous formation encountered is determined as definitely as possible. (3) Every possible step is taken to prevent damage to oil or gas-bearing strata by infiltrating water and to underground water suitable for irrigation (4) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire (5) Division is notified when oil or gas showing encountered, before landing or cementing any casing, and to witness bailing test of each possible water shut-off with hole open not more than 5' below cementing depth

T 32 S., R. 25 E., M D. B and M.

Sec 9—Shell Oil Co. well No "B. V. A." 1. (Report No P 4-15694.) Proposal to drill approved provisionally. Conditions: Well is about 330' S. and about 330' E. of W  $\frac{3}{4}$  section corner Estimate oil sand at 5600'. Proposed to cement 20" at 100'; cement 13 $\frac{3}{8}$ " at 1000', cement 8 $\frac{3}{8}$ " at 5600'; land 4 $\frac{1}{2}$ " at 6500'. Decision: Proposal is approved provided that: (1) Mud fluid of sufficient weight to prevent blow-outs is used in drilling of well, and column of mud fluid is maintained to surface at all times, particularly while pulling drill pipe. (2) Following blow-out prevention equipment is provided and ready for use at all times when drilling below 1000': (a) Master gate with control extending beyond derrick floor which will completely close well when drill pipe is out of hole. (b) Packer-type blow-out preventer for use when drill pipe is in hole. (3) Fluid content of each porous formation encountered is determined as definitely as possible (4) Every possible precaution is taken to prevent damage to underground water suitable for irrigation, damage to oil or gas-bearing strata by infiltrating water, and waste of oil or gas by blow-out or fire. (5) Division is notified when any oil or gas-bearing strata encountered, before landing or cementing any casing below 1000', and to witness each water shut-off test made below 1000'.



## DISTRICT No. 5

## COALINGA FIELD

T. 19 S., R. 15 E., M. D. B. and M.

Sec 2—Standard Oil Co. well No. "Continental" 19. (Report No. P 5-3920.) Proposal to set packer approved. Conditions: Depth 1939'; 10½" cemented at 1722', hole at 705'; 260' of 8½" landed at 1939', perforated 1699'-1939', well wet. Proposed to run hemp sleeve packer on 8½", setting it on stub at 1679'; return to production.

T. 20 S., R. 14 E., M. D. B. and M.

Sec. 11—John F. Wilcox well No. 2. (Report No. P 5-3923) Proposal to drill approved provisionally. Conditions: Well is 550' N. and 150' W. of SE section corner. Estimate oil sand at 460'. Proposed to land 12½" at 60'; cement 8½" at 450', land 6½" liner at 610'; core for oil sand, then plug back about 10' above same and cement 8½"; drill with rotary tools Decision: Proposal is approved provided division is notified before running 8½" in hole, and to witness bailing test of 8½" shut-off.

Sec 24—Salvia Oil Co well No. 21. (Report No T 5-1920.) Inspection of cementing operations. 12 sacks cement dumped at 1364'; hole shot in four stages 1272'-1295'; hole cleaned out to 1298' and 37 sacks cement dumped in two stages, 8 sacks cement dumped at 1290', hole kept full of water while cementing. Inspector noted bailer would not spud below 1272' and brought up sample of set cement. Location and hardness of cement plug at 1272' are approved.

Salvia Oil Co. well No. 21 (Report No. T 5-1921.) Inspection of cementing operations 4 sacks cement dumped at 1272', filling to 1250'; hole filled with soil 1250'-895'; 8½" shot and pulled from 892', wood plug driven in stub to 890' and 7 sacks cement dumped on plug. Inspector noted bailer would not spud below 875' and brought up sample of set cement. Location and hardness of cement plug at 875' are approved

T 20 S., R. 15 E., M. D. B. and M.

Sec 30—Associated Oil Co. well No. 7-A. (Report No. T 5-1927.) Inspection of cementing operations. Hole cleaned out to 2682'; 29 sacks cement dumped in stages starting at 2680', part of cement went away and part did not set, hole cleaned out to 2680' and 6 sacks cement dumped, top of cement at 2656', cleaned out to 2663'; 2 sacks cement dumped at 2663'. Inspector noted bailer would not spud below 2653' and brought up sample of set cement. Location and hardness of cement plug at 2653' are approved.

## KETTLEMAN NORTH DOME FIELD

T. 21 S., R 17 E., M. D. B. and M.

Sec 19—Standard Oil Co. well No 21. (Report No. T 5-1928) Shut-off test not approved. 9½" casing cemented at 8155'. Inspector noted 34 stands of drill pipe had been pulled, 34th stand reported one-half full of water, making top of fluid at about 2930', when remainder of drill pipe pulled first mud and cement was noted in 43d stand; 49th stand was nearly clear water, and first taste of salt came from 51st, fluid samples from 62d and 82d stands and from tester, tested 610, 850 and 850 gr. salt per gal, respectively. Shut-off is not approved

Sec 21—Standard Oil Co. well No. 38. (Report No T 5-1924) Shut-off test approved. 9½" casing cemented at 7814'. Inspector noted all drill pipe had been pulled except two stands and one double, when backing off upper stand 150' of fluid found in drill pipe, fluid was emulsified oil, mud, and water; water filtered from top and bottom of fluid column tested 160 and 120 gr. salt per gal, respectively. Shut-off is approved.

Sec 35—Petroleum Securities Co. well No. "Felix" 4 (Report No P 5-3919) Proposal to drill approved provisionally. Conditions: Well is 1606 8' N and 359 5' E. of S½ section corner. Estimate oil sand at 7420' and top of Temblor formation at 7020'. Proposed to cement 18½" at 800', cement 9½" at 7400'; core and test formation below 7400'. Decision Proposal is approved provided that: (1) Mud fluid of not less than 70 lb per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) 9½" is not cemented more than 450' below top of Temblor without consulting division. (4) 9½" is cemented with enough cement to reach at least 1500' up back of casing. (5) Division is notified to witness 9½" shut-off test.

## DIVISION OF OIL AND GAS

## T. 22 S., R. 17 E., M. D. B. and M.

Sec. 1—Kettleman North Dome Assoc. well No. 43. (Report No. T 5-1922.) Shut-off test approved. 9 $\frac{5}{8}$ " casing cemented at 7733'. Inspector noted upon opening valve there was 5 min. blow of fresh water and gas, then 2 min. of mainly gas; when drill pipe pulled it contained: stands 42 $\frac{1}{2}$ -46 $\frac{1}{2}$ , little dry gas, then short blow of fresh water and oil; 47 $\frac{1}{2}$ -49 $\frac{1}{2}$ , little clean oil, 50 $\frac{1}{2}$ -54 $\frac{1}{2}$ , little dry gas, 55 $\frac{1}{2}$ , clean oil; 56 $\frac{1}{2}$ , little clean oil; 57 $\frac{1}{2}$ -59 $\frac{1}{2}$ , dry gas, 60 $\frac{1}{2}$ , some clean oil, 61 $\frac{1}{2}$ , oil and fresh water; 62 $\frac{1}{2}$ -77 $\frac{1}{2}$ , fresh water and little oil; 78 $\frac{1}{2}$ , first frothy mud. 79 $\frac{1}{2}$ -82 $\frac{1}{2}$ , dry gas; 83 $\frac{1}{2}$ -84 $\frac{1}{2}$ , thin frothy mud, tested 328 gr. salt per gal.; 85 $\frac{1}{2}$ , 86 $\frac{1}{2}$  and just above tester were each thin muddy water, tested 321, 321 and 315 gr. salt per gal., respectively. Shut-off is approved.

Kettleman North Dome Assoc. well No. 43. (Report No. T 5-1923.) Inspection of equipment. Equipment as inspected is satisfactory.

## T. 22 S., R. 18 E., M. D. B. and M.

Sec. 16—Kettleman North Dome Assoc. well No. 55. (Report No. T 5-1929.) Shut-off test not approved. 9 $\frac{5}{8}$ " casing cemented at 8383'. Inspector noted 52 stands had been pulled; stands 53 to 75 contained oily fresh water, stands 53 to 62 were clear fresh water; stand 63 contained first muddy water with slightly salty taste; water from stands 64, 74, 84, and from tester, tested 547, 992, 1710, and 2262 gr. salt per gal., respectively. Shut-off is not approved. Oral approval to recement is hereby confirmed.

Kettleman North Dome Assoc. well No. 55. (Report No. T 5-1930.) Inspection of equipment. Equipment as inspected is satisfactory.

## T. 23 S., R. 18 E., M. D. B. and M.

Sec. 1—Standard Oil Co well No. 54 (Report No. T 5-1925.) Shut-off test approved. 9 $\frac{5}{8}$ " casing recemented at 7593'. Inspector noted all but four stands of drill pipe had been pulled, all dry; when remainder pulled fluid was found risen about 118'; all fluid was thin mud or muddy water; water filtered from samples from 88', 44' and just above tester, tested 260, 380 and 430 gr. salt per gal., respectively. Shut-off is approved.

Standard Oil Co well No. 54. (Report No. T 5-1926.) Inspection of equipment. Equipment as inspected was satisfactory except that float valves had not been installed in drill pipe. Later reported by telephone that they had been installed.

## HUMBOLDT COUNTY

## T. 3 N., R. 2 W., H. B. and M.

Sec. 1—The Texas Co well No. "Eureka" 1. (Report No. P 5-3921.) Proposal to drill approved provisionally. Conditions: Well is 1540' N and 377 14' W. of SE section corner. Prospect well.

## KINGS COUNTY

## T. 18 S., R. 23 E., M. D. B. and M.

Sec. 8—Turner & Goldsberry well No. 1. (Report No. P 5-3918.) Proposal of Jos Basile, Jr., to abandon approved. Prospect well.

## MADERA COUNTY

## T. 10 S., R. 14 E., M. D. B. and M.

Sec. 7—The Pure Oil Co well No. 1 "Chowchilla." (Report No. T 5-1931.) Shut-off test approved. 9" casing cemented at 7765'. Johnston tester run in and drill pipe filled with water to trip valve; while valve open for 2 hr fresh water flowed at first, followed by little mud, then practically dry gas; packer was not pulled loose until pressure at surface had blown down. when pulled, drill pipe contained 175' of thin mud above trip valve and 130' of thin mud above main valve; no indications of salt water or any excessive amount of water. Shut-off is approved.

## MONTH OF DECEMBER, 1934

Field or county <sup>1</sup>	Tests		Proposals					
	Rou- tine	Inspec- tion	New wells		Deepen	Redrill	Abandon	
			Drill	Supple- men- tary			First	Supple- men- tary
Distr. 1—Coyote Hills.....	1	1				1	1	
Dominguez.....	1	6		5	1	1		
Huntington Beach.....	2	11	2	1		10		2
Inglewood.....	1	4		4				
Long Beach.....	7	40	11	3	2	11		3
Los Angeles City.....								15
Montebello.....	1	2		1				
Playa del Rey.....		8	3					1
Potrero.....						2		
Richfield.....		1				3		
Rosecrans.....		2		2	1			
Santa Fe Springs.....	2	31				17		2
Seal Beach.....		1				2		
Torrance.....		1		1				
Whittier.....			2			1		1
Los Angeles County.....		2						
Riverside County.....			1					
San Diego County.....								1
Totals.....	15	110	20	17	4	48		27
Distr. 2—Bardadale.....		1						1
Piru.....		1						1
Rincon.....	2	1		2				
South Mountain.....				1				
Ventura.....	6	6	2	6		1		
Totals.....	8	9	2	9		1		2
Distr. 3—Capitan.....	1	3		2				
Cat Canyon.....		1						1
Elwood.....	1		1					
Mesa.....	11	2	11	1				2
Monterey County.....			1		1			
San Luis Obispo County.....				1				
Santa Barbara County.....				1				
Totals.....	13	6	13	5	1			2
Distr. 4—Belridge.....		1	1	1				
Devils Den.....			1					
Edison.....	4	6	6	2				2
Elk Hills.....		1				1		
Fruitvale.....	2	3	1			1		2
Kern River.....	1	1	1			2		1
Kern River.....	1	1						1
McKittrick.....	4	7	4	1	2	4		4
Midway.....	3	2	5					1
Mt. Poso.....	2	6	4	3		1		
Mountain View.....		1	1					1
Posc Creek.....	1			1	1	1		
Round Mountain.....		4						1
Sunset.....	1	2	3			1		8
Kern County.....								
Totals.....	19	35	27	8	3	11		21
Distr. 5—Coalinga.....						2		
Kettleman Middle Dome.....			1			1		
Kettleman North Dome.....	8	4	7	1		1		
Fresno County.....								1
Kings County.....			1					1
Madera County.....				2				
San Joaquin County.....				1				1
Totals.....	8	4	9	4		4		3
Grand totals.....	63	164	71	43	8	64		55

<sup>1</sup> Wells not in proved oil fields are designated by county only.

## DISTRICT No. 1

## COYOTE HILLS FIELD

T. 3 S., R. 9 W., S. B. B. and M.

Sec. 19—Great American Petroleum Co. well No. "Tuffree" 2. (Report No. T 1-27704.) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of 3.5 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{4}$ " at 3144'.

T. 3 S., R. 10 W., S. B. B. and M.

Sec 18—Standard Oil Co. well No. "Murphy-Coyote" 120. (Report No. T 1-27647) Shut-off test approved. 13 $\frac{3}{8}$ " casing cemented at 3207'. Inspector noted when tester valve open for  $\frac{3}{4}$  hr. very slight air flow issued when valve first opened, and fluid between drill pipe and 13 $\frac{3}{8}$ " casing remained stationary; when pulled, drill pipe contained 1.5 bbl. of water above tester, water filtered from sample from 3152' and 3200' tested 51 and 85 gr salt per gal, respectively. Shut-off is approved.

Sec. 19—Standard Oil Co. well No. "Murphy-Coyote" 54 (Report No. P 1-27575) Proposal to abandon approved. Conditions: Depth 4120', plugged to 3890', 16" landed at 1007'; 10 $\frac{3}{4}$ " cemented at 3160', 8 $\frac{3}{8}$ " cemented at 3823', 379' of 6 $\frac{5}{8}$ " landed at 4119', perforated 3806'-4119'. Sidetracked junk: 8 $\frac{3}{8}$ " 3140'-3531' and 3265'-3505'; 6 $\frac{5}{8}$ " 3149'-3770'; 7" bailer 3156'-3171'. Proposed to clean out to 3890' if possible and plug to 3720' with cement, running water in hole while dumping cement to apply pressure; notify division to witness this plug; fill hole with fluid; cut and pull 8 $\frac{3}{8}$ " from 3140' or above, if necessary, and cap stub with 20' cement; fill hole with fluid, cut and pull 10 $\frac{3}{4}$ " from 987' or above if necessary, and cap stub with 20' cement; notify division to witness this plug; fill hole to surface with fluid, hang wood plug inside 16" casing 10' below cellar floor; fill to cellar floor with cement; weld steel plate on top 16" at cellar floor and abandon well; remove rig and equipment.

Sec. 23—Associated Oil Co. well No. "Hualde" 9 (Report No. P 1-27574) Proposal to alter casing approved. Conditions: Depth 2743'; 10" cemented at 2402'; 8 $\frac{1}{4}$ " landed at 2743', perforated 2260'-2743', evidently there is hole through 8 $\frac{1}{4}$ " and 10" at about 1270'. Proposed to cut and pull 8 $\frac{1}{4}$ " at about 2000'; rerun and land 8 $\frac{1}{4}$ " with packer on stub

## DOMINGUEZ FIELD

T. 3 S., R 13 W, S B. B. and M

Sec 33—Shell Oil Co. well No. "Reyes" 63. (Report No. P 1-27539) Proposal to drill approved provisionally. Conditions: Well is 1401.72' S and 2558.20' E. of NW. corner of Reyes Lease. Estimate oil sand at 3830'. Proposed to cement 13 $\frac{3}{8}$ " at 930', cement 8 $\frac{3}{8}$ " at 4775', land 4 $\frac{3}{4}$ " at 5135'. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{3}{8}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Enough cement is used to fill back of 8 $\frac{3}{8}$ " to reach at least 1000' above shoe. (5) Column of mud fluid back of 8 $\frac{3}{8}$ " is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness test of 13 $\frac{3}{8}$ " surface casing, final mudding operations before cementing 8 $\frac{3}{8}$ ", and bailing test of 8 $\frac{3}{8}$ " shut-off.

Union Oil Co. well No. "Callender" 16. (Report No. T 1-27675.) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of 2 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 4580'.

Union Oil Co. well No. "Callender" 19. (Report No. P 1-27538.) Proposal to redrill water string and deepen approved provisionally. Conditions: Depth 4968'; 10" cemented at 3918'; 8 $\frac{1}{4}$ " landed at 4707', perforated 4330'-4707', cemented through perforations at 4330', collapsed at 4277' and rolled out from that point; 283' of perforated 6 $\frac{1}{2}$ " landed at 4968'. Proposed to shoot 8 $\frac{1}{4}$ " 4345'-4325' with 3" x 20" torpedo, clean out cavity, dump cement to about 4315' and shoot wet cement with 3" x 10" torpedo; clean out shot cavity and continue plug to 3920'; pull 8 $\frac{1}{4}$ " from 3920'; sidetrack 8 $\frac{1}{4}$ " and 6 $\frac{1}{2}$ " to 4450' and cement 8 $\frac{3}{8}$ " at 4450'; continue redrilling to 4968'; deepen to about 5000', coring for depth; complete with 4 $\frac{1}{2}$ " liner. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and

- ready for operation at all times (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{3}{8}$ " are mudded by open circulation until loss is not more than 2 bbl. per hr (4) Enough cement is used to fill back of 8 $\frac{3}{8}$ " to extend to 10' shoe. (5) Division is notified to witness location and hardness of cement plugs at 4315' and 3920', final mudding operations before cementing 8 $\frac{3}{8}$ ", and bailing test of 8 $\frac{3}{8}$ " shut-off.
- Union Oil Co. well No. "Hellman" 31. (Report No. P 1-27568.) Supplementary proposal to drill approved provisionally. Conditions: Depth 7373', plugged to 7000'; 11 $\frac{3}{8}$ " cemented at 3900'; 8 $\frac{3}{8}$ " cemented at 6170'; 6 $\frac{3}{8}$ " landed at 7347', including 101' perforated, cemented through perforations at 7243'. Proposed to plug with cement to 6835', having division witness plug at 6835'; perforate 6830'-6720' and test for production. Decision: Proposal is approved provided division is notified to witness production test within 10 days if satisfactory production obtained from 6830'-6720'.
- Union Oil Co. well No. "Hellman" 31. (Report No. T 1-27657.) Inspection of cementing operations. Hole cleaned out to 6919' and 14 sacks cement dumped; top of cement at 6829', cleaned out to 6835'; hole kept full of water during cementing operations. Inspector noted bailer would not spud below 6835' and brought up sample of set cement. Location and hardness of cement plug at 6835' are approved.
- Union Oil Co. well No. "Hellman" 31. (Report No. T 1-27674.) Inspection of cementing operations. Hole cleaned out to 6792' and 22 $\frac{3}{8}$  sacks cement dumped; top of cement at 6646', cleaned out to 6650'. Inspector noted bailer would not spud below 6650' and brought up sample of set cement. Location and hardness of cement plug at 6650' are approved.
- Union Oil Co. well No "Hellman" 31. (Report No. P 1-27599.) Supplementary proposal to drill approved. New conditions: Plugged to 6827'. Proposed to clean out to plug at 6827'; plug with cement to 6650'; have division witness location and hardness of plug at 6650'; perforate fifth zone.
- Union Oil Co. well No "Hellman" 31. (Report No. P 1-27612.) Supplementary proposal to drill approved provisionally. New conditions: Plugged to 6650'; interval 5965'-5815' produced neither oil nor water. Proposed to clean out to 6650'; set D & K. plug at 6056'; plug with cement 6056'-5795', having division witness location and hardness of cement plug; perforate 5790'-5605'. Decision: Proposal is approved provided division is notified to witness production test within 10 days after completion if satisfactory production secured after perforating as proposed.
- Union Oil Co. well No. "Hellman" 33. (Report No. P 1-27566.) Supplementary proposal to drill approved provisionally. Conditions. Depth 5523'; 11 $\frac{3}{8}$ " cemented at 3955'; 8 $\frac{3}{8}$ " cemented at 5377'; 200' of 4 $\frac{3}{8}$ " landed at 5518', including 137' perforated; water witch showed water entry 5435'-5518'. Proposed to pull all 4 $\frac{3}{8}$ " liner; plug to about 5430', notifying division to witness location and hardness of plug at 5430'; complete well with 4 $\frac{3}{8}$ " liner and test on production. Decision: Proposal is approved provided that: (1) Cement plug 5523'-5430' is placed under 500 lb minimum pressure. (2) Division is notified to witness production test within 30 days after placing on production again.
- Union Oil Co well No "Hellman" 33. (Report No. T 1-27700.) Inspection of cementing operations. Hole cleaned out to 5520'; 35 sacks cement pumped in through tubing hung at 5515', tubing raised to 5300' and 600 lb. pressure applied; 10 sacks cement dumped at 5459', filling to 5419'; hole cleaned out to 5430'. Inspector noted bailer would not spud below 5430' and brought up sample of set cement. Location and hardness of cement plug at 5430' are approved.
- Sec 34—Shell Oil Co. well No "Reyes" 59. (Report No. P 1-27614.) Supplementary proposal to drill approved provisionally. Conditions: Depth 4787', plugged to 4746'; 8 $\frac{3}{8}$ " cemented at 4620'; 4 $\frac{3}{8}$ " liner landed 4593'-4743', top of perforations at 4628'; water witch showed water source at top of plug. Proposed to pull liner; clean out plug to bottom; cement 5 $\frac{3}{8}$ " blank liner 4540'-4775'; perforate 4630'-4655', 4690'-4710' and 4730'-4745'; tube well and swab for production. Decision: Proposal is approved provided that: (1) Formations left back of 5 $\frac{3}{8}$ " are mudded by open circulation until loss is not more than 1 bbl per hr. (2) Division is notified to witness final mudding operations before cementing 5 $\frac{3}{8}$ " and production test within 30 days after recompleting well.
- Shell Oil Co. well No "Reyes" 60 (Report No. T 1-27601.) Production test. Decision deferred. 8 $\frac{3}{8}$ " casing cemented at 4545'. During this production test well produced at reported estimated rate of 400 bbl. of fluid per day. Flow line sample tested 31.7° A. P. I. gravity and cut 0.1% water and trace of mud. Pressures were: casing, 425 lb.; tubing, 220 lb. Test indicates 8 $\frac{3}{8}$ " shut-off is probably effective but is not conclusive due to pressure held on well. Decision is deferred pending receipt of further production data.
- Shell Oil Co. well No. "Reyes" 60 (Report No. T 1-27651.) Inspection of mudding operations. During  $\frac{3}{4}$  hr circulation test mud fluid was lost from pit at rate of 1 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to land 5 $\frac{3}{8}$ " at 4901' and cement through perforations at 4833'.
- Shell Oil Co. well No "Reyes" 62 (Report No. T 1-27591.) Inspection of operations for demonstrating that 13 $\frac{3}{8}$ " casing is water-tight. Inspector noted 400 lb. pressure applied inside 13 $\frac{3}{8}$ " casing for  $\frac{3}{4}$  hr. without pressure loss. Casing test is approved.

Shell Oil Co. well No. "Reyes" 64. (Report No. P 1-27622.) Proposal to drill approved provisionally. Conditions: Well is 1384 52' S. and 5258' 41' E. of NW. corner of Reyes Lease. Estimate oil sand at 3750'. Proposed to cement 1 3/8" at 930'; cement 8 5/8" at 4595'; land 4 3/8" at 4775'. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 5/8" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Enough cement is used to fill back of 8 5/8" to reach at least 1000' above shoe. (5) Column of mud fluid back of 8 5/8" is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness test of 1 3/8" surface casing, final mudding operations before cementing 8 5/8", and bailing test of 8 5/8" shut-off.

Union Oil Co. well No. "Hellman" 32. (Report No. P 1-27590.) Supplementary proposal to plug approved. Conditions: Depth 4470', plugged to 4448'; 1 1/2" cemented at 4312'; 6 5/8" landed at 4468', including 169' perforated, packer at 4258'; 2 1/2" tubing landed at 4299'. Proposed to produce well in its present condition.

### HUNTINGTON BEACH FIELD

T. 5 S., R. 11 W., S. B. B. and M.

- Sec. 32—Black Eagle Oil Corp. well No. 1-B. (Report No. T 1-27618) Inspection of mudding operations. During 1/2 hr. circulation test mud fluid was lost from pit at rate of 2 bbl. per hr., cement bridge at reported depth of 4250' held part of weight of drill pipe. Mudding operations are approved. Oral approval is hereby confirmed to cement 5" at 4250'.
- Black Eagle Oil Corp. well No. 1-B (Report No. P 1-27541.) Supplementary proposal to drill approved provisionally. Conditions. Redrilled depth 4702', cement bridge 4243'-4275'; 1 1/2" cemented at 125'; 9" cemented at 355'. Proposed to cement 5" at 4241' with 400 sacks cement. Decision: Proposal is approved provided division is notified to witness bailing test of 5" shut-off after cleaning out not more than 5' below cementing depth.
- Sec 34—Standard Oil Co. well No. "Bolsa" 7. (Report No. P 1-27591.) Proposal to plug approved. Conditions: Total depth 3807', redrilled depth 3760'; 8 5/8" cemented at 3424'; 405' of 6 5/8" landed at 3758', perforated 3386'-3758'; water witch showed major water source 3570'-3580', minor sources at 3750', later reported water entering 3661'-3678'. Proposed to reperforate 6 5/8" oil string 3645'-3715', clean out to 3760' and plug hole with cement 3760'-3645', running water in hole while dumping cement to apply pressure, and notify division to witness this plug; return to production (it is understood that plug at 3645' will constitute permanent abandonment of lower portion of hole).
- Standard Oil Co. well No. "Bolsa" 14. (Report No P 1-27597.) Proposal to redrill water string approved. Conditions: Depth 4650'; 10 3/8" drilled out through at 3303'; 8 5/8" cemented at 3790', 6 5/8" landed at 4647', perforated 3921'-4647', cemented through perforations at 3898', bad at 3890'. Production prevented by sand trouble. Proposed to try to clean out inside 5 5/8" oil string to 4650' if possible and plug with cement under pressure 4650'-3860', notifying division to witness plug; pull 6 5/8" from 3770' or above, if necessary, and cap stub with 20' cement, fill hole with fluid, pull 8 5/8" from about 3330', sidetrack stub with cable tools, and cement junk in place; redrill with rotary 3303' to about 4170'; cement 8 5/8" water string at about 4170' with enough cement to reach 10 3/8" shoe; notify division to witness mudding test before cementing 8 5/8", and shut-off test on same; if 8 5/8" water shut-off is effective, drill well in, using oil for circulation and complete with 6 5/8" perforated liner at about 4400'.
- Standard Oil Co well No. "Bolsa" 22. (Report No. T 1-27594.) Inspection of cementing operations. Hole could not be cleaned out below 3756' due to iron at that depth. 175 sacks cement pumped in through tubing in stages starting at 3756', and 900 lb pressure applied. Inspector noted bailer would not spud below 3585' and brought up sample of set cement. Location and hardness of cement plug at 3585' are approved.
- Standard Oil Co well No "Bolsa" 22. (Report No P 1-27595.) Inspection of cementing operations. 9" shot and pulled from 624', wood plug driven in stub, and 44 sacks cement dumped. Inspector noted bailer would not spud below 572' and brought up sample of set cement. Location and hardness of cement plug at 572' are approved.
- Standard Oil Co. well No. "Huntington A" 28. (Report No. P 1-27592) Proposal to plug approved. Conditions: Depth 2702'; 1 1/2" cemented at 2045'; 9" cemented at 2392'; 6 5/8"-7" landed at 2702', perforated 2385'-2702' (2385'-2702' is 7"), oil string bad at 2658' and below; water witch showed water entering 2620'-2635'; large amount sand heaving in. Proposed to clean out to 2702' if possible, reperforate 7" 2600'-2650'; swab perforations 2600'-2650'; bail hole clean to 2702' if possible and dump cement plug 2702'-2600', running water in while dumping cement to apply pressure; notify division to witness location and hardness of cement plug at 2600'; bail hole clean and make production test; if production not O. K., file supplementary notice covering further work; it is understood that plug at 2600 will constitute permanent abandonment of lower portion of hole.

- The Texas Co. well No. "Smyth" 1. (Report No. P 1-27598.) Proposal to plug approved provisionally. Conditions. Depth 4678', plugged to 4595'; 10" cemented at 3368'; 8½" cemented at 3748'; 6½" landed at 4678', including 936' perforated. Proposed to plug hole with cement 4595'-4400'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4400'.
- Union Oil Co. well No. "Brooks" 3. (Report No. P 1-27563.) Proposal to plug approved. Conditions. Depth 5000', plugged with cement 4295'-4254' and with 50 sacks cement above 4966'; 8½" cemented at 3632'; 6½" landed at 4999', including 1402' perforated, bad at 4042', water witch showed all water from below 3981' to 4042'. Proposed to clean out to 4042' and dump thin cement under hydrostatic head and plug to 3975'; have division test plug and production, if wet, relocate water and continue plugging higher, having division test plug, test on production.
- Union Oil Co. well No. "Brooks" 3. (Report No. T 1-27716.) Inspection of cementing operations. Hole cleaned out to 4042' and 23 sacks cement dumped; no pressure applied because formations were taking fluid. Inspector noted bailer would not spud below 3956' and brought up sample of set cement. Location and hardness of cement plug at 3956' are approved.
- Union Oil Co. well No. "Brooks" 5. (Report No. P 1-27569.) Proposal to plug and alter casing approved. Conditions: Depth 5000', cement plugs 5000'-4833', 4403'-4236' and 4130'-4105'; 8½" cemented at 3900', 6½" landed at 5000', shot 4405'-4395' and 4125'-4135', perforated 3940'-4100', cemented through perforations 3911'-3913' and at 4350', bad at 3955'. Proposed to clean out to 3955' or further if possible; plug under hydrostatic head to 3950' and have division test plug, test on production, if no fluid, perforate 6½" 3940'-3920', test on production.
- Sec. 35—Holly Oil Co. well No. 5. (Report No. P 1-27509.) Supplementary proposal to plug and alter casing approved provisionally. Conditions. Depth 4921', cement plug 4250'-4208'; 8½" cemented at 3551'; 6½" landed at 4913', perforated 3935'-4135' and 4443'-4913', cemented through perforations 3935'-3947' and at 4421', bad at 3972'. Proposed to run in tubing through bad place in 6½" and cement 4208'-3650'; cut and pull 6½" from 3650'; cement under pressure 3650'-3595'; if dry, land 6½" liner at 3595', perforated 3595'-3551', bottom of 8½". Decision. Proposal is approved provided division is notified to witness location and hardness of cement plugs at 3650' and 3595', and production test within 30 days after recompleting well.
- Holly Oil Co. well No. 5. (Report No. P 1-27564.) Supplementary proposal to plug and alter casing approved provisionally. New conditions: 6½" bad at 4000', plugged with cement 4250'-3650' and 3551'-3595'. Proposed to make production test. Decision: Proposal is approved provided division is notified to witness proposed production test after being on production for 30 days.
- Holly Oil Co. well No. 5. (Report No. T 1-27686.) Inspection of cementing operations. Hole cleaned out to 4208' and 100 sacks cement pumped in through tubing; hole kept full of water. Inspector noted bailer would not spud below 3650' and brought up sample of set cement. Location and hardness of cement plug at 3650' are approved.
- Holly Oil Co. well No. 8. (Report No. P 1-27578.) Proposal to plug approved provisionally. Conditions: Depth 4800'; 8½" cemented at 3772'; 6½" landed at 4797', perforated 3994'-4797', cemented through perforations at 3975', apparently bad at 4150'. Proposed to swage out 6½" at 4150' if possible, plug with cement 4797'-4070'; test for production. Decision. Proposal is approved provided that: (1) Proposed cement plug 4797'-4070' is placed under 500 lb. pressure. (2) Division is notified to witness location and hardness of cement plug at 4070', and production test within 30 days after recompleting well.
- John Italiani well No "La Bolsa Tile" 1. (Report No. T 1-27688.) Inspection of cementing operations. Hole cleaned out to 4493' and 13 sacks cement dumped, filling to 4435', well bailed for several days, producing water with only oil trace. Inspector noted bailer would not spud below 4435' and brought up sample of set cement. Location and hardness of cement plug at 4435' are approved.
- T. 6 S., R. 11 W., S. B. B. and M.
- Sec 2—V. R. G Wilbur well No. "Twining" 1. (Report No. P 1-27537.) Proposal to redrill water string approved provisionally. Conditions. Depth 5000', plugged with cement below 4650', 8½" cemented at 4020'; 6½" liner 3999'-5000', perforated 4118'-5000', shot at 4700', hole full of junk below 2416'. Proposed to pump in mud under 500 lb. pressure until it will not take any more, then put cement under pressure over top of junk; redrill 2416'-4050', coring for exact depth and cement 6½" at this point; bottom hole at about 4650', set perforated liner through oil sands (lower Ashton). Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6½" are mudded by open circulation until loss is not more than 4 bbl. per hr (4) Solid water string is cemented at not deeper than 4050'. (5) Enough cement is used to fill back of 6½" to reach at least 500' above shoe. (6) Division is notified to witness final mudding operations under 500 lb. pressure, total clean-out depth to top of junk

- tubing, location and hardness of cement plug at about 2396', final mudding operations before cementing 6½", and bailing test of 6½" shut-off.
- Sec 3—Standard Oil Co. well No. "Huntington B" 72 (Report No. P 1-27605) Proposal to drill approved. Conditions: Well is 2067' Northwesterly and 125' Northeasterly from center lines of 23d St and Ocean Ave, distances measured along center lines of Ocean Ave., thence 125' Northeasterly at right angles. Estimate oil sand at 2800'. Proposed to cement 20" S. F. at 40'; cement 13½" at 750'; cement 8½" at 3760'; land 630' of 6½" liner at 4350', notify division to witness pressure test on 13½" casing, mudding test before cementing 8½", and 8½" shut-off test; use enough cement behind 8½" to reach to about 2200'.
- Sec. 4—Standard Oil Co. well No. "Huntington B" 71. (Report No. T 1-27634.) Inspection of operations for demonstrating that 13½" casing is water-tight. Inspector noted mud fluid pumped into 13½" casing and 520 lb. pressure applied for ¼ hr. without pressure loss. Casing test is approved.
- Standard Oil Co well No. "P. E." 25. (Report No. T 1-27593) Inspection of operations for demonstrating that 13½" casing is water-tight. Inspector noted mud fluid pumped into 13½" and 420 lb pressure applied for ¼ hr. without pressure loss. Casing test is approved
- Standard Oil Co. well No. "P. E." 25. (Report No. T 1-27698.) Inspection of mudding operations. During ¼ hr. circulation test mud fluid was lost from pit at rate of 2.5 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" on cement bridge at 3805'.
- Sec. 10—Ambassador Petroleum Co. well No. "H. B." 9. (Report No. P 1-27567.) Proposal to abandon approved provisionally. Conditions. Depth 4341', 10" cemented at 3232'; 8½" cemented at 3532, 6½" oil string landed at 4340', perforated 4024'-4340', cemented through perforations at 4042'. Proposed to clean out to bottom if possible and cement up to 4000', having same witnessed, shoot and pull 6½" from about 2200', but in any case not below 3500'; cap 6½" stub with 20' cement plug and have witnessed, shoot and pull 8½" from about 1000' but in any case not below 3200', cap stub with 20' cement and have witnessed; shoot and pull 10" from not below 730', cap stub with 20' cement and have witnessed; cap at surface and abandon. Decision: Proposal is approved provided that: (1) Cement plug 4341'-4000' is placed under 400 lb. pressure. (2) Division is notified to witness total clean-out depth before placing any cement in hole, and all cementing and shooting operations.
- Ambassador Petroleum Co. well No. "H. B." 11. (Report No. P 1-27565.) Proposal to abandon approved provisionally. Conditions: Depth 4349'; 16" S. P. cemented at 751'; 8½" cemented at 3519; 365' of 6½" perforated liner landed at 3865'. Junk: Drill collar, underreamer, drill pipe 4349'-4139', sidetracked 4139'-4180'; 4" drill pipe, drill collar, fishtail bit 4180'-3889', cleaned out to top of junk at 3888', filled with cement to 3865'. Proposed to clean out to 3865' if possible and cement up to 3500', having same witnessed; shoot and pull 8½" at not below 730', cap stub with 20' cement and have witnessed; cap at surface and abandon. Decision: Proposal is approved provided that: (1) Cement plug 3865'-3500' is placed under 500 lb pump pressure and continued above 3500'-3480'. (2) Division is notified to witness clean-out depth before placing any cement, shooting at 730' in 8½", all cementing operations, and location and hardness of cement plugs 3480' and 710'.
- Macklin Oil Co. well No. "Macklin" 1. (Report No T 1-27685) Bailing test approved 8½" casing cemented at 3793'. Hole bailed to 2500' for test and stood 19½ hr. Fluid level rose at rate of 0.8 bbl. in 24 hr. Fluid sample from 3521' was medium heavy oily mud which tasted fresh.
- Sec 11—Day Investment Co. well No. 2. (Report No T 1-27592.) Inspection of mudding operations. During ¼ hr. circulation test mud fluid was lost from pit at rate of 5 bbl. per hr.; cement bridge at reported depth of 3721' held part of weight of drill pipe. Mudding operations are approved. Oral approval is hereby confirmed to cement 6½" at 3715'.
- Day Investment Co. well No. 2. (Report No. T 1-27705.) Bailing test approved. 6½" casing cemented at 3717'. Hole bailed to 3000' for test and stood 14 hr. Fluid level rose at rate of 2.5 bbl in 24 hr. Fluid sample from 3720' was very gas-cut frothy mud which tasted slightly salty, probably due to salty drilling fluid being used by operators. Shut-off is approved.
- Sec 14—D. D. Dunlap Oil Co. well No "Mills" 1. (Report No. T 1-27616) Inspection of mudding operations. During ¼ hr. circulation test mud fluid was lost from pit at rate of 0.5 bbl. per hr Mudding operations are approved. Oral approval is hereby confirmed to land 4½" liner at 4432 and cement through perforations at 4400'.

### INGLEWOOD FIELD

T. 2 S., R. 14 W., S. B. B. and M.

- Sec. 7—Associated Oil Co. well No. "Vickers" 50. (Report No. T 1-27676.) Bailing test approved. 6½" casing cemented at 3245'. Hole swabbed to 2564' for test and stood 13 hr. Fluid level rose at rate of 1 bbl. in 24 hr. Fluid sample from 3251' was oily muddy water which tasted salty.
- Western Consolidated Oil Co. well No. "Smith" 1. (Report No. P 1-27508) Supplementary proposal to drill approved provisionally. Conditions: Depth 5602', cement plug 5600'-5172', 9" cemented at 3952', 5½" landed at 5200', perforated 5432'-5600' and 5210'-5270', cemented through perfora-



tions at 5432'. Proposed to plug with cement 5349'-5190'; perforate 5154'-5170'; bail and swab for production test. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 5190', and production test within 10 days after placing on production.

Western Consolidated Oil Co well No. "Smith" 1. (Report No P 1-27535) Supplementary proposal to drill approved provisionally. New conditions: Hole plugged with cement 5349'-5172'; 5 $\frac{3}{8}$ " perforated 5155'-5169', sample from bottom showed hot salt water. Proposed to plug with cement 5172'-5130'; perforate 4785'-4807'; bail and swab for production test. Decision: Proposal is approved provided that: (1) Cement plug 5172'-5130' is placed under 500 lb pressure if possible (2) Division is notified to witness location and hardness of cement plug at 5130', and production test within 10 days after recompleting well if satisfactory production is secured after perforating 4735'-4807'.

Western Consolidated Oil Co. well No. "Smith" 1. (Report No T 1-27629) Inspection of cementing operations. 5 $\frac{3}{8}$ " perforated 5169'-5155'; tested wet; 5 sacks cement dumped at 5172'. Inspector noted bailer would not spud below 5132' and brought up sample of set cement. Location and hardness of cement plug at 5132' are approved.

Western Consolidated Oil Co well No "Smith" 1. (Report No P 1-27534) Supplementary proposal to drill approved provisionally. New conditions: Hole plugged with cement 5172'-5132'; 5 $\frac{3}{8}$ " perforated 4786'-4806'. Proposed to plug with cement to 4760'; perforated to test zone 4204'-4470'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4760', and production test within 10 days if satisfactory production secured.

Western Consolidated Oil Co well No "Smith" 1. (Report No T 1-27630) Inspection of cementing operations. 45 sacks cement dumped at 5132'. Inspector noted bailer would not spud below 4746' and brought up sample of set cement. Location and hardness of cement plug at 4746' are approved.

Western Consolidated Oil Co well No. "Smith" 1. (Report No T 1-27690) Inspection of cementing operations. Hole cleaned out to 4500', 60 sacks cement pumped in through drill pipe hung at 4498', drill pipe raised to 3990' and 600 lb pressure applied on fluid column; set cement located at 4160', cleaned out to 4360'. Inspector noted bailer would not spud below 4355' and brought up sample of set cement. Location and hardness of cement plug at 4355' are approved.

Western Consolidated Oil Co. well No. "Smith" 1. (Report No P 1-27616) Supplementary proposal to drill approved provisionally. New conditions: 5 $\frac{3}{8}$ " perforated 4430'-4445', 4430'-4390', shot 4390'-4380', perforated 4206'-4202', 4186'-4182' and 4250'-4210'; produces all salt water. Proposed to plug 4350'-4150' under 500 lb pressure; cut 5 $\frac{3}{8}$ " at greatest possible depth above 3900' and pull, capping stub with cement. Decision: Proposal is approved provided that: (1) 5 $\frac{3}{8}$ " stub is capped with 20' cement. (2) Division is notified to witness location and hardness of cement plugs at 4150' and on 5 $\frac{3}{8}$ " stub.

Sec 17—Standard Oil Co. well No "Baldwin-Cienega" 51. (Report No T 1-27640) Inspection of cementing operations. 200 sacks cement pumped in through tubing in two stages at 1620' and 1550' without obtaining circulation, top of cement at 1325'; 85 sacks cement pumped in through tubing in two stages at 1324' and 1194'; 8 sacks cement dumped at 1194'. Inspector noted bailer would not spud below 1113' and brought up sample of set cement. Location and hardness of cement plug at 1113' are approved.

### LONG BEACH FIELD

T 4 S., R 12 W., S B. B. and M.

Sec 19—Axis Petroleum Co well No "H O. B" 1. (Report No T 1-27639) Inspection of cementing operations. 4 $\frac{3}{8}$ " and 6 $\frac{5}{8}$ " perforated 2945'-2965' and tested wet; 4 $\frac{3}{8}$ " pulled from 2940'; 35 sacks cement pumped in through tubing hung at 3228' and 1000 lb. pressure applied. Inspector noted bailer would not spud below 2938' and brought up sample of set cement. Location and hardness of cement plug at 2938' are approved.

Bernal Oil Co well No 3. (Report No. P 1-27579) Proposal to drill approved provisionally. Conditions: Well is 35' N and 28' E of NE corner of Willow St and California Ave. Estimate oil sand at 4300'. Proposed to cement 11 $\frac{3}{8}$ " at 800'; cement 7" at 4300'; land 4 $\frac{3}{8}$ " at 4900'. Drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be side-tracked at any time during drilling of well is completely filled with cement (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl. per hr (4) Exact cementing depth for 7" is determined by coring starting not lower than 4200' (5) Enough cement is used to fill back of 7" to reach at least 1200' above shoe (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing (7) Division is notified to witness test of 11 $\frac{3}{8}$ " surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.

Dabney-Johnston Oil Corp. well No 12. (Report No P 1-27542) Proposal to alter casing approved. Conditions: Depth 7323', cement plug

- 7078'-7323'; 8½" cemented at 5240'; 5½" landed at 6944', perforated 5484'-6944', cemented through perforations at 5484'; 4" landed 5356'-7312', perforated 6994'-7312', cemented through perforations at 6994'. Proposed to perforate 4" 6944'-6988'.
- J. W. Dietzel well No "Gordon" 1. (Report No P 1-27582.) Proposal of G. L. Graham, Contractor, to abandon approved provisionally. Conditions: Depth 4905', cement plug 4905'-4572'; 15½" cemented at 765'; 8¼" cemented at 4020'; 6¼" cemented at 4265', perforated 4200'-4265', drilled through at 4187'; 4½" landed at 4905', perforated 4725'-4905', cemented through perforations at 4725', pulled from 3970'. Junk (old hole): whipstock 4182'-4195'; 6½" 4187'-4265', 4¾" 4230'-4600', total depth 4600'. Cement plug 4600'-4195'. Proposed to locate top of cement plug at 4572'; cap 4½" stub with 20' cement; shoot and pull 6¼" from as low as possible and cap stub with 20' cement; shoot and pull 8¼" from 745' and cap stub with 20' cement; cap at surface and abandon. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plugs at 4572' and on 4½", 6¼" and 8¼" stubs, and shooting of 6¼" and 8¼" casings.
- J. W. Dietzel well No. "Gordon" 1 (Report No. T 1-27655.) Inspection of cementing operations. Hole could not be cleaned out below 4578' due to cement in hole at that depth. Inspector noted bailer would not spud below 4578' and brought up sample of set cement. Location and hardness of cement plug at 4578' are approved.
- J. W. Dietzel well No "Gordon" 1. (Report No. T 1-27656.) Inspection of cementing operations. Wood plug driven in 4¾" stub at 3970' and 4 sacks cement dumped at 3970'. Inspector noted bailer would not spud below 3939' and brought up sample of set cement. Location and hardness of cement plug at 3939' are approved.
- W. O. Dye well No. "Dye" 3. (Report No. T 1-27684.) Inspection of mudding operations. During ¾ hr circulation test mud fluid was lost from pit at rate of 1 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 7" on cement bridge at 3915'.
- W. O. Dye well No. "Dye" 3 (Report No. T 1-27710.) Shut-off test approved. 7" casing cemented at 3912'. Inspector noted wall packer set at reported depth of 3890'; when tester valve opened for 30 min small amount of air issued from drill pipe during first few min, and fluid between drill pipe and 7" casing remained stationary; when pulled, drill pipe contained 0.2 bbl. of medium heavy mud above tester; fluid sample from bottom of drill pipe tasted fresh; sample from perforated nipple below tester was sand. Shut-off is approved.
- R. L. Goetz well No. "Goetz" 3. (Report No. T 1-27608.) Bailing test approved. 7" casing cemented at 4170'. Hole bailed to 3000' for test and stood 16½ hr. Fluid level rose at rate of 0.6 bbl. in 24 hr. Fluid sample from 4178' was very heavy mud which tasted fresh. Shut-off is approved.
- V. R. G. Wilbur well No. "Bergstrom" 4 (Report No. T 1-27667.) Bailing test approved. 8½" casing cemented at 3831'. Hole bailed to 2500' for test and stood 17 hr. Fluid found 10' below reported bailing depth. Fluid sample from 3838' was heavy mud which tasted fresh. Shut-off is approved.
- Woolner Oil Corp., Ltd., well No. "Signal Hill" 2. (Report No. P 1-27583.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 4732', plugged to 4690'; 8¼" cemented at 3490'; 6¾" cemented at 4139'; 4¾" landed at 4732', perforated 4120'-4732', cemented through perforations at 4120'; hole can not be cleaned out below 4160'. Proposed to plug with cement to 4120', notifying division to witness plug; continue cement plug to 4100'; perforate 6¼" and 4¾" in stages to try for commercial production. Decision: Proposal is approved provided that: (1) All cement plugs in perforated casing are placed under pressure if possible. (2) Each stage of perforations is plugged with cement before starting next stage if formations are wet or unproductive. (3) Division is notified to witness location and hardness of cement plug at 4120'.
- Woolner Oil Corp., Ltd., well No "Signal Hill" 2. (Report No. T 1-27709.) Inspection of cementing operations. Hole cleaned out to 4160' and 5 sacks cement dumped; water was run in hole while cementing. Inspector noted bailer would not spud below 4122' and brought up sample of set cement. Location and hardness of cement plug at 4122' are approved.
- Chester F. Yunker & Associates No 2 well No. 2. (Report No. T 1-27621.) Shut-off test approved. 7" casing cemented at 3867'. Inspector noted when tester valve opened for ¾ hr very small amount of air issued from drill pipe, and fluid between drill pipe and 7" casing remained stationary; when pulled, drill pipe contained 0.5 bbl. of slightly gas-cut heavy mud above tester; fluid sample from bottom of drill pipe tasted fresh. Shut-off is approved.
- Sec. 20—R. R. Bush Oil Co. well No "Fee" 4 (Report No. T 1-27610.) Inspection of operations for demonstrating that 14" casing is water-tight. Inspector noted mud fluid pumped into 14" casing and 550 lb. pressure applied for ¾ hr. without pressure loss; hole was open to about 560'. Casing test is approved.
- R. R. Bush Oil Co well No "Fee" 4. (Report No T 1-27712.) Inspection of mudding operations. During ¾ hr. circulation test mud fluid was lost from pit at rate of 1 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 3704'.
- Cordova Oil Co. Ltd well No 3 (Report No P 1-27528.) Proposal to alter casing approved provisionally. Conditions: Depth 3977'; 8½" cemented at 3674', bad 1900'-1925' and 3018'-3050'; 6½" liner 3622'-3977', perforated

3686'-3977'. Proposed to land and cement 6½" casing on 6½" liner at 3622', lead seal to be placed around top of present liner at 3622'. Decision: Proposal is approved provided division is notified to witness production test within 10 days after recompleting well.

Power Oil Co well No. "Temescal" 2. (Report No. T 1-27662.) Inspection of cementing operations of Emmons & Emmons, Contractors. 7 sacks cement dumped on wood plug driven into 6½" stub at 2500', top of cement at 2478'; 8½" and 10" cemented together and both cut and pulled from 225'. Inspector noted 20 sacks cement dumped on wood plug driven in 8½" at 225', and bailer would not spud below 202' and brought up sample of set cement. Location and hardness of cement plug at 202' are approved.

Willow Oil Co well No. "Poitevin" 1. (Report No. T 1-27638.) Inspection of operations for demonstrating that 13" casing is water-tight. Inspector noted mud fluid pumped in and 420 lb pressure applied for ½ hr. without pressure loss; hole was open to 600'. Casing test is approved.

Sec 28—Shell Oil Co well No. "Alamitos" 19. (Report No. T 1-27622.) Inspection of cementing operations. Hole cleaned out to 4799' and 35 sacks cement pumped in through tubing. Inspector noted bailer would not spud below 4610' and brought up sample of set cement. Location and hardness of cement plug at 4610' are approved.

Sec. 29—Allen Petroleum Co. well No. 1. (Report No. P 1-27613.) Proposal to drill approved provisionally. Conditions Well is 145° N. and 285° E. of center lines of 21st St. and Cherry Ave. Estimate oil sand at 4500'. Proposed to cement 12" at 700'; cement 7" at 4000'; land 500' of 4½" at unknown depth; drill with rotary tools. Decision. Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 3900'. (5) Enough cement is used to fill back of 7" to reach at least 1000' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 12" surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.

Boswell Petroleum Co. well No. "Crest" 1. (Report No. T 1-27682.) Inspection of operations for demonstrating that 11½" surface casing is water-tight. Inspector noted mud fluid pumped into 11½" and 500 lb pressure applied for ¼ hr. without pressure loss; hole was open to 694'. Casing test is approved.

Estate of Tom J. Cannon well No. 1. (Report No. P 1-27547.) Proposal to redrill water string and deepen approved provisionally. Conditions: Depth 3387'; 8½" cemented at 2935'; 400' of 6½" liner cemented at 3150', with 2750' of 6½" casing to surface; 500' or 535' of 4½" landed at 3387', including 200' perforated, well wet. Proposed to clean out to 3387'; plug with cement 3387'-3165' under full head of water, having division witness plug at 3165'; cap 4½" stub with 20' cement; pull 6½" casing from 2750'; cement whipstock at 2750' and sidetrack old hole; cement 6½" at about 4600'; notify division to witness mudding test before cementing 6½" and bailing test of same after drilling out; land 4½" liner at about 4650'. Decision: Proposal is approved provided that: (1) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (2) Exact cementing depth for 6½" is determined by coring starting not lower than 4200'. (3) Enough cement is used to fill back of 6½" to reach at least 800' above shoe. (4) Column of mud fluid back of 6½" is maintained to surface for at least 30 days after cementing casing.

Hernul Oil Co. well No. "Flower State" 1. (Report No. T 1-27609.) Inspection of mudding operations. During ½ hr. circulation test mud fluid was lost from pit at rate of 1 bbl. per hr., and cement bridge at reported depth of 4150' held part of weight of drill pipe. Mudding operations are approved. Oral approval is hereby confirmed to cement 6½" at 4150'.

Hernul Oil Co. well No. "Flower State" 1. (Report No. P 1-27540.) Supplementary proposal to redrill water string approved provisionally. Conditions: Depth 4314', cement plug 3470'-3410', whipstock set in cement 3410'-3400', cement bridge 4170'-4150'; 8½" cemented at 4085', drilled through at 3401'; 6½" froze at 3785', parted at 1127', tied together with die collar. Proposed to drill out cement plug at 4150'; drill to 4300'; run 4½" liner 4800'-3685', perforated 4800'-4400' with baffle plate at 4150'; cement 4½" and 6½" together, cementing through 4½" at 4150'. Decision: Proposal is approved provided that: (1) Formations left back of 4½" are mudded by open circulation until loss is not more than 1 bbl. per hr. (2) Division is notified to witness final mudding operations before cementing 4½", casing test after drilling out to about 4100' to determine effectiveness of shut-off between 6½" and 4½", and production test within 10 days after placing on production.

Hernul Oil Co. well No. "Flower State" 1. (Report No. T 1-27643.) Inspection of operations for demonstrating that 6½" casing is water-tight. Inspector noted top of fluid located at 1500'; no fluid entered well while standing 1½ hr. for test. Casing test is approved.

Hernul Oil Co. well No. "Flower State" 1. (Report No. T 1-27677.) Inspection of mudding operations. During ½ hr. circulation test mud fluid was lost from pit at rate of 1 bbl. per hr. Mudding operations are approved.

- Oral approval is hereby confirmed to land 4 $\frac{3}{4}$ " liner at 4743' and cement through perforations at 4150'.
- Alfred D. Mitchell well No. 6. (Report No. P 1-27515.) Supplementary proposal to plug and alter casing approved provisionally. Conditions: Depth 6730', cement plugs 6623'-6320' and 6130'-6056'; 7" cemented at 6566'; perforated 5450'-5525', 6086'-6175' and 6348'-6566'; perforated 4 $\frac{3}{4}$ " landed 6520'-6730'; well tested wet. Proposed to fill perforations with cement; perforate in stages, testing each new location; if wet, fill with cement and perforate above. Decision: Proposal is approved provided that (1) All cement plugs in perforated casing are placed under 500 lb. minimum pressure (2) Division is notified to witness location and hardness of cement plug at 5430'.
- Alfred D. Mitchell well No. 6. (Report No. T 1-27663.) Inspection of cementing operations. 7" perforated 5450'-5525'; well tested wet; wood plug driven in 7" to 5527' and 20 sacks cement dumped; 2 sacks cement dumped at 5434'; hole kept full of water. Inspector noted bailer would not spud below 5428' and brought up sample of set cement. Location and hardness of cement plug at 5428' are approved.
- Shell Oil Co. well No. "Alamitos" 12. (Report No. T 1-27602.) Inspection of cementing operations. Hole cleaned out to 4363' and 20 sacks cement pumped in through tubing; top of cement found at 4064' and cleaned out to 4100'. Inspector noted bailer would not spud below 4100' and brought up sample of set cement. Location and hardness of cement plug at 4100' are approved.
- Shell Oil Co. well No. "Alamitos" 16. (Report No. T 1-27661.) Inspection of cementing operations. Hole cleaned out to 4528' and 27 sacks cement pumped in through tubing; 4 sacks cement dumped at 4392'; 15 sacks cement pumped in through drill pipe at 4369'; no pressure applied because formations took fluid. Inspector noted bailer would not spud below 4321' and brought up sample of set cement. Location and hardness of cement plug at 4321' are approved.
- Shell Oil Co. well No. "Wilbur Community" 5. (Report No. T 1-27672.) Inspection of cementing operations. Hole cleaned out to 5157' and 40 sacks cement pumped in through tubing; no pressure applied because formations took fluid; top of cement found at 4925', cleaned out to 4970'. Inspector noted bailer would not spud below 4972' and brought up sample of set cement. Location and hardness of cement plug at 4972' are approved.
- Southern California Drilling Co. well No. "Miller" 3. (Report No. P 1-27513.) Proposal to drill approved provisionally. Conditions. Well is 438' N. and 16 $\frac{3}{4}$ ' W. of NW. corner of Hill St and Cherry Ave. Estimate oil sand at 4600'. Proposed to cement 13" at 650'; cement 7" at 4600'; land 5" at 4650'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu. ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 7" to reach at least 1200' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 13" surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.
- Southern California Drilling Co. well No. "Miller" 3. (Report No. T 1-27678.) Inspection of operations for demonstrating that 12 $\frac{3}{4}$ " surface casing is water-tight. Inspector noted mud fluid pumped into 12 $\frac{3}{4}$ " and 450 lb. pressure applied; after  $\frac{1}{4}$  hr. pressure was 425 lb.; hole was open to 600'. Casing test is approved.
- Twentieth Century Oil Co. well No. "Prosperity" 1. (Report No. P 1-27580.) Proposal to drill approved provisionally. Conditions. Well is 152' S of 21st St. and 91' W. from Temple St. Estimate oil sand at 4600'. Proposed to cement 13 $\frac{3}{4}$ " at 700'; cement 8 $\frac{3}{4}$ " at 4600'; land 6 $\frac{3}{4}$ " at 5200'; drill with rotary tools. Decision: Proposal is approved provided that (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{3}{4}$ " are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Exact cementing depth for 8 $\frac{3}{4}$ " is determined by coring starting not lower than 4000'. (5) Enough cement is used to fill back of 8 $\frac{3}{4}$ " to reach at least 1200' above shoe. (6) Column of mud fluid back of 8 $\frac{3}{4}$ " is maintained to surface for at least 30 days after cementing this casing. (7) Division is notified to witness test of 13 $\frac{3}{4}$ " surface casing, final mudding operations before cementing 8 $\frac{3}{4}$ ", and bailing test of 8 $\frac{3}{4}$ " shut-off.
- Sec 30—Robert Bowles Oil Co. well No 27. (Report No T 1-27596.) Inspection of cementing operations. Hole cleaned out to bottom, which was located at 5551' and not 5581' as previously reported; top of 4 $\frac{3}{4}$ " liner found at 5121'; 27 sacks cement dumped at 5551'; hole kept full of water. Inspector noted bailer would not spud below 5220' and brought up

- sample of set cement. Location and hardness of cement plug at 5220' are approved.
- Bremmor Petroleum Corp. well No "Roberts" 1. (Report No. T 1-27613.) Inspection of operations for demonstrating that 12 $\frac{3}{4}$ " casing is water-tight. Inspector noted mud fluid pumped into 12 $\frac{3}{4}$ " and 400 lb pressure applied for  $\frac{3}{4}$  hr. without pressure loss, hole was open to 820'. Casing test is approved.
- Chief Oil Co. well No "Chief" 2 (Report No. T 1-27612.) Inspection of operations for demonstrating that 12" casing is water-tight. Inspector noted mud fluid pumped in and 490 lb. pressure applied for  $\frac{3}{4}$  hr without pressure loss; hole was open to 790'. Casing test is approved.
- J H. Cochran well No. 9. (Report No T 1-27636.) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of 5 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 6 $\frac{5}{8}$ " on cement bridge at 4080'.
- J. H. Cochran well No. 9. (Report No T 1-27681.) Bailing test. Decision deferred. 6 $\frac{5}{8}$ " casing cemented at 4075'. Hole bailed to 2600' for test and stood 12 hr. Fluid level rose at rate of 28.4 bbl in 24 hr. Gas issued from 6 $\frac{5}{8}$ " casing. Fluid samples were: 1740', only gas-cut frothy mud; 4078', oil and very gas-cut frothy mud which tasted fresh and tested 114 gr. salt per gal. Test indicates 6 $\frac{5}{8}$ " shut-off is probably effective but is not conclusive due to large fluid rise. Decision is deferred pending receipt of production data after completing well.
- Cochran & Taylor Oil Co. well No "Cochran" 10 (Report No. T 1-27619 ) Inspection of operations for demonstrating that 10 $\frac{3}{4}$ " casing is water-tight. Inspector noted mud fluid pumped into 10 $\frac{3}{4}$ " casing and 550 lb. pressure applied for  $\frac{3}{4}$  hr. without pressure loss, hole was open to 830' Casing test is approved.
- Commercial Drilling Co., Inc., well No. "Commercial" 2. (Report No. T 1-27659 ) Inspection of mudding operations. During  $\frac{3}{4}$  hr circulation test mud fluid was lost from pit at rate of 1 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to land 6 $\frac{5}{8}$ " liner at 5633' and cement through perforations at 5170'
- Commercial Drilling Co., Inc., well No. "Commercial" 2. (Report No. T 1-27660.) Inspection of operations for demonstrating that water does not enter well between 9" and 6 $\frac{5}{8}$ " casings. Inspector noted no fluid entered well while standing 8 hr. for test; hole was open to 5108'. Casing test is approved.
- Commercial Producing Corp. well No. "Commercial" 3. (Report No. P 1-27603.) Proposal to drill approved provisionally. Conditions: Well is 486' S. and 67' E. of SE. corner of California Ave. and Willow St. Estimate oil sand at 4200'. Proposed to cement 14" at 650'; cement 8 $\frac{5}{8}$ " at 4200'; land 6 $\frac{5}{8}$ " at 5650' and cement through perforations at about 5175'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{5}{8}$ " and 6 $\frac{5}{8}$ " are mudded by open circulation until loss is not more than 5 and 2 bbl. per hr., respectively. (4) Exact cementing depth for 8 $\frac{5}{8}$ " and 6 $\frac{5}{8}$ " is determined by coring starting not lower than 4100' and 5000', respectively. (5) Enough cement is used to fill back of 8 $\frac{5}{8}$ " and 6 $\frac{5}{8}$ " to reach at least 700' above cementing point in each case (6) Column of mud fluid back of 8 $\frac{5}{8}$ " and 6 $\frac{5}{8}$ " is maintained to surface for at least 30 days after cementing these casings. (7) Division is notified to witness test of 14" surface casing, final mudding operations before cementing 8 $\frac{5}{8}$ " and 6 $\frac{5}{8}$ ", bailing test of 8 $\frac{5}{8}$ " shut-off, and production test within 30 days after placing on production.
- Congo Oil Co., Ltd, well No. "Congo" 1. (Report No. T 1-27625.) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of 4 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 7" at 4000'
- Congo Oil Co., Ltd., well No. "Congo" 1 (Report No. T 1-27680.) Bailing test approved. 7" casing cemented at 3998'. Hole bailed to 3000' for test and stood 14 $\frac{1}{2}$  hr. No fluid entered well. Fluid sample from 3998' was heavy mud fluid which tasted fresh.
- Dabney-Johnston Oil Corp. well No. 91. (Report No. P 1-27514 ) Supplementary proposal to plug and alter casing approved. Conditions: 6 $\frac{5}{8}$ " perforated 4502'-4480'; well wet. Proposed to fill above perforations with cement; re-perforate by stages and try for production
- Deco Oil Co well No. "Deco" 2 (Report No. P 1-27593.) Supplementary proposal to drill approved provisionally. Conditions: Depth 4715'; 6 $\frac{5}{8}$ " cemented at 4298'; 456' of 4 $\frac{3}{4}$ " inserted liner landed at 4715' including 401' perforated. Proposed to place cement bridge in 6 $\frac{5}{8}$ " 4249'-4259'; perforate 6 $\frac{5}{8}$ " 4155'-4244' and make production test. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4249', and production test after recompleting well.
- Deco Oil Co. well No "Deco" 2. (Report No P 1-27604 ) Supplementary proposal to drill approved provisionally. Proposed to disregard previous notice to plug and perforate; cut and pull all 4 $\frac{3}{4}$ " liner possible, plugging with cement any liner left in hole; deepen to about 5600'; land 4 $\frac{3}{4}$ "

combination oil string on bottom and cement through perforations at about 5100'. Decision: Proposal is approved provided that: (1) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (2) Formations left back of 4 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 2 bbl. per hr. (3) Exact cementing depth for 4 $\frac{1}{2}$ " is determined by coring starting not lower than 5000'. (4) Enough cement is used to fill back of 4 $\frac{1}{2}$ " to reach at least 700' above cementing point. (5) Division is notified to witness final mudding operations before cementing 4 $\frac{1}{2}$ ", and production test within 10 days after placing on production.

- H. C. Domengeaux well No. "Jackson" 2. (Report No. P 1-27589.) Proposal to drill approved provisionally. Conditions: Well is 140' E. and 20' S. from center lines of Walnut Ave. and 23d St. Estimate oil sand at 4400'. Proposed to cement 12 $\frac{3}{4}$ " at 650'; cement 7" at 4400'; land 4 $\frac{1}{2}$ " at 4450'; drill with rotary tools Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 7" to reach at least 1200' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing this casing. (7) Division is notified to witness test of 12 $\frac{3}{4}$ " surface casing, final mudding operations before cementing 7", and bailing test of 7" shut-off.
- H. C. Domengeaux well No. "Jackson" 2. (Report No. T 1-27708.) Inspection of operations for demonstrating that 12 $\frac{3}{4}$ " casing is water-tight. Inspector noted mud fluid pumped in and 450 lb. pressure applied; after  $\frac{1}{4}$  hr. pressure was 300 lb.; hole was open to 749'. Casing test is approved.
- General Petroleum Corp. well No. "Boyle-Perry" 7. (Report No. P 1-27512.) Proposal to plug and alter casing approved provisionally. Conditions: Depth 6500', plugged to 3048'; 10' cemented at 3086', perforated 2850'-3070'; 8 $\frac{1}{2}$ " cemented at 3995', perforated 2850'-3070', 3100'-3211', 3300'-3480', 3500'-3750' and 3760'-3965', drilled through at 3965'; 6 $\frac{3}{8}$ " froze and cemented at 4829', perforated 3300'-3480', 3500'-3750', 3760'-4000' and 4040'-4800', cut and pulled from 3277'; 4 $\frac{3}{8}$ " landed at 6487', screen 5841'-6487', perforated 4040'-4800', 5120'-5400' and 5400'-5475', cut and pulled from 4035'; 236' of 5 $\frac{1}{2}$ " cemented at 3046', all perforated, top 18" is 7 $\frac{1}{8}$ " adapter, this liner is set inside 8 $\frac{1}{2}$ " casing. Proposed to plug 3046'-2900'; jar out 5 $\frac{1}{2}$ " liner to about 2900'; cut and pull 8 $\frac{1}{2}$ " from about 2900'; plug to 2820' and bail for test of 10" casing; if dry, perforate 2790'-2800' and make bailing test; if free of water, perforate 10" 2750'-2790' and test for production. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 2820'.
- Geneva Marie Co. well No. 1. (Report No. T 1-27625.) Inspection of operations for demonstrating that 12 $\frac{3}{4}$ " casing is water-tight. Inspector noted mud fluid pumped into 12 $\frac{3}{4}$ " casing and 450 lb. pressure applied for  $\frac{1}{4}$  hr. without pressure loss; hole was open to 850'. Casing test is approved.
- Good-Rich Oil Corp, Ltd, well No. 1. (Report No. P 1-27588.) Proposal to drill approved provisionally Conditions: Well is 204' N. and 197' W. of NW. corner of Hill St. and Rose Ave. Estimate oil sand at 4500'. Proposed to cement 12 $\frac{3}{4}$ " at 650'; cement 7" at 4500'; land 5" at 4550'; drill with rotary tools Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 4200'. (5) Enough cement is used to fill back of 7" to reach at least 1000' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 12 $\frac{3}{4}$ " surface casing, final mudding operations before cementing 7" and bailing test of 7" shut-off.
- Good-Rich Oil Corp., Ltd., well No 1. (Report No T 1-27714 ) Inspection of operations for demonstrating that 13 $\frac{3}{8}$ " surface casing is water-tight. Inspector noted mud fluid pumped into 13 $\frac{3}{8}$ " and 600 lb pressure applied for  $\frac{1}{4}$  hr. without pressure loss; hole was open to 870' Casing test is approved.
- Hil-Mar Drilling Co, Inc., well No. 2. (Report No T 1-27699 ) Inspection of mudding operations During  $\frac{1}{4}$  hr. circulation test mud fluid was lost from pit at rate of 2 bbl. per hr. Mudding operations are approved Oral approval is hereby confirmed to cement 6 $\frac{3}{8}$ " at 4598'
- Huntington Investment Corp. well No. 2 (Report No T 1-27626 ) Inspection of mudding operations. During  $\frac{1}{4}$  hr circulation test mud fluid was lost from pit at rate of 3 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 7" at 4665'

- P. A. Kingsland well No. "P. A. Kingsland" 8. (Report No. T 1-27673) Inspection of mudding operations. During  $\frac{3}{4}$  hr circulation test mud fluid was lost from pit at rate of 2 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 7" at 4208'.
- Kiowa Petroleum Corp well No. "Kiowa" 1. (Report No P 1-27526.) Proposal to drill approved provisionally. Conditions: Well is 475' N and 110' E. of NE corner of Gaviota Ave and Hill St. Estimate oil sand at 4450'. Proposed to cement 12 $\frac{3}{4}$ " at 650', cement 7" at 4450'; land 5" at 4500'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 7" to reach at least 1200' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 12 $\frac{3}{4}$ " casing, final mudding operations before cementing 7", and balling test of 7" shut-off.
- Madison Oil Co well No. "L B" 1. (Report No. T 1-27620.) Shut-off test approved 8 $\frac{3}{8}$ " casing cemented at 4368'. Inspector noted when tester valve open for 30 min very small but steady flow of air issued from drill pipe, and fluid between drill pipe and 8 $\frac{3}{8}$ " casing remained stationary; when pulled, drill pipe contained 0.5 bbl of medium heavy slightly gas-cut mud above tester; fluid sample from bottom of drill pipe tasted fresh. Shut-off is approved.
- Mastadon Oil Corp well No. "Mastadon" 2. (Report No P 1-27581.) Proposal to drill approved provisionally. Conditions: Well is 180' N and 27' W of NW corner of Rose Ave and Hill St. Estimate oil sand at 4500'. Proposed to cement 15" at 650'; cement 8 $\frac{3}{8}$ " at 4500'; land 6 $\frac{3}{8}$ " at 4550'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 8 $\frac{3}{8}$ " are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Exact cementing depth for 8 $\frac{3}{8}$ " is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 8 $\frac{3}{8}$ " to reach at least 1200' above shoe. (6) Column of mud fluid back of 8 $\frac{3}{8}$ " is maintained to surface for at least 30 days after cementing this casing. (7) Division is notified to witness test of 15" surface casing, final mudding operations before cementing 8 $\frac{3}{8}$ ", and balling test of 8 $\frac{3}{8}$ " shut-off.
- Medal Oil Co well No 1. (Report No P 1-27530) Supplementary proposal to drill approved provisionally. Conditions: Bottom of hole cemented with 18 sacks cement; pipe perforated 4360'-4390', tested, and cemented off with plug at 4450'; pipe perforated 4190'-4260', tested, and perforations cemented off; plug set at 3800' and 6 sacks cement dumped, perforated 3700'-3760'. Proposed to make production test. Decision: Proposal is approved provided division is notified to witness production test within 10 days after completing well.
- Milpet Corp. well No "Campbell" 8. (Report No P 1-27619.) Proposal to drill approved provisionally. Conditions: Well is 429' N and 170' E. of NE corner of Hill St. and Gaviota Ave, Colony Tract. Estimate oil sand at 4450'. Proposed to cement 10 $\frac{3}{4}$ " at 650'; cement 6 $\frac{3}{8}$ " at 4450'; land 4 $\frac{1}{2}$ " at 4500'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6 $\frac{3}{8}$ " are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Exact cementing depth for 6 $\frac{3}{8}$ " is determined by coring starting not lower than 4100'. (5) Enough cement is used to fill back of 6 $\frac{3}{8}$ " to reach at least 1200' above shoe. (6) Column of mud fluid back of 6 $\frac{3}{8}$ " is maintained to surface for at least 30 days after cementing casing. (7) Division is notified to witness test of 10 $\frac{3}{4}$ " surface casing, final mudding operations before cementing 6 $\frac{3}{8}$ ", and balling test of 6 $\frac{3}{8}$ " shut-off.
- Morton & Elder well No. "Pauley" 3. (Report No P 1-27618.) Proposal to redrill water string and deepen approved provisionally. Conditions: Depth 3396', plugged with 4 sacks cement at 3396'; 8 $\frac{3}{4}$ " cemented at 3012'; 6 $\frac{1}{2}$ " liner 2975'-3396', perforated 3032'-3396'; casing probably collapsed at 2378'. Proposed to plug with cement under pressure 2378'-2358'; cut and pull 8 $\frac{3}{4}$ " from as far below 12 $\frac{3}{4}$ " shoe as possible, filling remainder of 8 $\frac{3}{4}$ " with heavy rotary mud and placing 20' cement plug in and around 8 $\frac{3}{4}$ " stub; redrill, cementing 8 $\frac{3}{8}$ " and completing well at depth to be determined by cores or other data. Decision: Proposal is approved provided that: (1) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (2) Exact cementing depth for 8 $\frac{3}{8}$ " is determined by coring, and hole is not drilled below 3200' before cementing this casing without consulting division. (3) Supplementary notice is filed before cementing 8 $\frac{3}{8}$ " (additional requirements may be

outlined at that time). (4) Division is notified to witness cementing operations in plugging 2378'-2358' and placing 20' cement plug on 8½" stub.

San Andres Oil Co., Inc. well No. 1 (Report No P 1-27527) Proposal to drill approved provisionally. Conditions: Well is 415' S and 15' W of SW. corner of Willow St. and Lemon Ave, Burnett Villa Tract. Estimate oil sand at 4100'. Proposed to cement 12" at 800', cement 7" at 4100'; land 4½" at 4850'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu. ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 5 bbl per hr. (4) Exact cementing depth for 7" is determined by coring starting not lower than 4050'. (5) Enough cement is used to fill back of 7" to reach at least 1200' above shoe. (6) Column of mud fluid back of 7" is maintained to surface for at least 30 days after cementing casing (7) Division is notified to witness test of 12" casing, final mudding operations before cementing 7", and bailing test of 7" shut-off

Sentinel Oil Co. well No "Sentinel" 1 (Report No T 1-27637) Inspection of operations for demonstrating that 12" casing is water-tight. Inspector noted mud fluid pumped into 12" casing and 430 lb pressure applied for ¼ hr. without pressure loss; hole was open to 800'. Casing test is approved.

The Texas Co. well No "Shilling" 3 (Report No. T 1-27679.) Inspection of mudding operations. During ½ hr circulation test mud fluid was lost from pit at rate of 2 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 6½" at 4025'

Union Oil Co. well No "Long Beach Community" 25 (Report No T 1-27611) Inspection of operations for demonstrating that 13½" casing is water-tight. Inspector noted mud fluid pumped in and 410 lb pressure applied for ¼ hr. without pressure loss. Casing test is approved

Union Oil Co well No "Long Beach Community" 25 (Report No T 1-27713.) Inspection of mudding operations. During ½ hr circulation test mud fluid was lost from pit at rate of 1 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 3740'.

Westport Oil Co. well No. 1. (Report No P 1-27529) Proposal to plug and alter casing approved. Conditions: Depth 5186', plugged with cement to 5118'; 7" cement at 4336'; 5" liner landed at 5186'-4262', including 106' perforated, cemented through perforations at 5080'. Proposed to clean out to plug at 5118' and notify division to witness top of plug and effectiveness of plugging; perforate 5" 4878'-4893', 4910'-4935' and 4955'-5010'.

Westport Oil Co well No 1. (Report No T 1-27658) Inspection of cementing operations. Inspector noted bailer would not spud below 5118' and brought up sample of set cement. Location and hardness of cement plug at 5118' are approved

Sec 33—The Hancock Oil Co well No. "Signal" 27 (Report No. P 1-27543) Proposal to alter casing approved. Conditions: Depth 6932', 8½" cemented at 5965'; 6½" landed at 6982', cemented through perforations at 6742'. Proposed to perforate in stages 6742' to 8½" shoe at 5965', first stage to be 6742'-6721'; if water encountered plug lower portion of hole with cement and notify division to witness depth and hardness of same before continuing perforating.

#### T. 4 S., R. 13 W., S. B. B. and M.

Sec 13—Dabney-Johnston Oil Corp. well No. 71. (Report No P 1-27584) Proposal to abandon approved provisionally. Conditions. Depth 4806', 13" cemented at 570', 6½" cemented at 4244'; 4½" liner cemented at 4720', top at 4022'; 4½" casing landed at 4022' with lead seal; 3" liner 4684'-4806', perforated 4724'-4806'. Junk: 2½" tubing 3883'-4684'; sidetracked 4½" 4300'-4491' Proposed to cement top of 2½" tubing at 3883', having division witness cap; cut and pull 4½" casing and cap stub with cement, cut and pull 6½", cap stub with cement, and have division witness cap. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plugs on top junk tubing and on 6½" stub

John F. Gallagher well No. "Gallagher" 1 (Report No P 1-27516) Proposal to alter casing approved. Conditions: Depth about 2805'; 13" S P cemented at 596'; 6½" cemented at 4321', drilled through at 2805'; well sanded up. Proposed to clean out to 3110'; shoot 3110'-3085'; put on production.

The Hancock Oil Co well No. "Signal" 21. (Report No T 1-27707) Inspection of mudding operations. During ½ hr circulation test mud fluid was lost from pit at rate of 0.5 bbl. per hr; cement bridge at reported depth of 5615' held part of weight of drill pipe. Mudding operations are approved. Oral approval is hereby confirmed to cement 6½" liner at 5615'

Pugh-Miller Drilling Co. well No. "Marine Trust & Savings Bank" 1 (Report No P 1-27518) Proposal of C. R. Owens, Contractor, to abandon approved provisionally. Conditions: Depth 4414', 6½" cemented at 4273'; 4½" perforated liner 4235'-4414'; 2½" junk tubing, top at about 3500'. Proposed to locate top of junk tubing and cap with 20' cement plug; shoot and pull 6½" from 560' or above and cap stub with 20' cement;



cap at surface and abandon. Decision: Proposal is approved provided division is notified to witness cleanout depth, placing of all cement plugs, shooting of 6½", and location and hardness of cement plugs on 2½" tubing and 6½" stub.

- Sec. 24—Bachmann Petroleum Corp. well No. "Irwin" 1. (Report No. P 1-27521) Proposal to plug and alter casing approved provisionally. Conditions. Depth 6677'; 8½" cemented at 5662'; 5¾" landed at 6063', perforated 5808'-6063', cemented through perforations at 5808'; 3" oil string, bottom 6677', cemented shoe 6368', perforated 6378'-6667'. Proposed to cut 3" oil string off at 6300'; fill bottom of hole with cement to 6280'; perforate 5¾" 6200'-6270'; try for production, if unsuccessful cut and pull 5¾" at 5662' and fill hole with cement to 5652'; perforate 8½" 5400'-5600' and try for production, if unsuccessful file new proposal to either perforate higher in 8½" or abandon hole. Decision: Proposal is approved provided that (1) Hole is first plugged with cement 6677' to above 6368' under 500 lb. pressure if possible. (2) All casing stubs are capped with at least 20' cement. (3) If well wet after perforating, perforations are plugged with cement before making another stage of perforations (4) Division is notified to witness location and hardness of cement plug at about 6348'.
- C. & F. Oil Co. well No. "Rainbow" 1. (Report No. T 1-27683.) Inspection of cementing operations. Hole cleaned out to 7013' and 7½ sacks cement dumped. Inspector noted bailer would not spud below 6915' and brought up sample of set cement. Location and hardness of cement plug at 6915' are approved.

## LOS ANGELES CITY FIELD

### (Figueroa Street Extension)

- Nate Bray well No. 1. (Report No. P 1-27548) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well in accordance with requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite. (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1); (b) Shooting at 400' and cementing operations as per item (2); (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 2. (Report No. P 1-27549) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite. (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as outlined in item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 3. (Report No. P 1-27550.) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite. (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as outlined in item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 4. (Report No. P 1-27551) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite. (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as outlined in item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.

- Nate Bray well No. 5. (Report No. P 1-27552.) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 6. (Report No. P 1-27553.) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 7. (Report No. P 1-27554.) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 8. (Report No. P 1-27555) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite. (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 9. (Report No. P 1-27556.) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite. (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 10. (Report No. P 1-27557.) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 11. (Report No. P 1-27558) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to

- abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite. (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 12. (Report No. P 1-27559.) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite. (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 13. (Report No. P 1-27560.) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite. (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 14. (Report No. P 1-27561.) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite. (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.
- Nate Bray well No. 15. (Report No. P 1-27562.) Proposal to abandon approved provisionally. Conditions: No records available. Proposed to abandon well as per requirements of division and Los Angeles city ordinances. Decision: Proposal is approved provided that: (1) Hole is bridged at 400' and outer string of casing shot at that depth with 10 sticks of 40% dynamite. (2) Shot cavity is cleaned out to top of bridge and slurry of 10 sacks cement and 5 sacks sand dumped in from surface. (3) After completing demonstration required in item (c) below, hole is filled with dirt from cement plug to surface. (4) All possible casing is removed from well. (5) Division is notified to witness: (a) Clean-out depth to top of bridge before shooting as per item (1). (b) Shooting at 400' and cementing operations as per item (2). (c) Demonstration that, after standing one week or longer, cement plug above 400' satisfactorily excludes oil, gas or water from hole.

### MONTEBELLO FIELD

T. 2 S., R. 11 W., S. B. B. and M.

- Sec. 5—Universal Consolidated Oil Co well No. N-2. (Report No. T 1-27633.) Inspection of operations for demonstration that 18½" casing is water-tight. Prospect well.
- Sec. 6—Standard Oil Co well No. "Baldwin" 75. (Report No. P 1-27601.) Supplementary proposal to drill approved. Conditions: Depth 8321', plug 3500'-3700'; 1½" cemented at 3195'; 339' of 4½" liner landed at 3495', perforated 3192'-3495'; water witch showed water entering 3485'-3490' and 3335'-3360'. Proposed to pull all 4½" liner; clean out to 3500' and scrape walls of hole; plug hole with cement 3500'-3450', notifying division to witness plug at 3450' take weight of drill pipe; reland 4½" at 3450' and make production test; if production not O. K., file supplementary proposal covering further work.

Standard Oil Co. well No. "Baldwin" 75. (Report No. T 1-27689) Inspection of cementing operations. Hole cleaned out to 3500'; 80 sacks cement pumped in through drill pipe and tubing hung at 3498'; top of cement at 3411', cleaned out to 3450'. Inspector noted plug at reported depth of 3450' held weight of drill pipe. Location and hardness of cement plug at 3450' are approved.

The Texas Co. well No. "Barry" 4. (Report No. T 1-27648.) Production test approved. 5" casing cemented at 6980'. During this production test well produced at reported gauged rate of 85 bbl. of fluid per day. Flow line sample tested 38.7 A. P. I. gravity and cut 0.1% water. Shut-off is approved.

### PLAYA DEL REY FIELD

T. 2 S., R. 15 W., S. B. B. and M.

Sec. 21—A. T. Jergins Trust well No. "San Vicente" 1. (Report No. P 1-27517.) Proposal to abandon approved provisionally. Conditions: Depth 4540'; 14" cemented at 660'; 8 $\frac{1}{2}$ " cemented at 3678'; 948' of 6 $\frac{1}{2}$ " liner landed at 4540', including 838' perforated; hole clean, no junk. Proposed to fill 6 $\frac{1}{2}$ " liner 4540'-3570' with cement; leave 8 $\frac{1}{2}$ " pipe in hole. Decision: Proposal is approved provided that: (1) Column of fluid in hole is maintained as high as possible while placing cement plug 4540'-3570' to apply pressure. (2) Division is notified to witness location and hardness of cement plug at 3570'.

Sec. 27—Big Ben Oil Co. well No. "Big Ben" 1. (Report No. T 1-27617) Inspection of operations for demonstrating that 11 $\frac{3}{4}$ " casing is water-tight. Inspector noted 360 lb. pressure applied on 11 $\frac{3}{4}$ " casing for  $\frac{1}{4}$  hr. without loss; top of cement inside 11 $\frac{3}{4}$ " located at 643' by drill pipe measurement. Casing test is approved.

D. D. Dunlap Oil Co. well No. "Del Rey" 1. (Report No. P 1-27596.) Proposal to drill approved provisionally. Conditions: Well is 1229' N. and 1481' W. of SE. section corner. Estimate oil sand at 6350'. Proposed to cement 11 $\frac{3}{4}$ " at 700'; cement 6 $\frac{1}{2}$ " at 6350'; land 4 $\frac{1}{2}$ " at 6500'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 6 $\frac{1}{2}$ " is determined by coring starting not lower than 6325'. (5) Column of mud fluid back of 6 $\frac{1}{2}$ " is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness test of 11 $\frac{3}{4}$ " casing, final mudding operations before cementing 6 $\frac{1}{2}$ ", and bailing test of 6 $\frac{1}{2}$ " shut-off.

Pacific Drilling Corp. well No. "Del Rey" 1. (Report No. P 1-27606) Proposal to drill approved provisionally. Conditions: Well is about 1095' W. and 167' N. from SE. section corner. Estimate oil sand at 6250'. Proposed to land 12 $\frac{3}{4}$ " at 750'; cement 6 $\frac{1}{2}$ " at 6250'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb per cu. ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drilling pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 6 $\frac{1}{2}$ " is determined by coring starting not lower than 6250'. (5) Column of mud fluid back of 6 $\frac{1}{2}$ " is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness test of 12 $\frac{3}{4}$ " casing, final mudding operations before cementing 6 $\frac{1}{2}$ ", and bailing test of 6 $\frac{1}{2}$ " shut-off.

Union Oil Co. well No. "King Vidor" 6. (Report No. P 1-27587.) Proposal to drill approved provisionally. Conditions: Well is 1200' Southerly and 3160' Easterly from NW. corner of Vidor Lease. Estimate oil sand at 5900'. Proposed to cement 11 $\frac{3}{4}$ " at 750'; cement 6 $\frac{1}{2}$ " at 5900'; land 200' of 4 $\frac{1}{2}$ " at 6050'; drill with rotary tools. Decision: Proposal is approved provided that: (1) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times (2) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (3) Formations left back of 6 $\frac{1}{2}$ " are mudded by open circulation until loss is not more than 5 bbl. per hr. (4) Exact cementing depth for 6 $\frac{1}{2}$ " is determined by coring starting not lower than 5900'. (5) Column of mud fluid back of 6 $\frac{1}{2}$ " is maintained to surface for at least 30 days after cementing casing. (6) Division is notified to witness 11 $\frac{3}{4}$ " casing test, final mudding operations before cementing 6 $\frac{1}{2}$ ", and bailing test of 6 $\frac{1}{2}$ " shut-off. Note: Attention is directed to fact that this notice should have been filed before commencement of drilling operations.

Union Oil Co. well No. "King Vidor" 6. (Report No. T 1-27664.) Inspection of operations for demonstrating that 11 $\frac{3}{4}$ " casing is water-tight.

Inspector noted 500 lb. pressure applied inside 11½" casing for 10 min. without loss. Casing test is approved.

- Sec. 28—A. W. Lindberg and F. B. Donnelly well No. 2. (Report No. T 1-27598.) Inspection of pressure mudding operations. Inspector noted 400 lb. pressure applied for ¼ hr. without loss, bailer would not spud below 2987' and brought up sample of heavy mud. Pressure mudding operations are approved.
- A. W. Lindberg and F. B. Donnelly well No. 2. (Report No. T 1-27599.) Inspection of cementing operations. Inspector noted 2 sacks cement dumped at 2987'; 9 sacks cement dumped at 2983'; bailer would not spud below 2967' and brought up sample of set cement. Location and hardness of cement plug at 2967' are approved.
- A. W. Lindberg and F. B. Donnelly well No. 2. (Report No. T 1-27600.) Inspection of cementing operations. 10½" shot and parted at 696', 4' wood plug driven in stub, and about 4' of broken bricks dumped in from surface. Inspector noted hole open to 683' and 21 sacks cement dumped at 683', bailer would not spud below 651' and brought up sample of set cement. Location and hardness of cement plug at 651' are approved.
- The Petrol Corp. well No. 2 (Report No. T 1-27623.) Inspection of pressure mudding operations of Oil Tool Exchange, Inc. Inspector noted 400 lb. pressure applied inside 8½"; after ¼ hr. pressure was 300 lb.; about 5 gal. of fluid required to build pressure up to 400 lb.; few minor leaks in connections at well head; hole was open to 3595'. Test is approved as indicating formations below 3595' were mudded under pressure satisfactorily under existing conditions.
- The Petrol Corp. well No. 2 (Report No. T 1-27653.) Inspection of cementing operations of Oil Tool Exchange, Inc. 4 sacks cement dumped at 3595'. Inspector noted bailer would not spud below 3560' and brought up sample of set cement. Location and hardness of cement plug at 3560' are approved.
- The Petrol Corp. well No. 2 (Report No. T 1-27668.) Inspection of cementing operations of Oil Tool Exchange, Inc. 8½" shot and parted at 590', wood plug driven in stub and 20 sacks cement dumped on plug. Inspector noted bailer would not spud below 570' and brought up sample of set cement. Location and hardness of cement plug at 570' are approved.

### POTRERO FIELD

T. 2 S, R. 14 W, S B B and M.

- Sec. 28—Beloil Corp., Inc., well No. 1 (Report No. P 1-27536.) Proposal to alter casing approved provisionally. Conditions: Depth 5476'; 14" landed at 1007', 6½" cemented at 5247', collapsed at about 3900'; 3" liner fallen over below 6½" shoe. Proposed to roll out 6½"; pull tubing below collapsed place; clean out hole and sidetrack 3" liner; run 4½" liner and full string of 4½" casing with bottom hole packer to set on top liner; put on pump. Decision: Proposal is approved provided division is notified to witness production test within 10 days after placing on production.
- Sunset Pacific Oil Co well No. "Inglewood Community" 3. (Report No. P 1-27545.) Proposal to plug approved provisionally. Conditions: Depth 5370', 9" cemented at 5035'; 4½" liner landed at 5370', including 345' perforated. Proposed to dump cement in stages to shut off bottom water or materially reduce quantity; produce from plugged depth. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug which excludes or materially reduces water production, and production test within 30 days after returning to production.

### RICHFIELD FIELD

T. 3 S, R. 9 W, S B B. and M.

- Sec. 28—Jose Oil Co, Ltd, well No. "Jose" 1 (Report No. P 1-27524.) Supplementary proposal to redrill water string approved. Conditions: Depth 2979'; 6½" cemented at 2732'; water witch showed water entering at 2920'. Proposed to plug with cement 2979'-2900', notifying division to witness location and hardness of cement plug with tubing; swab fluid through tubing; if fluid goes to 2500', let stand 12 hr. and make shut-off test; if well comes in, make production test, file supplementary notice covering further operations.
- Morton & Elder well No. "Seeple" 3 (Report No. P 1-27577.) Proposal to alter casing approved provisionally. Conditions: Depth 3724'; 10" cemented at 3107', 8½" landed at 3248', perforated 3220'-3216' and 3170'-3108'; 5½" landed 2707'-3724', perforated 3643'-3724', cemented through perforations at 3638'. Proposed to perforate 8½" and 5½" 3120'-3170'; make production test. Decision: Proposal is approved provided division is notified to witness production test within 10 days after placing on production.
- Sec. 30—Continental Oil Co well No. "Kraemer" 2 (Report No. T 1-27614.) Inspection of cementing operations. 4½ sacks cement dumped at 4585', filling to 4522'; top of cement plug located at 4526' and 5 sacks cement dumped at that depth; water was run in hole during cementing operations. Inspector noted bailer would not spud below 4485' and brought up sample of set cement. Location and hardness of cement plug at 4485' are approved.

Sec. 32—Chanslor-Canfield Midway Oil Co. well No. 1-B. (Report No. P 1-27602.) Proposal to plug and alter casing approved. Conditions: Depth 4825', cement plug 4825'-4746', 8½" cemented at 3176', cut and pulled from 1397'; 6½" landed at 3957', cemented through perforations 3175'-3180'; 4½" and 4¾" landed at 4825', including 1565' perforated, cemented through perforations at 3248'; water entering 4650'-4746'. Proposed to clean out to 4746' or as far as possible; continue cement plug to about 4625', using dump bailer after dumping fresh water at bottom and carrying as high hydrostatic head as possible; have plug witnessed; if possible get perforator through tight place at 3290' to re-perforate 4½" 4370'-3885' with knife, ¾ x 1 x 2' centers.

### ROSECRANS FIELD

T. 3 S., R. 13 W., S. B. B. and M.

- Sec. 7—George F. Getty, Inc., well No. "Athens" 2-A. (Report No. T 1-27654.) Inspection of cementing operations. Hole cleaned out to 5238' and 23 sacks cement dumped in stages; hole kept full of water during cementing operations. Inspector noted bailer would not spud below 5045' and brought up sample of set cement. Location and hardness of cement plug at 5045' are approved.
- Sec. 20—Cypress Petroleum Co. well No. 1. (Report No. T 1-27597.) Inspection of cementing operations. 6¼" shot and pulled from 1544', wood plug driven in to 1544', and 6 sacks cement dumped on plug. Inspector noted bailer would not spud below 1520' and brought up sample of set cement. Location and hardness of cement plug at 1520' are approved.

### SANTA FE SPRINGS FIELD

T. 2 S., R. 11 W., S. B. B. and M.

- Sec. 31—Associated Oil Co. well No. "Dallugge" 9. (Report No. T 1-27615.) Inspection of mudding operations. During ¾ hr. circulation test mud fluid was lost from pit at rate of 1 bbl. per hr.; cement plug at reported depth of 4635' held part of weight of drill pipe. Mudding operations are approved. Oral approval is hereby confirmed to cement 6½" at 4635'.
- Associated Oil Co. well No. "Dallugge" 9. (Report No. T 1-27649.) Shut-off test approved. 6½" casing cemented at 4635'. Inspector noted wall packer set at reported depth of 4623'; when tester valve open for 2 hr. gas started flowing moderately, gradually diminishing to slight flow in last ¾ hr., and fluid between drill pipe and 6½" casing remained stationary; when pulled, drill pipe contained 2 bbl. of oil and 1.5 bbl. of water; water filtered from fluid samples from 4280' and 4601' tested 130 gr. salt per gal. in each case, fluid sample from bottom of drill pipe tasted fresh. Shut-off is approved.
- Associated Oil Co. well No. "Dallugge" 9. (Report No. T 1-27650.) Inspection of cementing operations. Inspector noted cement plug at 4690' held 7 points of weight of drill pipe. Location and hardness of cement plug at 4690' are approved.
- Union Oil Co. well No. "Bell" 72. (Report No. T 1-27645.) Inspection of operations for demonstrating that 13¾" casing is water-tight. Inspector noted 550 lb. pressure applied inside 13¾" casing for 10 min. without loss. Casing test is approved.
- Union Oil Co. well No. "Bell" 72. (Report No. T 1-27703.) Inspection of mudding operations. During ¾ hr. circulation test mud fluid was lost from pit at rate of 2 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8¾" at 4125'.

T. 3 S., R. 11 W., S. B. B. and M.

- Sec. 5—Ambassador Petroleum Co. well No. "S. F." 1. (Report No. P 1-27617.) Proposal to alter casing approved provisionally. Conditions: Depth 4716'; 8½" cemented at 4298'; 4¾" landed at 4714', including 411' perforated, plugged to 4655', cut and pulled from 3881'. Proposed to wash over and pull 4¾" to 4650'; run in new 4¾" to 4640' and cement through perforations at 4420'; return to production. Decision: Proposal is approved provided that: (1) Formations left back of 4¾" are mudded by open circulation until loss is not more than 1 bbl. per hr. (2) Division is notified to witness final mudding operations before cementing 4¾" and production test within 30 days after recompleting well.
- Ambassador Petroleum Co. well No. "S. F." 15. (Report No. P 1-27523.) Proposal to plug approved. Conditions: 11¾" cemented at 4284'; 8¾" cemented at 7794', perforated 4635'-4613', 4595'-4420', re-perforated 4430'-4415', cemented through perforations 4415'-4430', shot 4645'-4640' and 4615'-4610', cleaned out to 4645', perforated 4635'-4613' and plugged with cement to 4638', 46' of 6½" perforated liner landed at 4638', top of adapter at 4592'; well sanded up; while cleaning out, water broke in. Proposed to rip one joint of 6¼" liner and pull from about 4620'; clean out to 4638' and cement 4638'-4600', having plug witnessed; return to production in Meyer zone.
- Ambassador Petroleum Co. well No. "S. F." 15. (Report No. T 1-27691.) Inspection of cementing operations. 6¾" liner pulled from 4620'; hole cleaned out to 4638' and 58 sacks cement dumped in stages; 9 sacks cement dumped at 4630'. Inspector noted bailer would not spud below 4600' and

- brought up sample of set cement. Location and hardness of cement plug at 4600' are approved.
- General Petroleum Corp well No "Santa Fe" 36. (Report No. P 1-27572.) Supplementary proposal to drill approved provisionally. Conditions: Depth 4816', plugged to 4775' with cement, 8 $\frac{1}{2}$ " cemented at 4120'; 6 $\frac{1}{2}$ " landed at 4804', including 50' perforated, cemented through perforations at 4750'. Proposed to continue cement plug to 4760' and test shut-off; if no shut-off, cement through top of perforations under pressure, if shut-off O. K. clean out to 4816', rig cable tools and drive in lead wool and cement plug 4816'-4804'. Decision. Proposal is approved provided division is notified to witness location and hardness of cement plug at 4804', and production test within 30 days after placing on production.
- General Petroleum Corp. well No. "Santa Fe" 46-A. (Report No. P 1-27571.) Proposal to plug approved provisionally. Conditions: Depth 5023'; 11 $\frac{3}{4}$ " cemented at 4123', 8 $\frac{1}{2}$ " cemented at 5023', including 69' perforated, cemented through perforations at 4950'. Proposed to dump cement plug 5023'-4970', having division witness plug, if water materially reduced but still too wet to produce, shoot casing at 4975' and drive in lead wool plug to 4968'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug which satisfactorily excludes water.
- General Petroleum Corp well No. "Santa Fe" 46-A (Report No T 1-27694.) Inspection of cementing operations. Hole cleaned out to 5023' and 20 sacks cement dumped in stages; water was run in hole while cementing Inspector noted bailer would not spud below 4970' and brought up sample of set cement. Location and hardness of cement plug at 4970' are approved.
- General Petroleum Corp. well No "Santa Fe" 152-D. (Report No. P 1-27531) Proposal to plug approved provisionally. Conditions: Depth 4945', plugged to 5856', 11 $\frac{3}{4}$ " cemented at 4023', 9" and 8 $\frac{1}{2}$ " cemented at 5494'; 5 $\frac{3}{4}$ " landed at 5868', including 370' perforated. Proposed to plug 5856'-5760' and make production test; if wet, plug 5760'-5660' and make production test. Decision. Proposal is approved provided division is notified to witness location and hardness of cement plug which excludes or substantially reduces amount of water entering well
- General Petroleum Corp. well No "Santa Fe" 240. (Report No P 1-27546) Supplementary proposal to plug approved provisionally. Conditions: Well plugged to 5765' with cement, 9" perforated 6380'-6420', 5840'-5814' and 5700'-5750'; swabbed salt water. Proposed to plug 5765'-5680', having plug witnessed; perforate 9" 4675'-4695' and test; if wet, plug off perforations by bridging below and plugging to 4655', have plug witnessed; perforate 9" 4630'-4650' and test, if wet, plug off perforations and perforate 9" 4590'-4605' and test, if dry, perforate 9" 4380'-4590', if wet, shoot and plug to 4600' before perforating higher. Decision. Proposal is approved provided division is notified to witness location and hardness of cement plug at about 4600' which excludes or substantially reduces water entering well
- General Petroleum Corp well No. "Santa Fe" 240. (Report No. T 1-27652.) Inspection of cementing operations. Hole cleaned out to 5980' and 36 sacks cement dumped in two stages, filling to 5850', 8 $\frac{1}{2}$ " shot twice at 5850'; hole cleaned out to 5850' and 39 shells of lead wool tamped in shot cavity, filling to 5845', 28 sacks cement dumped in three stages starting at 5845'. Inspector noted bailer would not spud below 5765' and brought up sample of set cement. Location and hardness of cement plug at 5765 are approved.
- General Petroleum Corp well No "Santa Fe" 240. (Report No. T 1-27669.) Inspection of cementing operations. Hole cleaned out to 5765' and 28 sacks cement dumped in stages, water was run in hole while cementing, top of cement found at 5665'. Inspector noted bailer would not spud below 5660' and brought up sample of set cement. Location and hardness of cement plug at 5660' are approved.
- General Petroleum Corp well No. "Santa Fe" 240. (Report No. T 1-27670) Inspection of cementing operations. Hole bridged at 4715' with rope and cement sacks, 47 sacks cement dumped in stages starting at 4715'; water was run in hole while cementing. Inspector noted bailer would not spud below 4655' and brought up sample of set cement. Location and hardness of cement plug at 4655' are approved.
- George F. Getty, Inc, well No. "S. F. S." 13. (Report No. P 1-27576) Proposal to plug and alter casing approved provisionally. Conditions. Depth 5440', cement plug 5440'-5300'; 3 $\frac{1}{2}$ " cement at 3513'; 6 $\frac{1}{2}$ " cemented at 4028'; 4 $\frac{1}{2}$ " cemented at 4926'. 3" inner 4889'-5440', perforated 4913'-5440'. Proposed to plug 5300'-4869', perforate 4 $\frac{1}{2}$ " 4040'-4630' and put on production. Decision. Proposal is approved provided that: (1) All cement plugs opposite perforations are placed under as much pressure as possible (2) Division is notified to witness location and hardness of cement plug at 4869'. (3) Division is consulted further if well is wet after perforating above 4630', additional requirements may be outlined at that time.
- George F. Getty, Inc, well No "S. F. S." 13 (Report No. T 1-27696) Inspection of cementing operations. Hole cleaned out to 5300' and 36 sacks cement dumped in stages; hole kept full of fluid while cementing, top of cement at 4834'. Inspector noted bailer would not spud below 4836' and brought up sample of set cement. Location and hardness of cement plug at 4836' are approved.
- Standard Oil Co. well No "South Whittier Community" 8. (Report No F 1-27609) Proposal to alter casing approved. Conditions: Depth 4656'; 3 $\frac{1}{2}$ " cemented at 3952', 6 $\frac{1}{2}$ " cemented at 4359'; 4 $\frac{1}{2}$ " landed at 4628', per-

forated 4376'-4628'; 59' of 3½" perforated liner landed at 4656'. Proposed to install cable tools, clean out to 4656' if possible, reperforate 4½" oil string 4370'-4597'; swab perforations with cable tools, ball hole clean, and make production test, if production not O. K., file supplementary notice covering further work.

- Sec 6—Associated Oil Co well No. "Dewenter" 4. (Report No. P 1-27573) Proposal to redrill oil string approved provisionally. Conditions: Depth 4530', shot 4530'-4500', plugged with cement 4530'-4500', 8½" cemented at 4080', 6½" landed at 4605', including 537' perforated, cemented through perforations at 4390', 195' of perforated 4½" froze at 4462', bad at 4328'. Proposal to pull 6½" from as far below 4080' as possible; plug 6½" and 4½" with cement from as far in 4½" as possible to top of 6½", sidetrack 6½" to 4500'; drill with oil; land 6½" combination string at 4500' and cement through perforations at about 4225'. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at about 4090'.
- Associated Oil Co. well No. "Green" 2. (Report No. P 1-27608.) Supplementary proposal to plug and alter casing approved provisionally. Conditions. 4½" and 6½" perforated 4740'-4580'; 2½" tubing landed at 4488', water entry located at 4660' and below. Proposed to shoot 4½" and 6½" at 4645'-4655' and plug with cement to 4460', maintaining high fluid level while dumping cement. Decision. Proposal is approved provided that: (1) Hole is plugged with cement 4740'-4640'. (2) Division is notified to witness location and hardness of cement plug at 4640' if this plug excludes or materially reduces water entrance.
- Bardeen Petroleum Co., Ltd, well No. "Springs" 3. (Report No. P 1-27522.) Proposal to redrill oil string approved provisionally. Conditions Depth 8064', cement plugs 8064'-7181', 6956'-6798', 5659'-5641' and 4481'-4565'; 8½" cemented at 6339', perforated 4550'-4500' and 4495'-4250', pulled from 3230'; 6½" cemented at 7332', perforated 6932'-6832', pulled from 5659', 4½" landed 7290'-8064', perforated 7384'-8064'. Proposed to redrill from 4481'. Decision: Proposal is approved provided supplementary notice is filed covering further work to be done before running additional casing in well.
- East Santa Fe Oil Co. well No. 1. (Report No. T 1-27604.) Inspection of cementing operations. 3½" pulled from 1506' and 16 sacks cement dumped, filling to 1490'. Inspector noted bailer would not spud below 1485' and brought up sample of set cement. Location and hardness of cement plug at 1485' are approved.
- East Santa Fe Oil Co. well No "National" 1. (Report No. T 1-27665.) Inspection of cementing operations. Hole cleaned out to 4582', found bad at 4456'; 53 sacks cement pumped in through drill pipe with cement retainer set at 4400', and 350 lb. pressure applied; 7 sacks cement dumped at 4423', top of cement at 4393'. Inspector noted bailer would not spud below 4398' and brought up sample of set cement. Location and hardness of cement plug at 4398' are approved.
- East Santa Fe Oil Co well No. "National" 1. (Report No. T 1-27666.) Inspection of cementing operations. 8½" cut and pulled from 3725', wood plug driven in stub, and 16 sacks cement dumped on plug. Inspector noted bailer would not spud below 3698' and brought up sample of set cement. Location and hardness of cement plug at 3698' are approved.
- General Petroleum Corp. well No. "Santa Fe Community" 186-E. (Report No. P 1-27570) Supplementary proposal to plug and alter casing approved. Conditions: Depth 6205', plugged to 5374', 9" and 8½" cemented at 4968'; 6½" cemented at 5580', perforated 5450'-5480', 5385'-5425' and 5340'-5370', 4½" cemented at 6160', perforated 5935'-5900', 5840'-5930', 5750'-5825', 5595'-5685', 5450'-5480', 5385'-5425' and 5340'-5370', jarred out and pulled from top of junk at 4872'. Proposed to pull 6½" from 4860' and run thin cement away until hole is filled to 4850', having plug witnessed; perforate 8½" 4815'-4825' and test for production, if wet, plug to 4800' and have plug witnessed; reperforate 8½" 4720'-4780' and test for production.
- General Petroleum Corp. well No. "Santa Fe Community" 186-E. (Report No. P 1-27620.) Supplementary proposal to plug and alter casing approved provisionally. New conditions: 6½" pulled from 4784', tools in hole, top at 4769', could not be fished out. Proposed to run thin cement away around tools if hole will take any, and cover up junk, having plug witnessed; perforate 8½" from 4720' to top of plug, test for production, if wet, plug off perforations and perforate 8½" 4650'-4700'. Decision: Proposal is approved provided that: (1) Junk at 4769' is capped with at least 20' cement (2) Perforations below 4720' are plugged with cement under 500 lb pressure, if possible, if production between 4720' and top of plug is not O. K. (3) Division is notified to witness location and hardness of cement plug at 4749'.
- Pedro Petroleum Corp well No "Fulton" 4. (Report No. P 1-27519) Proposal to plug and alter casing approved provisionally. Conditions: Depth 8330', cement plugs 8330'-8038', 7894'-8726', 5197'-5173' and 4638'-4608'; 9" cemented at 7032'; 6½" and 7" cemented at 7602', pulled from 4638'; 5" cemented at 7850', pulled from 5197'. Proposed to cement 9" through perforations at 4520', then perforate 4510'-4435' for production. Decision. Proposal is approved provided division is notified to witness location and hardness of cement plug at 4520'.
- Shell Oil Co well No. "Slusher" 16. (Report No. T 1-27624.) Inspection of cementing operations. Packer set at 4510' on 3" drill pipe and 20 sacks cement pumped out through perforations 4520'-4525'; top of cement found at 4508'; 8½" perforated 4475'-4440' and 4440'-4350'. Inspector



- noted bailer would not spud below 4503' and brought up sample of set cement. Location and hardness of cement plug at 4508' are approved.
- Shell Oil Co. well No. "Slusher" 17. (Report No. T 1-27627.) Inspection of cementing operations. Hole cleaned out to 7984'; 50 sacks cement pumped in through drill pipe hung at 7980'; top of cement at 7785'; 8 $\frac{3}{4}$ " perforated 4600'-4605' and 4650'-4655'; packer set at 4615' and 30 sacks cement pumped in through drill pipe and forced out through perforations under 1100 lb pressure. Inspector noted bailer would not spud below 4615' and brought up sample of set cement. Location and hardness of cement plug at 4615' are approved.
- Shell Oil Co. well No. "Slusher" 17. (Report No. P 1-27594.) Supplementary proposal to plug and alter casing approved provisionally. Conditions: Depth 8075', plugged to 7785', bridged 4655'-4615', 13 $\frac{3}{4}$ " cemented at 4291'; 8 $\frac{3}{4}$ " cemented at 7875', perforated 4600'-4605', 4650'-4655', 4460'-4520' and 4550'-4585'; well wet. Proposed to re-perforate 4600'-4605'; set Baker cement retainer at 4590'; pump in 20 sacks cement through Baker cement retainer; after standing 4 days bail mud and sand, tube well and put to pumping. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at about 4585'.
- Shell Oil Co. well No. "Slusher" 17. (Report No. T 1-27706.) Inspection of cementing operations. Hole cleaned out to 4615'; Baker cement retainer set at 4593' on 2 $\frac{1}{2}$ " tubing; 20 sacks cement pumped in through tubing at 4593' under 600 lb. pressure. Inspector noted bailer would not spud below 4561' and brought up sample of set cement. Location and hardness of cement plug at 4561' are approved.
- Shell Oil Co. well No. "Slusher" 18. (Report No. T 1-27692.) Inspection of cementing operations. Hole cleaned out to 7921' and 31 sacks cement dumped in stages, filling to 7638'. Inspector noted bailer would not spud below 7605' and brought up sample of set cement. Location and hardness of cement plug at 7605' are approved.
- Shell Oil Co. well No. "Slusher" 18. (Report No. T 1-27695.) Inspection of cementing operations. 8 $\frac{3}{4}$ " perforated 4500'-4505' and 4550'-4555'; 30 sacks cement pumped in through drill pipe hung with packer set on bottom at 4520'; cementing operations finished under 300 lb pressure. Inspector noted bailer would not spud below 4492' and brought up sample of set cement. Location and hardness of cement plug at 4492' are approved.
- Standard Oil Co. well No. "Walker Community" 1. (Report No. P 1-27615.) Proposal to plug and alter casing approved. Conditions: Depth 4449', 8 $\frac{3}{4}$ " cemented at 3733'; 6 $\frac{5}{8}$ " cemented at 4088'; 4 $\frac{3}{4}$ " landed at 4444', perforated 4109'-4444', casing crooked at 4105'. Proposed to clean out to 4444' if possible and plug with cement to 4065', running water in hole to apply pressure, and notify division to witness plug; cut and pull 4 $\frac{3}{4}$ " from about 4065' or above if necessary, and cap stub with 20' cement, locate vibration on 6 $\frac{5}{8}$ "; perforate 6 $\frac{5}{8}$ " 3765'-3790' with long knife perforator, swab perforations, bail and make production test; if production not O. K., bridge hole at 3810', plug with cement 3810'-3760', perforate 6 $\frac{5}{8}$ " 3733'-3760', swab perforations, bail and make production test; if plug at 3760' excludes water, notify division to witness this plug, if 6 $\frac{5}{8}$ " and 8 $\frac{3}{4}$ " are not cemented together, perforate 6 $\frac{5}{8}$ " 3790'-3810' and place plug in bond with formation before perforating 6 $\frac{5}{8}$ " and making production test noted above; if production from Bell zone not O. K. file proposal to abandon.
- Standard Oil Co. well No. "Weisel" 8. (Report No. P 1-27510.) Proposal to abandon approved. Conditions: Depth 4634', cement plug 4582'-4625'; 11 $\frac{3}{4}$ " cemented at 2959'; 8 $\frac{3}{4}$ " cemented at 4002'; 6 $\frac{5}{8}$ " cemented at 4401', 279' of 4 $\frac{3}{4}$ " landed at 4625', perforated 4390'-4625', ripped 4580'-4608'; produced only water. Proposed to clean out to 4582' if possible and plug with cement 4582'-4326', running water in hole while dumping cement to apply pressure, and notify division to witness plug; cut and pull 6 $\frac{5}{8}$ " from 3980' or above if necessary, and cap stub with 20' cement; fill hole with fluid; cut and pull 8 $\frac{3}{4}$ " from 2939' or above if necessary and cap stub with 20' cement, notifying division to witness plug; fill hole with fluid, hang wood plug inside 11 $\frac{3}{4}$ ", 10' below cellar floor, and fill to cellar floor with cement; weld plate on top 11 $\frac{3}{4}$ " at cellar floor and abandon hole; remove rig and equipment.
- Standard Oil Co. well No. "Weisel" 8. (Report No. T 1-27671.) Inspection of cementing operations. Hole cleaned out to 4585' and 36 sacks cement dumped in stages; water was run in hole while cementing; top of cement at 4316'. Inspector noted bailer would not spud below 4332' and brought up sample of set cement. Location and hardness of cement plug at 4332' are approved.
- Standard Oil Co. well No. "Weisel" 8. (Report No. T 1-27701.) Inspection of cementing operations. 6 $\frac{5}{8}$ " ripped and pulled from 3411', wood plug driven in stub and 8 sacks cement dumped on plug, filling to 3380'; 8 $\frac{3}{4}$ " ripped and pulled from 2735', wood plug driven in stub and 12 sacks cement dumped on plug. Inspector noted bailer would not spud below 2712' and brought up sample of set cement. Location and hardness of cement plug at 2712' are approved.
- Standard Oil Co. well No. "Weisel" 12. (Report No. T 1-27646.) Inspection of cementing operations. Hole cleaned out to cement plug at 4565' and 8 sacks cement dumped in stages; water was run in hole while cementing. Inspector noted bailer would not spud below 4494' and brought up sample set cement. Location and hardness of cement plug at 4494' are approved.

- Standard Oil Co. well No. "Weisel" 17. (Report No. T 1-27603.) Inspection of cementing operations. 8½" reperforated 4530'-4480'; 17 sacks cement dumped at 4530'; water was run in hole while cementing. Inspector noted bailer would not spud below 4500' and brought up sample of set cement. Location and hardness of cement plug at 4500' are approved.
- The Texas Co well No. "Patterson B" 12. (Report No. P 1-27525.) Supplementary proposal to drill approved provisionally. Conditions: Depth 4275'; 18" S P. cemented at 968'. Proposed to drill to locate Meyer shut-off point; cement casing over Meyer zone; drill to about 4550' and complete. Decision: Proposal is approved provided that: (1) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (2) Formations left back of water string are mudded by open circulation until loss is not more than 5 bbl per hr. (3) Water string is cemented at about 4300', coring for exact depth. (4) Division is notified to witness final mudding operations before cementing water string and bailing test of water string.
- Union Oil Co well No. "Alexander" 10. (Report No. T 1-27693.) Inspection of cementing operations. Hole could not be cleaned out below 6320'; 5 sacks cement dumped at 6320'; top of cement at 6302'. Location and hardness of cement plug at 6300' are approved.
- Union Oil Co. well No. "Alexander" 25. (Report No. T 1-27687.) Inspection of operations for demonstrating that 13½" surface casing is water-tight. Inspector noted 500 lb. pressure applied; after ¼ hr. pressure was 470 lb. Casing test is approved.
- Union Oil Co. well No "Alexander" 25. (Report No. T 1-27702.) Inspection of mudding operations. During ½ hr. circulation test mud fluid was lost from pit at rate of 2 bbl. per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 3665'.
- Union Oil Co. well No. "Bell" 65. (Report No. P 1-27595.) Proposal to deepen approved provisionally. Conditions: Depth 3750', plugged to 3677'; 8½" cemented at 3667', perforated 3660'-3667'; 44' of 6½" landed at 3677', all perforated. Proposed to pull 6½" liner and deepen to 4050'; cement 6½" casing at 4050'; clean out to 4060' and ball to 3000' for test; deepen to 4940' and land 4½" splice liner, including 30' perforated, and cement through perforations at about 4910'; test on production. Decision: Proposal is approved provided that: (1) Formations left back of 6½" and 4½" are mudded by open circulation until loss is not more than 1 and 2 bbl per hr. respectively. (2) Enough cement is used to fill back of 6½" and 4½" to reach at least 3650' and 4050', respectively. (3) Division is notified to witness final mudding operations before cementing 6½" and 4½", bailing test of 6½" shut-off, bailing test before drilling out cement in 4½" to demonstrate absence of water between top of 4½" liner and 6½" casing, and production test within 10 days after placing on production.
- Union Oil Co. well No "Bell" 71. (Report No. T 1-27605.) Inspection of mudding operations. During ½ hr. circulation test mud fluid was lost from pit at rate of 3.6 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 3647'.
- Union Oil Co. well No "Bell" 71. (Report No. T 1-27644.) Bailing test approved. 8½" casing cemented at 3645'. Hole swabbed to 2632' for test and stood 16½ hr. No fluid entered well.
- Wilshire Annex Oil Co. well No. "Wilshire Annex Koontz" 4. (Report No. T 1-27628.) Inspection of cementing operations. 6½" and 8½" perforated 4546'-4536'; well tested wet; 56 sacks cement dumped in stages starting at 4619'. Inspector noted bailer would not spud below 4540' and brought up sample of set cement. Location and hardness of cement plug at 4540' are approved.
- Wilshire Oil Co., Inc., well No. "Wilshire-Cecelia" 1-B (Report No. P 1-27621.) Supplementary proposal to alter casing approved provisionally. Conditions: Depth 7954', cement plugs 7954'-6280' and 5733'-5684'; 8½" cemented at 5600'; 6½" cemented at 6345', perforated 5690'-5606'; 4½" cemented at 7356', perforated 7140'-6965', 6840'-6790', 6675'-6602' and 6480'-6355', cut and pulled from 5725'; 612' of 3" liner landed at 7897', including 546' perforated. Proposed to place wood bridging plug at 4550'; bridge with cement 4550'-4520'; perforate 6½" and 8½" 4475'-4490' and test; if looks O K, produce Meyer zone at this point; if wet, squeeze with cement, drill out bridging plug and produce Buckbee zone as before. This is not notice to abandon Buckbee zone. Decision: Proposal is approved provided that (1) If satisfactory production secured after perforating 6½" and 8½" 4475'-4490', proposed cement bridge 4550'-4520' shall not constitute permanent abandonment of hole below 5605'. (2) Division is notified to witness test of 6½" casing after cleaning out to 4510' if production from Meyer zone is not O. K., and production test after recompleting well.
- Wilshire Oil Co., Inc., well No. "Wilshire-Julian" 6 (Report No. T 1-27606.) Inspection of cementing operations. Hole could not be cleaned out below 1404' due to hard packed mud; 6 sacks cement dumped at 1404'. Inspector noted bailer would not spud below 1377' and brought up sample of set cement. Location and hardness of cement plug at 1377' are approved.
- Wilshire Oil Co., Inc., well No. "Wilshire-Julian" 6. (Report No. T 1-27607.) Inspection of cementing operations. When strain taken on 8½" it parted and pulled from 911'. 20 sacks cement dumped at 911'. Inspector noted bailer would not spud below 891' and brought up sample of set cement. Location and hardness of cement plug at 891' are approved.

Wilshire Oil Co., Inc., well No "Wilshire-Julian" 7. (Report No. T 1-27631.) Inspection of cementing operations of Haskell Greene, Contractor. 8 $\frac{1}{2}$ " found collapsed at 2601'; about 5 bbl. of mud dumped and 500 lb. pressure applied on 8 $\frac{1}{2}$ "; after  $\frac{1}{2}$  hr. pressure was 450 lb., drop largely due to leaks around casing head; 6 sacks cement dumped at 2597'. Inspector noted bailer would not spud below 2568' and brought up sample of set cement. Location and hardness of cement plug at 2568' are approved.

Wilshire Oil Co., Inc., well No "Wilshire-Julian" 7. (Report No. T 1-27632.) Inspection of cementing operations of Haskell Greene, Contractor. 8 $\frac{1}{2}$ " shot at 965' and came loose but parted while being pulled and about 3 joints dropped in hole; wood plug driven in 8 $\frac{1}{2}$ " stub to 987'. Inspector noted 20 sacks cement dumped at 897', and bailer would not spud below 882' and brought up sample of set cement. Location and hardness of cement plug at 882' are approved.

Wilshire Oil Co., Inc., well No. "Wilshire-Julian" 7. (Report No. P 1-27532.) Proposal of Haskell Greene, Contractor, to abandon approved. Conditions: Original depth 4649', redrilled depth 4645', plugged at 4200' with 10 sacks cement and sand, and 2850' with 6 sacks cement; 15 $\frac{1}{2}$ " cemented at 1000'; 8 $\frac{1}{2}$ " cemented at 4290', collapsed at 2850'; 6 $\frac{3}{4}$ " casing cemented at 4649', collapsed at 4400'; 6 $\frac{1}{2}$ " perforated liner landed 4236'-4645', ripped 4237'-4256', collapsed at 4400'. Junk: 4" drill pipe 3934'-4059'; 4 $\frac{1}{2}$ " perforated casing 4296'-4649'. Proposed to clean out as deep as possible and get pressure test; dump cement and have plug witnessed; witness shooting 8 $\frac{1}{2}$ " casing not lower than 980'; cement 20' cap over 8 $\frac{1}{2}$ " stub and have witnessed; cap surface and abandon. Decision: Proposed work, which has now been completed, is approved.

T. 3 S., R. 12 W., S. B. B. and M.

Sec. 1—Richfield Oil Co. well No "Elliott" 1. (Report No T 1-27607.) Proposal to plug approved. Conditions: Depth 4498'; 8 $\frac{1}{2}$ " cemented at 3948'; 6 $\frac{5}{8}$ " cemented at 4315'; 5" landed at 4498', perforated 4304'-4480', bad 4405'-4432' or higher. Proposed to clean out as far as possible with cable tools; plug with cement to about 4400', running water in hole while cementing and shooting casing before last stage; advise division of effectiveness of plug and notify to witness same if effective

### SEAL BEACH FIELD

T. 5 S., R. 12 W., S. B. B. and M.

Sec 3—Standard Oil Co well No. "San Gabriel" 9. (Report No. P 1-27520.) Proposal to plug and alter casing approved. Conditions: Depth 5432'. cement bridge 5305'-5320'; 11 $\frac{1}{2}$ " cemented at 3592'; 9" originally cemented at 4705', drilled through at 4130'; 6 $\frac{5}{8}$ " cemented at 5195'; 287' of 4 $\frac{3}{4}$ " landed at 5432', perforated 5189'-5432'. Proposed to drill out cement bridge 5305'-5320' with cable tools and clean out to 5412' or 5432' if possible, reperformate 4 $\frac{3}{4}$ " 5305'-5400'; plug with cement from clean-out point to 5300', notifying division to witness location and hardness of plug; swab or wash perforations, bail, and return to production

Trinity Oil Corp., Ltd., well No. "Connolly" 1 (Report No. P 1-27585.) Proposal to plug approved provisionally. Conditions: Depth 5075', cement plug 4733'-4667'; 8 $\frac{5}{8}$ " cemented at 4650'; 6 $\frac{1}{2}$ " perforated liner 4728'-5075'; 4 $\frac{3}{4}$ " landed at 4638'-4728', perforated, plugged with cement to 4666'. Proposed to plug with cement to 4658'; put on production. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 4658'

Trinity Oil Corp., Ltd., well No "Fueller" 1 (Report No. T 1-27711.) Inspection of cementing operations. 6 $\frac{5}{8}$ " and 8 $\frac{5}{8}$ " perforated 4110'-4135' and tested wet; 10 sacks cement dumped at 4142'; 6 $\frac{5}{8}$ " and 8 $\frac{5}{8}$ " perforated 3740'-3765' and tested wet; 10 sacks cement dumped on wood plug at 3770'; water was run in hole while cementing. Inspector noted bailer would not spud below 3715' and brought up sample of set cement. Location and hardness of cement plug at 3715' are approved.

### TORRANCE FIELD

T. 3 S., R. 14 W., S. B. B. and M.

Sec. 31—Aron H Hover Organization well No. "Bryant" 1. (Report No P 1-27586 ) Supplementary proposal to drill approved provisionally. Conditions: Depth 4200', cement plugs 3987'-3935'; 8 $\frac{5}{8}$ " cemented at 3210'; 1000' of 5 $\frac{1}{2}$ " liner landed at 4200'. Proposed to put on pump test on production: if production not O. K., swage out 5 $\frac{1}{2}$ " liner at 3675' and plug with cement 3935'-3675'; file supplementary notice covering further work. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plugs at 3675', and 3935' if 5 $\frac{1}{2}$ " liner can be swaged out at 3675', and production test within 30 days after completing well. Note: Attention is directed to fact that hole was shot at 3987' and 3940' and plugged with cement 4017'-3935' without first filing notice and receiving approval of division. In future written approval must be issued by

division before any work is started which alters present mechanical condition of hole.

T. 4 S., R. 14 W., S. B. B. and M.

Sec. 15—Pacific Western Oil Co. well No. 5. (Report No. P 1-27600.) Proposal to abandon approved provisionally. Conditions: Depth 3796'; 15½" cemented at 657'; 10" cemented at 3520'; 6¼" at 3796', including 285' perforated, bad at 3368'. Proposed to clean out to 3368', plug 6¼" with cement 3368'-3348', cut and pull 10" not lower than 630' and cap stub with cement, fill hole with heavy mud and cap 15½" at surface. Decision: Proposal is approved provided that (1) Hole is cleaned out as far as possible below 3368' and plugged with cement above clean-out depth as proposed. (2) Division is notified to witness clean-out depth before placing any cement, all cementing operations, all shooting or ripping operations for removal of casing, and location and hardness of cement plugs at 3348' and 610'.

Pacific Western Oil Co. well No. 5. (Report No. T 1-27697.) Inspection of cementing operations. Hole could not be cleaned out below 3355' due to collapsed pipe; 4 sacks cement dumped at 3355'. Inspector noted bailer would not spud below 3331' and brought up sample of set cement. Location and hardness of cement plug at 3331' are approved.

### WHITTIER FIELD

T. 2 S., R. 11 W., S. B. B. and M.

Sec. 26—Standard Oil Co. well No. "Murphy-Whittier" 32. (Report No. P 1-27610.) Proposal to alter casing approved. Conditions: Depth 3046', cement plugs 2040'-2073' and 2120'-3046'; 10½" cemented at 2152', perforated 1720'-1840'; 897' of 8½" landed at 2970', perforated 2170'-2450', 2676'-2706', 2800'-2970', plugged 2120'-2970', ripped and pulled from 2073'; water witch showed water entering through hole in 10½" at 1611'. Proposed to continue perforating 10½" 1720'-1640'; fill hole with sand to 1670' and cap with cement to 1655'; make bailing test; if wet, fill hole with sand 1655'-1650' and cap with cement to 1645'; set cement retainer on 2½" tubing at about 1580' and pump in cement under pressure to exclude water; make casing test; if dry, clean out cement and sand bridges to 1655' and make bailing test; if wet, recement; if dry, clean out to 1850' and make production test; if not commercially productive, file supplementary proposal covering further work.

### LOS ANGELES COUNTY

T. 3 S., R. 12 W., S. B. B. and M.

Sec. 25—Vanco Development Co., Ltd., well No. "Mullard" 1 (Report No. P 1-27623) Proposal to drill approved provisionally. Conditions: Well is 200' N. and 100' E. of SW corner of NE¼ of NW¼. Prospect well.

T. 3 S., R. 14 W., S. B. B. and M.

Sec. 2—Frederick A. Speik well No. "Johnson" 1. (Report No. P 1-27533) Proposal to drill approved provisionally. Conditions: Well is 350' N. and 640' W. of S¼ section corner. Estimate oil sand at 4000'. Proposed to cement 12½" at 650'; cement 8½" at 4000'; land 6¼" oil string at unknown depth; drill with rotary tools. Decision: Proposal is approved provided that: (1) All possible steps are taken to determine fluid content of porous formations encountered. (2) (a) Mud fluid of not less than 70 lb per cu ft is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) At least 800' conductor casing is cemented in hole to protect surface or domestic water supplies. (4) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (5) Division is notified to witness test of 12½" casing, when oil or gas showing encountered, before landing or cementing any casing (other requirements may be outlined at that time), and to witness bailing test of each possible water shut-off.

T. 4 S., R. 13 W., S. B. B. and M.

Sec. 7—Thomas Kelly & Sons, Inc., well No. "Kelly-Del Amo" 1 (Report No. P 1-27511) Proposal of J. R. Cannon to abandon approved provisionally. Prospect well.  
Thomas Kelly & Sons, Inc., well No. "Kelly-Del Amo" 1 (Report No. T 1-27641) Inspection of cementing operations. Prospect well.  
Thomas Kelly & Sons, Inc., well No. "Kelly-Del Amo" 1 (Report No. T 1-27642) Inspection of cementing operations. Prospect well.

### RIVERSIDE COUNTY

T. 3 S., R. 7 W., S. B. B. and M.

Sec. 27—Corona Oil Co., Ltd., well No. "Wardlow" 1 (Report No. P 1-27611) Proposal to drill approved provisionally. Conditions: Well is 1311'

southwesterly along W. line of Lot 3, Trinidad Yorba Tract, from intersection of said line and State Highway, thence 330' Westerly at right angles. Estimate oil sand at 1800'. Proposed to cement 8 $\frac{1}{2}$ " at 500', drill with rotary tools. Decision: Proposal is approved provided that: (1) All possible steps are taken to determine fluid content of porous formations encountered (2) (a) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (b) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) At least 500' of conductor casing is cemented to protect surface or domestic waters (4) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (5) Division is notified to witness test of 9 $\frac{1}{2}$ " surface casing, when oil or gas showing encountered, before landing or cementing any casing (other requirements may be outlined at that time), and to witness bailing test of each possible water shut-off.

### SAN. DIEGO COUNTY

T. 15 S., R 3 W., S. B. B. and M.

Sec. 23—San Diego Dome Drilling Fund, Inc., well No. 1. (Report No P 1-27544.) Proposal to abandon approved. Conditions: Depth 1147', plugged at 30' with 40 sacks cement; 13 $\frac{1}{2}$ " cemented at 970'; no oil or gas produced Proposed to fill hole with heavy mud; bridge and plug at 30' from top of surface pipe with wood plug and 40 sacks cement Decision: Proposed work, which has already been completed, is approved.

## DISTRICT No. 2

## BARSDALE FIELD

T. 3 N., R. 19 W., S. B. B. and M.

Sec. 2—The Texas Co. well No. "McGuire" 1. (Report No. P 2-3238.) Proposal to abandon approved provisionally. Conditions: 20" landed at 30'; 15½" landed at 341'; cap welded on 15½"; hole drilled dry and no fluid, oil, gas, or water encountered. Proposed to pull 15½" from 341'; fill hole with mud and abandon; if salt water found, insert necessary plugs. Decision: Proposal is approved provided that: (1) Division is notified of condition of well when cap has been removed. (2) If no fluid found in well, it is abandoned by filling hole with mud or surface material and placing required U. S. Government marker in 20" or 15½". (3) If fluid found in well, any necessary cement plugging is done when notified as required in item 1. (4) Division is notified to witness that hole is left full of mud or surface formation.

The Texas Co. well No. "McGuire" 1. (Report No. T 2-2455.) Inspection of operations for purpose of noting condition of hole at surface. Hole cleaned out to 348' and 10 sacks cement dumped, filling to 334'; hole filled with dirt to 20' and plugged with 10 sacks cement from 20' to surface; 15½" casing plugged with cement at surface and 4" pipe marker extended above 15½" casing. Operations are approved.

## PIRU FIELD

T. 4 N., R. 18 W., S. B. B. and M.

Sec. 14—Piru Petroleum Co. well No. "Holser" 1. (Report No. P 2-3236.) Proposal to abandon approved provisionally. Conditions: Depth 3545'; 12½" landed at 497'. Proposed to fill hole with heavy mud and cap same. Decision: Proposal is approved provided division is notified to witness that hole is left full of heavy mud, and proposed cap is either welded or secured on or into 12½" casing.

Piru Petroleum Co. well No. "Holser" 1. (Report No. T 2-2450.) Inspection of operations for demonstrating that hole was left full of heavy mud. Deputy noted top of heavy mud in hole at about 8' down from derrick floor; no evidence of oil or gas noted. Operation as reported and witnessed is approved as indicating that hole is left full of heavy mud.

## RINCON FIELD

T. 3 N., R. 24 W., S. B. B. and M.

Sec. 8—Chanslor-Canfield Midway Oil Co. well No. "Hobson" B-4. (Report No. T 2-2443.) Bailing test approved 11½" casing cemented at 3156'. Hole bailed to 1500' for test and stood 17 hr. No fluid entered well. Bailer picked up at 3161' and brought up thick mud and pieces of cement from that point.

Sec. 23—Continental Oil Co. well No. "Grubb" 3. (Report No. P 2-3232.) Supplementary proposal to drill approved provisionally. Conditions: Redrilled depth 5930'; 13½" cemented at 1500'; 7" froze and cemented at 4994', top of cement found at 4951', drilled out to 5905'; 1002' of 5½" liner cemented at 5905'. Proposed to drill out cement to 4943'; bail to 3000' for test of casing and 5½" liner stub at 4903'; drill out and clean out to 5910'; bail to 3000' for water shut-off test. Decision: Proposal is approved provided division is notified to witness test demonstrating that 5½" liner has been sealed solidly to 7" casing, 5½" shut-off test with hole open about 5' below 5½" shoe, and before landing any casing below 5½" shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Continental Oil Co. well No. "Grubb" 3. (Report No. T 2-2442.) Inspection of operations for demonstrating that 5½" liner has been effectively sealed to 7" casing. Deputy noted no fluid entered well while standing 6 hr. for test; bailer was run to 5134' without encountering any bridge. Later reported that when drill pipe was run in top of cement was found at 5545'. Operation is approved as indicating 5½" liner was satisfactorily sealed to 7" casing.

Continental Oil Co. well No. "Grubb" 3. (Report No. T 2-2449.) Bailing test. Decision deferred. 4994' of 7" and 1002' of 5½" casing cemented at 5905'. Hole bailed to 2400' for test and stood 16 hr. Fluid, practically all oil, rose at rate of 37.5 bbl. in 24 hr. Top of fluid, oil, found at 1734'; little water found in bailer sample from 2567'; sample from 2824' was nearly all water; sample from bottom was muddy water and oil; samples of water from 2824' and bottom tested 37 and 181 gr. salt per gal., respectively; gas issued from well. Later reported drill pipe was

run to 5910' and 1650 lb. pressure applied to casing and shut-off for  $\frac{3}{4}$  hr., no fluid could be forced out. Test indicates 7" and 5 $\frac{1}{2}$ " shut-off is effective but not entirely conclusive. Decision on shut-off is deferred pending results of proposed production test.

Continental Oil Co. well No. "Grubb" 3. (Report No P 2-3244.) Supplementary proposal to drill approved provisionally. New conditions: Depth 6377'. Proposed to land 4" perforated liner at 6377' and test for production. Decision: Proposal is approved provided division is notified to witness proposed production test.

### SOUTH MOUNTAIN FIELD

T. 3 N., R. 20 W., S. B. B and M.

Sec 17—Driggs Petroleum Corp well No. 1. (Report No. P 2-3243) Supplementary proposal to drill approved provisionally. Conditions: Depth 4270', plugged to 4194' with cement; 10" cemented at 2259'; 6 $\frac{1}{2}$ " landed at 4162', cemented through joint at 4062', perforated 4162'-2452', 2270'-2300', ripped 2215'-2225' and cement forced through rips; bridged with sand to 2284' and cemented through perforations up to 2119'; 6 $\frac{1}{2}$ " found bad 2640'-2760'. Proposed to run 4 $\frac{3}{4}$ " to 2850', perforated below 2300', cement joint and baffle plate at 2280'; cement out through cement joint, cementing 4 $\frac{3}{4}$ " and 6 $\frac{1}{2}$ " together up to about 2130'; close in between 6 $\frac{1}{2}$ " and 4 $\frac{3}{4}$ " and force cement out into formation; clean out to bottom and put on production; notify division to witness production test. Decision: Proposal is approved provided division is notified to witness proposed production test.

### VENTURA FIELD

T. 3 N, R. 23 W., S. B. B. and M.

Sec. 23—Associated Oil Co well No. "McGonigle" 5. (Report No. P 2-3245) Supplementary proposal to drill approved provisionally. Conditions: Depth 7005'; 16" cemented at 1973'; 9" cemented at 6175'. Proposed to plug with cement 7005'-6940'; cement 6 $\frac{1}{2}$ " at 6815'; make open hole production test of zone 6815'-6940', if test O. K., plug hole to 6810' with cement and perforate 6 $\frac{1}{2}$ " opposite best oil zone shown by coring 6175'-6810'. Decision: Proposal is approved provided division is notified to witness satisfactory test of mudding of formations 6175'-6815'.

Associated Oil Co well No. "McGonigle" 5 (Report No. T 2-2456) Inspection of mudding operations. During  $\frac{1}{2}$  hr circulation test mud fluid was lost at rate of 2 bbl per hr. Mudding of formations 6175'-6815' is satisfactory.

Sec 24—Associated Oil Co. well No. "V. L. & W" 23 (Report No T 2-2440.) Bailing test approved. 11 $\frac{1}{2}$ " casing recemented at 6350'. Inspector noted when tester valve opened for  $\frac{1}{4}$  hr. air issued from drill pipe for 10 min. and good flow of gas for 20 min., and fluid remained stationary between drill pipe and casing; when packer released 2 $\frac{1}{2}$ " bbl of mud fluid was required to fill casing; 27 bbl. of oily gas-cut mud fluid entered drill pipe; fluid samples from top, 17 stands down, 19 stands down, 21 stands down, and from tester valve, tested 210, 210, 213, 213, and 209 gr. salt per gal., respectively. Shut-off is approved.

Sec 26—Associated Oil Co. well No "Lloyd" 92. (Report No T 2-2448.) Inspection of mudding operations. During  $\frac{1}{2}$  hr circulation test fluid loss was at rate of 4 bbl. per hr. Mudding of formations 1193'-6073' is satisfactory.

Associated Oil Co well No "Lloyd" 92 (Report No T 2-2452) Shut-off test not approved. 9" casing cemented at 6050'. Johnston tester run in on drill pipe and packer set at reported depth of 6035'; while test valve open for 55 min air flowed fairly constant, then gas flowed for 8 min. and space between drill pipe and casing remained filled with mud; when test valve closed and packer released 5 $\frac{1}{2}$  bbl of fluid was required to refill 9" casing; when pulled, drill pipe contained 80 bbl of fluid; samples of fluid from top, middle and bottom tested 246, 154 and 137 gr salt per gal., respectively. Later reported circulation broken around 9" casing after above test was made, and casing would be recemented. Shut-off is not approved. Division should be notified to witness retest of 9" shut-off after recementing.

Associated Oil Co well No "Lloyd" 92. (Report No T 2-2454) Shut-off test approved. 9" casing recemented at 6050'. Inspector noted Johnston tester run in on 4" drill pipe and packer set at reported depth of 6036'. while valve opened for 33 min constant medium flow of air issued from drill pipe, and space between drill pipe and casing remained full of mud. there was no evidence of gas; when test valve closed and packer released 2 bbl. of fluid was required to refill 9", when pulled, drill pipe contained 1.9 bbl of medium gas-cut mud fluid with oil showing: fluid samples from 44' down, 88', 132' and from tester, tested 154, 154, 164, and 164 gr. salt per gal., respectively. Later reported hole was open to 6060' and would take no fluid under 1000 lb pressure. Shut-off is approved.

Associated Oil Co well No "V L & W" 27. (Report No T 2-2441) Inspection of mudding operations. During  $\frac{1}{2}$  hr circulation test mud fluid was lost at rate of 4 bbl. per hr. Mudding of formations 7451'-8690' is approved.

Associated Oil Co well No "V L. & W" 27. (Report No P 2-3234) Supplementary proposal to drill approved. Conditions: Depth 8914', plugged to 8690'; 16" cemented at 5080', 11 $\frac{1}{2}$ " cemented at 7451'; 8 $\frac{1}{2}$ "

- froze and cemented at 7790'. Proposed to cement 6 $\frac{3}{8}$ " at 8690'; test oil zone 8690'-8914'. Decision: Proposal is approved. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools
- Sec 27—Associated Oil Co well No. "Lloyd" 134. (Report No. P 2-3239.) Supplementary proposal to drill approved provisionally Conditions: Depth 9378', plugged 9060'-9000'; 16" cemented at 4273'; 11 $\frac{3}{8}$ " cemented at 7064'; 8 $\frac{3}{8}$ " froze and cemented at 7982'. Proposed to cement 6 $\frac{3}{8}$ " at 9000'; clean out hole to 9378'; make open hole production test of zone 9000'-9378'. Decision: Proposal is approved provided division is notified to witness water shut-off test of 6 $\frac{3}{8}$ " casing.
- Associated Oil Co well No. "Lloyd" 134. (Report No. T 2-2451.) Inspection of mudding operations During  $\frac{1}{2}$  hr. circulation test mud fluid was lost at rate of 5 bbl. per hr. Mudding operations are approved Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 9000'.
- Associated Oil Co well No. "Lloyd" 135. (Report No. T 2-2444.) Shut-off test. Decision deferred. 11 $\frac{3}{8}$ " casing cemented at 6980'. Deputy noted Johnston tester run in on 4" drill pipe and packer set at reported depth of 6972'; space between drill pipe and casing remained full of mud during test; when test valve opened for 20 min. air flowed fairly strongly from drill pipe for 4 min., then changed to gas which flowed 16 min. in gradually decreasing volume; when test valve closed and packer released 3.75 bbl. of fluid was required to refill 11 $\frac{3}{8}$ " casing; when pulled, drill pipe contained 103 bbl of fluid; fluid samples from 60' down, 412' down, 538' down, and bottom, were thick oily gas-cut mud, thick oily gas-cut mud, medium oily gas-cut mud, thin oily gas-cut mud, and thin oily gas-cut mud, which tested 222, 193, 174, 243 and 321 gr salt per gal, respectively; last two samples seemed to show considerable increase in water content; sample of ditch circulating mud tested 253 gr salt per gal. Later reported by telephone that after running drill pipe to about 6985' 1100 lb. pressure was applied to casing and shut-off, but no fluid could be forced away. Decision on shut-off is deferred Oral approval is hereby confirmed to continue drilling, with provision that division be notified before placing any additional casing in well.
- Associated Oil Co. well No "Lloyd" 135. (Report No. P 2-3240.) Supplementary proposal to drill approved provisionally Conditions: Depth 7486'; 16" cemented at 4075'; 11 $\frac{3}{8}$ " cemented at 6980' Proposed to drill to 7600'; set 6 $\frac{3}{8}$ " perforated liner 6950'-7600'; set 3 $\frac{3}{8}$ " casing with packer at 6950'; complete well. Decision: Proposal is approved provided division is notified to witness production test within 30 days after completing well
- Shell Oil Co well No "Gosnell" 8-A. (Report No P 2-3233.) Supplementary proposal to drill approved Conditions. Depth 5782', cement bridge 5695'-5745'; 13 $\frac{3}{8}$ " cemented at 1200'. Proposed to cement 8 $\frac{3}{8}$ " at 5695'; redrill 7 $\frac{3}{8}$ " hole to about 7000'; complete well with 5 $\frac{3}{8}$ " perforated liner.
- Shell Oil Co. well No. "Gosnell" 8-A. (Report No T 2-2445.) Inspection of mudding operations During 1 hr circulation test 10 bbl of fluid was lost. Mudding of formations 1200'-5695' is satisfactory
- Shell Oil Co well No. "Gosnell" 8-A. (Report No. T 2-2446.) Bailing test. Decision deferred. 8 $\frac{3}{8}$ " casing cemented at 5687' Hole swabbed to 4040' for test and stood 12 hr. Oil entered at rate of 6 bbl in 24 hr. Water entered at rate of 36 bbl. in 24 hr. Fluid samples were: bottom, thick oily gas-cut mud, testing 109.4 gr salt per gal; 4040', muddy water and oil, testing 54.7 gr salt per gal. With hole open to 5705' 800 lb. pressure was applied to 8 $\frac{3}{8}$ " for 20 min. 45 bbl. of fluid was forced away Decision on shut-off is deferred pending receipt of proposed production test
- Sec 28—Shell Oil Co well No "Taylor" 77 (Report No P 2-3242.) Supplementary proposal to drill approved provisionally Conditions: Depth 9482', plugged to about 8226'; 6 $\frac{3}{8}$ " landed at 9380', cemented through perforations at 7245' Proposed to plug to about 8125'. Decision: Proposal is approved provided division is notified to witness production test after completing well.
- Sec 29—Shell Oil Co well No "Taylor" 11. (Report No. P 2-3235.) Proposal to alter casing approved Conditions: Depth 5830'; 13 $\frac{3}{8}$ " cemented at 3155'; 9 $\frac{3}{8}$ " cemented at 4110' Proposed to clean out to 5830', hang 6 $\frac{3}{8}$ " perforated liner 4070'-5830'.
- Shell Oil Co. well No. "Taylor" 83. (Report No T 2-2447.) Inspection of mudding operations During  $\frac{1}{2}$  hr circulation test mud fluid was lost at rate of 16 bbl. per hr. Mudding of formations 914'-4970' is satisfactory.
- Shell Oil Co well No "Taylor" 83. (Report No. T 2-2453.) Bailing test. Decision deferred. 8 $\frac{3}{8}$ " casing cemented at 4969' Swab pulled from about 4500'; fluid swabbed was all oil; well flowed oil and some emulsion for 20 min., followed by gas with no fluid. After flowing gas for 2 hr well died; hole then cleaned out to 4980' and squeezed under 1000 lb. pressure without taking any fluid Test indicates shut-off is probably effective but is inconclusive due to small amount of salt water entering well Decision is deferred pending production test to be made by division after hole is cleaned out to bottom
- Shell Oil Co well No. "Taylor" 84. (Report No P 2-3237.) Proposal to drill approved provisionally Conditions: Well is 1696.56' S. and 9994.95' W. of Rancho Canada Larga Corner No. 11. Estimate oil sand at 5320' Proposed to cement 13 $\frac{3}{8}$ " at 900'; cement 8 $\frac{3}{8}$ " at 5320'; land 5 $\frac{3}{8}$ " at about 5290'-5650'. Decision: Proposal is approved provided that (1) Hole is kept full to surface at all times with mud fluid weighing not less than 70 lb per cu. ft., and adequate blow-out prevention equipment is provided and ready for operation at all times. (2) 8 $\frac{3}{8}$ " is cemented above first com-



mercial oil zone, and coring to locate such zone and satisfactory cementing point is begun at not deeper than 5250'. (3) Formations left back of 8½" water string are sealed with mud as demonstrated by open hole circulation test with loss reduced to satisfactory minimum. (4) Division is notified before running 8½" in hole or drilling below 5350', and to witness mudding test noted above and satisfactory test of 8½" shut-off.

T. 4 N., R. 23 W., S. B. B. and M.

Sec 34—Griffith & Fletcher well No. 7. (Report No. P 2-3241.) Proposal to drill approved provisionally. Conditions: Well is 250' S. and 20' E. from G. L. Strobeck well No "Strobeck" 1. Estimate oil sand at 410'. Proposed to cement 8½" at 25'; drill to about 900' and produce from open hole unless water encountered, in which case 6½" will be set. Decision: Proposal is approved provided that: (1) Division is notified before any casing is run in hole and when water or oil bearing formations are encountered. (2) Further requirements will be outlined upon receipt of data noted above

## DISTRICT NO. 3

## CAPITAN FIELD

T. 5 N., R. 30 W., S. B. B. and M.

- Sec. 32—General Petroleum Corp. well No. "Erburu" 11. (Report No. P 3-2409) Supplementary proposal to drill approved. Conditions: Depth 3130', plugged to 2600'; 8 $\frac{3}{8}$ " cemented at 2384'; 6 $\frac{3}{8}$ " cemented at 2600', including 69' perforated and cemented through perforations at 2527'. Proposed to perforate 6 $\frac{3}{8}$ " 2385'-2450'. Decision: Proposal is approved. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- General Petroleum Corp. well No. "Erburu" 12. (Report No. T 3-1178.) Inspection of mudding operations. During 20 min. circulation test mud fluid was lost from pit at rate of 0.5 per hr. Mudding of formations 316'-1250' is satisfactory.
- Shell Oil Co. well No. "Covarrubias 1" 4. (Report No. T 3-1173.) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of 1 l bbl. per hr. Mudding of formations 437'-1174' is satisfactory.
- Shell Oil Co. well No. "Covarrubias 1" 4 (Report No. T 3-1174.) Inspection of mudding operations. During  $\frac{3}{4}$  hr. circulation test mud fluid was lost from pit at rate of 0.5 per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 2244'.
- Shell Oil Co. well No. "Covarrubias 1" 4. (Report No. T 3-1180.) Bailing test. Decision deferred. 8 $\frac{3}{8}$ " casing cemented at 2242'. Hole swabbed to 2000' for test and stood 4 $\frac{3}{4}$ " hr. Well was flowing at estimated rate of 2000 Mcf. gas per day with slight mist of oil. Pressures were: Casing, 350 lb.; tubing, 325 lb.; no free water noted. Test indicates 8 $\frac{3}{8}$ " shut-off is probably effective but is not conclusive, due to pressure held on well. Decision is deferred pending receipt of production data after completing well.
- Shell Oil Co. well No. "Orella" 2. (Report No. P 3-2404) Supplementary proposal to drill approved provisionally. Conditions: Depth 3194'; 10 $\frac{3}{4}$ " cemented at 1749'. Proposed to bridge with cement 2700'-3050', cement 7" at 2700'; clean out to 2880', make production test, depending upon results of test, land 4 $\frac{3}{4}$ " perforated liner at about 2880'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Formations left back of 7" are mudded by open circulation until loss is not more than 2 bbl per hr (4) Not more than 5' of hole is open below 7" shoe when shut-off test is made. (5) Division is notified to witness final mudding operations before cementing 7" and bailing test of 7" shut-off. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

## CAT CANYON FIELD

T. 9 N., R. 32 W., S. B. B. and M.

- Sec. 30—Palmer Stendel Oil Corp well No. "Stendel" 2. (Report No. T 3-1171.) Inspection of cementing operations. Hole could not be cleaned out below 1714'; 6 sacks cement dumped at 1714'. Bailer would not spud below 1695' and brought up sample of set cement. Location and hardness of cement plug at 1695' are approved.

T. 9 N., R. 33 W., S. B. B. and M

- Sec. 23—Gilmore Oil Co. well No. 6. (Report No. P 3-2413.) Supplementary proposal to abandon approved. Conditions: Cement plug placed 1267'-1242'; 12 $\frac{3}{8}$ " shot at 550', could not be recovered below 500'. Proposed to perforate 12 $\frac{3}{8}$ " and 16 $\frac{3}{8}$ " 517'-565'; leave well in this condition, without capping 12 $\frac{3}{8}$ " stub, for water well.

## ELWOOD FIELD

T. 4 N., R. 29 W., S. B. B. and M.

- Sec. 15—Bankline Oil Co. well No. 89-8. (Report No. P 3-2415.) Proposal to drill approved provisionally. Conditions: Well is 65.7' S. and 54.57' W. from well No. 89-5. Estimate oil sand at 3200'. Proposed to cement 16" at 250'; cement 10 $\frac{3}{8}$ " at 3200'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface,

particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Division is notified to witness bailing test of 10½" shut-off.

Barnsdall Oil Co. well No. "Doty" 8. (Report No. T 3-1166.) Bailing test approved 1646' of 5" and 1673' of 4½" cemented at 3319'. Hole bailed to 200' for test and stood 13 hr. No fluid entered well.

### MESA FIELD

T. 4 N., R. 27 W., S. B. B. and M.

- Sec. 28—E C Arnold Oil Co. well No. "Booher" 1. (Report No. P 3-2416.) Proposal to drill approved provisionally. Conditions: Well is 25.5' N. and 201' E. of SW. corner of Lot 30, Fair Acres Lease (Lot 30-B). Estimate oil sand 2010'. Proposed to cement 10½" at 105'; cement 6½" at 2010'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 6½" is determined by coring starting not lower than 1975'. (4) Shut-off test is made in silt stone above Vaqueros sand. (5) Division is notified to witness bailing test of 6½" shut-off.
- Bastanchury Oil Co well No. 2. (Report No. T 3-1172.) Bailing test approved. 6½" casing cemented at 2080'. Hole bailed to 1200' for test and stood 12 hr. Fluid level rose at rate of 0.2 bbl. in 24 hr.
- Bernstein Mathes Oil Co. well No. 1. (Report No. P 3-2411.) Proposal to drill approved provisionally. Conditions: Well is 24' S. and 24' W. of E. property line of Lot 57, Fair Acres Tract. Estimate oil sand at 2000'. Proposed to cement 13" at 150' with 65 sacks cement; cement 7" at 2000'. Decision: Proposal is approved provided: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 7" is determined by coring starting not lower than 2000'. (4) 7" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 7" shut-off.
- Fred E Cole well No. "Cole" 6. (Report No. T 3-1176.) Bailing test. Decision deferred 6½" casing cemented at 1968'. Hole swabbed to 1200' for test and stood 16½ hr. Well flowed small amount of clean heavy oil. Pressures were: tubing, 10 lb., casing, 150 lb. Test indicates 6½" shut-off is probably effective but is not conclusive due to pressure held on well. Decision is deferred pending receipt of production data after completing well.
- Fred E. Cole well No. "Cole" 8. (Report No. P 3-2414.) Proposal to drill approved provisionally. Conditions: Well is 665' S. and 225' easterly from NW. corner of S. A Perkins Tract fronting Cliff Drive. Estimate oil sand at 1960'. Proposed to cement 12½" at 100'; cement 5" at 1960'. Decision: Proposal is approved provided: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 5" is determined by coring starting not lower than 1940'. (4) Shut-off test is made in silt stone above Vaqueros sand. (5) Division is notified to witness bailing test of 5" shut-off.
- Fred E Cole well No. "Stewart Community" 1. (Report No. P 3-2419.) Proposal to abandon approved provisionally. Conditions: Depth 2130'; 12" cemented at 200'; 6½" cemented at 2072'. Proposed to clean out to 2130'; place cement plug 2052'-2130'; cut and pull all 6½" possible; place cement plug 180'-220'; fill with heavy mud or sand all portions of hole not plugged with cement; cap at surface and abandon. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plugs at 2052' and 180'.
- Crude Oil Drilling Co., Ltd., well No. 1 (Report No. T 3-1169.) Bailing test approved 6½" casing cemented at 1997'. Hole bailed to 1200' for test and stood 13 hr. Fluid level rose at rate of 1.2 bbl. in 24 hr.
- Crude Oil Drilling Co., Ltd, well No. 2 (Report No P 3-2403.) Proposal to drill approved provisionally. Conditions: Well is 25' S and 25' W of NE corner. Estimate oil sand at 2000'. Proposed to cement 12½" at 145'; cement 6½" at about 1985', coring for exact depth. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 6½" is determined by coring starting not lower than 2000'. (4) 6½" is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 6½" shut-off.
- East Elwood Petroleum Corp. well No. "Low" 1. (Report No P 3-2412.) Proposal to abandon approved provisionally. Conditions: Depth 2300'; 13" cemented at 100'; 9½" cemented at 2200'; 8½" cemented at 2068'; 7" landed at 2300'; no commercial production. Proposed to clean out to

- 2102' by circulating with tubing to bottom, cement through tubing under pressure; extend cement plug 2102'-2050'; pull about 1500' of 9 $\frac{5}{8}$ " plug with cement 120'-80' inside 13" surface pipe, plug surface and abandon. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plugs at 2050' and 80'.
- East Elwood Petroleum Corp. well No. "Low" 1. (Report No. T 3-1167.) Inspection of cementing operations. 8 $\frac{5}{8}$ " cemented at 2079' instead of 2068' as previously reported; hole cleaned out to 2102'; 15 sacks cement pumped in through tubing hung at 2100', tubing raised two stands and pressure applied for 12 hr. Deputy noted bailer would not spud below 2045' and brought up sample of set cement. Location and hardness of cement plug at 2045' are approved.
- East Elwood Petroleum Corp. well No. "Low" 1. (Report No. T 3-1168.) Inspection of cementing operations. 8 $\frac{5}{8}$ " shot and pulled from 1475'; bridge placed at 130'; 28 sacks cement dumped at 130'. Deputy noted bailer would not spud below 90' and brought up sample of set cement. Location and hardness of cement plug at 90' are approved.
- Fair Mesa Oil Co. well No. "Gray" 2. (Report No. P 3-2422.) Proposal to drill approved provisionally. Conditions: Well is 26' N. and 26' W. of SE. corner of Lot 45, Fair Acres Tract. Estimate oil sand at 1990'. Proposed to cement 12 $\frac{3}{4}$ " at 100'; cement 6 $\frac{5}{8}$ " at 1990'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Any hole to be sidetracked at any time during drilling of well is completely filled with cement. (4) Exact cementing depth for 6 $\frac{5}{8}$ " is determined by coring starting not lower than 1950'. (5) 6 $\frac{5}{8}$ " is cemented high enough above oil sand to leave at least 10' cement plug below shoe after drilling out for shut-off test. (6) Division is notified to witness bailing test of 6 $\frac{5}{8}$ " shut-off.
- Daniel Fisher well No. "Fisher" 1. (Report No. P 3-2406.) Proposal to drill approved provisionally. Conditions: Well is 33' S and 28' E of NW. corner of Lot 61, Fair Acres Tract. Estimate oil sand at 2030'. Proposed to cement 10 $\frac{5}{8}$ " at 100'; cement 6 $\frac{5}{8}$ " at 2030'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 6 $\frac{5}{8}$ " is determined by coring starting not lower than 2000'. (4) 6 $\frac{5}{8}$ " is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 6 $\frac{5}{8}$ " shut-off.
- Daniel Fisher well No. "Fisher" 1. (Report No. T 3-1181.) Bailing test approved. 5 $\frac{3}{4}$ " casing cemented at 1998'. Hole bailed to 1200' for test and stood 22 hr. Fluid level rose at rate of 0.3 bbl. in 24 hr. Fluid sample from 1200' was froth and muddy water, and from bottom was heavy mud fluid showing little gas.
- Fornachon and Wilson, Inc., well No. 2. (Report No. T 3-1179.) Bailing test. Decision deferred. 5 $\frac{3}{4}$ " casing cemented at 1993'. Hole swabbed to 1200' for test and stood 21 hr. Oil entered at rate of 12.3 bbl. in 24 hr. No water entered well. Top of oil found at 690'; swab was run in until it hit pin in tubing at 1824', and was then pulled from hole; clean oil only discharged from flow line. Test indicates 5 $\frac{3}{4}$ " shut-off is probably effective but is not conclusive because sample could not be obtained from bottom. Decision is deferred pending receipt of production data after completing well.
- Rex C. Gale well No. 1. (Report No. T 3-1164.) Bailing test. Decision deferred. 6 $\frac{5}{8}$ " casing cemented at 2008'. Hole bailed to 1200' for test and stood 16 hr. Fluid level rose at rate of 6 bl. in 24 hr. Fluid samples were: 1200', gas-out mud; 2008', oil and froth. Test indicates 6 $\frac{5}{8}$ " shut-off is probably effective but is not conclusive due to large fluid rise. Decision is deferred pending receipt of production data after completing well.
- Jordan & Maney well No. "Hels" 1. (Report No. P 3-2401.) Proposal to drill approved provisionally. Conditions: Well is 76' S. and 17' W. of NE. corner of Lot 27, Fair Acres Tract. Estimate oil sand at 1984'. Proposed to cement 14" surface casing at 125'; cement 8 $\frac{5}{8}$ " water string at 1980'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 8 $\frac{5}{8}$ " is determined by coring starting not lower than 1975'. (4) 8 $\frac{5}{8}$ " is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 8 $\frac{5}{8}$ " shut-off.
- Jordan & Maney well No. "Hels" 1. (Report No. T 3-1177.) Bailing test approved. 8 $\frac{5}{8}$ " casing cemented at 1975'. Hole bailed to 1220' for test and stood 45 hr. Fluid level rose at rate of 0.2 bbl. in 24 hr. Fluid samples were: 1215', medium mud fluid showing gas; 1933', heavy mud fluid.
- Mission Oil Co. well No. 1. (Report No. P 3-2405.) Proposal to drill approved provisionally. Conditions: Well is 10' S. and 71' W. of NE.

- corner of Lot 68, Fair Acres Tract. Estimate oil sand at 2050'. Proposed to cement 12 $\frac{3}{8}$ " at 125', cement 6 $\frac{3}{8}$ " at 2050'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 6 $\frac{3}{8}$ " is determined by coring starting not lower than 2000'. (4) 6 $\frac{3}{8}$ " is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 6 $\frac{3}{8}$ " shut-off.
- Moss & Walker well No. "Securities" 2. (Report No. T 3-1170.) Shut-off test approved. 7" casing cemented at 1973'. Johnston tester run in and packer set at reported depth of 1968'; while tester valve open for 10 min. large amount of gas issued from drill pipe, and space between drill pipe and 7" casing remained full of mud fluid, demonstrating that packer prevented migration of fluid between drill pipe and casing; when pulled, drill pipe contained  $\frac{3}{4}$  bbl. of fluid; fluid was gas-cut mud at top, mud and oil in center, and clean oil in bottom of column. Shut-off is approved.
- Rio Grande Oil Co well No. "Perkins" 2 (Report No. P 3-2408.) Supplementary proposal to drill approved provisionally. Proposed to start coring at 1960' to find blue silt stone and top of black oil sand; set 5 $\frac{3}{8}$ " on this sand and cement; drill out enough cement from inside 5 $\frac{3}{8}$ " to permit gun perforator to be fixed opposite Vaqueros blue silt stone; make four shot perforations at this horizon, coring for exact depth, and ball casing dry for water shut-off test. Decision: Proposal is approved provided division is notified to witness bailing test of 5 $\frac{3}{8}$ " shut-off.
- Rio Grande Oil Co. well No. "Perkins" 2 (Report No. T 3-1165.) Bailing test approved. 5 $\frac{3}{8}$ " casing cemented at 2028'. Hole bailed to 2013' for test and stood 10 $\frac{3}{4}$  hr. No fluid entered well.
- Rio Grande Oil Co. well No. "Perkins" 3. (Report No. P 3-2407.) Proposal to drill approved provisionally. Conditions: Well is 1022' southerly from NW. corner of Rio Grande Perkins lease along W. boundary line of lease, thence 75' easterly at right angles to said boundary. Proposed to cement 10 $\frac{3}{8}$ " at 120'; cement 6 $\frac{3}{8}$ " at 1975'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 6 $\frac{3}{8}$ " is determined by coring starting not lower than 1930'. (4) After cementing, 6 $\frac{3}{8}$ " is perforated above sand and silt stone contact and hole bailed dry for shut-off test. (5) Division is notified to witness bailing test of 6 $\frac{3}{8}$ " shut-off.
- Rio Grande Oil Co. well No. "Perkins" 3. (Report No. T 3-1175.) Bailing test approved. 6 $\frac{3}{8}$ " casing cemented at 1965'. Hole bailed to 1925' for test and stood 12 hr. No fluid entered well. Fluid sample from bottom was thin mud fluid showing gas.
- Rio Grande Oil Co. well No. "Perkins" 4. (Report No. P 3-2420.) Proposal to drill approved provisionally. Conditions. Well is 1377' southerly from NW. corner of Rio Grande Perkins lease along W. boundary of lease, thence 75' easterly at right angles to said boundary. Estimate oil sand at 2000'. Proposed to cement 13 $\frac{3}{8}$ " at 100'; cement 8 $\frac{3}{8}$ " and 9" at 2000'; test water shut-off at about 2000' by use of gun perforator. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 8 $\frac{3}{8}$ " and 9" is determined by coring starting not lower than 1975'. (4) After cementing, 8 $\frac{3}{8}$ " and 9" are perforated above sand and silt stone contact, and hole is bailed dry for test of shut-off. (5) Division is notified to witness bailing tests of 8 $\frac{3}{8}$ " and 9" shut-offs.
- Jacques Vinmont well No "Low" 1 (Report No. P 3-2402) Proposal to drill approved provisionally. Conditions: Well is 989' S and 150' E. of NW. corner of Low Lease. Estimate oil sand at 2000'. Proposed to cement 10 $\frac{3}{8}$ " at 100'; cement 6 $\frac{3}{8}$ " at 2000'. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Exact cementing depth for 6 $\frac{3}{8}$ " is determined by coring starting not lower than 1900'. (4) 6 $\frac{3}{8}$ " is cemented at sufficient height above oil sand to leave 10' cement plug below shoe after drilling out for shut-off test. (5) Division is notified to witness bailing test of 6 $\frac{3}{8}$ " shut-off.
- Jacques Vinmont well No. "Low" 1 (Report No. T 3-1182) Shut-off test approved. 6 $\frac{3}{8}$ " casing cemented at 1981'. Johnston tester run in and packer set at reported depth of 1971'; space between drill pipe and 6 $\frac{3}{8}$ " casing remained full of mud fluid during test, demonstrating that packer prevented any migration of fluid between drill pipe and casing; while valve opened for 20 min. gas flowed through drill pipe at increasing rate for first 5 min., then subsided to gentle flow during remainder of period, when pulled, drill pipe contained 1 bbl. of medium gassy mud fluid showing oil varying from trace at top to about 25% at bottom of fluid column; sample from tester was oily mud and sand. Shut-off is approved.

**MONTEREY COUNTY**

T. 22 S., R. 14 E., M D B and M.

Sec 31—Thomas Petroleum Corp. well No. "Flentge" 3. (Report No. P 3-2418) Proposal to deepen approved provisionally. Conditions Well is 300' W. from well No. "Flentge" 1. Estimate oil sand at 123' Proposed to land 8" at 20', land 64" at 120'. Decision Proposal is approved provided division is notified to witness bailing test of 64" shut-off.

T 23 S., R 15 E, M D B. and M.

Sec 33—Parkfield Leaseholders, Inc, well No 1 (Report No. P 3-2421.) Proposal to deepen approved provisionally. Conditions Depth 352', oil sand found 339'-350', then explored old hole, supposedly drilled to 1200', and decided to use same. Proposed to drill to 5000' if necessary, case well when advisable. Decision. Proposal is approved provided that: (1) Fluid content of all porous formations is carefully determined (2) Water-tight casing is cemented in impervious formation below all porous formations containing water suitable for irrigation or domestic purposes. (3) Division is consulted when important oil or gas showings encountered and before running casing in hole (additional requirements may be outlined at that time) (4) Division is notified to witness bailing test of each possible water shut-off.

**SAN LUIS OBISPO COUNTY**

T 25 S., R. 15 E., M. D B and M.

Sec 10—Willett Oil Co. well No. "Jack" 2 (Report No. P 3-2410.) Supplementary proposal to drill approved. Conditions: Dry thief sand below surface casing absorbing large amount of drilling water, also certain amount of sluffing in hole Proposed to set additional surface string of 10" pipe 45 lb to the foot at about 2000' and cement with about 400 sacks cement under pressure.

**SANTA BARBARA COUNTY**

T 10 N, R. 34 W, S. B B. and M.

Sec 23—Union Oil Co well No "Enos" 1 (Report No P 3-2417) Supplementary proposal to drill approved provisionally Prospect well

## DISTRICT No. 4

## BELRIDGE FIELD

T. 27 S, R 20 E., M D. B. and M.

Sec. 35—Belridge Oil Co. well No. 16-35. (Report No. P 4-15722.) Supplementary proposal to drill approved. Conditions: Depth 8905', 8 $\frac{1}{2}$ " cemented at 8385'; 6 $\frac{1}{2}$ " liner 8331'-8905' landed on liner hanger; 6 $\frac{1}{2}$ " casing landed on liner at 8331' with 8 $\frac{1}{2}$ " to 6 $\frac{1}{2}$ " packer; water witch showed water entering 8574'-8905'. Proposed to pull 6 $\frac{1}{2}$ " casing and liner; plug hole to 8538' with cement, land 4 $\frac{1}{2}$ " liner and test upper sand 8397'-8538'.

Belridge Oil Co. well No. 22-35. (Report No. P 4-15719.) Proposal to drill approved provisionally. Conditions: Well is 1908 1' S. and 1894 7' E. of NW. section corner. Estimate oil sand at 4935'. Proposed to cement 16" at 750'; cement 11 $\frac{1}{2}$ " at 4935', land 6 $\frac{1}{2}$ " at 5464'. Decision: Proposal is approved provided that (1) Column of mud fluid of sufficient weight to prevent blow-outs is maintained to surface at all times, particularly while pulling drill pipe. (2) Following blow-out prevention equipment is provided and ready for use at all times when drilling below 3000': (a) Master gate with control extending beyond derrick floor to completely close well when drill pipe is out of hole (b) Packer type blow-out preventer for use when drill pipe is in hole. (3) 16" is cemented with enough cement to fill space behind casing to surface (4) If cement does not reach surface space outside casing is cemented from surface to as deep as possible. (5) Formations left behind 11 $\frac{1}{2}$ " are mudded by open circulation until mud loss is not more than 5 bbl per hr (6) Enough cement is used behind 11 $\frac{1}{2}$ " to reach to at least 3000'. (7) Division is notified to witness final mudding operations before cementing 11 $\frac{1}{2}$ " and 11 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below 11 $\frac{1}{2}$ " shoe. (8) Division is notified to inspect blow-out prevention equipment before drilling below 4500' and again after cementing 11 $\frac{1}{2}$ ".

Belridge Oil Co. well No 49-35. (Report No T 4-12386.) Inspection of cementing operations. Hole cleaned out to 5580'; 110 sacks cement pumped in through drill pipe hung at 5578'. Inspector noted cement plug at reported depth of 5371' held 5 points of weight of drill pipe. Location and hardness of cement plug at 5371' are approved.

## DEVILS DEN FIELD

T. 25 S, R 18 E., M. D. B. and M.

Sec. 14—Richfield Oil Co. well No. "Alferitz" 2. (Report No P 4-15707.) Proposal to drill approved provisionally. Conditions: Well is 800' N and 250' E from center of section. Estimate oil sand at 350'. Proposed to cement 16" at 340'; cement 11 $\frac{1}{2}$ " at 940'; cement 8 $\frac{1}{2}$ " at 2200', cementing through perforations at 1700'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent damage to oil or gas bearing strata by infiltrating water and oil or gas waste by blow-out or fire (2) Formations above 940' are mudded by open circulation until mud loss is not more than 1 bbl per hr (3) Division is consulted before cementing or landing any casing below 940'. (4) Division is notified to witness final mudding operations before cementing 11 $\frac{1}{2}$ " and any smaller strings of casing, and 16", 11 $\frac{1}{2}$ ", and any other shut-offs. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

## EDISON FIELD

T. 30 S., R. 29 E, M D. B. and M.

Sec. 5—Lee Oil Co, Inc., well No. "Edison-Seale-5" 2. (Report No. P 4-16327.) Proposal to drill approved provisionally. Conditions: Well is 993 73' N and 1657 32' W. of SE section corner. Estimate oil sand at 3680'. Proposed to cement 13 $\frac{1}{2}$ " at 500'; cement 8 $\frac{1}{2}$ " at 3700', coring for exact cementing point to start at 3600'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire (2) Enough cement is pumped behind 8 $\frac{1}{2}$ " to fill up to 2000' (3) Formations left back of 8 $\frac{1}{2}$ " are mudded until mud loss is reduced to 5 bbl. per hr. (4) Space behind 8 $\frac{1}{2}$ " is kept full of mud fluid for one month after completing well. (5) Division is notified to examine all cores taken before cementing 8 $\frac{1}{2}$ ", to witness mudding test just before cementing 8 $\frac{1}{2}$ ", 8 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below shoe, and pressure test on formations left behind 8 $\frac{1}{2}$ " one month after completing well. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

- Sec. 8—Foster, Incorporated, well No. "Osborn" 1. (Report No. P 4-16328) Proposal to drill approved provisionally. Conditions: Well is in S $\frac{3}{4}$  of Lot 13; Sierra Vista Tract. Estimate oil sand at 3700'. Proposed to cement 12 $\frac{1}{2}$ " at 500'; cement 8 $\frac{1}{2}$ " at 3700'; start coring at 3600' for exact cementing depth of 8 $\frac{1}{2}$ " and completion depth. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) Enough cement is pumped behind 8 $\frac{1}{2}$ " to fill up to 2000'. (3) Formations left back of 8 $\frac{1}{2}$ " are mudded until mud loss is reduced to 5 bbl. per hr. (4) Space behind 8 $\frac{1}{2}$ " is kept full of mud fluid for one month after completing well. (5) Division is notified to examine all cores taken before cementing 8 $\frac{1}{2}$ ", to witness mudding test just before cementing 8 $\frac{1}{2}$ ", 8 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below shoe, and pressure test on formations left behind 8 $\frac{1}{2}$ " one month after completing well. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- Sec. 14—General Petroleum Corp. well No. "Leddly-Nichols" 1. (Report No. T 4-13253.) Inspection of cementing operations. 60 sacks cement pumped in through drill pipe hung at 3046'; 150 sacks cement pumped in through drill pipe hung just above 3000'. Inspector witnessed drilling out hard cement 2885'-2886'; samples of set cement taken from ditch. Location and hardness of cement plug at 2886' are approved.
- General Petroleum Corp. well No. "Leddly-Nichols" 1. (Report No. T 4-13254.) Inspection of mudding operations. During 1 hr. circulation test 1 bbl. of mud fluid was lost. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{1}{2}$ " at 2770'.
- General Petroleum Corp. well No. "Leddly-Nichols" 1. (Report No. T 4-13255.) Shut-off test approved. 8 $\frac{1}{2}$ " casing cemented at 2770'. Inspector noted 770' of oil with shows of mud and sand brought up in drill pipe. Shut-off is approved.
- Shell Oil Co. well No. "Nichols" 1. (Report No. T 4-13263.) Shut-off test approved. 11 $\frac{3}{4}$ " casing cemented at 1790'. Inspector noted test was dead for 10 min. when valve closed; packer sealed effectively during test, when packer broken fluid on outside of drill pipe dropped about 15'; 6 $\frac{1}{2}$ " of mud, similar to that circulated into hole, was brought up in drill pipe. Shut-off is approved.
- Sec. 15—General Petroleum Corp. well No. "Jed" 1. (Report No. P 4-16339) Supplementary proposal to drill approved provisionally. Conditions: Depth 2195'; 16" S. P. cemented at 300'. Proposed to omit cementing 11 $\frac{3}{4}$ " as proposed at 1985'; use enough cement in cementing 8 $\frac{1}{2}$ " to reach at least 1200' above shoe. Decision: Proposal is approved provided that: (1) Formations left back of 8 $\frac{1}{2}$ " are mudded by open circulation until mud loss to formations is less than 2 bbl. per hr. (2) Division is notified to witness final mudding operations before cementing 8 $\frac{1}{2}$ " and 8 $\frac{1}{2}$ " water shut-off test with hole open not more than 5' below shoe.
- General Petroleum Corp. well No. "Jed" 1. (Report No. T 4-13271) Inspection of mudding operations. During 1 hr. circulation test 1 bbl. of mud fluid was lost. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{1}{2}$ " at 2760'.
- General Petroleum Corp. well No. "Jed" 1. (Report No. T 4-13281) Shut-off test approved. 8 $\frac{1}{2}$ " casing cemented at 2758'. Inspector noted 200' of fluid brought up in drill pipe; top 176' of fluid was heavy mud with gas shows and trace of mud; bottom 44' of fluid was sandy oily mud showing gas. Shut-off is approved.
- General Petroleum Corp. well No. "Jed" 2. (Report No. P 4-16332.) Proposal to drill approved provisionally. Conditions: Well is 90' N. and 330' W. of SE. corner. Estimate oil sand at 1950'. Proposed to cement 16" S. P. at 300', cement 11 $\frac{3}{4}$ " at 1950'; cement 8 $\frac{1}{2}$ " at 2850'; land 6 $\frac{1}{2}$ " at 3050'; core for exact depths for 8 $\frac{1}{2}$ " and 6 $\frac{1}{2}$ "; start coring at 1900' for exact depth of 11 $\frac{3}{4}$ ". Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (2) Enough cement is pumped behind 11 $\frac{3}{4}$ " to fill up to 1000'. (3) Formations left back of 8 $\frac{1}{2}$ " are mudded until mud loss is reduced to satisfactory minimum. (4) Enough cement is pumped behind 8 $\frac{1}{2}$ " to fill up to 11 $\frac{3}{4}$ " shoe (5) Division is notified to examine all cores taken before cementing 11 $\frac{3}{4}$ ", and to witness mudding test just before cementing 8 $\frac{1}{2}$ " and 11 $\frac{3}{4}$ " and 8 $\frac{1}{2}$ " shut-off test with hole open not more than 5' below shoe in each case. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- Monterey Exploration Co. well No. "Duff" 3. (Report No. T 4-13266) Inspection of mudding operations. During 1 hr. circulation test no mud fluid was lost from tank. Mudding operations are approved.
- Shell Oil Co. well No. "Osborne" 1. (Report No. T 4-13264) Inspection of mudding operations. During 1 hr. circulation test 2 75 bbl. of mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{1}{2}$ " at 3424'.
- Shell Oil Co. well No. "Osborne" 1. (Report No. T 4-13279) Shut-off test approved. 8 $\frac{1}{2}$ " casing cemented at 3424'. Inspector noted when valve opened for 30 min. fairly strong blow of air and gas by heads came from drill pipe, and packer did not leak; drill pipe contained 320' of frothy gassy mud with large amount of oil; no free water in fluid. Shut-off is approved.
- Sec. 16—Shell Oil Co. well No. "Cauley" 1 (Report No. P 4-16333.) Proposal to abandon approved provisionally. Conditions: Depth 4276', plugged to 4257'; 13 $\frac{1}{2}$ " cemented at 800'; 8 $\frac{1}{2}$ " cemented at 2353'; 6 $\frac{1}{2}$ " cemented at



3935'; 356' of 4½" liner landed at 4257', perforated 4236'-4257', cemented through perforations at 4234'. Proposed to clean out to bottom of liner; plug 4½" with cement 4257'-4216', notifying division to witness top of plug; cut and pull 6½" above 2333", bridge above stub and plug to 2310' with cement; cut and pull 8½" above 780', bridge above stub and plug to 770' with cement; cap 13½" at surface and abandon. Decision: Proposal is approved provided division is notified to witness location and hardness of each proposed cement plug.

Sec 17—Consolidated Crude Corp well No "Bloemer-Jeppi" 1 (Report No P 4-16306.) Proposal to drill approved provisionally. Conditions: Well is 331 25' N. and 332 25' E of W½ section corner. Estimate oil sand at 5200'. Proposed to cement 12" at 812', cement 7" or 3½" at about 5200'; core below 2200' for exact cementing depth for 8½". Decision: Proposal is approved provided that: (1) Fluid content of each porous formation encountered is determined as definitely as possible (2) Every possible step is taken to prevent damage to oil or gas bearing strata by infiltrating water and to underground water suitable for irrigation (3) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (4) Division is notified when oil or gas showing encountered, before landing or cementing any casing, and to witness bailing test of each possible water shut-off with hole open not more than 5' below cementing depth.

Sec 22—A T Jergins Syn, Inc, well No "Hay" 1. (Report No P 4-16315) Proposal to abandon approved provisionally. Conditions: Depth 3894', redrilled 2650'-2770', first hole plugged with cement 3375'-3325' and 2700'-2650'; 16" cemented at 194', bit fell back into old hole at 2750'. Proposed to clean out to 2750'; set plug of about 100 sacks cement 2750'-2500' and 50 sacks cement above 1000', weld steel cap over surface pipe and abandon. Decision: Proposal is approved provided division is notified to witness either proposed cementing operations or location and hardness of plug at about 1000'.

A T Jergins Syn, Inc, well No "Hav" 1 (Report No. T 4-13257) Inspection of cementing operations 100 sacks cement pumped in through drill pipe hung at 2750'. 365 cu ft of mud fluid used to displace cement; drill pipe raised to 1000' and 50 sacks cement pumped in; 140 cu ft of mud fluid used to displace this cement. Cementing operations are approved.

Sec 23—Gilco, Inc, well No "Stuart-Gerard" 2. (Report No. P 4-16320) Supplementary proposal to drill approved. Conditions: Depth 2259', cement plug 2259'-2110'; 10½" cemented at 1844', 8½" combination liner 1814'-2110', perforated 2110'-2070' and 1956'-1844' with baffle plate at 2070'; cemented through perforations 2070'-1956' back of blank liner; zone 1844'-1956' tested wet, packer set at 1980', lower zone tested O. K. Proposed to place cement plug inside 8½" liner 1990'-1960'; place cement plug 1960'-1948' and 1933'-1860'; clean out to 1860' and test zone by bailing; if zone clean, then clean out to 1980' and test by bailing; if clean, clean out to 1925' and test by bailing; if clean, clean out to 1948' and test by bailing; if clean, clean out to 1970' and test by bailing; if clean, clean out to bottom and try for production; if one or both zones are wet, cement perforations under pressure.

A T Jergins Trust well No "R R Andrews" 1 (Report No P 4-16322) Proposal to drill approved provisionally. Conditions: Well is 331.38' S. and 331.91' W from center of section. Estimate oil sand at 2000'. Proposed to cement 13½" at 200', cement 8½" at about 2000', coring for exact depth; land 6½" liner at unknown depth. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire (2) Enough cement is used to fill up to 900' behind 8½" (3) Division is notified to examine all cores taken before cementing 8½" and to witness 8½" shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

Sec. 36—The Ohio Oil Co well No "Cauley" 2 (Report No P 4-16321.) Proposal to drill approved provisionally. Conditions: Well is 330' S. and 330' W. of NE corner. Estimate oil sand at 800'. Proposed to cement or land 13½" at 20', cement 8½" at 800'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire (2) Enough cement is used to fill up to 500' above 8½" shoe. (3) Division is notified to examine all cores taken before cementing 8½", and to witness 8½" shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.

### ELK HILLS FIELD

T. 30 S, R. 24 E, M. D B. and M.

Sec 22—Roy N. Bishop, Trustee, well No 1. (Report No P 4-15700) Supplementary proposal to abandon approved provisionally. Conditions: Depth 4497', cement plugs 3775'-3762' and 2305'-2290'; 10" cemented at 3315', collapsed at 2360', drilled through and sidetracked from 2337', 6½" cemented at 3760', pulled from 2305' or 2309'. Proposed to salvage all 10" above 2300'; abandon hole as per requirements of division. Decision: Proposal is approved provided that: (1) 10" stub is capped with at least 10' of cement before pulling 10" more than 15' above cut-off. (2) All

unplugged portions of hole above 2300' are filled with surface formation or heavy mud (3) Hole is capped with cement at surface. (4) Division is notified to witness shooting off of 10" and placing cement on 10" stub. (5) Form 102 is filed in duplicate upon completion of proposed work.

North Elk Oil Co well No 1 (Report No P 4-15701) Supplementary proposal to abandon approved provisionally Conditions: Depth 4003', 15½" cemented at 112'; 8¼" cemented at 3505', bad at 2700'. Proposed to salvage all 8¼" above 2700'; abandon hole as per requirements of division Decision: Proposal is approved provided that: (1) 8¼" stub is capped with at least 10' cement before pulling 8¼" more than 15' above cut-off point (2) All unplugged portions of hole are filled with heavy mud or surface formation (3) 15½" is securely capped at surface (4) Division is notified to witness shooting off of 8¼" and placing cement cap on 8¼" stub (5) Form 102 is filed in duplicate upon completion of proposed work

T. 31 S, R 25 E., M D. B and M.

Sec 6—Pan American Petroleum Co. well No "Crampton" 6-A (Report No P 4-15711) Supplementary proposal to redrill water string approved provisionally Conditions: Depth 5067', cement plugs 3950'-3921' and 3450'-3375', 10" cemented at 3206', drilled through at 2775'; 8¼" cemented at 3350'; 6½" liner landed 3322'-3374', perforated 3343'-3374', water entering around 8½" shoe or from sands below 3350' Proposed to clean out to 3375'; plug 3375'-3300' with dump bailer, filling hole to surface with fluid after dumping; perforate 8½" with two holes at 3240' and test effectiveness of cement job by bailing, if O K, perforate 8½" 3250'-3285' and make production test Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 3300', and bailing test after perforating at 3240'

Pan American Petroleum Co well No. "Crampton" 6-A (Report No T 4-12389) Inspection of cementing operations: Hole cleaned out to 3375' and 16 sacks cement dumped, filling to 3295'; 8¼" perforated with two holes at 3245' and 3246'; top of fluid located at 2760' Inspector noted fluid rose in 2 hr. at rate of 141 bbl per 24 hr., and bailer would not spud below 3295' Test indicates water does not enter in damaging amounts through perforations at 3245' and 3246' Condition of cementing behind 8¼" and location and hardness of cement plug at 3295' are approved.

### FRUITVALE FIELD

T 29 S, R 27 E, M. D. B. and M.

Sec 22—Western Gulf Oil Co well No. 15-KCL-B (Report No T 4-13248) Inspection of mudding operations During 1 hr circulation test 1 bbl of mud fluid was lost from tank Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 3594'

Western Gulf Oil Co well No 15-KCL-B (Report No T 4-13249) Bailing test approved 8½" casing cemented at 3594' Hole bailed to 2200' for test and stood 16½ hr No fluid entered well. Fluid samples from 2200' and 3597 were heavy mud

Western Gulf Oil Co well No. 16-KCL-B (Report No P 4-16312) Proposal to drill approved provisionally Conditions Well is 2255' N and 2008' E of SW section corner Estimate oil sand at 3600' Proposed to cement 12½" at 500', cement 8½" at 3600' Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire (2) Formations left back of 8½" are mudded by open circulation until mud loss is reduced to 2 bbl per hr (3) Division is notified to examine all cores taken before cementing 8½", to witness mudding test just before cementing 8½", and to witness 8½" shut-off test with hole open not more than 5' below shoe

Western Gulf Oil Co well No 16-KCL-B (Report No T 4-13275) Inspection of mudding operations During 1 hr circulation test 1 8 bbl of mud fluid was lost from pit Mudding operations are approved Oral approval is hereby confirmed to cement 8½" at 3596'.

Western Gulf Oil Co. well No 2—"Price & Stewart." (Report No P 4-16336.) Proposal to redrill and alter casing approved provisionally Conditions: Depth 3936'; 10¾" cemented at 531', 6½" cemented at 3603'; 4¾" landed at 3936', including 350' perforated; water entry at 3602' Proposed to cut 4¾" liner at 3634' and pull from above that depth, place cement plug over stub, and retest 6½" water shut-off; if water entering at that point recement 6½" to shut off water; redrill to present depth and recomplete well Decision: Proposal is approved provided division is notified to witness proposed retest of 6½" water shut-off

Western Gulf Oil Co well No 2—"Price & Stewart" (Report No. T 4-13258.) Bailing test Decision deferred 8½" casing cemented at 3594'. Inspector noted fluid standing at surface, and bailer spudded at 3597', bringing up sample of heavy gassy drilling mud and few particles of shale Test indicates shut-off is probably effective but is not conclusive due to gas interference. Decision is deferred pending receipt of results of further tests.

Sec. 23—George F Getty, Inc, well No "Fairhaven" 1. (Report No P 4-16341) Proposal to abandon provisionally Conditions Depth 4003', cement plug 4003'-3770', 18½" cemented at 514'; 11¾" cemented at 3648'. 8¼" liner 3615'-3770', perforated 3770'-3647'. Proposed to plug 3770'-3615'; per-

forate 3325'-3405' and test; if wet, plug 3300'-3425', cut and pull 11 $\frac{3}{4}$ " to 510'; plug stub and abandon. Decision: Proposal is approved provided that (1) Cement plug 3770'-3615' is placed under 300 lb minimum pressure (2) All hole not plugged with cement is left full of heavy mud (3) Division is notified to witness location and hardness of cement plugs (4) 18 $\frac{5}{8}$ " is securely capped at surface

- Sec 27—Mohawk Petroleum Co well No 6 (Report No P 4-16340) Proposal to abandon approved provisionally. Conditions: Depth 4196', cement plugs 4196'-4151' and 4110'-3776'; 12 $\frac{3}{4}$ " cemented at 677'. 8 $\frac{5}{8}$ " cemented at 3695'; 6 $\frac{5}{8}$ " liner landed 4147'-3633'; all perforated, cemented through perforations 3660'-3820', bad at 4110', reperforated 3728'-3708', shot 3728'-3708'. Fish 4 $\frac{3}{4}$ " casing with milling shoe 3704'-3688'. Proposed to plug with cement 3776'-3633', cut and pull 8 $\frac{5}{8}$ " from 650' and plug stub with cement, weld plate on 12 $\frac{3}{4}$ ". Decision: Proposal is approved provided that (1) All hole not plugged with cement is left filled with heavy mud. (2) Division is notified to witness location and hardness of cement plug at 3633' and of cement plug on 8 $\frac{5}{8}$ " stub
- Mohawk Petroleum Co well No 6 (Report No T 4-13272) Inspection of cementing operations 4 $\frac{3}{4}$ " casing was run to 3677' and milled on iron to 3704', casing then pulled, but 16' of it and milling shoe left in hole; 40 sacks cement pumped in through tubing hung at 3770'. Inspector noted bailer would not spud below 3589' and brought up sample of set cement. Location and hardness of cement plug at 3589' are approved.

### KERN RIVER FIELD

T. 28 S, R 27 E, M D B and M.

- Sec 22—California Star Oil Co well No 1-40. (Report No. T 4-13256.) Bailing test approved. 9" casing cemented 1998'-2326'. Hole bailed to 1500' for test and stood 15 hr. No fluid entered well
- Pacific Western Oil Co well No 1 (Report No. T 4-16338.) Supplementary proposal to redrill approved provisionally. Conditions: Depth 2634', cement plug 2623'-2260'; 10" cemented at 2519', perforated 2502'-2480', milled out through casing 2229'-2236'; 8 $\frac{5}{8}$ " oil string landed at 2623', including 99' perforated, cut and pulled from 2517', well underreamed and casing was run to 2439' where it stuck. Proposed to cut 8 $\frac{5}{8}$ " at about 2220'; clean out well to 2630'; fill with cement 2630'-2210', run in whipstock and redrill about 2180'-2630', run full string of 8 $\frac{5}{8}$ ", perforated 2630'-2340', and cement through perforations at about 2340'. Decision: Proposal is approved provided 8 $\frac{5}{8}$ " is cemented with enough cement to reach up to point of drilling through 10".
- Pacific Western Oil Co well No 4-B (Report No. P 4-16346) Proposal to abandon approved. Conditions: Depth 48'; 18" S P cemented at 39'. Proposed to fill hole with surface material and erect regulation marker.
- Sec 25—The Kern River Oilfields of Calif, Ltd, well No 1. (Report No. P 4-16342.) Proposal to drill approved provisionally. Conditions: Well is 200' S and 200' E of NW section corner. Estimate oil sand at 1900'. Proposed to cement 8 $\frac{5}{8}$ " at 1900'. Decision: Proposal is approved provided division is notified to examine all cores taken before cementing 8 $\frac{5}{8}$ ", and to witness 8 $\frac{5}{8}$ " water shut-off test with hole open not more than 5' below shoe
- Sec 26—The Kern River Oilfields of Calif, Ltd, well No 9 (Report No. P 4-16317.) Proposal to plug approved provisionally. Conditions: Depth 2210'; 10 $\frac{3}{4}$ " cemented at 2066'. 8 $\frac{5}{8}$ " perforated liner 2045'-2201'; produces all water. Proposed to plug with sand to 2076' and cap plug with 1 sack cement, pump cement away at casing shoe as long as it can be forced out under 500 lb. pressure. Decision: Proposal is approved provided division is notified to witness 10 $\frac{3}{4}$ " water shut-off test with hole open not more than 5' below shoe.
- Sec 36—Hugh B. Evans, Inc, well No 7 (Report No T 4-13267) Inspection of operations for purpose of cementing 10 $\frac{3}{4}$ " casing at 1390'. Inspector noted 10 $\frac{3}{4}$ " landed at reported depth of 1390' in 13" cable tool hole; 175 sacks cement pumped in through casing with two plugs, 765 cu ft. of mud fluid used to displace cement under 450 lb. final pressure. Cementing operations are approved.

### McKITTRICK FIELD

T 29 S, R 21 E, M D B and M

- Sec. 26—Welport Oil Co well No 10. (Report No T 4-12392.) Inspection of mudding operations. During  $\frac{1}{2}$  hr. circulation test mud fluid was lost from pit at rate of 15 bbl per hr. Mudding operations are approved. Oral approval is hereby confirmed to cement 10 $\frac{3}{4}$ " at 971'.

T. 30 S., R 22 E, M. D. B and M

- Sec 8—Franco Western Oil Co. well No. 11 (Report No. T 4-12381.) Shut-off test approved. 9 $\frac{5}{8}$ " casing cemented at 2257'. Inspector noted Halliburton tester run in on drill pipe and wall packer set at 2252', while tester valve open for 25 min air blew intermittently from drill pipe and space between 4 $\frac{3}{4}$ " drill pipe and 9 $\frac{5}{8}$ " casing remained full of

mud fluid; when packer released 5.6 cu. ft. of mud fluid was required to fill space between 4½" drill pipe and 9½" casing, and 31.9 cu. ft. of oily gas-cut mud fluid was found in drill pipe; fluid sample from 2252' was gas-cut oily mud which tasted fresh. Shut-off is approved.

- Sec 29—Western Petroleum Co well No. "J. F. McMahon" 3. (Report No. P 4-15725.) Proposal to abandon approved. Conditions: Depth 800'; 8½" to bottom, all perforated; hole full of formation to about 50'; no oil showings. Proposed to fill hole to surface with surface formation; place screw plug in 8½" at surface.

### MIDWAY FIELD

T. 31 S, R 23 E, M. D. B. and M.

- Sec. 21—Standard Oil Co well No. 79. (Report No P 4-15702.) Supplementary proposal to drill approved. Conditions: Depth 3417'; 16" cemented at 195'. Proposed to dump cement plug 3417'-3050'; pump in cement bridges 2800'-2650', 2350'-2200' and 1800'-1550', leaving space between bridges filled with heavy mud; cement 8½" at about 1550', notifying division to test shut-off; clean out to about 1700' and land 6½" liner to complete as gas well; if gas production O. K, remove derrick and allow well to remain in that condition indefinitely, using gas as needed.

Standard Oil Co. well No. 79. (Report No. T 4-12383.) Bailing test approved. 8½" casing cemented at 1550'. Hole bailed to 1552' for test and stood 19½ hr. Fluid level rose at rate of .4 bbl. in 24 hr.

- Sec. 30—Pioneer Midway Oil Co. Consolidated well No. "Mays" 2 (Report No. P 4-15724.) Proposal to abandon approved provisionally. Conditions: Depth 2914'; 16" S. P landed at 690', 12½" at 1434', 10" at 2001' and 8½" at 2583'; 6½" cemented at 2830'; 4½" perforated liner 2795'-2914'; casing collapsed at 2629'. Proposed to place 20' cement at point of collapsed pipe, 2629'; cut and pull 6½" at 2563', leaving 20' lap by 8½" shoe and place cement cap on stub; cut and pull 8½" from 1980', 10" from 1415', and 12½" from 675', placing cement cap on each stub; fill with heavy mud all unplugged portions of well; place cement cap and marker at surface; notify division to witness such stages of work as it may designate

T. 31 S, R 24 E, M D B and M

- Sec. 31—Standard Oil Co. well No. 34. (Report No. P 4-15716.) Proposal to abandon approved. Conditions: Depth 3508', 10½" cemented at 3428'; 8½" cemented at 3435'; 6½" landed at 3507', perforated 3450'-3507'. Junk 6½" sidetracked 3438'-3507', plugged with cement 3456'-3507', sidetracked and plugged with cement 3450'-3508'. Proposed to dump cement plug 3507'-3450'; shoot 6½" with heavy shot and pull casing from as near 3460' as possible; dump cement plug 3450'-3435', where division will test plug; dump cement plug 3435'-3400'; if possible, rip and pull 8½" from near 3400', dump cement plug 3400'-3380', if 8½" is pulled from considerable distance above 3400' fill stub with mud, place wood plug on stub and cap with 30' cement bridge in 10½"; fill 10½" with mud, above last cement plug, cap at surface and abandon

Standard Oil Co well No 223. (Report No P 4-15703) Proposal to abandon approved provisionally. Conditions Depth 3330', 10½" cemented at 3040', evidently collapsed on 6½", 1086' of 6½" landed at 3326', perforated 3038'-3326', cut and pulled from 2240'; hole dry to 2260'. Junk About 1020' of ¾" rods and 1080' of 2½" tubing inside 6½" oil string with top at 2260', small iron from protracted fishing job on top. Proposed to siphon cement past junk through tubing hung at 2255', using enough cement to fill 6½" 3326'-2100', fill 10½" to surface with mud or oil, and abandon. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 2100'.

T 32 S., R 23 E., M. D B and M.

- Sec 8—Chanslor-Canfield Midway Oil Co. well No. 29. (Report No T 4-12377) Inspection of cementing operations. 8½" cut and pulled from 1978', adapter set at 1976' and wood bridge plug set on adapter; 20 sacks cement dumped at 1976', filling to 1915'; 10½" perforated 1912'-1798' and tested dry, perforated 1770'-1674' and tested dry, reperforated 1905'-1800' and tested wet; hole cleaned out to 1935' but sand kept heaving in; 8½" with adapter on top, cemented 1935'-1644' with 150 sacks cement, top of cement at 1659', fluid could not be bailed below 460'; 150 sacks cement pumped in through tubing hung at 1640', no fluid entered when bailed to 1644' and allowed to stand 27 hr.; 125' of cement drilled out of 10½" and 290' of set cement drilled out of 8½", equivalent to 137 sacks; cement drilled out 1644'-1945' after casing test and hole bailed dry. Inspector noted no fluid entered well while standing 2½ hr. for test. Test indicates no fluid enters through perforations 1674'-1912' or around 8½" solid liner. Cementing operations are approved.

- Sec. 22—Cypress Petroleum Co. well No. 5. (Report No P 4-15704) Proposal to deepen approved provisionally. Conditions: 10" landed at 802'; 8½" landed at 992', cut from 775', 9" cast iron plug set at 990'; perforated 850'-992'. Proposed to core ahead through 8½" liner and set about 50'

- of 6½" liner. Decision: Proposal is approved provided that form 102 is filed in duplicate upon completion of proposed work.
- Pan American Petroleum Co. well No. "Buena Fe" 20. (Report No. P 4-15718.) Proposal to drill approved. Conditions: Well is 50' N. and 565' E of S½ corner of NW¼ section. Estimate oil sand at 400'. Proposed to land 10" at 400'; land 8½" at 700'.
- Pan American Petroleum Co. well No. "Buena Fe" 57. (Report No. P 4-15723.) Proposal to deepen approved. Conditions: Depth 534'; 10" landed at 534', perforated 345'-534'. Proposed to fish out rods and tubing, clean out to bottom; deepen to about 600' and land 8½" perforated liner on bottom; return to production.
- Sec 26—Mascot Oil Co. well No. 2. (Report No. P 4-15717.) Proposal to abandon approved provisionally. Conditions. Depth unknown; 11½" at unknown depth; 9½" landed at 782', perforated 660'-762'; 7½" landed at unknown depth; 5½" landed at unknown depth, perforated 688' to unknown depth, parted and pulled from 720'; old pump barrel and 6' anchor found in bottom of 5½" casing which was pulled. Proposed to abandon as per requirements of division. Decision: Proposal is approved that: (1) Hole is cleaned out as far as possible. (2) Hole is plugged with cement from this depth to 710'. (3) 7½" is pulled from as deep as possible. (4) Cement plug is continued 710'-650'. (5) 7½" is capped with at least 10' cement. (6) 9½" is pulled from as deep as possible, provided no uncased hole is left between 9½" stub and 11½" shoe. (7) 9½" is capped with at least 10' cement. (8) No 11½" is pulled. (9) 11½" is securely capped at surface. (10) All unplugged portions of hole are filled with heavy mud or surface formation and water. (11) Division is notified to witness clean-out depth and placing of all cement plugs.
- Mascot Oil Co. well No. 2. (Report No. T 4-12393.) Inspection of cementing operations. Inspector noted hole could not be cleaned out below 715'. 33 cu ft. of cement-sand mix dumped at 715'; bailer would not spud below 695' and brought up sample of set cement; 23.3 cu. ft. of cement-sand mix dumped at 695'; bailer would not spud below 651' and brought up sample of set cement. Cementing operations and location and hardness of cement plug at 651' are approved.
- Mascot Oil Co. well No. 4. (Report No T 4-12378.) Inspection of cementing operations. Hole filled with surface formation 660'-419'. Inspector noted hole open to 419' and 6 sacks cement dumped, filling 11½" to 409'. Cementing operations are approved.
- Mascot Oil Co. well No. 4. (Report No. T 4-12379.) Inspection of cementing operations. 11½" shot at 150' but did not part, shot at 120' and pulled up 19'; hole filled with surface formation to 120'. Inspector noted hole open to 120', and 21 cu ft. of cement-sand mix dumped at 120', filling 15½" to 104. Shooting and cementing operations are approved.
- T. 32 S, R 24 E, M. D. B. and M.
- Sec. 4—Honolulu Oil Corp, Ltd., well No. 61. (Report No. P 4-15705.) Proposal to alter casing approved. Conditions: Depth 3830'; 9" cemented at 3661'; 6½" landed at 3828', including 196' perforated. Proposed to cut and pull 6½" from 3625'; seal 9" at surface; remove rig to another property.
- Honolulu Oil Corp, Ltd., well No. 63. (Report No P 4-15706.) Proposal to alter casing approved. Conditions: Depth 3335'; 9" cemented at 3236'; 6½" landed at 3335', including 107' perforated. Proposed to cut and pull 6½" from 3200'; seal 9" at surface; remove rig to another property.
- Honolulu Oil Corp, Ltd., well No. 72. (Report No. P 4-15708.) Proposal to alter casing approved. Conditions: Depth 3606'; 9" cemented at 3512'; 6½" landed at 3606', including 112' perforated. Proposed to cut and pull 6½" from 3485'; seal 9" at surface; remove rig to another property.
- Sec 14—Honolulu Oil Corp., Ltd., well No. 1. (Report No. P 4-15713.) Proposal to drill approved provisionally. Conditions: Well is 438.27' S. and 442.62' E of NW. section corner. Estimate oil sand at 2440'. Proposed to cement 18½" at 160'; cement 10¼" at 2430'; cement 8½" at 2630'; land 6½" at 2780', including 100' perforated. Decision: Proposal is approved provided that: (1) Mud fluid of sufficient weight to prevent blow-outs is used in drilling well, and column of mud fluid is maintained to surface at all times, particularly while pulling drill pipe. (2) Adequate blow-out prevention is provided and ready for operation at all times. (3) Coring is started not deeper than 2330'. (4) Formations left behind 10¼" and 8½" are mudded by open circulation until mud loss is not more than 5 and 1 bbl. per hr., respectively. (5) Enough cement is used behind 10¼" to reach at least 1000' above 10¼" shoe and behind 8½" to reach to 10¼" shoe. (6) Division is notified to witness final mudding operations before cementing 10¼" and 8½", and 10¼" and 8½" shut-off tests with hole open not more than 5' below shoe in each case.
- Honolulu Oil Corp., Ltd, well No. 5. (Report No. P 4-15714.) Proposal to drill approved provisionally. Conditions: Well is 1320' N. and 440' E of SW. section corner. Estimate oil sand at 3040'. Proposed to cement 8½" at 3030'; land 90' of perforated 6½" liner at 3090'. Decision: Proposal is approved provided that: (1) Mud fluid of sufficient weight to prevent blow-outs is used in drilling well, and column of mud fluid is main-

- tained to surface at all times, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Formations left behind 8½" are mudded by open circulation until mud loss is not more than 5 bbl per hr (4) Division is notified to witness final mudding operations before cementing 8½" and 8½" shut-off test with hole open not more than 5' below 8½" shoe
- Honolulu Oil Corp., Ltd., well No. 22 (Report No T 4-12332.) Shut-off test approved 10½" casing cemented at 2707'. Inspector noted Johnston tester run in on 4½" drill pipe and wall packer set at reported depth of 2695'; while tester valve open for ¾ hr air flowed intermittently from drill pipe, and space between 4½" drill pipe and 10½" casing remained full of mud fluid, when packer released 6 cu ft. of mud fluid required to fill space between drill pipe and 10½"; 46.9 cu. ft. of heavy gas-cut mud fluid found in drill pipe; no evidence of free water; fluid samples from 2108' and 2695' tested 96 and 364 gr. salt per gal, respectively Shut-off is approved
- Honolulu Oil Corp., Ltd., well No. 22 (Report No T 4-12384.) Inspection of mudding operations. During ½ hr. circulation test mud fluid was lost from pit at rate of 1 bbl per hr Mudding operations are approved Oral approval is hereby confirmed to cement 8½" at 2980'
- Honolulu Oil Corp., Ltd., well No. 22 (Report No T 4-12387.) Shut-off test approved 8½" casing cemented at 2969'. Inspector noted Johnston tester run in on 4½" drill pipe and packer set at reported depth of 2961'; when tester valve opened for 5 min. air blew strongly for 4 min, followed by strong flow of gas and rotary mud, and space between drill pipe and 8½" casing remained full of mud fluid, when packer released 7 cu ft of mud fluid was required to fill space between 4½" drill pipe and 8½" casing; 616' of heavy gas-cut mud and 572' of heavy gas-cut mud and oil found in 4½" drill pipe, fluid samples from 1773' and 2961' tasted fresh and showed no evidence of any free water. Shut-off is approved
- Honolulu Oil Corp., Ltd., well No 41 (Report No P 4-15715.) Proposal to drill approved provisionally. Conditions Well is 472' S and 1314' W of NE corner Estimate oil sand at 3020' Proposed to cement 8½" at 3010'; land 90' of perforated 6½" liner at 3080' Decision Proposal is approved provided that: (1) Mud fluid of sufficient weight to prevent blow-outs is used in drilling well, and column of mud fluid is maintained to surface at all times, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Coring is started not deeper than 2950' (4) Formations left behind 8½" are mudded by open circulation until mud loss is not more than 5 bbl per hr. (5) Division is notified to witness final mudding operations before cementing 8½" and 8½" shut-off test with hole open not more than 5' below shoe
- Sec. 15—Standard Oil Co well No 25 (Report No T 4-12391.) Inspection of mudding operations. During ½ hr circulation test mud fluid was lost from pit at rate of 4 bbl per hr Mudding operations are approved Oral approval is hereby confirmed to cement 11½" at 2585'
- Standard Oil Co well No 25 (Report No T 4-12394.) Shut-off test approved 11½" casing cemented at 2585' Inspector noted Johnston tester run in on drill pipe and wall packer set at reported depth of 2576'; when tester valve opened for 28 min air flowed steadily from drill pipe for 5 min, followed by intermittent air flow, and space between drill pipe and 11½" casing remained full of mud fluid; when packer released 84 cu ft of mud fluid was required to fill space between drill pipe and 11½" casing, 21.7 cu ft. of gas-cut mud fluid found in drill pipe, fluid samples from 2304' and 2576' tested 7 and 354 gr salt per gal, respectively; no evidence of free water, salt content of fluid sample from 2576' was not excessive for this zone Shut-off is approved
- Standard Oil Co well No 25 (Report No T 4-12396.) Inspection of mudding operations. During ½ hr. circulation test no mud fluid was lost from pit Mudding operations are approved Oral approval is hereby confirmed to cement 8½" at 2825'
- Sec 28—Murvale Oil Co well No 2. (Report No P 4-15709.) Proposal to alter casing approved Conditions: Depth 3070'; 8½" cemented at 2516'; 6½" cemented at 2915'; 4½" landed at 3068', perforated 2917'-3065'; water entering around 6½" shoe Proposed to fill hole with mud to 2935'; bridge with sand 2935'-2927' and cap with cement 2927'-2922', leaving 5' open perforations; place cement retainer above top of perforations, then recement 6½" shoe through perforations, allowing several feet of cement to come up between 4½" and 6½" to take care of any possible leaks in 6½" water string

### MT. POSO FIELD

T. 26 S, R. 28 E, M D B and M

- Sec 28—Isler & Turk well No. 1 (Report No. P 4-16330.) Proposal of Petroleum Pipe and Supply Co to abandon approved provisionally. Conditions: Depth 1730'; 8½" cemented at 1634' Proposed to plug hole 1665'-1614'; fill hole with heavy mud; shoot 8½" where loose and pull up 60'; place after filling hole with heavy mud; pull 8½"; cap hole at surface with cement Proposal is approved provided division is notified to witness placing of cement plug at 1665', shooting of 8½", placing cement plug on 8½" stub, and location and hardness of cement plug on 8½" stub. Note: This

- merely approves proposed abandonment work and does not pass upon right to do the work.
- Isler & Turk well No. 1. (Report No T 4-13277.) Inspection of cementing operations of Petroleum Pipe & Supply Co. Inspector noted 6 sacks cement dumped at 1665', bailer would not dump on last run and several pieces of brick and junk iron were thrown in hole, on next run bailer stuck at 1634' and could not be pulled. Later reported bailer recovered and 7½ sacks cement dumped in hole. Inspector noted 6 sacks cement dumped at 1634'. Cementing operations are approved.
- Isler & Turk well No. 1. (Report No. T 4-13278.) Inspection of cementing operations of Petroleum Pipe & Supply Co. 8½" shot at 372', 325' and 240', pulled up 60' from 240', hole filled with earth and heavy mud to 247'; 15 sacks cement dumped at 247'. Inspector noted bailer spudded at 217' and brought up sample of set cement. Location and hardness of cement plug at 217' are approved.
- Modoc Petroleum, Ltd., well No "Johnson" 3. (Report No P 4-16211.) Proposal to drill approved provisionally. Conditions: Well is 310' N. and 220' W. of NE. corner of NW¼ of NW¼. Estimate oil sand at 1540'. Proposed to cement 8½" at 1540'; land 6½" at 1555'; core for exact depths. Decision: Proposal is approved provided division is notified to examine all cores taken before cementing 8½", and to witness 8½" shut-off test with hole open not more than 5' below shoe.
- Sec 33—J N. Kerwin and George C Champ well No. 1 (Report No. P 4-16310.) Proposal to drill approved provisionally. Conditions: Well is 1000' N. and 750' E of SW. section corner. Estimate oil sand at 1800'. Proposed to cement 15½" at 100'; cement 8½" on sand after coring at unknown depth. Decision: Proposal is approved provided division is notified to examine all cores taken before cementing 8½", and to witness 8½" shut-off test with hole open not more than 5' below shoe.
- T 27 S., R. 28 E., M D B. and M
- Sec 9—Shell Oil Co. well No "Vedder" 14. (Report No. T 4-13252.) Shut-off test approved. 8½" casing cemented at 1632'. Inspector noted valve opened for ¼ hr.; there was good initial rush of air, followed by several short flows; packer sealed effectively, 30' of mud brought up in drill pipe. Shut-off is approved.
- Shell Oil Co. well No "Vedder" 16. (Report No P 4-16313.) Proposal to drill approved. Conditions: Well is 592.87' S. and 600.94' W of N¼ section corner. Estimate oil sand at 1735'. Proposed to cement 16" S P. at 30'; cement 8½" at 1730', land 6½" liner at 1790'. Decision: Proposal is approved. Notify division to witness 8½" shut-off test with hole open not more than 5' below shoe.
- Shell Oil Co well No. "Vedder" 16. (Report No. T 4-13260.) Shut-off test approved. 8½" casing cemented at 1720'. Inspector noted when valve opened for 30 min there was one strong blow of air for 1 min. from drill pipe, followed by feeble blow by heads remainder of time; packer held effectively while valve open; drill pipe contained 294' of oily mud, oil and sand without any trace of water. Shut-off is approved.
- Shell Oil Co well No "Vedder-Rail" 6. (Report No P 4-16335.) Proposal to drill approved. Conditions: Well is 550.24' S and 19.12' E. of N¼ section corner. Estimate oil sand at 1740'. Proposed to cement 16" S P at 30.4'; cement 8½" at 1735', land 6½" liner at 1942'. Decision: Proposal is approved. Notify division to witness 8½" shut-off test with hole open not more than 5' below shoe.
- Sec 10—Pongratz Petroleum Co. well No "Pongratz" 4 (Report No T 4-13262.) Bailing test approved. 10" casing cemented at 1807'. Hole bailed to 900' for test and stood 5 hr. Oily, gassy, sandy mud entered at rate of 107 bbl. in 24 hr. Slight trace of free water found in sample from near bottom.
- Sec 15—Shell Oil Co. well No "Glide" 4 (Report No. P 4-16323.) Proposal to drill approved. Conditions: Well is 293.87' N and 302.79' E of SW. corner of NW¼ of NW¼ section. Estimate oil sand at 1509'. Proposed to cement 16" S P. at 30', cement 8½" at 1505'; land 6½" liner at 1824'. Decision: Proposal is approved. Notify division to witness 8½" shut-off test with hole open not more than 5' below shoe.

### MOUNTAIN VIEW FIELD

T. 30 S, R. 28 E., M. D. B. and M.

- Sec 14—The Hancock Oil Co well No. "Miller" 2 (Report No T 4-13268.) Inspection of mudding operations. During 1 hr. circulation test no mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8½" at 5315'.
- The Hancock Oil Co well No "Miller" 3. (Report No P 4-16325.) Proposal to drill approved provisionally. Conditions: Well is 993.72' N. and 331.74' E of SW property corner. Estimate oil sand at 5340'. Proposed to cement 13½" at 1150', cement 8½" at 5340'; land 6½" perforated liner 5320'-5410'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire. (2) Formations left back of 8½" are mudded by open circulation until mud loss is reduced to 5 bbl per hr. (3) Enough cement is used to fill up to 1000' above 8½" shoe. (4) Division is notified to examine all cores taken before cementing 8½", and to witness mudding test just

- before cementing 8 $\frac{1}{2}$ " and 8 $\frac{3}{4}$ " shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- The Texas Co well No. "Mateo Smith" 4 (Report No. T 4-13250) Inspection of mudding operations. During 1 hr. circulation test no mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{4}$ " at 5360'.
- The Texas Co. well No. "Mateo Smith" 4. (Report No T 4-13259) Shut-off test approved. 8 $\frac{3}{4}$ " casing cemented at 5360'. Inspector noted several unsuccessful attempts to test well with Halliburton formation tester; then Johnston formation tester was run in on 4" drill pipe and packer set at 5342', 893' of heavy mud fluid placed in drill pipe below trip valve; when valve opened for 32 min. there was strong blow of air for 2 min, fair blow for 14 min, and intermittent blow remainder of time; packer held effectively while valve open; there was net rise of 283' of heavy oily gassy mud in drill pipe; no evidence of free water found in fluid Shut-off is approved.
- Sec. 15—Union Oil Co well No. "Kernco A" 3. (Report No P 4-16343.) Supplementary proposal to drill approved provisionally. Conditions: Depth 5521', cement plug 5521'-5414'; 13 $\frac{3}{8}$ " cemented at 1218'; 6 $\frac{5}{8}$ " cemented at 5409'. Proposed to continue cement plug to 5375', notifying division to witness plug at 5375'; cut and pull 6 $\frac{5}{8}$ " from about 5000' and cap stub with 10' cement; notify division to witness cement plug on 6 $\frac{5}{8}$ " stub; suspend operations indefinitely. Decision: Proposal is approved provided all hole not plugged with cement is left full of heavy mud.
- Union Oil Co. well No. "Kernco A" 4. (Report No. P 4-16344.) Supplementary proposal to drill approved provisionally. Conditions: Depth 5474'; 13 $\frac{3}{8}$ " cemented at 1202'. Proposed to plug with cement 5474'-5340', having division witness plug at 5340'; place cement bridge about 1220', 1175', having division witness plug at 1175'; suspend operations indefinitely. Decision: Proposal is approved provided all hole not plugged with cement is left full of heavy mud.
- Sec 23—Standard Oil Co. well No. "Wible" 3. (Report No. P 4-16308.) Proposal to drill approved provisionally. Conditions: Well is 324' S and 1662' W. of NE. section corner. Estimate oil sand at 5420'. Proposed to cement 13 $\frac{3}{8}$ " at 1200'; cement 9" at 5410'; land 7" at 5500'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire (2) Formations left back of 9" are mudded by open circulation until mud loss is reduced to 5 bbl per hr. (3) Enough cement is used to fill up to 1000' above 9" shoe (4) Division is notified to examine all cores taken before cementing 9" to witness mudding test before cementing 9", and to witness 9" shut-off test with hole open not more than 5' below shoe Note Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal relations relating to development of new pools.
- Standard Oil Co. well No. "Wible" 3. (Report No T 4-13269) Inspection of mudding operations. During 1 hr. circulation test no mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 9" at 5400'.
- Union Oil Co. well No. "Wible" 3. (Report No P 4-16319) Proposal to drill approved provisionally. Conditions: Well is 330' S. and 830' W. of N $\frac{1}{2}$  section corner. Estimate oil sand at 5575'. Proposed to cement 13 $\frac{3}{8}$ " at 1200'; cement 8 $\frac{3}{4}$ " at 5570'; land 82' of 6 $\frac{5}{8}$ " liner at 5630', including 60' perforated Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire (2) Formations left back of 8 $\frac{3}{4}$ " are mudded by open circulation until mud loss is reduced to 5 bbl per hr (3) Enough cement is used to fill up to 1000' above 8 $\frac{3}{4}$ " shoe. (4) Division is notified to examine all cores taken before cementing 8 $\frac{3}{4}$ ", and to witness mudding test just before cementing 8 $\frac{3}{4}$ " and 8 $\frac{3}{4}$ " shut-off test with hole open not more than 5' below shoe Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools
- Sec 24—Mohawk Petroleum Co well No. "Mabry" 2 (Report No. P 4-16309) Proposal to drill approved provisionally. Conditions: Well is 332.27' N and 993.18' W from center of section Estimate oil sand at 5500'. Proposed to cement 13 $\frac{3}{8}$ " at 800'; cement 8 $\frac{3}{4}$ " at 5550'. Decision: Proposal is approved provided that: (1) Well is equipped and drilled in manner to prevent oil or gas waste by blow-out or fire (2) Formations left back of 8 $\frac{3}{4}$ " are mudded by open circulation until mud loss is reduced to 5 bbl per hr (3) Enough cement is used to fill up to 1000' above 8 $\frac{3}{4}$ " shoe (4) Division is notified to examine all cores taken before cementing 8 $\frac{3}{4}$ " to witness mudding test just before cementing 8 $\frac{3}{4}$ ", and to witness 8 $\frac{3}{4}$ " shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools
- T 30 S R 29 E, M D B and M
- Sec 19—Standard Oil Co well No "Nichols Community" 1. (Report No. P 4-16314) Proposal to plug and alter casing approved. Conditions: Total depth 5843', redrilled depth 5630'; 9" cemented at 5335'; 337' of 7" landed at 5629', perforated 5629'-5338'. Proposed to set wood plug on 7" liner at



- 5292' and pump in cement bridge 5292'-5120'; perforate 9" water string 5110'-5030' and test for production.
- Sec 30—Mohawk Petroleum Co. well No. "Clendenen" 3. (Report No. T 4-13261.) Inspection of mudding operations. During 1 hr. circulation test 2.5 bbl. of mud fluid was lost from tank. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 5486'.
- Mohawk Petroleum Co. well No. "Clendenen" 3. (Report No. T 4-13270.) Shut-off test approved. 8 $\frac{3}{8}$ " casing cemented at 5482'. Inspector noted valve opened for 13 min., packer held effectively while valve was open; air and gas flowed steadily from drill pipe for 5 min., then changed to strong gas flow by heads for 4 min., which rapidly changed to steady gas flow in such increased volume it was advisable to close valve and remove tool; drill pipe contained 500' of thin very gas-cut fluid with considerable oil shows; apparently thinning fluid in drill pipe was due to gas action and not to dilution by water. Shut-off is approved.
- Wood-Callahan Oil Co., Ltd, well No. "National Oil" 3. (Report No. T 4-13274.) Inspection of mudding operations. During 1 hr circulation test 3.4 bbl mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 5435'.
- Sec 32—Barnsdall Oil Co well No. "Morris" 2. (Report No. P 4-16334.) Supplementary proposal to drill approved provisionally. Conditions: Depth 5316'; cored continuously from 4897'. Proposed to mud formations to be left back of 8 $\frac{3}{8}$ "; cement 8 $\frac{3}{8}$ " at 5082' in 12 $\frac{1}{2}$ " hole with 500 sacks cement; make water shut-off test; core ahead. Decision. Proposal is approved provided division is notified to witness final mudding operations before cementing 8 $\frac{3}{8}$ " and 8 $\frac{3}{8}$ " water shut-off test with hole open not more than 5' below shoe.
- Barnsdall Oil Co well No. "Morris" 2. (Report No. T 4-13273.) Inspection of mudding operations. During 1 hr. circulation test 2.5 bbl. of mud fluid was lost from pit. Mudding operations are approved. Oral approval is hereby confirmed to cement 8 $\frac{3}{8}$ " at 5082'.

### POSO CREEK FIELD

T. 27 S, R. 27 E, M. D B. and M.

- Sec. 10—Buckeye Union Oil Co. well No. "New Hope Clafin" 1. (Report No. P 4-16326.) Proposal to drill approved provisionally. Conditions: Well is 250' N and 250' W of SE. section corner. Estimate oil sand at 1110'. Proposed to cement 10" at 1110'. Decision: Proposal is approved provided division is notified to examine all cores taken before cementing 10", and to witness 10" shut-off test with hole open not more than 5' below shoe. Note: Approval is contingent upon time of drilling and location of well being in strict conformity with all Federal regulations relating to development of new pools.
- Sec 22—The Ohio Oil Co. well No. "Brown" 1. (Report No. P 4-16307.) Proposal to abandon approved. Conditions: Depth 1486'; 12 $\frac{1}{2}$ " landed at 24'; 8 $\frac{3}{8}$ " cemented at 1339'; 6 $\frac{3}{8}$ " liner 1364'-1308'; perforated 1486'-1466'; reperforated 1359'-1348', all pulled except bottom 8'; no commercial production. Proposed to plug with cement 1486'-1293'; fill hole with heavy mud and cap surface pipe at surface. Decision: Proposal is approved. Notify division to witness location and hardness of cement plug at 1293'.
- The Ohio Oil Co well No. "Brown" 1. (Report No. T 4-13251.) Inspection of cementing operations. 50 sacks cement pumped in through drill pipe hung at 1485'; drill pipe raised to 1289' and circulated 8 $\frac{1}{2}$  hr. Inspector noted cement plug held weight of drill pipe at reported depth of 1293'. Location and hardness of cement plug at 1293' are approved.

### ROUND MOUNTAIN FIELD

T 28 S, R 28 E, M. D. E. and M

- Sec. 13—The Kern River Oilfields of Calif, Ltd., well No. "Kernco" 3. (Report No. P 4-16345.) Proposal to alter casing approved. Conditions: Depth 2099', cement plug 2099'-2088'; 10 $\frac{3}{8}$ " cemented at 1922'; 8 $\frac{3}{8}$ " landed at 2090', perforated 2090'-2039'; adapter set at 1902'. Proposed to back off 8 $\frac{3}{8}$ " at 1902' and recover same.
- T. 28 S, R 29 E, M. D B. and M.
- Sec. 6—Golden Bear Oil Co, Ltd, well No 1. (Report No. P 4-16318.) Proposal to deepen and alter casing approved. Conditions: Depth 1669'; 12 $\frac{1}{2}$ " cemented at 1625'; 10" liner 1590'-1669', perforated 1669'-1621'. Proposed to pull 10" liner if possible; prospect ahead to possible deeper sand; file supplementary notice before landing or cementing any casing or placing any cement plugs.
- Sec 18—Honolulu Oil Corp, Ltd., well No. 76. (Report No. T 4-13265.) Shut-off test approved. 10 $\frac{3}{8}$ " casing cemented at 1850'. Inspector noted while valve opened for 30 min packer held effectively, and fair blow of air came from drill pipe; drill pipe contained 45' of heavy drilling mud; no indication of free water or thin drilling fluid in drill pipe. Shut-off is approved.
- Honolulu Oil Corp., Ltd, well No. 76. (Report No. P 4-16337.) Supplementary proposal to drill approved provisionally. Conditions: Depth 2219'; 10 $\frac{3}{8}$ " cemented at 1850'. Proposed to plug with cement 2219'-1980' and

test plug; land 170' of 6½" liner at 1980', including 1930' perforated; test for production. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at 1980'.

### SUNSET FIELD

T. 11 N., R. 23 W., S. B. B. and M.

- Sec 8—North American Oil Consolidated well No "Bronco" 1. (Report No. P 4-15710.) Proposal to abandon approved provisionally. Conditions: Depth 3667', cement plugs 3446'-3667', 3188'-3234' and 2770'-2823'; 11½" cemented at 2468'; 9" cemented at 3290', perforated 2594'-2600' and 2700'-2800', cemented through perforations at 2347', left hand adapter at 2347'; 6½" cemented at 3467', pulled from 3235', hung at 2686' with hook wall packer Proposed to pull 6½", plug with cement 2700'-2770', continue plug to 2580', pull 9" from adapter to 2347' and plug stub with 20' cement; fill hole with mud and abandon Decision. Proposal is approved provided that (1) All unplugged portions of hole are filled with heavy mud or surface formation and water (2) 11½" is capped at surface (3) Division is notified to witness location and hardness of cement plugs at 2700' and 2580' (4) Form 102 is filed in duplicate upon completion of proposed work, covering all work done on well since Feb 19, 1930.
- North American Oil Consolidated well No "Bronco" 1 (Report No. T 4-12388). Inspection of cementing operations. 6½" which was hung at 2686' all pulled; hole cleaned out to 2770' and 28 sacks cement dumped. Inspector noted bailer would not spud below 2695' and brought up sample of set cement Location and hardness of cement plug at 2695' are approved.
- North American Oil Consolidated well No "Bronco" 1. (Report No. T 4-12390.) Inspection of cementing operations 32 sacks cement dumped at 2695'; 16 sacks cement dumped at 2617' Bailer would not spud below 2568' and brought up sample of set cement Location and hardness of cement plug at 2568' are approved

T. 11 N., R. 24 W., S. B. B and M.

- Sec 12—Snook & Wells, Inc, well No. 34 (Report No T 4-12380.) Inspection of cementing operations. 10" shot and pulled from 489' and wood plug driven into stub. Inspector noted 7 sacks cement dumped at 489', which was sufficient to fill to 479' Cementing operations are approved

T. 12 N, R. 24 W., S B B. and M

- Sec 25—Hallmark Oil Co., Inc., well No 1-A. (Report No. T 4-12385) Inspection of mudding operations. During ¾ hr circulation test mud fluid was lost from pit at rate of 1.8 bbl. per hr, mud was of good quality and free from gas. Mudding operations are approved Oral approval is hereby confirmed to cement 8½" at 2356'.

### KERN COUNTY

T. 10 N, R. 14 W, S. B. B. and M.

- Sec. 26—Regina Oil Corp. Ltd., well No "Marsh" 1 (Report No. P 4-16316.) Proposal to abandon approved Conditions. Depth 3267'; 16" cemented at 480'; 8½" cemented at about 2500'. Junk 4" drill pipe 3267'-2700'; 1st redrilled hole 2737'-3041', junk bailer and fishing string 3041'-2965'; 2d redrilled hole 2725'-2969', junk drilling tools and 1 joint 6½" casing, 4th redrilled hole 2615'-2700'; 6½" drilling string pulled from about 2924'. Proposed to pull all 8½" and 16" possible, fill hole with sand, cap at surface with cement.

T. 10 N, R 19 W, S B. B. and M.

- Sec. 2—Reserve Oil and Gas Co well No "Tejon Ranch" 1. (Report No P 4-16324) Proposal to drill approved provisionally Conditions Well is 1030' N. and 1120' W of SE section corner. Estimate oil sand at 3500'. Proposed to cement 12½" at 500', cement 8½" at 3500', coring for exact depth. Decision: Proposal is approved provided that (1) Fluid content of each porous formation encountered is determined as definitely as possible (2) Every possible step is taken to prevent damage to oil or gas bearing strata by infiltrating water and to underground water suitable for irrigation. (3) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire (4) Division is notified when oil or gas showing encountered, before landing or cementing any casing, and to witness bailing test of each possible water shut-off with hole open not more than 5' below cementing depth.

T. 11 N., R. 19 W., S B B and M.

- Sec. 31—The Petrol Corp well No. "Badger" 1. (Report No. P 4-15721) Supplementary proposal to redrill oil string and plug approved Prospect well.

T. 11 N, R. 23 W., S. B. B nd M

- Sec. 22—Western Minerals Co. well No. 4. (Report No. P 4-15726.) Proposal to abandon approved provisionally Conditions: Depth 1340'; 13½" landed at

475'; 11½" landed at 655', 9½" cemented at 1307'; no commercial production. Proposed to clean out to 1340' if possible, and cement back to 1295', cut and pull 9½" and 11½" from as low as possible, fill to surface with heavy mud, cement required marker in top of hole; notify division to witness all such stages of work as it designates. Decision: Proposal is approved provided that (1) Division is notified to witness placing of cement plug to 1295'. (2) Form 102 is filed in duplicate after completing above work.

Sec. 23—Western Minerals Co well No 6 (Report No. P 4-15727.) Proposal to abandon approved provisionally. Conditions: Depth 1248', 14" landed at 348', 11½" landed at 876'; 9½" landed at 1178'; no commercial production. Proposed to clean out to 1200' and cement 1200'-1165', cut and pull 9½" and 11½" from as low as possible, fill 1165' to surface with heavy mud, cement required marker in top of hole; if 9½" pulled from below 11½", place 20' cement plug below 11½" shoe, if 9½" not pulled from below 11½" shoe, place cement plug 345'-355', notify division to witness all stages of work it designates. Decision: Proposal is approved provided that (1) Division is notified to witness shooting off of 9½" and 11½", and placing of all subsurface cement plugs (2) Form 102 is filed in duplicate after completion of proposed work.

Sec 25—Western Minerals Co well No 8 (Report No P 4-15728.) Proposal to abandon approved provisionally. Conditions: Depth 2045', 13½" landed at 580', 11½" cemented at 1105', 9½" landed at 1357', 7½" landed at 1568', no commercial production. Proposed to clean out to 1380'; pull 7½" from 1380' and place cement plug 1380'-1345'; pull 9½" and 11½" from as low as possible, fill with heavy mud all unplugged portions of hole, cement required marker at surface, notify division to witness all stages of work it designates. Decision: Proposal is approved provided that. (1) Division is notified to witness shooting off of 7½" and placing cement plug 1380'-1345'. (2) Form 102 is filed in duplicate after completion of proposed work.

Sec 26—Western Minerals Co. well No 12 (Report No P 4-15729.) Proposal to abandon approved provisionally. Conditions: Depth 903', 11½" landed at 707'; 9½" landed at 903', no commercial production. Proposed to clean out to 903'; place cement plug in bottom of hole, pull 9½" from as low as possible, fill hole with heavy mud, cementing marker in top of hole, notify division to witness all stages of work it designates. Decision: Proposal is approved provided that: (1) Cement plug in bottom of well is at least 10' long. (2) Division is notified to witness shooting or loosening of 9½" and placing bottom plug. (3) Form 102 is filed in duplicate after completing proposed work.

Sec 35—Western Mineral Co. well No. 11. (Report No P 4-15730.) Proposal to abandon approved provisionally. Conditions: Depth 1310', 11½" landed at 1275', no commercial production. Proposed to place cement plugs 320'-330' and 240'-250', fill with heavy mud all unplugged portions of hole, cement required marker in top of hole, notify division to witness all stages of work it designates. Decision: Proposal is approved provided that. (1) 11½" is shot 320'-330' and 240'-250' before placing cement plugs. (2) Division is notified to witness two shots, and placing two subsurface cement plugs (3) Form 102 is filed in duplicate after completion of proposed work.

T. 25 S, R 27 E, M. D B. and M.

Sec 14—Cimarron Oil Corp well No "Quinn" 1. (Report No P 4-16331.) Proposal to abandon approved provisionally. Conditions: Depth 2172'; no commercial oil or gas. Proposed to fill hole with heavy mud, place cement plug at about 700' with 35 sacks cement, fill hole with heavy mud; cap at surface with cement. Decision: Proposal is approved provided division is notified to witness placing cement plug at about 700'.

Cimarron Oil Corp well No "Quinn" 1 (Report No T 4-13275.) Inspection of cementing operations. Inspector noted brick and wood bridge placed in hole with top at 560', and 35 sacks cement dumped on bridge at 560'. Cementing operations are approved.

T. 28 S., R. 20 E., M D B and M.

Sec 29—Casamera Oil Co well No 1-A (Report No. P 4-15720.) Proposal to abandon approved provisionally. Conditions: Depth 6508', 13½" S P cemented at 625', 8½" cemented at 3768', 4½" landed at 6508', perforated 5050'-6508', cemented through perforations at 5050', black sulphur water rose to 100'-150'. Proposed to pump well full of heavy mud from bottom to top; pump in cement plug 5150'-5000', notifying division to witness operations, cut or shoot 4½" off at 3750' and cap with 20' cement; cut and pull 8½" from as deep as possible, cap at surface. Decision: Proposal is approved provided that. (1) Division is notified to witness placing cement plug 5150'-5000' and either placing or location and hardness of cement cap on 4½" stub (2) Upon completion of proposed work complete log, history and core record are filed in duplicate covering all work done from time of spudding to completion of abandonment work.

Casamera Oil Co well No 1-A. (Report No T 4-12395.) Inspection of cementing operations. Wood plug pushed down to 6107' and cement plug dumped at 5225', point to which plug must have floated. Inspector requested new plug be run to 5100' and cement dumped at this depth. 6 sacks cement dumped at 5104'. Cementing operations are approved. Later reported top of plug located at 5031' and cement had set hard.

## DIVISION OF OIL AND GAS

T 29 S., R 29 E., M D B. and M.

Sec 22—Petroleum Drilling and Exploration Co., Inc. well No. "Beazley" 1 (Report No. P 4-16329) Proposal to drill approved provisionally. Conditions: Well is 330' N. and 790' E. of S $\frac{1}{4}$  corner. Estimate oil sand at 500'. Proposed to cement 10" at 500', core for exact cementing depth and completion depth. Decision. Proposal is approved provided that: (1) Fluid content of each porous formation encountered is determined as definitely as possible. (2) Every possible step is taken to prevent damage to oil or gas bearing strata by infiltrating water and to underground water suitable for irrigation. (3) Well is equipped and drilled in manner to prevent waste of oil or gas by blow-out or fire. (4) Division is notified when oil or gas showing encountered, before landing or cementing any casing, and to witness bailing test of each possible water shut-off with hole open not more than 5' below cementing depth.

T. 29 S. R 30 E., M D B. and M.

Sec 31—Signal Oil and Gas Co well No. "Southern Pacific Land Company" 1. (Report No. T 4-13280) Bailing test approved. Prospect well

T 30 S., R 24 E., M. D. B and M.

Sec 5—Seeple Oil Corp well No. "Buttonwillow" 1. (Report No. P 4-15712) Proposal to drill approved provisionally. Conditions: Well is 606' S. and 1780' W of NE section corner. Proposed to cement 13 $\frac{3}{8}$ " at 500'; determine cementing of any other casing by cores and formation tests, notifying division accordingly before running any casing. Decision. Proposal is approved provided that: (1) 13 $\frac{3}{8}$ " is cemented at or below 500'. (2) Mud fluid of sufficient weight to prevent blow-outs is used in drilling, and column of mud fluid is maintained to surface at all times, particularly while pulling drill pipe. (3) Adequate blow-out prevention equipment is provided and ready for operation at all times. (4) Well is equipped and drilled in manner to prevent damage to oil or gas bearing strata by infiltrating water, damage to underground water suitable for irrigation, and waste of oil or gas by blow-out or fire. (5) Fluid content of each porous formation encountered is determined as definitely as possible. (6) Division is notified when any oil or gas showing encountered and before cementing or landing any casing below 500'.

## DISTRICT No. 5

## COALINGA FIELD

T. 20 S., R. 14 E., M. D. B. and M.

Sec 26—C. R. Butz well No. 3. (Report No P 5-3927.) Proposal to alter casing approved. Conditions: Depth 872', 8" landed at 773', 6 $\frac{1}{2}$ " oil string set at 850', perforated 773'-830', 8 $\frac{1}{2}$ " water string set at 771'; water very strong of sulphur. Proposed to cut off 6 $\frac{1}{2}$ " at 745' and set packer.

T. 21 S., R. 15 E., M. D. B. and M.

Sec 6—Italo Petroleum Corp. of America well No "Empire" 4 (Report No. P 5-3944.) Proposal to alter casing approved. Conditions: Depth 2814'; 10" cemented at 2728'; 8 $\frac{1}{2}$ " hung at 2794', perforated 2700'-2794'; well gone to water due to possible hole in 10" at about 400'. Proposed to land 8 $\frac{1}{2}$ ", cut off at about 1000', and set hemp packer

## KETTLEMAN MIDDLE DOME FIELD

T. 23 S, R. 19 E, M. D. B. and M.

Sec 29—Standard Oil Co. well No 6. (Report No. P 5-3939.) Proposal to plug approved. Conditions: Depth 8406', cement plug 8406'-7835', 9 $\frac{1}{2}$ " cemented at 7513', 7" landed at 7836', perforated 7548'-7836', cemented through perforations at 6951' and 7533'; 4 $\frac{1}{2}$ " flow string at 7579', pulled to 7488' under pressure, water witch showed water source at 7815' or lower. Proposed to clean out cement plug 7835'-7971', wall scrape hole and replug with cement to about 7824'; make production test; if production not O. K., reperforate 7" 7824'-7775', wash perforations and pump in cement plug to 7775'; make production test; if production still not O. K., reperforate 7" and plug with cement in stages until production is satisfactory. Decision: Proposal is approved. Note Approval will not apply without further consideration in event of abandonment.

Standard Oil Co. well No 38 (Report No P 5-3932) Proposal to drill approved provisionally. Conditions: Well is 329' N and 1638' E. of SW. section corner. Estimate oil sand at 7570'. Proposed to cement 16" at 3500', cement 11 $\frac{1}{4}$ " at 5750'; cement 9" at 7550', land 6 $\frac{1}{2}$ " at 7800'; drill with rotary tools. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times (3) 9" is cemented between bentonite marker and top of Temblor zone, both of which should be located by coring. (4) Division is notified to witness 9" shut-off test.

## KETTLEMAN NORTH DOME FIELD

T. 21 S., R. 17 E., M. D. B. and M.

Sec 19—Standard Oil Co. well No 21. (Report No T 5-1935.) Shut-off test approved. 9 $\frac{1}{2}$ " casing recemented at 8155'. Inspector noted 62 stands of drill pipe had been pulled; when connection broken on 63d stand 60' of fluid was found in this stand above trip valve, making top of fluid about 5450'; 40' air pocket measured below trip valve, all fluid was fresh water except about 15' which was thick mud testing fresh. Later reported by telephone that water filtered from fluid sample from bottom tested 110 gr. salt per gal, and drill pipe measured to bottom at 8160' without circulating or rotating. Shut-off is approved.

Standard Oil Co well No 21. (Report No T 5-1936) Inspection of equipment. Equipment as inspected was satisfactory except that there were no float valves in drill pipe; later reported by telephone that these had been installed.

Standard Oil Co well No 36. (Report No. P 5-3934) Proposal to drill approved provisionally. Conditions. Well is 1684' N and 1660' E of SW. section corner. Estimate oil sand at 7620'. Proposed to cement 18 $\frac{1}{2}$ " at 600'; cement 9 $\frac{1}{2}$ " at 8000'; land 7" at 8770'; drill with rotary tools. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Division is notified to witness 9 $\frac{1}{2}$ " shut-off test.

Sec. 20—Kettleman North Dome Assoc. well No. 8 (Report No. P 5-3933) Proposal to drill approved provisionally. Conditions. Well is 330' N. and

- 330.3' E. of SW. section corner. Estimate oil sand at 7715'. Proposed to cement 16" at 1200'; cement 9 $\frac{1}{2}$ " at 7710'; land 6 $\frac{1}{2}$ " liner at 8575'. Drill with rotary tools. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Division is notified to witness 9 $\frac{1}{2}$ " shut-off test.
- Kettleman North Dome Assoc. well No. 43. (Report No. P 5-3931.) Proposal to drill approved provisionally. Conditions: Well is 1653' S. and 2305' E. of NW. section corner. Estimate oil sand at 8060'. Proposed to cement 16" at 1200', cement 9 $\frac{1}{2}$ " at 8050', land 6 $\frac{1}{2}$ " at depth to be determined by results of coring and testing formation, notify division before landing casing; drill with rotary tools. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) 9 $\frac{1}{2}$ " is not cemented more than 400' below top of Temblor zone without consulting division. (4) Division is notified to witness 9 $\frac{1}{2}$ " shut-off test.
- Sec 28—Kettleman North Dome Assoc. well No. 45. (Report No. P 5-3930.) Proposal to drill approved provisionally. Conditions: Well is 322' S. and 2292.05' E. of W $\frac{1}{2}$  section corner. Estimate oil sand at 7335'. Proposed to cement 16" at 1200'; cement 9 $\frac{1}{2}$ " at 7300'; land 6 $\frac{1}{2}$ " at 8260'; drill with rotary tools. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) 9 $\frac{1}{2}$ " is not cemented more than 400' below top of Temblor zone without consulting division. (4) Division is notified to witness 9 $\frac{1}{2}$ " shut-off test.
- Sec. 30—Kettleman North Dome Assoc. well No. 65. (Report No. P 5-3938.) Supplementary proposal to drill approved provisionally. Conditions: Depth 7936'; 16" cemented at 1192'. Proposed to cement 9 $\frac{1}{2}$ " at 7936'; cement 6 $\frac{1}{2}$ " at about 8526'; finish at 8766' with 4 $\frac{1}{2}$ " perforated liner. Decision: Proposal is approved provided division is notified to witness 9 $\frac{1}{2}$ " and 6 $\frac{1}{2}$ " shut-off tests.
- Kettleman North Dome Assoc. well No. 65. (Report No. T 5-1943.) Shut-off test approved. 9 $\frac{1}{2}$ " casing cemented at 7934'. Inspector noted 56 stands of drill pipe had been pulled, all dry, top of fluid located at 4925', rise of about 65'; all fluid was fresh water except bottom 60' which was thick mud; water filtered from samples from just above and from 22' above tester, each tested 41 gr. salt per gal. Later reported drill pipe measured in to 7936' without circulating or rotating before any weight was taken, and first cuttings on ditch were dark grey sand. Shut-off is approved.
- Kettleman North Dome Assoc well No. 65. (Report No. T 5-1942.) Inspection of equipment. Equipment as inspected is satisfactory.
- Kettleman North Dome Assoc. well No. 81. (Report No. P 5-3946.) Proposal to drill approved provisionally. Conditions: Well is 340.53' S. and 392.89' W. of NE. section corner. Estimate oil sand at 7680'. Proposed to cement 16" at 1200'; cement 9 $\frac{1}{2}$ " at 7680'; land 6 $\frac{1}{2}$ " at 8545'; drill with rotary tools. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Division is notified to witness 9 $\frac{1}{2}$ " shut-off test.
- Sec. 32—Kettleman North Dome Assoc. well No. 52. (Report No. T 5-1938.) Shut-off test approved. 9 $\frac{1}{2}$ " casing cemented at 7692'. Inspector noted 52 stands of drill pipe had been pulled, all dry, when remainder of drill pipe pulled, top of fluid was found about 75' above trip valve and 30' air pocket measured below valve; all fluid was fresh water except bottom 43' which was medium thick mud; water filtered from samples from 40' above and from immediately above tester tested 34 and 41 gr salt per gal., respectively. Later reported by telephone that drill pipe measured to 7694' without circulating or rotating, and first cuttings obtained on resuming drilling was shale. Shut-off is approved.
- Kettleman North Dome Assoc well No 52 (Report No T 5-1939.) Inspection of equipment. Equipment as inspected was satisfactory except that there was no packer for kelly. Later reported this packer had been supplied.
- Sec. 33—Standard Oil Co. well No. 47. (Report No. P 5-3935.) Proposal to drill approved provisionally. Conditions: Well is 994' N and 2322' E. from SW. section corner. Estimate oil sand at 6900'. Proposed to cement 18 $\frac{1}{2}$ " at 600', cement 9 $\frac{1}{2}$ " at 6880'; land 7" and 6 $\frac{1}{2}$ " at 8350', cement through perforations at 7550', drill with rotary tools. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Division is notified to witness 9 $\frac{1}{2}$ " shut-off test.
- Sec. 35—Standard Oil Co. well No. 4. (Report No. T 5-1940.) Shut-off test not approved. 9 $\frac{1}{2}$ " casing cemented at 7305'. Inspector noted 28 stands

and one single had been pulled; 29th stand was full of fluid; all fluid to 51st stand was slightly muddy water tasting fresh; first salt taste came in 52d stand; water from samples from 52d stand and from bottom tested 320 and 2740 gr. salt per gal., respectively. Shut-off is not approved. Oral approval is hereby confirmed to recement.

Standard Oil Co. well No. 4. (Report No. T 5-1941.) Shut-off test approved. 9½" casing recemented at 7305'. Inspector noted 57 stands of drill pipe had been pulled, all dry; top of fluid found at about 7155', rise of 140'; about one-half of fluid was gas-cut frothy mud, no water could be filtered from sample from near top of fluid; remainder of fluid was thin mud; water filtered from samples just above and from single above tester tested 780 and 680 gr. salt per gal., respectively. Later reported drill pipe measured in to bottom at 7310' without circulating or rotating, and first cuttings obtained when drilling ahead were sandy shale. Shut-off is approved.

Standard Oil Co. well No. 45. (Report No. P 5-3936.) Proposal to drill approved provisionally. Conditions: Well is 2273' N. and 2318' E. of SW. section corner. Estimate oil sand at 7085'. Proposed to cement 18½" at 600'; cement 9½" at 7535'; land 7" and 6½" at 8285'; drill with rotary tools. Decision: Proposal is approved provided that: (1) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) 9½" is not cemented more than 450' below top of Temblor zone without consulting division. (4) Division is notified to witness 9½" shut-off test.

Standard Oil Co. well No. 47. (Report No. P 5-3925.) Proposal to plug approved provisionally. Conditions: Depth 8234', 9½" cemented at 6693'; 7" and 6½" landed at 8223', perforated 7419'-8223', cemented through perforations at 7384'; water witch showed water source 7970'-7990'. Proposed to wash perforations 7900'-8223'; plug with cement 8223'-7930'; perforate 6½" 7270'-7290' to try to increase surface flow pressure; return to production. Decision: Proposal is approved provided division is notified to witness location and hardness of cement plug at about 7930'. This approval will not apply without further consideration in event of abandonment.

T. 22 S., R. 17 E., M. D. B. and M.

Sec 1—Standard Oil Co. well No. 54. (Report No. T 5-1933.) Shut-off test approved 9½" casing cemented at 7540'. Inspector noted 62d stand hanging in derrick, top of fluid found at about 5430' when joint broken; when remainder of drill pipe pulled all fluid was fresh water except bottom 80' which was thin mud; water filtered from fluid samples from tester and from first double above tested 280 and 210 gr. salt per gal., respectively. Later reported by telephone that drill pipe went to 7536' without circulating or rotating, circulated to 7537' and had to be rotated to 7544'; Johnston tester was run again with 2040' of drill pipe filled with water and packer set at 7527', anchor went to 7542'; when valve tripped there was gentle blow lasting 10 min., packer pulled loose; when drill pipe pulled fluid was found risen 88'; fluid was thin watery mud testing 360 gr. salt per gal.; drill pipe measured to 7542' without circulating or rotating, and first cuttings were sand and cement. Shut-off is approved.

Standard Oil Co. well No. 54. (Report No. T 5-1934.) Inspection of equipment. Equipment as inspected was satisfactory except that there were no float valves in drill pipe. Later reported these has been installed.

T. 22 S., R. 18 E., M. D. B. and M.

Sec. 16—Kettleman North Dome Assoc. well No. 55. (Report No. T 5-1932.) Shut-off test not approved. 9½" casing recemented at 8383'. Inspector noted 62nd stand hanging in derrick and contained about 20' of fluid when joint was broken, making top of fluid at about 4557'; fluid was as follows: down to 89th stand, fresh water; 89th stand, about 5' of thin mud; stands 90, 91, 92, and 95, fairly thick mud; stands 93 and 94, thin mud which tasted salty; water filtered from samples from stands 89, 91, 93, 94 and 95 tested 143, 205, 543, 691, and 198 gr. salt per gal., respectively. Test indicates small amount of salt water enters from unknown source. Shut-off is not approved. Oral approval is hereby confirmed to drill out cement plug and make test with hole open to 8436'.

Kettleman North Dome Assoc. well No. 55. (Report No. T 5-1937.) Shut-off test approved. 9½" casing recemented at 8383'. Inspector noted 26 stands of drill pipe had been pulled; upon opening valve on drill head gas flowed gently; when pulled, drill pipe was dry to 84th stand which contained single of clean 36° gravity oil; when 85th stand pulled there was about 2 min. blow of nearly all clean oil; stands 86, 87 and 88 were dry; few feet of oil found in stand 89; stand 91 was half full of water; all remaining stands contained water, making about 390' in all; water from samples from about 350', 180', 93' and 5' above tester tested 294, 328, 348, and 335 gr. salt per gal., respectively. Shut-off is approved.

### FRESNO COUNTY

T. 17 S., R. 15 E., M. D. B. and M.

Sec. 11—Western Gulf Oil Co. well No. 2 "S. P. L." (Report No. P 5-3928.) Proposal to abandon approved provisionally. Conditions: Depth 7379'; 16"

cemented at 1224'; no oil or gas showings. Proposed to fill hole with heavy mud and plug with cement 1204'-1244'. Decision: Proposal is approved provided cement plug at about 1204' is tested for location and hardness and data is given in final report of abandonment.

### KINGS COUNTY

T. 23 S., R. 19 E., M. D. B. and M.

Sec. 2—Tulare Basin Gas Co., Ltd., well No. 1. (Report No. P 5-3941.) Proposal to abandon approved provisionally. Conditions: Depth 1194'; 16" S. P. landed at 70'; 10" froze at 935'; 6 $\frac{3}{8}$ " cemented at 1133'; 5" cemented at 1190'; well produced large amount of water with gas, water could not be excluded; hole filled solid with cement 1194'-1160'. Proposed to clean out cement in 5" to 1175'; shoot 5" at 1175' with either cement shot or ordinary shell; if shot with cement shot and cavity not entirely filled with cement, dump additional cement; if shot with ordinary shell, fill shot cavity with cement; cut and pull 5" from not deeper than 118', fill casing below that point with dirt and/or heavy rotary mud, and cap around, in, and on top of stub with cement; cut and pull 6 $\frac{3}{8}$ " from not deeper than 915', following same procedure as under 5" casing; cap at surface and abandon (interval to be filled with dirt or mud). Notify division to witness cement plug after filling shot cavity. Decision: Proposal is approved provided that: (1) Proposed shot cavity is at least 15' long. (2) Division is notified to witness location and hardness of cement plug at top of shot cavity at about 1155'.

Tulare Basin Gas Co., Ltd., well No. 2. (Report No. P 5-3940.) Supplementary proposal to abandon approved provisionally. Conditions: Depth 1192', cement plug 1192'-1175'; 12 $\frac{1}{2}$ " cemented at 307'; 8 $\frac{3}{8}$ " cemented at 1188'. Proposed to shoot 8 $\frac{3}{8}$ " at 1175' with either cement shot or ordinary shell; if shot with cement shot and cavity not entirely filled with cement, dump additional cement to entirely fill cavity; if shot with ordinary shell, fill cavity entirely with cement; cut and pull 8 $\frac{3}{8}$ " from not deeper than 237', casing below that point to be filled with dirt and/or heavy rotary mud, and cap around, in, and on top stub with cement; cap with cement at surface, filling interval above last plug with dirt and/or heavy rotary mud, and abandon; notify division to witness cement plug after filling shot cavity. Decision: Proposal is approved provided that: (1) Proposed shot cavity is at least 15' long. (2) Division is notified to witness location and hardness of cement plug at top of shot cavity at about 1155'.

T. 24 S., R. 22 E., M D B. and M.

Sec. 36—Trico Oil and Gas Co. well No. 3. (Report No. P 5-3948) Proposal to drill approved provisionally. Conditions: Well is 660' N. and 660' W. of SE. section corner. Proposed to cement 12 $\frac{1}{2}$ " at 400'. Decision: Proposal is approved provided that: (1) Water suitable for irrigation is protected from contamination. (2) Adequate blow-out prevention equipment is provided and ready for operation at all times. (3) Mud fluid of not less than 70 lb. per cu. ft. is used in drilling of well, and column of mud fluid is maintained at all times to surface, particularly while pulling drill pipe. (4) Division is notified when oil or gas showing encountered, before landing or cementing any casing below surface casing, and to witness bailing test of each water shut-off.

### MADERA COUNTY

T. 10 S., R. 14 E., M. D. B. and M.

Sec 7—The Pure Oil Co. well No. 1 "Chowchilla." (Report No. P 5-3924.) Supplementary proposal to drill approved provisionally. Conditions: Depth 8250', cement plug 8250'-8031' and 7470'-7620'; 9" cemented at 7765'; 7" landed 7687'-8031', bottom 265' perforated; hole perforated 7298'-7348', produced hot brackish water. Proposed to plug off water and perforate casing 6030'-6110'. Decision: Proposal is approved provided all perforations from which no oil or gas production obtained are plugged with cement under pressure.

The Pure Oil Co. well No. 1 "Chowchilla" (Report No. P 5-3945.) Supplementary proposal to drill approved provisionally. New conditions: Cement plug 7360'-7182'; 7" landed 7687'-8031', perforated 7766'-8031'. Proposed to drill out plug, pull liner, and deepen well. Decision: Proposal is approved with understanding that if zone 7765'-8031' proves of commercial value, test is made to demonstrate effectiveness of cementing operations in excluding water from coming through perforations in 9".

### SAN JOAQUIN COUNTY

T. 3 S, R 4 E, M. D. B and M.

Sec. 24—Milham Exploration Co well No. "Moy" 2. (Report No. P 5-3926.) Supplementary proposal to drill approved provisionally. Conditions: Depth 4002'; 9 $\frac{5}{8}$ " cemented at 964'; dry gas showings 3270'-3680', small showings 3800'-4002'. Proposed to set 6 $\frac{3}{8}$ " at 4000', including about 200' perforated, and cement through whirler collar at about 3800'; test zone 3800'-4002'; if this zone does not carry gas or water, perforate 3270'-3680' in short



stages, testing and plugging where necessary. Decision: Proposal is approved provided each stage of perforations is plugged with cement under pressure before making further perforations.

Milham Exploration Co. well No "Moy" 2. (Report No. P 5-3947.) Proposal to abandon approved provisionally. New conditions: Plugged with cement under pressure 3180'-3389'; 6 $\frac{3}{8}$ " set at 4000', bottom 214' perforated, cemented through perforations at 3781', perforated 3510'-3690', 3340'-3420' and 3268'-83'; no commercial production obtained; hole filled with heavy mud. Proposed to pull all 6 $\frac{3}{8}$ " possible and dump cement plug on stub, place plug at 9 $\frac{1}{2}$ " shoe; close 9 $\frac{1}{2}$ " at surface and abandon. Decision: Proposal is approved provided that. (1) Proposed plug at 9 $\frac{1}{2}$ " shoe is extended 984'-944'. (2) Plug at about 944' is tested for location and hardness and details of test reported in final report of abandonment.

## SUMMARY OF OPERATIONS—CALIFORNIA OIL FIELDS

(Asterisks (\*\*)) indicate that publication is out of print.)

- VOLUME 4
- 1919—
- \*\*April Purpose of publication, by R. P. McLaughlin.  
Peg model of Coyote Hills oil field.
  - \*\*May Natural gas development in the Elk Hills, Kern County, by R. P. McLaughlin.
  - \*\*June Casing Leaks—Notes on testing and repairing, by R. E. Collom.  
Methods of measuring and recording production of oil well, by R. P. McLaughlin.  
Perforating casing for the purpose of producing from or testing undeveloped formations, by Lawrence Vander Leck.
- VOLUME 5
- 1919—
- \*\*No. 1. Report on cause of damage by water to oil wells in Sections 25 and 26, T. 31 S., R. 22 E., M. D. B. and M., Midway oil field, Kern County, California, by R. N. Ferguson.
  - \*\*No. 2. Review of four years' work of the Department of Petroleum and Gas, by R. P. McLaughlin.  
Township plats of proved oil land as determined March 3, 1919.
  - \*\*No. 3. Report on cause of damage by water in the southwestern portion of the Kern River oil field, Kern County, California, by R. N. Ferguson.
  - \*\*No. 4. Comparison of efficiency in oil field operations, by R. P. McLaughlin.  
Encroachment of edgewater in the oil sands of some California fields, by J. B. Case.
  - No. 5. Measuring casing, by M. H. Soyster and John H. Dougherty.  
Sealing formations in an oil well with mud fluid, by J. B. Case.
  - \*\*No. 6. Tulare Lake gas field, by R. P. McLaughlin.  
Report on cause of damage by water to oil wells in the vicinity of Twenty-five Hill, Midway oil field, Kern County, California, by R. N. Ferguson.
- 1920—
- No. 7. Perforating casing which serves to exclude water from an oil well.  
Possibilities of mud fluid in abandoning oil wells, by R. P. McLaughlin.
  - No. 8. Report on Ventura oil field, Ventura County, California, by Lawrence Vander Leck.  
Source of water in oil wells, by H. W. Bell.
  - No. 9. Graphic methods of maintaining operating and cost statistics of oil wells, by W. B. Blodget and H. L. Briggs.  
Application of aerial photography to topographic and geological mapping, by R. P. McLaughlin.  
Successful repair of oil wells, by R. D. Bush.
  - \*\*No. 10. Resume of oil well operations in Imperial Valley, by Irving V. Augur.  
Report on Casmalia oil field, by H. W. Bell.
  - \*\*No. 11. Report on Montebello oil field, by Irving V. Augur.
  - No. 12. Increasing oil production by plugging and abandoning certain wells, by R. P. McLaughlin.  
Use of temporary water shut-off, by T. D. Kirwan.  
Oil and gas statistics—1919, by Walter W. Bradley.
- VOLUME 6
- 1920—
- No. 1. Recementing through tubing under pressure, by C. C. Thoms.  
California oil supply, by R. P. McLaughlin.
  - \*\*No. 2. Circulating mud-laden fluid in connection with cable tool drilling, by M. Van Couvering.  
Financial statement.  
Collection of funds by assessment.  
Township plats of proved oil land—March, 1920.
  - No. 3. Production statistics of California oil fields—July 1, 1919, to June 30, 1920.  
\*Refinery statistics—U. S. Bureau of Mines.
  - No. 4. Control of California oil lands, by R. P. McLaughlin.
  - No. 5.
  - No. 6. Wooden packer or plug for placing cement through tubing, by H. B. Thomson.  
An occurrence of oil and gas at shallow depth in the Ventura Avenue field, by C. C. Thoms.
- 1921—
- \*\*No. 7. California petroleum in 1900 and 1920, by R. E. Collom.  
Spacing of oil wells and town-lot development, by R. E. Collom.
  - \*\*No. 8. Notes on a small oil recovery plant in the Midway field, by E. Huguenin.  
Production statistics of California oil fields—July 1, 1920, to December 31, 1920.
  - \*\*No. 9. A method for the graphical interpretation of water analysis, by F. G. Tickell.  
Prospect wells, by R. E. Collom.
  - \*\*No. 10. A method for introducing mud-laden fluid under high pressure into porous formations, by H. J. Steiny.

\* These statistics published monthly, commencing with this number, to and including Vol 18, No. 2.

## Summary of Operations—California Oil Fields

(Asterisks (\*\*)) indicate that publication is out of print.)

- 1921—
- VOLUME 6—Continued
- \*\*No. 11. Peg models, their construction and use, by J. B. Case and H. B. Thomson.  
 \*\*No. 12. Notes on core drilling methods in oil fields, by R. E. Collom.  
 Notes on "Core Sampling" in connection with rotary drilling as practiced by Shell Co. of California in the Coalinga oil field, by R. M. Barnes.
- 1921—
- VOLUME 7
- \*\*No. 1. Notes on Elk Hills oil field, by C. C. Thoms and F. M. Smith.  
 No. 2. Proved oil land, by R. E. Collom.  
 Production statistics of California oil fields—January 1, 1921, to June 30, 1921.  
 Collection of funds by assessment and financial statement.  
 Township plats of proved oil land—March, 1921.  
 Amended law.  
 Directory of California oil operators.  
 \*\*No. 3. A successful method of introducing mud fluid into a flowing well, by H. B. Thomson.  
 The oil and gas prospects in the vicinity of Buttonwillow, Kern County, California, by R. N. Ferguson.  
 \*\*No. 4. Oxy-acetylene welding applied to oil well casing, by P. S. Haury.  
 Notes on the effect of water invasion on the production of oil in the Kern River oil field, by J. B. Stevens.  
 \*\*No. 5. Report on Huntington Beach oil field, Orange County, California, with special reference to lack of definite subsurface information, after eighteen months of drilling activity, by J. B. Case.  
 \*\*No. 6. Notes on the use of oil instead of water or mud fluid as a mixing fluid in drilling, by H. B. Thomson.  
 A method for loosening frozen casing or drill pipe with oil, by W. W. Copp.
- 1922—
- No. 7. Method used by Chanslor-Canfield Midway Oil Company in drilling oil wells in the North Midway oil field, California, by F. W. Ziegler.  
 A method of lubricating drill collars to protect casing from wear, by W. W. Copp.  
 No. 8. Production statistics of California oil fields—July 1, 1921, to December 31, 1921.  
 Resume of oil field operations in California in 1921, by R. E. Collom.  
 Notes on results of shut-down, September 12–November 2, 1921, inclusive, by C. C. Thoms, R. M. Barnes, E. Huguenin.  
 No. 9. Notes on the use of core barrel with rotary tools, by J. B. Case.  
 Automatic bailer for oil recovery, by E. Huguenin.  
 Report on water conditions in northwesterly part of Cat Canyon oil field, by F. D. Gore.  
 No. 10. Notes on Long Beach oil field, by M. H. Soyster.  
 No. 11. Production and consumption of California petroleum, by R. E. Collom.  
 A successful type of oil and gas separator, by H. B. Thomson.  
 No. 12. Unusual engineering problems in the development of the South Mountain oil field, Ventura County, by Wendell M. Jones, with introduction by H. B. Thomson.
- 1922—
- VOLUME 8
- \*\*No. 1. Core drilling in oil fields of Southern California, by J. E. Elliott and F. C. Merritt.  
 A preliminary report on the Tulare Lake region, by R. M. Barnes.  
 No. 2. Gas conservation and development in Buena Vista Hills, by C. C. Thoms.  
 California's proved oil and gas fields, by R. E. Collom.  
 Production statistics of California oil fields—January 1, 1922, to June 30, 1922.  
 Collection of funds by assessment and financial statement.  
 Township plats of proved oil land—March, 1922.  
 No. 3. Notes on improved oil field tools, by W. W. Copp.  
 No. 4. Power equipment for drilling and producing oil wells, by H. A. Godde and W. L. Williams.  
 No. 5. The determination of water in petroleum emulsions, by Harold V. Dodd.  
 No. 6. Method of handling heavy crude oil in the Casmaita oil field, by F. D. Gore.
- 1923—
- No. 7. Mud fluid in rotary drilling, by R. E. Collom.  
 The use of mud fluid to prevent water infiltration in oil and gas wells, by R. E. Collom.  
 No. 8. Production statistics of California oil fields—July 1, 1922, to December 31, 1922.  
 Resume of oil field operations in California in 1922, by R. E. Collom.  
 \*\*No. 9. Natural gas production and utilization in southern California, by H. L. Masser.  
 \*\*No. 10. Completing an oil well and starting production, by W. W. Copp.  
 No. 11. Report on Santa Fe Springs oil field, by J. B. Case.  
 No. 12. Notes on use of resin for excluding water from oil wells, by R. M. Barnes.

## Summary of Operations—California Oil Fields

(Asterisks (\*\*)) indicate that publication is out of print.)

1923—

## VOLUME 9

- No. 1. Recovering oil by perforating the water string, by H. A. Godde.  
 No. 2. California oil production and reserves, by R. E. Collom and R. M. Barnes.  
 Production statistics of California oil fields—January 1, 1923, to June 30, 1923.  
 Collection of funds by assessment and financial statement.  
 Township plats of proved oil land—March, 1923.  
 No. 3. Cooperative supervision of oil field operations, by R. E. Collom.  
 \*\*No. 4. Report on the Long Beach oil field, by J. B. Case and Robt. L. Keyes.  
 No. 5. Report on southeastern portion of Thirty-five anticline, Sunset oil field, Kern County, California, by W. W. Copp and H. A. Godde.  
 No. 6. Report on Huntington Beach oil field, by J. B. Case and V. H. Wilhelm, including geochemical relationship of waters encountered in the Huntington Beach field, by M. A. Grizzle.

1924—

- No. 7. The use of fluids in cleaning oil wells, by Lew Suverkrop.  
 No. 8. Production statistics of California oil fields—July 1, 1923, to December 31, 1923.  
 Resume of oil field operations in California in 1923, by R. D. Bush.  
 No. 9. Methods of determining the fluid content of formations in open hole at Huntington Beach oil field, by V. H. Wilhelm.  
 No. 10. Mechanical control of oil wells flowing under high pressure, by A. J. Mason.  
 No. 11. Determination of core samples in core drilling, by Albert C. Rubel, with introduction by J. B. Case.  
 No. 12. The minor oil fields of Kern County—Part 1 (Devil's Den; Hovey Hills; Sunset Extension; Wheeler Ridge).

1924—

## VOLUME 10

- No. 1. The minor oil fields of Kern County—Part 2 (Lost Hills; Belridge, North Belridge; Poso Creek).  
 No. 2. Production statistics of California oil fields—January 1, 1924, to June 30, 1924.  
 Collection of funds by assessment and financial statement.  
 Township plats of proved oil land—March, 1924.  
 Directory of California oil operators.  
 No. 3. The study of subsurface formations in California oil field development, by G. D. Hanna and H. L. Driver.  
 No. 4. Plunger rotators, by Lew Suverkrop.  
 No. 5. Oil fields of Ventura County, by H. A. Godde.  
 No. 6. Rapid methods of water analysis, by F. G. Tickell.

1925—

- No. 7. Notes on the efficiency of flowing wells in the Dominguez field, California, by T. E. Swigart.  
 No. 8. Resume of oil field operations in California in 1924, by R. D. Bush.  
 Production statistics of California oil fields—July 1, 1924, to December 31, 1924.  
 No. 9. A recent development in drilling tools, by Lew Suverkrop.  
 No. 10. A long shoe used in the Kern River field, by R. G. Rogers.  
 No. 11. Recent developments in the east end of the Elk Hills oil field, by L. W. Saunders.  
 No. 12. An electrical apparatus for locating the source of water in oil wells, by Robert L. Keyes.

1925—

## VOLUME 11

- No. 1. Results of wildcat drilling in California, 1914–1924, inclusive, by R. D. Bush.  
 No. 2. Production statistics of California oil fields—January 1, 1925, to June 30, 1925.  
 Collection of funds by assessment and financial statement.  
 Township plats of proved oil land—March, 1925.  
 Directory of California oil operators.  
 No. 3. Report on the Torrance oil field, by E. H. Musser.  
 No. 4. Use of quik setting cements in oil wells, by C. C. Thoms.  
 No. 5. The Rosecrans oil field, by E. H. Musser.  
 No. 6. Effect of closing in production in the Coalinga field, by V. H. Wilhelm.

1926—

- No. 7. Methods of identifying subsurface strata for correlative purposes, by D. C. Roberts.  
 No. 8. Resume of oil field operations in California in 1925, by R. D. Bush.  
 Production statistics of California oil fields—July 1, 1925, to December 31, 1925.  
 No. 9. Conservation of natural gas, by R. D. Bush.  
 Natural gas in California, by C. C. Brown.  
 No. 10. Production and utilization of gas from Ventura field, by C. C. Thoms.  
 No. 11. Improved pumping equipment for oil wells.  
 Part I. Long stroke equipment, by E. H. Musser.  
 Part II. Circulating plunger pumps, by F. A. Graser.  
 No. 12. Inglewood oil field, by E. Huguenin.

## Summary of Operations—California Oil Fields

(Asterisks (\*\*)) indicate that publication is out of print.)

- 1926—
- VOLUME 12
- No. 1. Report on the northeastern flank of the Buena Vista Hills, Midway oil field, Kern County, California, by H. A. Godde and R. L. Keyes.
- No. 2. Production statistics of California oil fields—January 1, 1926, to June 30, 1926.  
Collection of funds by assessment and financial statement.  
Township plats of proved oil land—March, 1926.  
Directory of California oil operators.
- No. 3. Use of heavy minerals in rotary drilling mud in the Ventura field, by C. C. Thoms.
- No. 4. Dominguez oil field, by Harold V. Dodd.
- No. 5. Production losses into low pressure oil and gas sands, by R. D. Bush and V. H. Wilhelm.
- \*\*No. 6. The Richfield oil field, by E. H. Musser.
- 1927—
- No. 7. Report on the Mt. Poso oil field, by V. H. Wilhelm and L. W. Saunders.
- No. 8. Production statistics of California oil fields—July 1, 1926, to December 31, 1926.  
Resume of oil field operations in California in 1926, by R. D. Bush.  
Wildcat wells abandoned in 1925 and 1926, by R. D. Bush.
- No. 9. Conservation of gas in the production of oil, by R. D. Bush.
- No. 10. Fossil markers of Midway-Sunset-Elk Hills in Kern County, California, by D. C. Roberts.
- No. 11. Developments of the Maricopa shale production in the southeastern portion of Thirty-five anticline, Sunset oil field, Kern County, California, by H. A. Godde and E. H. Musser.
- \*\*No. 12. Recent developments in the Huntington Beach oil field, by F. A. Graser.
- 1927—
- VOLUME 13
- No. 1. Some improvements in fishing tools and devices used in rotary drilling, by Bernard H. Scott.
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## Summary of Operations—California Oil Fields

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 No. 2. Seal Beach oil field, by R. M. Barnes and Glen H. Bowes.
- 1931—  
 No. 3. Elwood oil field, by S. G. Dolman.  
 Resume of oil field operations in California in 1930, by R. D. Bush.  
 Production statistics of California oil fields—July 1, 1930, to December 31, 1930.  
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 Production statistics of California oil fields—January 1, 1931, to June 30, 1931.  
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 Proved oil land—March, 1931.  
 Directory of California oil operators.  
 No. 2. A report on Playa del Rey oil field, by Cecil L. Barton.
- 1932—  
 No. 3. Resume of oil field operations in California in 1931, by R. D. Bush.  
 Production statistics of California oil fields—July 1, 1931, to December 31, 1931.  
 Wildcat wells abandoned in 1931.  
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 Lompoc oil field, Santa Barbara County, by S. G. Dolman.
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 Production statistics of California oil fields—January 1, 1932, to June 30, 1932.  
 Collection of funds by assessment and financial statement.  
 Proved oil land—March, 1932.  
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 No. 2. Recent developments in the Long Beach oil field, by Walter J. Crown, G. G. Peirce and Paul J. Howard.
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 Production statistics of California oil fields—July 1, 1932, to December 31, 1932.  
 Wildcat wells abandoned in 1932.  
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 Production statistics of California oil fields—July 1, 1933, to December 31, 1933.  
 Wildcat wells abandoned in 1933.  
 No. 4. Round Mountain oil field, by Alex Diepenbrock.

1934—

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- No. 1. Production Statistics of California oil fields—January 1, 1934, to June 30, 1934.  
Collection of funds by assessment and financial statement.  
Proved oil land—March, 1934.  
Directory of California oil operators.
- No. 2. Newhall oil field, by R. W. Walling

## OIL FIELD MAPS

The following maps of the oil fields of the State have been completed and placed on sale at the Division of Oil and Gas, Ferry Building, San Francisco, and the various branch offices.

The maps are revised from time to time as development work advances and ownerships change.

Map	Price (including postage)
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No. 2—Santa Maria, including Cat Canyon and Los Alamos, Santa Barbara County	1 00
No. 3—Santa Maria, including Casmalia and Lompoc, Santa Barbara County	1 00
No. 4—Brea-Olinda, including east portion of Coyote Hills, Los Angeles and Orange counties	1 00
No. 6—Salt Lake-Beverly Hills, Los Angeles County	1 00
No. 7—Sunset, including San Emidio, Kern County	1 00
No. 8—South Midway, including Buena Vista Hills, Kern County	1 00
No. 9—North Midway and McKittrick, Kern and San Luis Obispo counties	1 00
No. 10—Belridge and McKittrick Front, Kern County	1 00
No. 11—Lost Hills and North Belridge, Kern County	1 00
No. 12—Devils Den, Kern County	75
No. 13—Kern River and Fruitvale, Kern County	1 00
No. 14—Coalinga, Fresno County	1 25
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No. 16—Ventura-Ojai, Ventura County	1 00
No. 17—Santa Paula-Sespe, including Bardsdale, South Mountain and Camarillo, Ventura County	1 00
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No. 19—Arroyo Grande, San Luis Obispo County	75
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No. 21—Portion of District No. 4, showing boundaries of oil fields—Kern and Kings counties	75
No. 21-A—Portion of District No. 4, showing boundaries of oil fields—Kern County	75
No. 21-B—Portion of District No. 5, showing boundaries of oil fields—Fresno, Kings and Kern counties	75
No. 22—Portion of District No. 3, showing boundaries of oil fields—Santa Barbara County	75
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No. 48—Mountain View and Edison, Kern County	1 25



## PUBLICATIONS OF DIVISION OF MINES

## Relating to Petroleum and Gas

- Bulletin 3—Gas and Petroleum Yielding Formations of the Central Valley of California, W. L. Watts, 1894.
- Bulletin 11—Oil and Gas Yielding Formations of Los Angeles, Ventura and Santa Barbara Counties, W. L. Watts, 1896.
- Bulletin 15—Map of Oil City Oil Fields, Fresno County, J. H. Means.
- Bulletin 19—Oil and Gas Yielding Formations of California, W. L. Watts, 1900.
- Bulletin 31—Chemical Analyses of California Petroleum (tabulated sheet), H. N. Cooper, 1903.
- Bulletin 32—Production and Use of Petroleum in California, P. W. Prutzmann, 1904.
- Bulletin 63—Petroleum in Southern California, P. W. Prutzman, 1912.
- Bulletin 69—Petroleum Industry of California, with folio of maps (18 x 22 in.) R. P. McLaughlin and C. A. Waring, 1914.
- Bulletin 73—Report of Operations of Department of Petroleum and Gas for 1915-1916, R. P. McLaughlin, 1917.
- Bulletin 82—Second Annual Report of the State Oil and Gas Supervisor, 1916-1917, R. P. McLaughlin, 1918.
- Bulletin 84—Third Annual Report of the State Oil and Gas Supervisor, 1917-1918, R. P. McLaughlin, 1918.
- Bulletin 89—Petroleum Resources of California, Lawrence Vander Leck, 1921.
- Preliminary Report No. 1—Notes on Damage by Water in California Oil Fields, R. P. McLaughlin, December, 1913.
- Preliminary Report No. 2—Notes on Damage by Water in California Oil Fields, R. P. McLaughlin, March, 1914.

The above publications are out of print, but may be referred to in any public library or in the library of the Division of Mines.

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